



**UPCYCLE CHIC**

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**DIPLOMA IN BUSINESS STUDIES**

**SESSION I: 2024/2025**

**POLITEKNIK SULTAN SALAHUDDIN ABDUL AZIZ SHAH**

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A project report submitted in partial fulfilment of the requirement for the award of Diploma  
in Business Studies.

**COMMERCE DEPARTMENT**

**SESSION I: 2024/2025**

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**TITLE: UPCYCLE CHIC**

**SESSION I: 2024/2025**

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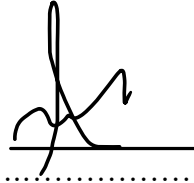
are the final year student of **Diploma in Business Studies, Commerce department, Polytechnic Sultan Salahuddin Abdul Aziz Shah,** located at **Persiaran Usahawan 40150, Shah Alam, Selangor.**

2. We verify 'this project' and intellectual properties are our original work without any plagiarism from any sources.

3. We agree to release the project's intellectual properties to the above said polytechnic in order to fulfil the requirement of being awarded a **Diploma in Business Studies.**

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## LETTER OF AUTHORIZATION

We declare that the work in this final year project paper was carried out in accordance with the regulation of Polytechnic. It is original and is the result of our own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any diploma or qualification.

We, hereby, acknowledge that we have been supplied with the Academic Rules and Regulations for Undergraduate, Polytechnic, regulating the conduct of my study and research.



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## **ACKNOWLEDGEMENT**

Dear All,

As we conclude our proposal report we would like to express our heartfelt appreciation to everyone who contributed to its success.

First, we thank Almighty God for blessing us with the strength and guidance to complete this project. We are also deeply grateful to our parents for their unwavering support, which motivated us throughout this journey.

Our sincere thanks go to our supervisor, Puan Rahida, for providing invaluable guidance and expertise. Your insights into this report helped shape the direction of this project and ensured its success.

To our classmates, we appreciate your hard work, dedication, and teamwork. Each of you brought something unique to the table, and it has been a pleasure working alongside such committed individuals.

Finally, we would like to thank the Sultan Salahuddin Abdul Aziz Shah Polytechnic community for giving us your support has been key in making this campaign impactful.

Together, we have raised awareness about the importance of sustainable practices, and we hope this initiative inspires continued efforts towards environmental responsibility.

Thank you once again for your support and collaboration!

## ABSTRACT

This study focuses on the development and impact of the **upcycled mini cupcake bag**, a multifunctional accessory made from recyclable materials like plastic bottles and reusable fabrics. In an era where environmental sustainability is critical, upcycling offers a creative solution to reducing waste while producing functional and stylish products. This bag aligns with the **Sustainable Development Goals (SDGs)**, particularly **SDG 12 (Responsible Consumption and Production)** and **SDG 13 (Climate Action)**, by promoting eco-friendly consumption practices.

The literature review highlights the growing importance of upcycling in fashion and accessory design, emphasizing how discarded materials can be transformed into innovative, eco-conscious products. Case studies show that upcycled designs can meet both consumer demands for practicality and fashion, while minimizing environmental impact. By exploring these concepts, this paper illustrates the potential of upcycled products like the mini cupcake bag to support sustainability efforts while maintaining commercial appeal.



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## **CHAPTER 1: INTRODUCTION**

### **1.1 INTRODUCTION**

Upcycle Chic is a brand dedicated to sustainability and fashion, creating eco-friendly bags from recycled materials. The core philosophy of the brand revolves around upcycling, a process where discarded or unused materials like plastic, old fabrics, and other recyclable items are transformed into stylish and functional products. By giving new life to these materials, Upcycle Chic helps reduce waste and promotes environmentally responsible consumption in the fashion industry.

The brand's product line is designed for eco-conscious consumers who value sustainability without compromising on style. Each bag is thoughtfully crafted to serve a dual purpose, offering practical features like compartments for small accessories while maintaining a chic, modern aesthetic. This multifunctionality caters to individuals looking for everyday convenience and a unique, fashion-forward product that aligns with their environmental values.

