# **Exploring the Intersection of Tradition and Modernity: Designing a Multi-purpose Desk Accessory**

#### A PROJECT REPORT

submitted in partial fulfillment of requirements for the award of the degree of

### **MASTER OF DESIGN**

#### IN PRODUCT DESIGN

Submitted by:

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under the supervision of

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Department of Design



#### DEPARTMENT OF DESIGN

#### **DELHI TECHNOLOGICAL UNIVERSITY**

(Formerly Delhi College of Engineering) Bawana Road, Delhi-110042, May 2023

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I, Divyata Mahar, Roll No. 2k21/mdpd/03 student of M.Des in Product Design, I project dissertation entitled "Exploring the Intersection of Tradition and Mo Multi-purpose Desk Accessory" is submitted by me to the Department of Design University, Delhi in partial fulfillment of the requirement for the award of the Design in Product Designing. This is my original work and has not been co without proper citation. This work has not previously formed the basis for the Diploma Associateship, Fellowship, or other similar title or recognition.	dernity: Designing a n, Delhi Technological e degree of Master of spied from any source
Place: Delhi	Divyata Mahar
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### **CERTIFICATE**

I hereby certify that the Project Dissertation titled "Exploring the Intersection of Tradition and Modernity: Designing a Contemporary Multi-purpose Desk Accessory" which is submitted by **Divyata**Mahar, Roll No. 2K21/MDPD/03, Department of Design, DelhiTechnological University, Delhi in partial fulfillment of the requirement for the award of the degree of Master of Design in Product Designing, is a record of the project work carried out by the student under my supervision.

Ms. Monica Singh Prof Ranganath M. Singari

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### Acknowledgment

In pursuing my creative fulfillment through this project, countless individuals and influences have contributed significantly. I extend my deep sense of gratitude to my supervisor Prof. Ranganath M. Singari and Ms. Monica Singh, Department of Design, Delhi Technological University, New Delhi for his unwavering support, invaluable guidance, resources, and encouragement. I acknowledge the contribution of my teachers and all faculty members for fostering an environment where my imagination could flourish, their wisdom and expertise have been instrumental in shaping my creative vision, I owe an immeasurable debt of gratitude. I would especially like to mention Mrs. Aditi Parikh, guest faculty at DOD, founder of Totem Design studio and my industry mentor all along.

A special appreciation goes to the countless artists, authors, and creators whose works have left an indelible mark on my creative psyche. Through their masterpieces, they have transported me to magical realms, stirred my emotions, and fueled my desire to contribute something meaningful to the design world. I also extend my gratitude to my classmates whose collaborative spirit and thought-provoking discussions have been instrumental in refining my work and pushing the boundaries of creativity.

To each and every one of you, thank you for being a part of this journey.

- Divyata Mahar

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## **ABSTRACT**

The whole idea of tradition and modernity in our age is subjective, the infusion of traditional knowledge with modern concepts and technology opens up a new dimension altogether. This project is an attempt to explore that dimension from a product design perspective to make a mundane everyday object fun, multipurpose and versatile in its usage. The knowledge of traditional craft could manifest itself in a variety of forms, for instance manufacturing, aesthetics, technique and material. The foundation of the project lies in the same. The overall form has explored the modern and pop culture dimension to make the product look more appealing so as to target a large customer base.

The final product is the result of continuous research in terms of design value and has tried to establish a harmony between the trinity of market, form and function. After thorough conceptualisation, the objective has been to understand the feasibility of any concept, then coming out with the best possible way for its production. The whole process of production from availability of raw material to final polishing is included in the report.

The everyday desk accessory is designed in a way that catches the curiosity of the onlooker and can be used in a way that is unique to the user, and their needs.

# CHAPTER 1. INTRODUCTION

#### 1.1 Introduction

A desk accessory is a product that is built and designed for various purposes such as a show piece to add to the aesthetics of the ambience, as storage container to hold different objects together, as a toy, as an object to fidget, as a paper weight and various other purposes. This versatile nature of a desk accessory makes it a useful tool to study the user behaviour and opens up a vast array of possibilities to understand how one interacts with its surroundings.

The design process of a product involves few basic steps-

Empathy(user study), Define (research), Conception (ideate), Test, Production

All of these steps involve constant learning and thorough brainstorming, but what stands above it all is the user study and that provides a roadmap ahead for the whole process.

The project initiated with the keen interest in knowing the crafts of India and looking for a fun, toy-like element to it. The craft in focus is 'Channapatna' craft i.e. the traditional aspect of the final product. In the market analysis stage of the design process, the necessity of innovation was highlighted, thus the concept of exploring the popular demands of the customer in its modern context. The modern element of it is a pop culture reference from a popular sci-fi series 'Star wars'. After a thorough understanding of both the aspects of the study, certain features were adopted as design elements.

The project is an attempt towards understanding the user behavior and the market dynamics at every stage that are under play in the entire lifecycle of a product from a designer's mind to the market. It is not just a study to understand the journey of one successful product but also of the countless other iterations and ideas that were produced on paper but could not make it to our desks. It holds the same relevance as 'it is not the how of things but also why; and why only this, not others, that provides more clarity' in this case about the user and our understanding of design.

# 1.2 Objective

Using the product design process to 'Explore the intersection of tradition and modernity by designing a multi-purpose desk accessory'

Understanding traditional processes to design a product that makes use of traditional to build a modern product, and thus understanding the market pattern for traditional crafts, build over it a desk accessory that infuses both and caters to the demands of a wider audience.

# 1.3 Significance of project and research involved

A desk accessory might seem like a mundane everyday object with something of little significance in our day to day life, but turns out this seamlessly uninteresting everyday object is one of our most interacted and looked on thing. It can give a great insight into our choices and our interactions with our surroundings, also, if given a chance, a user has its own unique way of using an everyday object unless taught so. A quality we developed as a kid, like no two kids would play the same game in the same way or weave a similar story around a toy, unless taught so or instructed. The same idea when applied to an everyday object can result in something that seems like an interactive desk accessory, a toy that can be used by anyone anyway they like.

The research around 'Channapatna craft' highlights our rich cultural heritage and the state of Indian craft sector, especially focussed on the aforementioned craft and the brands associated with it, their market value, web traffic, also all the revivalistic measures for the craft to thrive in the competitive market of wooden items.

The project also gives detailed insight into the demographics of customers interested in buying traditional crafts and the demographics of individuals interested in pop culture merchandise. Further these insights, inferred by thorough market analysis are used in designing to bridge the gap between the two by a contemporary design.

# CHAPTER 2. Literature review

The project required study of Indian crafts, therefore various reports focussing on the Indian handicraft market was studied along with the crafts itself.

**Traditional Indian crafts-** The craft of any region is influenced by various factors such as history of a place, social organisation, environment, cultural needs and raw material availability. Crafts develop over a period of time, the crafts and its forms as we see today is a result of its long evolution and civilizational interaction. Much like humans ourselves, this evolution of crafts can be understood by the similarities and differences within geographical area.

India is known for its rich cultural heritage and variety of crafts are available in different states, indigenous to the area. These include- Metal crafts, art, baskets, Paper Mache, ceramics, clock making, puppetry,textile, block printing, miniature painting, glass work, fabric, furniture, home décor, jewellery, leather crafts, antiques, paper crafts, pottery, embroidery, stone, bamboo and wood works.

Some renowned craft forms are- Dokra craft, Bidriware, Bandhani, Pattachitra, Kantha, Kamrupi, Pembarthi, Zardoji, Blue pottery, Channapatna craft (toy making), Khurja pottery, Kondapalli dolls, and Papier mache. The report focuses on Channapatna craft in particular.

# 2.1 Channapatna

Channapatna craft is a traditional form of wooden toy making that originated in Channapatna, Karnataka, India. The toys are made from locally sources ivory wood and are handcrafted by skilled artisans using a lathe. They are known for their bright colours achieved through natural dyes made from vegetable extracts. Channapatna toys come in a variety of shapes and sizes and are popular among children and collectors. The craft is being promoted as an eco-friendly alternative to plastic toys.

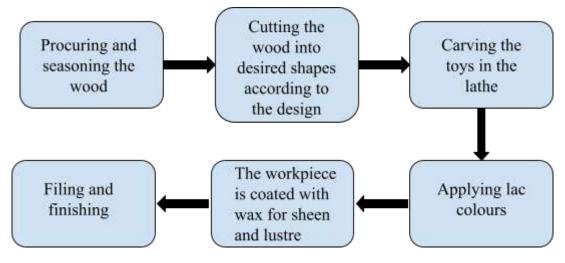


These toys trace back their history to the time of Tipu Sultan who invited Persian artisans to train people in the craft of making wooden toys. The craft's origin in Persa itself is around 200 years old. The town of Channapatna is also called 'Gombegala Ooru' or the toy town. Initially, they carved toys out of ivory, but later on, they used rubber, cedar, and teak.

Under the World Trade Organization, this ancient craft is safeguarded as a geographical indicator (GI), which is managed by the Karnataka government. Traditionally, the task entailed lacquering, Wrightia tinctoria tree wood, often known as "ivory-wood," or Aale mara. This industry has been primarily relied on Doodi Ki Lakdi (ivory) for about two centuries and sometimes on, sandalwood and rosewood as well. The scope of this art and the artisans has expanded the horizon into a multitude of wood types, including red rubber, sycamore, silver, fine, rubber, Nepal wood, teakwood, pinewood, and cedar.

The craft and products made using it have changed and are now keeping pace with the changing needs of the time. The ability to perform intrinsic work on different types of wood according to the preferences of the client has revitalized the toy town industry as a whole. The product line also includes items intended for interior decorating in addition to classic toys, household utensils, coaster sets, coat hangers, key chains, spice and salt boxes, and mobile holders and a wider selection of business gift merchandise

#### **Process-**



(Fig. 4) Ref.- D'source

# 2.1.1 Why Channapatna

The following reasons make Channpatna an attractive option for using in the project-

- Ease of manufacturing- the simplicity in the production and the processes involved.
- <u>Fun element</u>- the craft has a fun element to it, the circular and rounded nature of the basic form makes it a viable option for a desk accessory.
- <u>Exploration-</u> The above mentioned reasons along with the diverse exploration potential of the craft makes it an apt choice for the study.
- <u>Adaptability</u> the adaptability of the craft to adapt to the changing times and designs is evident in the versatile range of products.