Beyond its commitment to sustainability, Upcycle Chic stands out by fostering innovation and creativity in design. By integrating recycled materials into fashionable items, the brand not only contributes to reducing environmental impact but also supports the growing trend of ethical consumerism. As more people seek out products with a purpose, Upcycle Chic provides a meaningful alternative, proving that sustainable fashion can be both trendy and functional.

## 1.2 PRODUCT RESEARCH

bag is defined as a container made of flexible material with an opening at the top, used for carrying things. In the context of fashion and sustainability, bags are often designed not just for utility but also to reflect personal style and values. The Upcycle Chic product is a modern example of this evolution, combining aesthetic appeal with eco-conscious design principles. Bags come in a variety of forms, from simple tote bags to sophisticated backpacks and multifunctional handbags.

However, from our research platforms like etsy and amazon most bags are made using new materials like leather, synthetic fibers, or plastic, which contribute to environmental degradation through resource extraction and waste. The Upcycle Chic breaks away from this norm by utilizing recycled plastic and old cloth, reducing both production waste and the environmental footprint associated with manufacturing. One of the standout features of the Upcycle Chic is its thoughtful design, which includes a small compartment to store smaller items like keys, cards, or accessories.

This addition enhances the bag's functionality, making it more practical for users who need to organize their belongings efficiently. The combination of versatility and sustainability sets the Upcycle Chic apart from conventional bags on the market. By integrating recycled materials, Upcycle Chic offers a creative alternative to traditional bags.

The materials not only serve a functional purpose but also contribute to the product's aesthetic, giving each bag a unique appearance based on the upcycled components. This personalization adds value for consumers who are looking for products that align with their sustainable lifestyle choices.

Moreover, the choice of high-quality recycled materials ensures that the Upcycle Chic is durable and long-lasting. This is critical because it encourages consumers to adopt a more sustainable approach to fashion by investing in fewer, higher-quality products that can be used over a longer period. The use of these materials also enhances the product's tactile and visual appeal, making it more attractive to consumers who prioritize eco-friendly fashion without compromising on style

### **1.3 PROBLEM STATEMENT**

In the current era, Camilla Barbarossa where sustainability and functionality are both increasingly prioritized, consumers face the challenge of finding products that align with their eco-conscious values while still meeting practical needs. Many conventional bags in the market are produced from new materials, which contribute to the growing environmental concerns, including waste and resource depletion

Additionally, these products often lack multifunctionality, making it difficult for users to carry and organize items effectively, especially in a fast-paced, on-the-go lifestyle. With the rising demand for eco-friendly products, there is a need for innovative solutions that repurpose existing waste, such as plastic and old textiles, into functional, stylish accessories.

This is where Upcycle Chic comes in, offering an upcycled bag that not only addresses sustainability but also adds practical elements, such as a small compartment for storing small items like keys or cards. The lack of compact, multi-functional bags that serve both environmental and organizational needs highlights the gap in the market that Upcycle Chic aims to fill. This bag provides consumers with an eco-friendly alternative that promotes both sustainability and convenience, empowering them to reduce their environmental footprint while staying organized in their everyday lives.

## **1.4 OBJECTIVE**

### **Objectives of our product are:**

1. Reduce environmental waste by using upcycled materials, promoting eco-friendly fashion choices.
2. Provide consumers with a versatile bag that includes a small compartment for easy organization, combining style with functionality.
3. Promote awareness around sustainable fashion, inspiring consumers to choose eco-conscious products that have minimal environmental impact

## **1.5 PROJECT QUESTIONS**

**Question 1-** 1. How can Upcycle Chic contribute to reducing environmental waste through sustainable fashion

**Question 2.** What are the benefits of using recycled materials in the design and production of Upcycle Chic bags?

**Question 3.** How does the multifunctional design of Upcycle Chic enhance its practicality for consumers?

## **1.6 SCOPE OF PROJECT**

This project examines the environmental effects of disposing of fabric waste, with a focus on Malaysia, where the Solid Waste Management Department reports that a significant percentage of all garbage generated annually is made up of plastic and fabric. It also looks at ways to reduce the environmental impact of the textile and apparel industries through the creation of functional, upcycled products such as the Upcycle Chic bag. The report further investigates the environmental benefits of using recycled materials like old cloth and plastic in the production of fashionable bags. The study focuses on the dual functionality of the product, which includes a dedicated small compartment for storing accessories, enhancing its usability. The conclusion will be based on the available public data from the Solid Waste Management Department, though it is acknowledged that waste statistics may vary by region. This study highlights the importance of repurposing waste and aims to reduce fabric and plastic waste disposal by introducing innovative, eco-friendly fashion solutions.

## 1.6 SIGNIFICANCE OF PROJECT

### 1.6.1 SWOT ANALYSIS

<b>STRENGTH</b> <ul style="list-style-type: none"><li>• Sustainable and eco friendly The product is made from recycled materials like plastic and old cloth, appealing to environmentally conscious consumers.</li><li>• Dual Functionality The bag includes a small compartment for accessories, increasing practicality and customer appeal.</li><li>• Unique Design Offering an upcycled, fashion-forward product sets it apart from mass-produced items.</li><li>• Cost-Effective Production Using recycled materials may reduce production costs, making it competitively priced</li></ul>	<b>WEAKNESS</b> <ul style="list-style-type: none"><li>• Limited Availability of Materials x Dependence on the availability of recyclable fabric and plastic could limit production scale.</li></ul>
<b>OPPORTUNITIES</b> <ul style="list-style-type: none"><li>• Growing eco conscious and consumer base the trend toward eco friendly and sustainable products is on the rise, and more consumers are prioritizing environmental impact in their purchasing decisions. Customization Offering customizable bags (in term of design, size or color) Could attract more customers looking for personalized eco friendly products.</li></ul>	<b>THREAT</b> <ul style="list-style-type: none"><li>• Fluctuating Material Costs Changes in the cost or availability of recycled materials could affect production and pricing.</li><li>• Competition from Established Brands Larger companies with established supply chains might enter the upcycled market, offering similar products at lower prices.</li></ul>



## **1.6 OPERATIONAL DEFINITION**

The name "Upcycle Chic" reflects the brand's commitment to stylish and sustainable fashion. "Upcycle" indicates that the products are made from repurposed materials, emphasizing the environmental aspect of the brand. "Chic" suggests that the bags are not only functional but also trendy and fashionable, appealing to consumers who value aesthetics alongside sustainability.

Upcycle Chic offers a solution to the problem of fabric waste in the fashion industry. By using recycled materials, the product helps reduce the amount of waste sent to landfills and promotes the concept of sustainable fashion. The bags are designed to be versatile and multifunctional, addressing the needs of consumers who seek both utility and style in their accessories.

The global textile industry generates significant waste, with millions of tons of fabric discarded each year. Upcycle Chic tackles this issue by transforming waste materials into desirable fashion items. For example, instead of throwing away damaged fabric or plastic, these materials are creatively upcycled into stylish bags, thus contributing to waste reduction.

Upcycle Chic directly contributes to reducing fabric waste and promoting sustainability. Each bag produced minimizes the environmental footprint associated with new fabric production. Next, The product raises awareness about sustainable fashion practices, encouraging consumers to consider the environmental impact of their purchasing decisions. The bags are designed to be multifunctional, serving various purposes, which helps consumers make the most out of their purchase.

The small compartment within each bag allows users to store and organize small items such as keys, makeup, or accessories. This feature enhances the bag's practicality, making it suitable for everyday use. By providing a dedicated space for smaller items, Upcycle Chic helps users avoid clutter and easily access their essentials, contributing to a more organized lifestyle.