#### 2.2 Modern crafts

The term "modern craft" describes the innovative and renewed interest in traditional craftsmanship in modern settings. Modern craft places a strong emphasis on the importance of expert workmanship, individual expression, and a relationship to materials and processes in a world where mass manufacturing and digital technology are taking over. This movement reassesses the place of the handcrafted in our technologically evolved society, rather than rejecting technology altogether.

A few essential elements define contemporary craft:

- Expertise of the Craft: In contemporary craft, artisanal abilities and knowledge are highly valued. Craftsmen and craftswomen, whether in metalworking, woodworking, ceramics, or textiles, frequently go through a rigorous training program to become experts in their chosen field. The focus is on accuracy, quality, and a thorough knowledge of the materials being used.
- <u>Innovation and Experimentation:</u> Though firmly anchored in tradition, contemporary craft promotes exploration and invention. Craftsmen stretch the limits of what is conventionally regarded as craft by experimenting with new shapes, materials, and processes. The fusion of creativity and tradition results in modern, frequently state-of-the-art products.
- Sustainability: it is a top priority for a lot of contemporary crafters. This can entail using locally
  produced or recycled materials, cutting waste, and implementing eco-friendly production
  techniques. The focus on sustainable methods is in line with the public's increased consciousness
  of environmental challenges.
- <u>Community and Cooperation</u>:Collaboration and a sense of community are frequently fostered by
  modern craft. Craftspeople may collaborate on projects while exchanging resources and expertise.
  This spirit of cooperation also permeates the relationship between artisans and customers,
  strengthening the bond between the creator and the final product.
- <u>Digital Integration</u>: Although handmade methods are emphasized, contemporary craft is aware of
  the advantages of digital technologies. Technology is used by many craftspeople for marketing,
  prototyping, and design. Greater accuracy and efficiency are possible thanks to the incorporation
  of digital techniques, all without compromising the fundamentals of workmanship.

- <u>Personal Expression</u>: A defining characteristic of contemporary craft is its appreciation of personal expression. Craftspeople challenge the homogeneity frequently associated with mass-produced commodities by infusing their creations with personal style and distinctive perspectives.
- <u>Interdisciplinarity approach</u>:Contemporary craft frequently crosses conventional discipline boundaries. Artists can blend many craft mediums or incorporate craft into disciplines like technology, architecture, and design. The works produced by this cross-disciplinary approach are diverse and creative, although they are difficult to classify.

In conclusion, modern craft is a dynamic and developing movement that embraces new challenges and principles while respecting existing skills. It honors the handcrafted, demonstrates a dedication to sustainability, and acknowledges the persistent human need for unique expression in the midst of a world that is changing quickly.

#### 2.2.1 Popular culture

Popular culture or Pop culture is the collection of beliefs, customs, and cultural phenomena that influence day-to-day existence and embody a certain society's mindset. Pop culture is always changing, and different things reflect and shape society trends, which affects how individuals view and interact with the outside world. This study explores a few major pop culture themes that have become more well-known recently.

- <u>Streaming Services and Digital Entertainment</u>: The way that consumers consume entertainment has changed with the emergence of streaming services like Netflix, Hulu, and Disney+. The practice of binge-watching has changed how people consume movies and television, which has helped make original content and revivals of beloved programs more popular.
- <u>Viral Phenomena and Memes</u>: Memes, which are frequently amusing pictures or movies that are
  extensively circulated online, have developed their own vocabulary. Memes offer a common
  cultural experience by capturing and communicating society sentiments. Viral phenomena, such as
  dancing challenges and viral challenges, proliferate quickly on social media and spark moments of
  group engagement

- Social Media:Influencers on social media have grown to be significant players in the popular culture landscape. People gain enormous followings on social media sites like YouTube, Instagram, and TikTok, which helps them influence trends in lifestyle, fashion, and other areas. Influencers have a growing influence on customer behavior and preferences, and brands are collaborating with them more and more.
- Remakes and nostalgia: Remakes draw heavily from nostalgia, which is a growing trend in popular
  culture. The popularity of reboots, remakes, and adaptations of nostalgic material in both television
  and film is evidence of this. Reimagined versions of well-known stories and characters for modern
  audiences tend to appeal to them.
- <u>Diversity & Inclusion</u>: A wider range of perspectives and experiences are being reflected in pop culture. Media representation is receiving more attention as attempts are made to highlight and include underrepresented voices. The themes, stories, and casting decisions of many modern movies, TV series, and songs all reflect this change.
- <u>Gaming Culture</u>: From a specialized pastime to a popular kind of entertainment, video gaming has changed with time. The acceptance and celebration of gaming as a respectable and significant cultural force is facilitated by esports, live broadcasting on websites like Twitch, and the incorporation of gaming into larger popular culture.
- <u>Clothes and Urban Style</u>: Pop culture has a big influence on fashion trends, especially in streetwear. The fashion industry is always evolving, including celebrity sponsorships, partnerships between businesses, and the impact of music and cinema on fashion.
- Political and Social Activism: Political and social activism are becoming more and more entwined.
   Celebrities support social justice causes, and hot-button social topics are frequently covered by popular media. The assimilation of activism into popular culture is indicative of a wider consciousness and involvement in contemporary affairs.

Pop culture of today is a dynamic and complex tapestry that is shaped by a wide range of factors that both reflect and impact contemporary values, trends, and habits. A dynamic and interwoven global cultural experience is an ongoing evolution of the scene, which includes everything from gaming culture to social media influencers.

# CHAPTER 3. Design Process

The methodical process of designing new products or enhancing current ones is known as the product design process. It consists of a number of steps that direct designers from the first concept to the finished product. Although particular approaches and jargon may differ, the general flow of the product design process is as follows:

#### 3.1 Discover

- Identify need: Clearly define the problem or need that the product aims to address.
- Market Research: Understand the target audience, competition, and market trends.
- Set Objectives: Establish clear goals and objectives for the design project.
- Research and Analysis: User research: Learn about the needs, preferences, and behaviors of the
  final users, analyze current trends in design, materials, and technology that are pertinent to the
  product.

#### 3.2 Define

State the problem statement or the need of the user being addressed or state the purpose or expected outcome of the project. The clearer the problem statement and the definition the quicker and accurate would be the final solution. Clarity of thought and the process goes a long wa in designing a product as there could be multiple iterations of a single problem, the task is to find out the best suited one for our target audience and what we are trying to achieve and study in the entire process.

#### 3.3 Ideation

After defining the problem/need the next step is to ideate and try reaching a possible solution to the problem/need/ design brief. To generate ideas one proven way is to brainstorm. When <u>brainstorming</u>, come up with a lot of ideas without passing judgment right away.

#### 3.3.1 Conceptualize

<u>Concept Development</u>: Pick the best ideas and hone them, give sufficient time to an idea or concept, build around it until a more clearer picture is obtained.

Rough sketches and storyboards should be made in order to visualize possible solutions.

## 3.4 Prototype

When a particular idea is conceptualized in the head it is important to understand the viability of it in 3d, for that in the prototyping stage a low cost, either paper, pop or thermocol prototype are made which are either 1:1 or a scale down version of the design.

<u>Make Prototypes</u>: Provide low-cost models in the form of 3D models, mockups, or tangible prototypes.

<u>Feedback</u>: Get input from users to pinpoint the design's advantages and disadvantages and make necessary revisions.

<u>Iterate</u>: Adjust the design in light of the knowledge obtained from testing prototypes.

#### 3.5 Production

This process involves bringing together the ideas to life. All the technical measurements needed for the manufacturing process are done using CAD softwares in 3d or through sketches whatever is easier for the craftsmen during production. It is important to make the manufacturer understand the design, therefore a standard is set that is understood by the manufacturer and implemented by the designer. Later stage involves choice of material which again depends on the availability of raw material, with the suggestion of the manufacturer, also a very important factor to consider here is the cost factor, the material chosen and the process finalised should be cost effective to both customer and the producer.

The tools are quipped, checked for availability and thus begins the final production process.

The craftsmen makes each piece if the design involves multiple pieces and later assembles it altogether. The finishing processes like waxing and polishing are carried out to give the product a market ready look.

PRODUCT DESIGN PROCESS



(Fig 5) courtesy: Nebulum product design

# CHAPTER 4. Discover

In order to comprehend the issue area and lay the groundwork for the upcoming design work, designers, stakeholders, and teams usually start the design process at the "Discover" stage. This phase is essential for defining the design challenge, setting objectives, and getting a thorough grasp of the environment in which the design will be implemented.

- <u>Problem framing:</u> The main goal of the Discover stage is to precisely define and frame the design problem. Making sure that the design efforts tackle the appropriate problems and offer significant answers is the aim.
- <u>User centric approach</u>: A crucial part of the Discover stage is user research. Gaining understanding
  of end consumers' needs, preferences, and behaviors is the goal of designers. A user-centric
  approach facilitates the creation of designs that effectively address the needs and concerns of the
  intended audience.
- Holistic yet contextual understanding: There is no design in a vacuum. Background is important. A
  thorough examination of the environment in which the product or solution will be utilized is part of
  the Discover stage. This entails taking into account potential influences on the design from the
  cultural, environmental, and social domains.
- Market and Competitive analysis: Designers must understand the larger market environment.
   Important insights can be gained by carefully examining the goods and services that are currently offered in the market and by comprehending the advantages and disadvantages of rivals. The design team uses this data to help them find areas where they can stand out from the competition.

- <u>Stakeholders</u>: Stakeholder engagement is crucial to bringing all project participants into alignment.
   Setting expectations and comprehending varied viewpoints are aided by stakeholder interviews and workshops.
- <u>Inspiration:</u> The Discover stage is a period for inspiration and creative investigation. Designers get inspiration from a variety of sources, such as different industries, art, and nature as well as current technological advancements.
- <u>Limitations and possibilities</u>: Early constraint identification is essential. Financial restrictions, schedule restrictions, and technological restrictions, are few examples of this. Recognizing these limitations enables designers to work within the constraints and come up with innovative solutions.
- <u>Persona development:</u> Developing user personas gives the design process a more personal touch.
   Personas are made-up characters that stand in for various user kinds. They aid in gaining a personal knowledge of consumers by taking into account their preferences, frustrations, and ambitions.
- <u>Principles of design</u>: A framework for making design decisions can be established by establishing
  design principles. These guiding concepts capture the main objectives and ideals that the design
  must represent. They serve as a compass, guiding the process of design in a coherent manner.