## **1.7 SUMMARY**

Upcycle Chic represents a meaningful step toward sustainable fashion by transforming recycled materials into stylish, functional bags. With a focus on reducing textile waste, the product not only addresses environmental concerns but also meets the practical needs of consumers. The innovative design, featuring a small compartment for organization, enhances usability while appealing to eco-conscious individuals seeking both functionality and style. As awareness of environmental issues grows, Upcycle Chic positions itself as a viable solution for consumers looking to make responsible purchasing choices. By promoting the principles of upcycling and sustainability, the brand not only contributes to waste reduction but also inspires a shift toward a more eco-friendly lifestyle in the fashion industry. Ultimately, Upcycle Chic embodies the potential for fashion to be both stylish and sustainable, paving the way for a greener future.

## **CHAPTER 2 LITERATURE REVIEW**

### **2.1 INTRODUCTION**

The growing need for eco-friendly solutions in fashion is becoming more urgent due to environmental challenges like pollution and waste. Upcycling offers an innovative way to tackle these problems by transforming old or discarded materials into new, functional items. The Upcycle Chic mini cupcake bag is a perfect example of this. Made from recyclable materials like plastic bottles and left over fabrics from tailor shop, this bag not only reduces waste but also promotes sustainability. It aligns with the Sustainable Development Goals (SDGs), especially SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action), by encouraging people to make more sustainable choices.

Research has shown that upcycled products can be both stylish and practical. For instance, Ong et al. (2021) and Abidin et al. (2022) explored how upcycling can create useful and aesthetically appealing products. Like the mini cupcake bag, these upcycled items meet consumer needs for both fashion and functionality while minimizing environmental impact.

The Upcycle Chic bag is versatile and ideal for everyday use, whether for shopping, commuting, or casual outings. It not only helps reduce waste but also supports creative and sustainable fashion choices. By choosing upcycled products like this bag, consumers contribute to waste reduction and more sustainable lifestyles.

In conclusion, the Upcycle Chic mini cupcake bag highlights the potential of upcycling in the fashion industry. It serves as an example of how eco-friendly design can combine style, practicality, and sustainability, helping to address environmental challenges.

## **2.2 PREVIOUS STUDIES / REVIEW / INVESTIGATIONS**

The purpose of this section is to provide context for research proposals by summarizing related previous studies. Overall, it relates to the study of the Upcycle Chic mini cupcake bag, focusing on the target market audience for this sustainable fashion product.

Based on previous research, the target market for upcycled products includes environmentally-conscious consumers who prioritize sustainability and eco-friendly solutions. For example, individuals who value reducing waste and making sustainable fashion choices are drawn to products like the Upcycle Chic mini cupcake bag, which is made from recycled materials such as plastic bottles and old clothes. This market often includes people who are interested in the environmental impact of their purchases and who prefer stylish, functional items that support responsible consumption. Items like reusable water bottles, coffee cups, metal straws, and shopping bags. These are designed to reduce single-use plastic consumption.

Additionally, younger consumers, such as college and university students, are attracted to upcycled products for their versatility and unique designs. These consumers often live in shared or small spaces and appreciate compact, multipurpose items like the Upcycle Chic mini cupcake bag. Moreover, fashion-forward individuals and sustainability advocates are key users of such eco-friendly accessories, especially when these products align with Sustainable Development Goals (SDGs) like SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action).

Regarding the aesthetic and functional appeal, previous studies highlight the importance of creating products that balance design and practicality. Upcycled fashion items such as the Upcycle Chic mini cupcake bag are not only environmentally beneficial but also visually appealing. Designers focus on creating products that fit the modern lifestyle, which increases the usability and market success of upcycled products.

Previous research on developing upcycled fashion products often includes user surveys or interviews to better understand consumer preferences. Building prototypes, as seen with other upcycled products, allows designers to test durability, functionality, and user satisfaction.

Gathering feedback from users is crucial in refining designs and ensuring optimal usability and comfort.

In conclusion, by considering the preferences of the target market, the design process for the Upcycle Chic mini cupcake bag ensures that the final product meets user needs while supporting sustainable practices. This method provides maximum satisfaction and optimal usability for environmentally-conscious consumers.

## **2.3 SUMMARY**

Research on upcycled fashion products, such as the Upcycle Chic mini cupcake bag, shows a growing interest among sustainability-conscious consumers who value eco-friendly solutions. These studies highlight those consumers, particularly young adults and students, are attracted to products that combine sustainability with practicality and style.

The target market prioritizes eco-conscious materials like recycled plastic bottles and old clothes, while designers focus on creating visually appealing, functional items that align with the Sustainable Development Goals (SDGs). Previous studies emphasize the importance of consumer feedback, testing prototypes to ensure durability and usability, which ultimately leads to more refined, user-centric designs.

## **CHAPTER 3 METHODOLOGY**

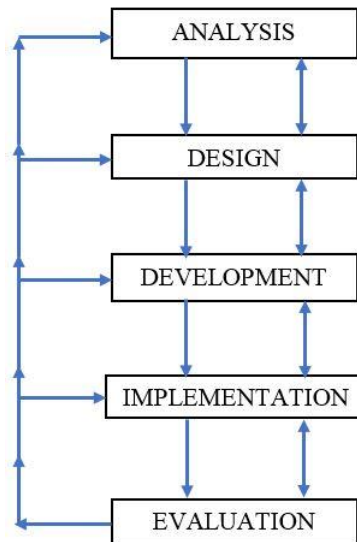
### **3.1 INTRODUCTION**

This chapter outlines the methodology employed in the development of the Upcycle Chic project. The purpose of the methodology is to provide a clear framework for understanding the processes and techniques used to create the final product, including the design, material selection, and data collection methods. The methodological approach focuses on sustainability, with particular emphasis on upcycling and eco-friendly practices. This section will detail the project design, production techniques, materials used, and data collection methods, ensuring that all steps taken align with the project's objective to promote responsible consumption and reduce environmental waste.

### **3.2 PROJECT DESIGN**

The project design for Upcycle Chic follows the ADDIE model to ensure a structured and efficient development process. This model provides a step-by-step guide, enabling the team to systematically plan, create, and evaluate the product.

Here is an example of how the ADDIE model could be applied to the development of an Upcycle Chic:



## **ANALYSIS**

During the Analysis phase, the team identified the core environmental issues surrounding textile and plastic waste and assessed market gaps. The focus was on the needs of environmentally conscious consumers looking for multifunctional and sustainable products. This phase also involved aligning the project with broader sustainability goals, such as the United Nations' Sustainable Development Goals (SDG 12: Responsible Consumption and Production).

## **DESIGN**

In the Design phase, the team conceptualized a chic, multifunctional bag made from upcycled materials. The design included practical features such as a compartment for small items, with emphasis placed on both aesthetics and functionality. Sketches and 3D models were created to visualize the final product, ensuring that the design met both consumer needs and sustainability objectives.

## **DEVELOPMENT**

The Development phase involved the sourcing of recycled materials, including discarded plastic and fabrics, and the creation of prototypes. These prototypes were tested for durability and user satisfaction, undergoing iterative refinement to improve their practicality and aesthetic appeal based on feedback.