The entire design process is built upon the Discover stage. By creating a solid foundation, it guarantees that further design choices are based on a thorough comprehension of the issue, the target audience, and the larger context.

### 4.1 Research Methodology

Designing of a desk accessory involved various primary and secondary research methods, most of which revolves around user study, the associated behaviour and interaction with the environment.

<u>Primary research</u>: The approach followed here was to first gather information regarding the various types of Indian crafts through literature review, then focusing on the one selected.

Secondary research: Market analysis of the brands pioneering in craft products.

<u>Observation:</u> observing the accessories around and how people interact with them. This was the most widely used methodology as the user is observed in their natural state, thus free of any biases.

Questionnaire: general questionaire to see the preferences of the user and understanding their needs.

#### 4.1.1 Market Research

For the purpose of determining trends, assessing customer preferences, and comprehending the workings of the craft industry, market research is crucial for craft products.

The Indian craft market is renowned for its vast array of handcrafted goods that pay homage to the nation's cultural legacy, traditional craftsmanship, and rich diversity. Traditional crafts have a long history in India, and the market includes a wide range of goods, methods, and local peculiarities. There are many online and offline markets for Indian crafts-

#### Offline:

- Art Exhibitions and Melas: India is home to several melas and craft fairs where local artisans from
  various parts of the country exhibit their wares. Visitors looking to purchase traditional Indian crafts
  are drawn to events like the Surajkund Crafts Mela, Delhi hatt and Dastkari Haat Samiti.
- <u>Governmental Stores:</u> Government-run markets, including those operated by state handloom and handicrafts boards, give craftspeople a place to exhibit and market their goods. These emporiums frequently stock a wide range of crafts made in several states.
- Artisan clusters: India has many areas that are well-known for particular crafts. You can purchase
  directly from craftspeople by going to artisan clusters, such the ones in Varanasi for silk weaving or
  Jaipur for block printing.

- Regional Bazaars & Markets: There are thriving local marketplaces and bazaars in Indian towns and cities where artisans
- <u>Craft Exhibitions:</u> Artists can showcase their creations in galleries or cultural institutions through craft exhibitions. These shows frequently highlight particular crafts or subjects.
- <u>Art and Craft Workshops:</u> Certain craftspeople hold workshops or maintain studios where clients can drop by, discover how their crafts are made, and buy directly from the creators.

#### **Online:**

- <u>E-commerce Platforms:</u> Indian craftspeople can reach a large global audience by selling their products on online marketplaces such as Etsy, Flipkart, and Amazon. These online stores give customers an easy method to browse and buy handcrafted goods.
- <u>Craft-specific Websites:</u> Handmade and traditional Indian crafts are the exclusive focus of specialized craft websites and platforms. These forums frequently include comprehensive details on the craftspeople and their methods of creation.
- Social Media Platforms: Social media sites like Facebook, Pinterest, and Instagram are used by
  artisans and craft companies to display their items. Social media offers the possibility of viral
  spread as well as direct client connection.
- Online auctions: Customers can place bids on one-of-a-kind things on some platforms that host online auctions for handcrafted and handmade goods.
- <u>Virtual Craft Exhibition</u>: Virtual craft shows have arisen in reaction to the digital age, giving craftspeople an online platform to display and sell their creations. Immersion experiences and interactive components are common in these displays.

Artisans websites: Numerous individual craftspeople or artisan collectives have their own websites
where buyers may peruse and buy things straight from the source. These websites frequently
feature narratives about the craftspeople and their work.

In addition to servicing a wide range of customers and protecting the rich cultural legacy of traditional crafts, the integration of online and offline markets offers a complete ecosystem for Indian handmade products.

#### 4.1.2 Social Media presence

Study of social media presence has found more relevance in the E-commerce era, where it has become imperative for business owners to have a strong presence across all platforms to run a successful business.

#### **Bands studied:**

• Varnam Craft Collective, Zwende, Totem studio and Amala Earth





(Fig 6) varnam logo

(Fig 7) Totem logo

(Fig 8) Zwende logo

(Fig 9) Amala earth logo





#### 1. Varnam Craft collective-

Location- Chennai, Tamil Nadu

About: Varnam craft collective works with artisans in Channapatna and other craft clusters in India. Their products range from toys, home decor, lightening to kitchen items.

#### Social Media Presence-

Follower demographics: Count: 14k (as of February 23): 95% female 5% male (estimated)

Most comments- (People from Chennai who recently visited the store)

Profession- Designers, art and craft enthusiasts

Buyers/ interested people:

- Mothers
- People looking for home décor products
- Interior decorators
- Fellow business owners/entrepreneurs entrepreneurs



(Fig 10)

#### 2, Zwende-

Location-Bengaluru, Karnataka

About: One-of-a-kind handcrafted products & artistic experiences from Indian makers and artists-Handcrafted products that are 100% customizable.(DIY kits and craft supplies.)

#### Social Media Presence-

Follower demographics: Count: 195k (as of February 23)

Most comments-Profession- Creators, art and craft enthusiasts

Buyers/ interested people:

- Mothers
- Artists
- People looking for home décor products
- Interior decorators
- Fellow business owners/entrepreneurs entrepreneurs



(Fig.11)

#### 3. Amala Earth-

Location- Delhi, India

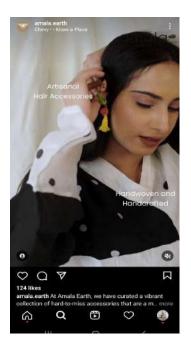
About: Amala Earth is a way of conscious living built on a foundation rooted deeply in Indian origin. It brings together brands, products, experts, and individuals that create a world where all living beings can co-exist harmoniously.

#### Social Media Presence-

Follower demographics: Count: 55.7k (as of February 23) Most comments: Profession- Lifestyle Creators, varied.

Buyers/ interested people:

- Environmentally conscious people
- Interior decorators
- Health conscious people
- Natural products consumers
- Lifestyle Bloggers/vloggers
- Dieticians



(Fig.12)

#### 4.Totem Design Studio -

Location- Delhi, India

About: Totem design studio is a craft-based studio, which focuses on inspiring users to unleash their creative selves their products are visually compelling, and generally revolve around a fun theme. The basic elements in their design are imagination, exploration and fun with the product. <u>Social Media</u>

#### Presence-

Follower demographics: Count:595 (as of February 23)
Most comments:Profession- (Relatively new, less traction)



(Fig. 13)



#### 4.2 Brand in focus



**Totem**:(definition) a person or thing regarded as being symbolic or representative of a particular quality or concept.

#### 4.2.1 Brand Ideology

**Totem:** a product that represents ideas of boundless creativity that knows no bar, gender, or age. It adds up to your space and is uniquely yours, but not stagnant, its changes with your exploration, imagination and. creationYour representation your way.



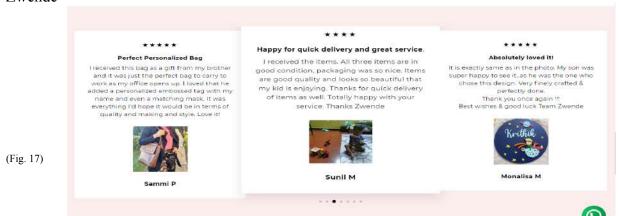
(Fig. 16)

# 4.3 Competitive analysis

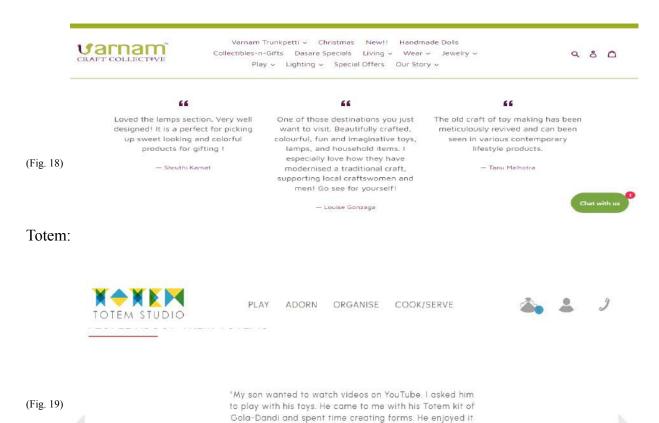
Three ways have been used to conduct competitive analysis among the aforementioned brands namely: Product review, engagement analysis and market analysis.

#### Product review:

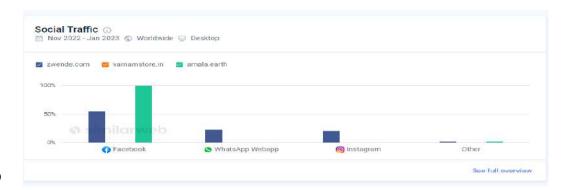
#### Zwende-



#### Varnam Craft collective:



### **Engagement and market analysis:**



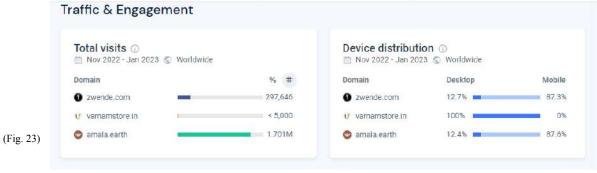
(Fig. 20)

Marketing Channels Channels overview 

(Fig. 21)



(Fig. 22)



#### 4.4 Research inferences-

- Niche market and Art-Intendent Audience: Products with a craft component frequently appeal to a
  niche market made up of people who value things that are distinctive, handcrafted, and artistic.
  This audience appreciates each item's artistry, originality, and cultural relevance. The uniqueness
  and genuineness of craft appeal to buyers who are looking for things other than mass-produced
  substitutes.
- <u>Driven by Social Media and Verbal Referrals</u>: Social media networks are an effective marketing tool for products made by craftsmen. Visual marketplaces such as Facebook, Pinterest, and Instagram allow vendors and craftspeople to present their products, share the backstory of each one, and reach a worldwide customer base. Furthermore, word-of-mouth marketing is crucial since happy consumers frequently tell friends and family about their experiences, which fosters the natural expansion of the artisan or brand.
- The majority of buyers of craft products are women: The finding that women make up the bulk of purchasers is consistent with the notion that people who value handmade creativity and have a strong sense of aesthetics are frequently drawn to products with a craft component. Craft products tend to appeal more to women because of their distinctiveness, personal touch, and frequently elaborate designs. This knowledge can help with product creation and targeted marketing campaigns that are tailored to the tastes of female consumers.
- <u>Limitations in Production and Usage Based on Function and Craft</u>: Certain constraints may apply to the manufacture and practical application of craft-based products:

<u>Production Restrictions:</u> Compared to mass-produced goods, handmade crafts could take more time and labor to make. It's possible that skilled artisans won't be able to match the overwhelming demand.

<u>Usage Restrictions</u>: Because of the materials' properties or the age-old manufacturing methods utilized, certain craft objects could have functional restrictions. While workmanship and beauty are valued highly, utility isn't always the top priority.

<u>Collectibles</u>: it appears that customers view craft-based products as precious and deserving of
preservation because the majority of them are purchased as collectibles. Craft products are
frequently regarded by collectors as more than just functional objects; they are recognized as
pieces.

# CHAPTER 5. **Define**

The stage after discovering and thorough research on the craft and the market, the final brief for the project is derived.

Design brief: To design a desk accessory that is multi-functional and adds a touch of fun to the workspace.

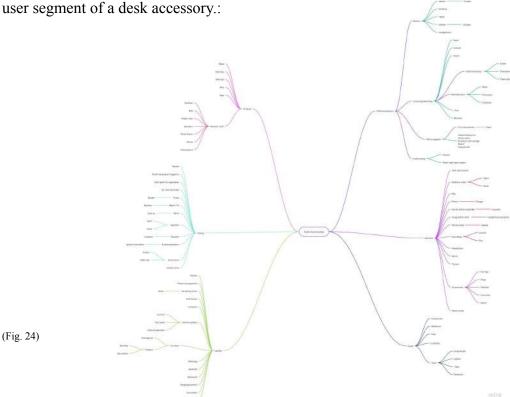
Craft techniques -Channapatana (Woodturning Operation

Brand inspiration- Totem

# **5.1 Object Functionality**

In examining desk accessories, it turns out that the benefits extend to many areas. Deliberately focused on a business-oriented approach to gain a broader understanding of their application and targeted user segments. This approach went beyond technical analysis purely in complexity, and has gone beyond the practical effects of these auxiliaries in real-life situations.

Effectively also could address the variety needs of specific user groups As a result came with a design trend that sought to humanize the function of these accessories, transforming them from mere tools into companions with a purpose. A synthesis of thoughtful design and practical utility aimed at humanizing. Create accessories that seamlessly combine different aspects of experiences, offering practical solutions to a wide range of needs. There are multiple areas where a desk accessory can be used, therefore a functionality mind was made, which helped in understanding the functionality and the



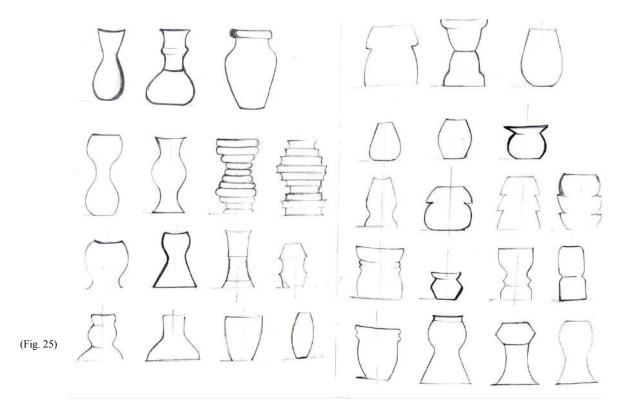
(Fig. 24)

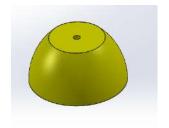
## **5.2 Form Study**

In seeking an understanding of the art in this sculpture, an important prerequisite — a deeper understanding of the foundations This essential understanding comes from the fundamental relationship of the sculpture and into the rotational activity easily achieved by lathe. In a closer examination of the changes that occurred during the study, an interesting finding was captured. Light appeared in the dynamic of possibilities, as the communication of thought and movement became the focus. It became clear to me that there was an opportunity to put a game into design beyond the technical challenges and this led to a new approach, where the changes required extended beyond just mechanics and engaged movement in the empire.

Not simplest was the concept of motion in layout a philosophical breakthrough, however it also became a conscious undertaking to infuse energy into the innovative system. The idea turned into breaking through the conventional boundaries of static sculpture that allows you to foster a brand new diploma of engagement and interest. In other words, the transition from know-how to incorporating motion wasn't only a necessary technological improvement; as a substitute, it changed into a revolution that aimed to reinvent the essence of artwork—no longer simply technical skill ability but intrinsic splendor and intrigue.

To understand the craft; it was necessary to understand the primary forms; as the craft involves a turning operation using a lathe, turning forms explored while studying that, the idea of playing with motion occurred to me to make it more fun and interactive.











(Fig. 26)

#### 5.3 User Persona

User personas are detailed and semi-fictional representations of the idealized and generalized user of a product, service, or system. It is a tool used in design and marketing to better understand and empathize with the target audience. Users often include information such as demographics, behaviors, goals, motivations, pain points, and other relevant attributes.

Creating user personas helps design and development teams humanize users, enabling them to make more informed user decisions. With a clear understanding of the needs and wants of different user groups, teams can tailor their products or services to better meet the expectations and needs of their target audience User personas often based on surveys, interviews and data analysis to ensure accurate reflection of the diversity and complexity of users.

The following was the user persona created for the study:

# **User Persona**

#### Brief

Arjun works as a Ux designer at a studio in Delhi. The workload is hectic and there are multiple projects going on. Arjun is a hard worker who jots down bits and information on his sticky notes and places them on his laptop. He generally uses pens and pencils for his work.

Age- 25

Characteristics

Hardworking, organized, clean freak

Motivation

- · Organise space,
- · Keep track of notes
- Aesthetics



(Fig. 27)

# 5.4 Design elements (Concept definition)

The concept definition design phase stands as a critical moment in the design process, a team effort where designers, product managers, and stakeholders come together to carefully articulate and prepare the necessary building blocks that will shape the upcoming product. This complex phase manifests itself as a dynamic interaction of creative minds, mixed designers expertise, insight into the structure of the objects under management, and the perspectives of the stakeholders.

The overall goal is to give the essence of the product from it by clarifying its basic concepts, characteristics and characteristics. Through a collaborative dance of brainstorming, rigorous analysis and thoughtful dialogue, the many facets of the object begin to crystallize. This part is not just a technical analysis but a holistic analysis. This includes delving into key questions about the product's purpose, function, and overall vision. The collective goal is to establish a nuanced understanding of the user's needs, to ensure that the design perfectly matches the desired user experience.

The insights gleaned during this theoretical process form the foundation upon which the entire planning process will be based, thus guiding decision-making throughout the development process Ideas created with creative energy have the power to bring about change. Basic requirements can be converted, revealing the functions and features necessary for the successful presentation of the product. At the same time, these collaborative efforts can lead to general design principles that will govern aesthetic and functional aspects of the object.

Furthermore, the culmination of this collaborative creation can result in a comprehensive design brief, a document that encapsulates the distilled wisdom of key ideas and serves as a lodestar for subsequent design efforts. It is the beginning of a story that unfolds across the design spectrum, as it guides production methods.

The design elements taken further from study here are- The traditional methods and techniques used in the Channaptna craft that gives a subtle roundness and the Pop culture reference specially the fun, modern element of it which adds to the products appeal in its surrounding.

# CHAPTER 6. Ideation

#### 6.1 Introduction

Design thinking is a dynamic and evolving creative journey, where sparks of innovation are lit and ideas fly. Essentially, it encompasses all the generating, nurturing and refining of ideas, making it the cornerstone of the system. This critical phase is like a canvas on which designers, often in collaboration with team members, embark on an open-minded systematic exploration, seeking to reveal uncharted territories of possibilities and reveal a solution to a problem or challenge Theoretically, art is based on ideas—deliberate departures from the confines of conventional wisdom.

It's the process of thinking broadly, breaking free from the shackles of conventional thought processes and cultivating a fertile ground where creativity thrives. Mindfulness, an active and participatory exercise, becomes the medium through which the ideas flow, as group members contribute ideas, thoughts and insights, providing resources that a bright veil of possibility emerges. Sketching and prototyping emerge as indispensable tools in this conceptual odyssey. Once ambiguous ideas begin to emerge through visual images, they provide a visual language for communicating and separating ideas. This visual presentation not only helps with conceptual clarity and improvement but also serves as a bridge to the more advanced stages of planning.

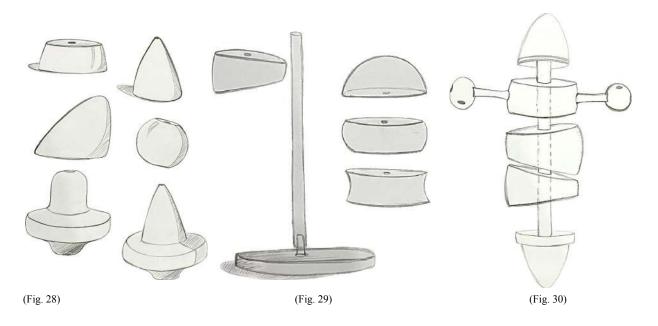
The main objective of perspective is to generate possible solutions to the design challenge at hand. It is a playground of innovation where designers experiment with techniques, encourage unconventional ideas and weave a rich tapestry of possibilities. Each idea is a step, revealing possible solutions. With this insight, designers fine-tune their ability to draw promising insights from the experiment, and guide potentially more transformative and advanced design choices.

As a dynamic and creative process, the concept is set for advanced stages, later in the process. This is the catalyst that propels the program journey forward, inculcating energy, vision and promise of transformational solutions to the challenges at hand Essentially the idea is that poetic openness that leads musicians to the face of a polished design team, marking the beginning of internal innovation an ever-changing environment of creative problem solving.

# 6.1 Concept 1

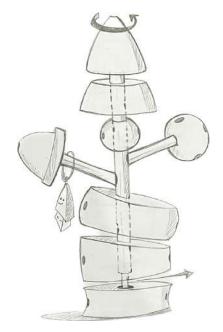
The first concept was named 'Ghumru'. The idea is to make a rotating, fidgeting accessory that could be used as a building block toy, fridge magnets and to hold the stuff in the arms. The fixed stick in the between could act as a pole around which other pieces rotate. Below are the sketches for the same.

- (Fig 28) are the pieces or building blocks
- (Fig 29) is the stand or pole
- (Fig 30) is one iteration of the whole set-up
- (Fig 31) depicts how the product can be used to hold stuff (keychain) and as a fidgeting accessory.



#### 6.1.1 Reason for rejection

- Technical flaws
- Does not appeal to a wider audience
- More like a toy, less like a desk accessory.
- Emotional connect missing
- Chance of disbalancing.



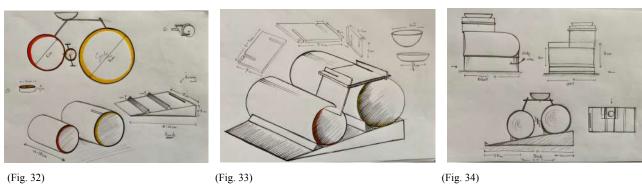
(Fig. 31)

# 6.2 Concept 2

This concept is inspired by the concept of bicycle as it gives a sense of nostalgia and encouragement of moving forward, and the idea seemed apt for a desk accessory. It also embeds the idea of making it yourself to make it more interactive. The whole design has 6 parts that are to be assembled i.e. two drums depicting the tyres of the cycle, seats (small concave block), a pedal like element and three grooved blocks which fit together on a slope/ramp.

The slope of the ramp depicts the upward motion

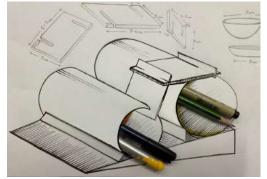
- (Fig. 32) The first picture depicts the form and the manifestation of the inspiration
- (Fig. 33) The second is how the blocks fit together
- (Fig. 34) It is the sketch from different angles, Top view, Front view, side view along with dimensions.



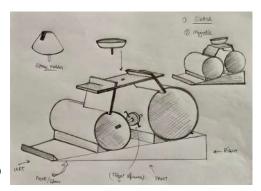
(Fig. 35) This picture shows how the product can be used and will appear in 3d.

(Fig. 36) This is also a 3d view to better understand the design.

(Fig. 37) The final product with imagined functionalities.







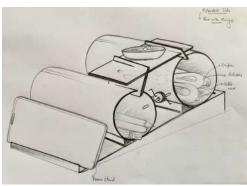
#### 6.2.1 Reason for rejection

Too complicated

(Fig. 35)

- Theme not conveyed well in the design
- Small parts are difficult to manufacture.
- The actual product might be too bulky

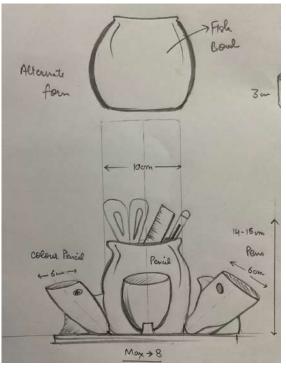




# 6.3 Concept 3

This concept derives inspiration from the form of a fish and the rounded forms possible by turning operation, the idea was to play with the various forms possible from turning operation, for instance cutting the rounded conical form at an angle to make it look like a fish opening its mouth as seen in (fig 38) which also shows the functionality as imagined and indicated in the sketches.

(Fig. 39) shows the base, designed for maximum space utilization





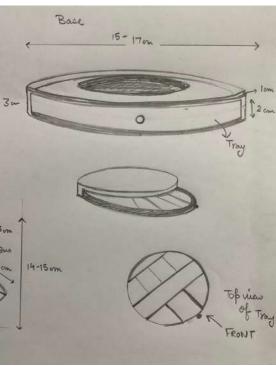


Fig. 39)

#### 6.3.1 Reason for rejection

- Too complicated
- The parts are difficult to manufacture
- Due to the circular base of the design, it covers too much space when placed on a working desk.
- The actual product might be too bulky and not cost effective.

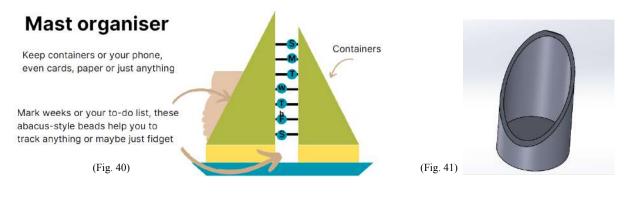
## 6.4 Concept 4

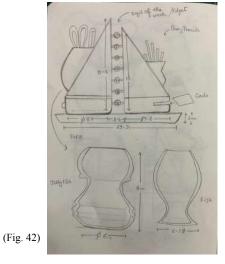
This concept is based on a ship's mast which appears so from front view as seen in (Fig 40)\, the middle part is intended to be a month tracker, inspired from the abacus.

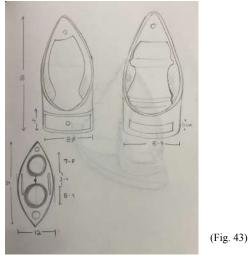
(Fig. 41) is the 3d of the container portion

(Fig. 42), (fig43) is the detailed explanation of the utility of the design along with dimensions of the parts

(Fig. 44) is the side of the final product.

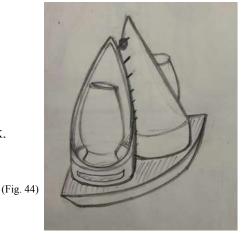






#### 6.4.1 Reason for rejection

- Too complicated
- The parts are small and thus difficult to manufacture
- Due to circular base of the design,
   covers too much space when placed on a working desk.
- The actual product might be too bulky.
- No emotional connection.



## 6.5 Concept 5

This concept is also based on the building block concept, but with a more utilitarian approach. There are different parts which fit into each other through inner and outer grooves, the blocks can be mixed and match as shown in the picture, with the base acting as coasters, thus giving the user freedom to compartmentalise at their own will.



(Fig-45)

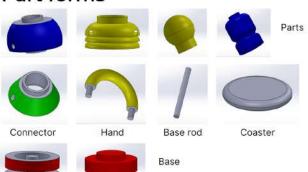
(Fig.45) The group describes the working and the idea behind it using paper prototype.

(Fig 46) The group shows different forms and how It will all fit together as a product.

#### 6.5.1 Concept prototyping

The concept after thorough sketching seems
Promising, to check the viability of it in 3d, live
Size dimensions, for 3d visualisation was
developed in Solidworks (CAD software)

### Part forms





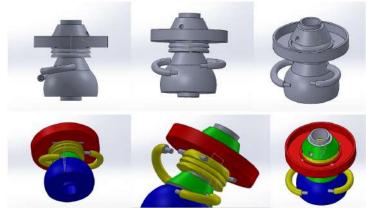
(Fig.46)

(Fig 47)

(Fig 48) is the 3d model as it would look with live dimensions. The overall form is intended to look more like a human figure to give a personal touch.

(Fig 48)

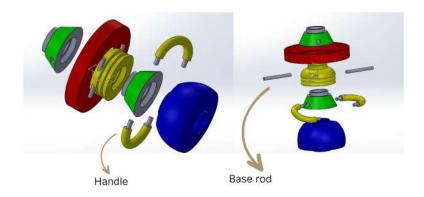
## **3d exploration**



(Fig 49) is the 3d model and its exploded view showing how the parts would connect.

(Fig 49)

## **Exploded view**



(Fig. 50) shows different iterations of the form when used with different types of blocks and reorganising it.

(Fig 50)

### 6.5.2 Reason for rejection

- Can get towering for a desk accessory.
- Technical difficulty in handcrafting
- Isuue with balancing (might topple)
- Less utilitarian.

## Iteration with other parts

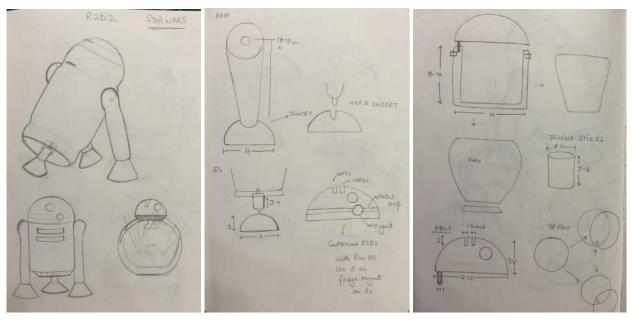


## 6.6 Concept 6 (Final)

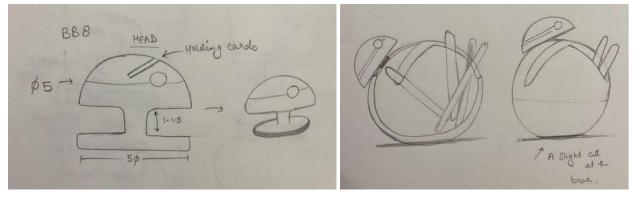
This concept attempts a theme based approach, instead of going abot in a function driven way, the idea is to go about the theme first, then incorporate function to, the idea seems to work and thus developed the final concept theme of 'Star Wars'. The theme and mood for which would be explained in subsequent chapters.

(Fig 51) is a group of figures that show the initial sketching for the concept. which is based on pop culture characters taken from the movie.

(Fig 52) is another design sketch with the same theme.

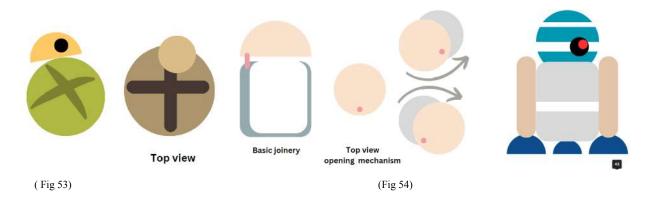


(Fig 51)



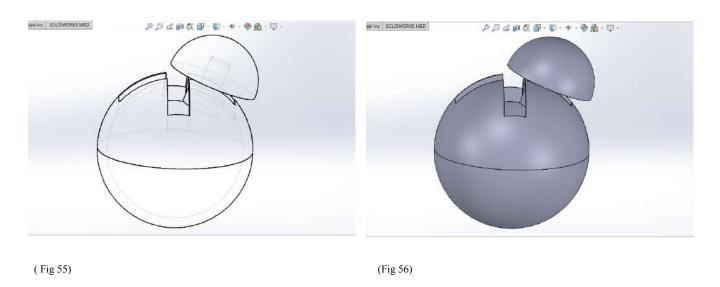
(Fig 52)

(Fig. 53) and (Fig 54) are the two iterations from the sketches presented in graphic format.



## 6.6.1 3D prototyping

The following pictures (Fig. 55) (Fig. 56) are the 3d model of the final selected product, made using the CAD software SolidWorks. It depicts a clear picture of the final product, how it will appear to the customer.



### 6.6.2 Reason for acceptance

- Multi-functional
- Ease of manufacturing(fewer parts)
- Emotional connect (star wars reference)
- Scope for Imagination
- Wide audience
- A friendly, appealing happy form.

# **CHAPTER 7. Form Inspiration**

The theme chosen is from a pop culture reference, i.e a very popular movie from the 90s, which still finds its fan base amon the younger generation. This attribute makes 'Star Wars' a theme that can attract a large number of audience across generations and across the globe.

<u>Star Wars</u>-One of the most recognizable and significant pop cultural phenomena ever is Star Wars. "Star Wars: Episode IV - A New Hope," the first movie based on George Lucas's creation, was released in 1977 and immediately became a worldwide phenomenon. The following are some examples of how Star Wars has grown to be a prominent pop culture allusion:

<u>Symbolic Figures</u>: Icons of popular culture include Yoda, Han Solo, Princess Leia, Luke Skywalker, and Darth Vader not to mention the iconic robots like R2D2 and BB8 of the series have a separate following. Their enduring influence on popular culture can be attributed to their memorable sayings, unique looks, and intricate plotlines.

<u>Lines to Cite</u>:There are numerous iconic and frequently quoted lines from Star Wars. Sayings like "Do or do not, there is no try," "I've got a bad feeling about this," and "May the Force be with you" have become commonplace.

<u>Extended Cosmos</u>:Beyond the movies, a vast universe of books, comics, animated shows, and video games has been created around the Star Wars franchise. This expanded world has added to the Star Wars franchise's ongoing appeal by enabling fans to discover new aspects of the galaxy.

<u>Merchandising phenomenon</u>: Star Wars is a major force in merchandise. Toys, apparel, action figures, and other things have brought in billions of dollars. An industry standard has been set by the marketing of Star Wars items.

<u>Cultural Parodies and Homages</u>: Numerous movies, TV series, and other forms of media have made fun of or paid homage to Star Wars. Comedic skits, cartoons, and even advertising contain references to Star Wars.

<u>Fandom and Conventions</u>: There are a lot of devoted fans of Star Wars. The ardent followers of the franchise have given rise to fan gatherings such as Star Wars Celebration, when enthusiasts unite to commemorate their mutual fondness for the galaxy far, far away.

<u>Impact on Next Generations</u>: Filmmakers, storytellers, and other creatives have been impacted by Star Wars in later generations. Its influence can be observed in the manner that blockbuster movies are created and promoted today.

<u>Worldwide Cultural Illusion:</u> Borders and linguistic barriers no longer apply to the global cultural phenomenon that is Star Wars. Audiences all throughout the world are drawn to the universal themes of heroism, good versus evil, and the hero's journey.

The Star Wars series is still a major pop culture touchstone, whether it is due to the ongoing popularity of the original trilogy or the ongoing development of the Star Wars universe.

## 7.1 Inspiration Board- (Fig. 57)

The major source of inspiration are the robots BB8 and R2D2 from star wars.







(Fig. 57)

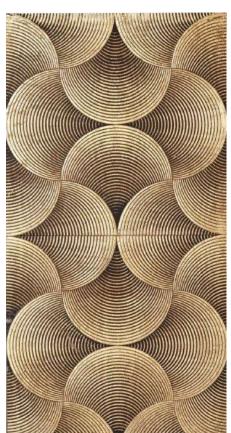
## 7.2 Mood Board- (Fig. 58)

A moodboard is a visual collection of pictures, fonts, colors, textures, and layout components that work together to express the desired tone, feel, and look of a creative work. Moodboards are used in graphic design, product design, fashion, interior design, and other disciplines. They are a source of inspiration, help with team and customer communication, and ease decision-making during the creative process. Moodboards guarantee a common understanding of the project's direction, avoid misunderstandings, and steer the consistent execution of the planned style and ambiance across a variety of creative pursuits by providing a coherent visual reference.

Below is the mood board for the final product which depicts a happy, positive mood with a tinge of nostalgia depicted by some pictures, along with it being functional for a desk accessory.















## **Production**

In industrial design, production is the process of transforming an idea into a physical, ready-to-sell product. Product functionality and aesthetics are prioritized in industrial design, which also takes into account user experience, production viability, and general market appeal. The following steps are commonly included in the industrial design production process:

#### 8.1 Process-

<u>Selection of Materials:</u> To select the best materials for the project, designers collaborate with materials engineers. Durability, cost, sustainability, and manufacturability are among the factors taken into account. The materials chosen should complement the intended purpose and visual appeal of the product.

<u>Planning the Manufacturing Process:</u> Designers and engineers work together to plan the manufacturing process. This entails picking suitable production techniques like additive manufacturing, CNC machining, or injection molding. Cost-effectiveness and production scalability are enhanced by good manufacturing planning.

<u>Specifications and Detailing:</u>Specifications are created in detail, detailing the precise measurements, allowances, and standards for finishing that apply to every part. For consistency and quality to be maintained during production, this information is essential.

<u>Manufacturing Prototyping:</u> A small batch of products may be manufactured prior to mass production in order to optimize the manufacturing process and detect any potential problems before full-scale production begins. These prototypes aid in guaranteeing that the finished product satisfies design requirements.

<u>Tools and Production Configuration</u>: For the production process, the appropriate tools, molds, and other equipment are ready. Depending on the manufacturing process, this could entail setting up CNC equipment, building injection molds, or arranging production lines.

<u>Guarantee of Quality:</u> Strict quality control procedures are used to guarantee that every item satisfies the set requirements. To ascertain the overall quality of the products, this may entail random sampling, functional testing, and inspections.

<u>Assembly and Packaging:</u> After the product's components are put together, it is packed for delivery. Packaging is also designed to preserve the product during transportation and to improve the overall perception of the brand.

<u>Distribution & Introduction</u>: The final goods are supplied to retailers or customers directly. For the product launch, marketing tactics are put into place, highlighting the product's value proposition, distinctive characteristics, and design qualities.

In order to guarantee that the finished product satisfies realistic requirements for both production and market success, cooperation between designers, engineers, and manufacturing specialists is crucial throughout the industrial design production process.

#### 8.2 Material-

In order to make sure that the materials used for a project are in line with its objectives, designers must carefully analyze the many elements that influence material selection during the design and production phases. The following are important variables that affect material choice:

<u>Functional specifications</u>: When choosing a material, the product's main purpose is quite important. The mechanical, thermal, and electrical properties of various materials differ. Materials for a structural part, for instance, would be different from those for a decorative piece.

<u>Physical Characteristics</u>: Strength, hardness, flexibility, and fatigue resistance are examples of mechanical qualities of materials that need to match the intended usage and pressures the product will encounter over its lifetime.

<u>Sturdiness and Resistance to Wear:</u> The wear resistance and durability of materials become significant factors based on the intended use. Materials having a strong resistance to wear and deterioration may be needed for products that are subjected to regular usage or harsh environmental conditions.

<u>Considering Weight:</u> Materials weight is an important consideration, particularly in the aerospace and automobile industries. High strength-to-weight ratio materials are frequently chosen to maximize performance and reduce total weight.

<u>Price</u>:The cost of materials has a big influence on a product's total production cost. Budgetary restrictions and performance needs must be balanced by designers. Occasionally, less expensive materials might be appropriate without sacrificing functionality.

<u>Productionability:</u> It is crucial that a material be simple to work with during the manufacturing process. Certain materials can be machined, molded, or shaped more easily than others. In order to ensure successful and economical production, designers take the manufacturability of materials into consideration.

<u>Availability:</u>One practical limitation may be the supply of materials. To prevent production delays or pricing changes, designers should use materials that have a solid supply chain and are easily obtainable.

<u>Design intent and aesthetics:</u>The physical and visual characteristics of the materials add to the product's overall beauty. Designers choose materials based on how they want them to look, feel, and be designed.

<u>Recyclability and Disposal:</u> Materials' ease of disposal and capacity for recycling are factors that are becoming more and more significant. Materials that are recyclable or have no environmental impact at the end of their life cycle may be selected by designers.

Through a meticulous assessment of these variables, designers may make well-informed decisions regarding material selection, guaranteeing that the materials they choose fulfill the project's functional, financial, and ethical specifications.

#### Material Used: Sheesham wood

The scientific name for sheesham wood is Dalbergia sissoo, and it is a hardwood species that is indigenous to the Indian subcontinent. Most people just call it Indian Rosewood. The following are some essential traits and applications of sheesham wood:

<u>Appearance</u>: The unique and lovely grain pattern of sheesham wood frequently consists of dark streaks set against a lighter background. The sapwood is often paler than the heartwood, which can range in color from golden brown to deep brown.

<u>Density and Durability:</u> Sheesham is a strong wood that is robust and dense. It falls into the group of hardwoods with good resistance to impact and wear thanks to its Janka hardness grade.

<u>Worability:</u> Sheesham wood is renowned for being pliable. Because of its ease of carving, turning, and polishing, it is a popular material for ornate furniture and decorative accents.

Sustainability of Sheesham wood is contingent upon conscientious harvesting methods. It can be a more environmentally beneficial option for wood goods when supplied responsibly.

<u>Availability:</u> Grown in the Indian subcontinent, sheesham wood is abundantly accessible. Its popularity on the international market is bolstered by its exports to different regions of the globe.

<u>Problems:</u> Sheesham wood has many benefits, but if it isn't properly dried and seasoned before use, it can be prone to cracking. This risk can be reduced by using the right drying methods and treatments.

In conclusion, Sheesham wood is a beautiful and adaptable hardwood that is frequently used in furniture and handcrafted goods. For both indoor and outdoor uses, its strength, workability, and resistance to insects and decay make it a popular choice

#### 8.3 Tools-

The final product is made keeping the technicalities of the craft in mind. For manufacturing the traditional lathe turning is used. When it comes to production tools and machinery, Channapatna still uses traditional methods. They are listed below:

- 1. The overhead belt drivers used by the artisans are powered by a tiny motor, and one end of the belt drive transforms vertical action into circular, horizontal motion.
- 2. The craftsmen employ a range of measurement tools, including a compass, angles, planes, and numerous other such devices.
- 3. They employ a variety of chisels and files in various sizes and shapes for chipping.
- 4. While the wooden block is still turning on the lathe, coloring is done with vegetable dyes.



(Fig.59 )Lathe turning (Fig.61) Half finished product



(Fig.60) Turning in process

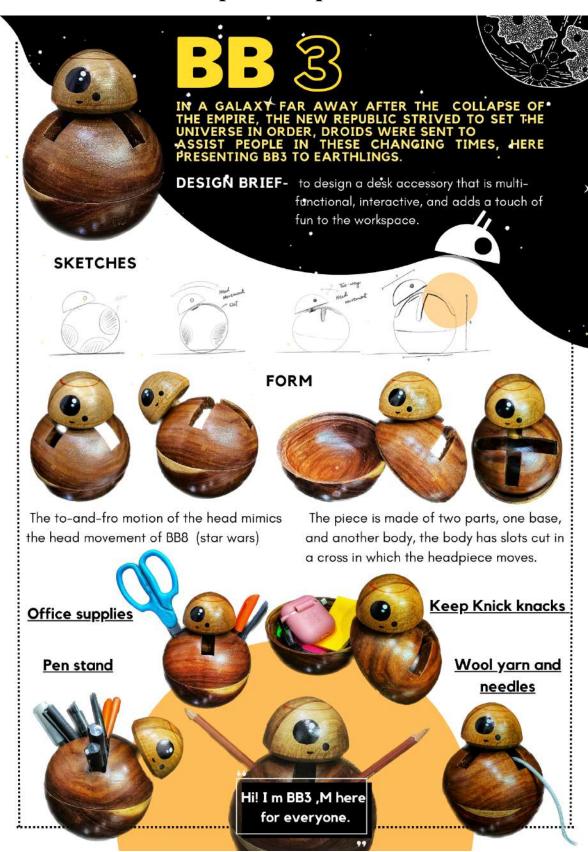


(Fig.62) The semi finished product



(Fig.63) Cutting the product

# **CHAPTER 9. Final product poster**



(Fig. 64)

# CHAPTER 10. Conclusion

The final product is named 'BB3' after the robot 'BB8'. The entire report not only describes how the final product came into being but the also the multiple iterations that lead to it. The process of designing is personal and varies from individual to individual, it is an amalgamation of owning the process and while in it, there were many learnings on the customer behaviour and how a small product can be made successful by putting in alot of thought and making a connect with the audience. Every product demands certain things, for which understanding and clarity of the process and the objective is must. The desk accessory thus designed is an apt mood buster, as it can used to fidget around with the bobbling head and its unique design captures not just the attention of a star wars fan, but also of a toddler, for adults with no relevance to Pop culture, it is a purely functional object that can add up to any space.

In the process of designing BB3, there were instances of great learnings as well as unlearning, sometimes the overly complicated looking problems just need a change of perspective from the designers end. It is also important to emphasis on teh fact that the philosophy of 'Think more, Design less' is not only applicable to minimalism but in everyday objects as well. The simpler it is, the better and more convenient it is for the user, also the actual task is it to simplify, we as humans tend to complicate things, that is why it is all the more relevant and difficult to design a simpler product which finds utility in everything.

The feedback received for the product was overwhelmingly positive, people seem to like the rounded form of the product, many could instantly relate it to the movie reference, which was the intent of the product. For a middle age woman it was a problem solver in for its knitting and yarn keeping function. Fo some, it was the fidgeting aspect, but for most of the people it was the cute and happy 'BB3', that found its place on the design exhibition of DOD'23 and was successful in bringing a smile on the faces of many with its big, round eyes.

## References-

- 1. 'Channapatna toys of Karnataka: The Art of crafting' wood by Prof. Bibhudutta Baral and Mr. Antony William NID, Bengaluru. Source: <a href="http://dsource.in/resource/channapatna-toys-karna-taka">http://dsource.in/resource/channapatna-toys-karna-taka</a>
- 2. Channapatna toys images, Source : <a href="https://toysofcpt.com/">https://toysofcpt.com/</a>
- 3. Design process image, Source: <a href="https://nebulem.com/resources/product-design/">https://nebulem.com/resources/product-design/</a>
- 4. Moodboard, Inspiration Board images: Pinterest
- 5. Brand logos, Source respective sites: <a href="https://varnamstore.in/">https://www.zwende.com/</a>, <a href="https://www.zwende.com/">https://www.zwende.com/</a>, <a href="https://totemstudio.in/">https://totemstudio.in/</a>
- 6. Competitive analysis, website performance: Similarweb ,Brand pages on social media: Instagram
- 7. Star wars movies and merchandise.

## About the candidate

## Divyata

## mahar

#### P R O D U C T D E S I G N E R



#### SKILLS Software skills

Drafting software- 1. Auto CAD Modeling software- 1. SOLIDWORKS

2. CREO

Adobe Illustrator Adobe Photoshop Adobe Indesign Figma

#### Manual skills

Product Development

Research

Design Thinking

Sketching

Prototyping

Painting

Calligraphy

#### INTERESTS

Sketching Painting Reading novels Dance

Illustration Writing

#### Contact

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#### ABOUT

An inquisitive person with a knack for designing, driven towards adding value to people's lives; also I do art.

#### EDUCATION

#### Delhi Technological University

Master of Design | 2021-2023

lgnou

Diploma in Creative writing | 2020-21

**Kumaon Engineering College** 

Bachelor of technology (Mechanical) | 2016-2020

Gen. B C Joshi Army Public School Graduated | Mar 2016

#### EXPERIENCE

Gigai

Internship | June'22-July'22

Sketched, ideated, and assisted in designing headgears and accessories for Varun Bahl's show at FDCI India couture week 22, space design for KC Roasters outlet in Delhi.

#### Go Foundation

Volunteer | August '20- July'21

Assisted in campaign against Child labour, taught mathematics and science.

#### • Freelance

Graphic and Package Design | January '21

Designed logo and package design for a few local brands.

#### • IIT Guwahati

Design Intern | June '20- July '20

Designed a calendar stand and its graphics.

Studied the basics of design and product development, along with developing concepts and graphic study of traditional patterns and using it in the design process.

## ACTIVE PARTICIPATION AND ACHIEVEMENTS

- First and third position respectively in wall painting and geomodeling held at IIT Roorkee annual tech fest Cognizance.
- District level participation in National Children Science Congress(NCSC).
- · First position in Block level Science Fair.
- First position in the poster-making competition for 3 consecutive years in college.
- First postion in international group dance (choreography) competition.
- Finalists of Student design challenge in Empower 2022.

#### POSITION OF RESPONSIBILTY

Enthusiasm Committe Head

College and Departmental level

Fest Co-ordinator

Scintilla College cultural fest

#### ABOUT THE SUPERVISORS



**Brief CV of** 

Ms Monica Singh BFA, MFA, (PhD)

monicasingh.dtu@gmail.com Contact: 8802167683 LinkedIn:

https://in.linkedin.com/in/monica-singh-a7b331248?trk=public\_post\_follow-view-profile

Ms. Monica Singh is an exceptionally talented and creative visual art educator who possesses a diverse range of skills and expertise. With an unwavering passion for teaching, Monica has dedicated more than four years to delivering exceptional education in the field of drawing, rendering, perspective, sculpture, calligraphy, history of art and design, aesthetics, and much more.

As a dedicated learner and enthusiastic educator, Monica has pursued her education with great diligence, obtaining a BFA and MFA from Central Universities. Throughout her academic journey, Monica has seamlessly integrated her learning with her teaching, creating a rich and multi-dimensional curriculum that spans different cultures and art movements.

Apart from her extensive experience in teaching, she has also curated and coordinated exhibitions at the US Embassy, North office, KG Marg, New Delhi, under the guidance of the eminent artist, Late Prof. Jai Jharotia. She is a remarkable educator and researcher who has made significant contributions to the field of cognitive design and color perception. Her ability to delve into the intricacies of mood, emotions, and behavior through color and art is truly inspiring, and she has consistently demonstrated an unwavering commitment to enriching the lives of her students and the wider artistic community with her innovative and insightful work.

#### **Academic Qualification:**

An alumnus of Jamia Millia Islami Central University (MFA), College of Art, Delhi (BFA) University of Delhi with specialization in Painting, now Ms. Monica Singh is with Delhi Technological University for her PhD Research works. She has registered as Full Time Research scholar and joined DTU on 02/08/2021. She has completed her course works, SRC and also published 5 papers as per the requirement.

#### **Supervision of Thesis:**

Supervising Design Projects and thesis both at Masters and Bachelors level

#### **Conferences:**

Worked as research coordinator during ICDM 2022 and ICAPIE 2022. Reviewed many papers during this conference wherein selected papers where published in Elsevier proceedings and Scopus/SCI Journals. Also presented research papers in several conferences.

#### **Publications:**

Publication Type	Title of the paper	Journal Name	Year	ISSN No.	Page No.	Volume	DOI
UGC Listed SCOPUS INDEXED	A Study Of Indian Cultural Heritage, Effect Of Colors And Human Behavior	ZEICHEN Journal	2023	09324747	109	9	DOI:15.10089.ZJ.2023.V0 9I02.285311.3074
UGC Listed SCOPUS INDEXED	The unique Visual and Psychological Effects of Jaipur Blue Pottery: A study with Cognitive Design Research Approach	Res Milataries	2023	22656294	3488-3505	13	https://resmilitaris.net/men u-script/index.php/resmilita ris/article/view/3244
UGC Listed SCOPUS INDEXED	A review study of cognitive design research on colors from a visual psychological perspective	International Journal of Experiment Research and Review	2023	24554855	1-10	30	DOI to be assigned.
UGC Listed	Jaipur Miniature Painting: An Exploration of its Historical Significance, Evolution, and Contemporary Applications in Modern Lifestyle and Product	GIS Science Journal	2023	18699391	1122-1133	10	DOI:20.18001.GSJ.2022.V 10I3.23.40885
UGC Listed	Harnessing the Power of Color: The Impact of Color on Visual Psychological Perception in Handicrafts	ZEICHEN Journal	2023	09324747	1-10	3	DOI:15.10089.ZJ.2023.V0 9103.285311.3092

## List of Academic and Professional Achievements in Design Education and Coordination of Ms. Monica Singh (2021-2023):

- 1. She have experience in teaching B.Des and M.Des Courses.
- 2. She is coordinating the Department of Design DTU's Design Degree Show, which will take place from April 27-29,
- 3. As a mentor, she worked on the 2023 BDes and MDes brochure.
- 4. In 2022, she gave expert presentations on the subject of Visual Narrative and Storytelling at NSUT. To put it differently, she delivered informative talks about how to effectively convey stories through visual media at NSUT during that year.
- 5. As coordinator, she arranged guest lecture by Mr. Rounak Dua, an expert in several areas including Additive Manufacturing, Manufacturing Design, Product Development, 3D Printing, and CAD at NSUT and DTU. The lectures were centered on the subjects of product design and 3D printing.
- 6. As a coordinator she arranged a guest lecture at NSUT by Prof. Ranganath M. Singari, Head of the Design Department at DTU. He is an expert in several fields, including Innovative Product Design, Industrial Processes and Design, Production & Industrial Engineering, Research and Publication Ethics, CAD/CAM/Automation, Operations Research, and Design Thinking and Management. The lecture focused on the topic of product design.
- 7. She has worked for developing teaching materials, like Syllabi and Visual Aids.
- 8. She has been working as research coordinator for organizing Conferences, Seminars and Events.
- 9. She has worked with examination activities like preparation of question papers, evaluation of answer sheets and as Jury examiner for B.Des and M.Des courses.
- 10. She has Coordinated in preparing examinations and invigilation duties in the department.
- 11. She has worked for compiling/preparing Time table and Admission Brochure M.Des (2021-2023).
- 12. She have experience of preparing proposals for workshops, seminars and expert lectures.
- 13. She has conducted a four-week internship program on Visual Narratives and Storytelling (June 2022).
- 14. She has conducted a four-week winter internship program on 2D 3D Animation and Film Making (December 2022).
- 15. She has conducted a Two-week internship program in 2022 on Pattern making and Garment Construction being coordinated.

- 16. Expert Lecture by Prof. Mihir Bholey, Principal Faculty Interdisciplinary Design Studies, Science and Liberal Arts, National Institute of Design Ahmedabad India is being participated and coordinated.
- 17. Expert lecture on 3D Printing by Mr Rounak Dua expert in Additive Manufacturing, Manufacturing Design, Product Development, 3D Printing and CAD (2021) is being coordinated.
- 18. Assisted in Bdes admissions 2022- Scrutinizing documents in the admission process.
- 19. Delivered expert lectures on the topic of Visual Narrative & Story Telling (2022).
- 20. Delivered expert lectures on the topic of 2D Animations & Film making (2022).
- 21. As research coordinator ICDM 2022 held from 27th -30th January, an international conference organized by DOD DTU.
- 22. Assisted in organizing a Design Degree Show on 13th, 14th, and 15th May 2022 and worked for the opening of a fashion studio at DOD DTU.
- 23. Worked on the development of a Fashion Design Studio and Computer Labs (2021-2022).
- 24. Akshar Mahotsav a National event on 10th Aug 2022 is being coordinated.
- 25. Coordinator/organizing secretary during the Art & Design competition 16-17 Sept (2022).

#### Award & Achievement:

- Draft designs of silver and gold coins were selected by SPMCL Ministry of Finance, Government of India on the occasion of 75th Azadi Amrit Mahotsav, which were made by our DOD DTU team.
- I received 1st Prize on the ocassion of "51st Annual Flower Show" Painting competition in Delhi University (2009) By Shri. Deepak Pental, Vice-Chancellor University of Delhi.
- Two time awarded 1st Prize on National level Painting competition held by Ministry of Environments & Forest (2008 and 2009) By Hon'ble Shri Jai Ram Ramesh, Union Minister of Environments & Forest.
- Awarded 1st Prize in Painting and Art Competition organized by MGICC in College of Art, Delhi University.
- Two time winner at state level (2008 and 2010) and awarded by Mahabali Shri. Satpal Singh, Assistant Director of Education, Delhi.
- Awarded in a Painting competition held by Nehru Bal Samitee at Russian Culture Centre, New Delhi.
- Awarded in a National level Painting competition held by Pawan Hans Helicopter Ltd. and Ministry of Civil Aviation Govt. of India (2011) By Mr. Naseem Zaidi, Secretary, Minster of Civil Aviation. (2011)
- Awarded in National level painting competition held by NIDM (2011) by Hon'ble Shri Ramchandran Mullapally, Union Minister of state Home Affairs, and Govt. of India.
- Got first prize in a Painting competition held by National Museum of Natural History (NMNH), Mandi House, New Delhi & Ministry of Environment & Forest, Govt. of India. (2010) By Director of NMNH.
- Many other Prize and Certificate number of 50 was awarded in many Art and Poster design Competition at different levels like; Zonal, State and National in the last 12 years.

#### **Experience of Teaching Subjects:**

Sketching Rendering 2D/3D, Typography, Photography and Videography, Calligraphy, Design Projects with M.Des and B.Des, Elements of Design, History of Design, Communication Studies and Semiotics, Cognitive Ergonomics and Visual Ergonomics, Color, Context and Composition, Ethnographic Studies, Visual Narratives and Storytelling, Design Project, Clay Modeling, POP, Murals, Graffiti, Painting in oil/acrylic/water color, Aesthetics of Art & Design

#### **Art & Design Exhibition:**

- 2022 July, Solo Exhibition hosted by Department of Design Delhi Technological University.
- International Group Exhibition in Lalit Kala Academy H.P 2022.
- 2021, 86th All India Exhibition of Fine Arts, Amritsar, group exhibition.
- 2019, Group Exhibition Tagore International Literature & Arts Festival Vishva Rang, Bhopal. Madhya Pradesh.
- 84th All India Exhibition of Arts 2019 Amritsar, group exhibition.
- 2019, Art Exhibition M F Hussain Gallery in Jamia Millia Islamia, New Delhi May.
- Udaipur, Saptarangini Art Exhibition in 2019.

- 2019, International Art Exhibition & Workshop at International Roerich Memorial Trust Art Gallery, Kullu, Himachal Pradesh.
- 2018-19, All India Women Artist at Punjab University, Chandigarh, acrylic on canvas, title was Affection.
- Art Exhibition M F Hussain Gallery in Jamia Millia Islamia, New Delhi Dec, 2018
- 2018, Color of Indian Artists at Bagaur Ki Havelli, Udaipur, acrylic on canvas, untitled.
- 2015, 2016, 2017 Kala Care Group, hosted by U.S. Embassy, north office New Delhi, Mix Media Art on canyas.
- 2017, Triveni Kala Sangam Mandi House, New Delhi, Acrylic on Canvas, theme was Pollution.
- Also, got an opportunity to curate and coordinate exhibitions at US Embassy, North office, KG Marg, New Delhi. In the guidance of eminent Artist, Late Prof. Jai Jharotia.

#### **Projects:**

- Worked for Marriot Resort as designer for wall décor project 2022.
- Worked in association with Navayu since 2018 on different projects in different places in graffiti wall art.
- 2018, Delhi Metro Rail Corporation, graffiti wall art at Aqua Line Noida, which were organized by Kiran Nadar Museum of Art.
- Worked association with Prathmas group since 2016 on different projects in Art and Design workshop.

#### **Known Persons:**

- 1. Prof. Ranganath M. Singari, Head, Department of Design, Delhi Technological University, Delhi, India
- 2. Prof. Mihir Bholey, Senior Professor, National Institution of Design, Ahmedabad, Gujarat, India



**Professor Ranganath M Singari** has an extensive career spanning over 25 years in the field of design, mechanical, production, and industrial engineering. He is currently serving as the Head of the Department of Design and Chairman of the Board of Studies at Delhi Technological University, where he has been working since 1998.

As the Head of the Department of Design, he has been instrumental in building the department's recognition and reputation in the minds of people. He has taught at all levels of undergraduate, postgraduate, and PhD programs, covering a diverse range of subjects such as innovative product design, industrial processes and design, production and industrial engineering, research and publication ethics, CAD/CAM/automation, operations research, design thinking, and management.

He strongly believes that design is a perfect combination of art and science, and that it involves positivity, imagination, creativity, and innovation. He defines design as a development of ergonomics for sustainability with interaction between God and nature. He emphasizes that design is all about development, ergonomics, sustainability, interaction, God, and nature.

Apart from teaching, Professor Singari has also been actively involved in academic administration, conference management, and project management. He has excellent skills in higher education research, industrial production engineering, CAD/CAM, and product design. He has also served as an assistant professor at Delhi College of Engineering from 2009 to 2012.

Professor Singari initiated two research centres CAPIER and CIDE which are known for Research and Innovation. ICAPIE and ICDM, two international conferences initiated by Prof Ranganath have created history. He strongly believes that the study of design, product, and management are directly connected with the minds of people and that self-motivation is necessary to develop in these areas.

Overall, Professor Ranganath M Singari has a wealth of experience in the field of Design, Engineering and Management. He is committed to making a significant contribution to the field in the future.

Thank you.