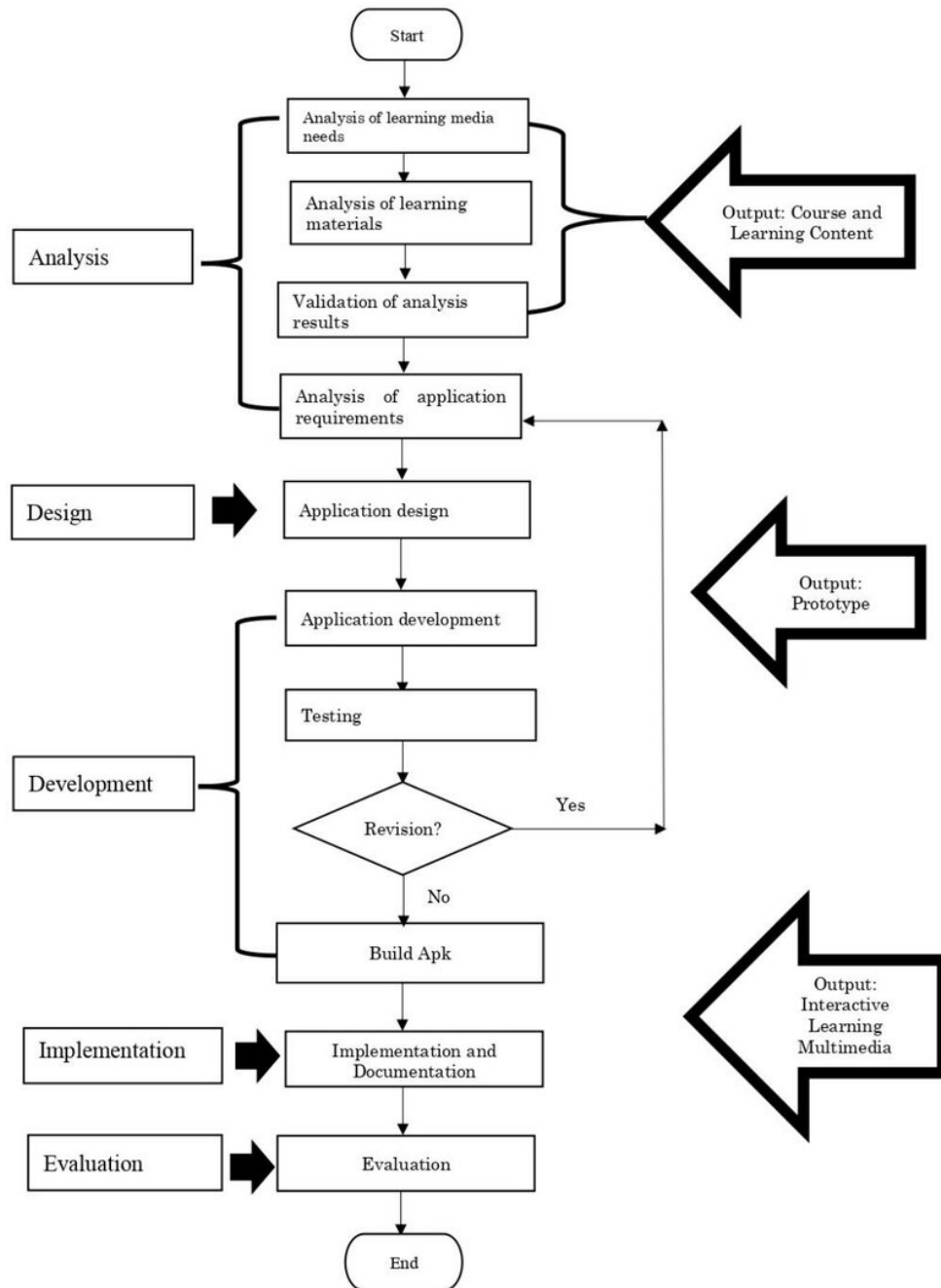
## **IMPLEMENTATION**

The Implementation phase saw the final production of the Upcycle Chic bag, with an emphasis on quality control and adherence to the eco-friendly production process. The team ensured that the product was produced efficiently, using upcycled materials to reduce waste. Additionally, strategies for product distribution through eco-friendly channels and partnerships with sustainable brands were developed.

## **EVALUATION**

Finally, the Evaluation phase assessed the overall success of the project through both formative and summative evaluations. Continuous feedback during development helped refine the product, while post-production evaluation focused on user satisfaction and market reception. The project's environmental impact was measured by tracking waste reduction and promoting responsible consumption, confirming that the Upcycle Chic met its sustainability goals.

### 3.2.1 FLOW CHART



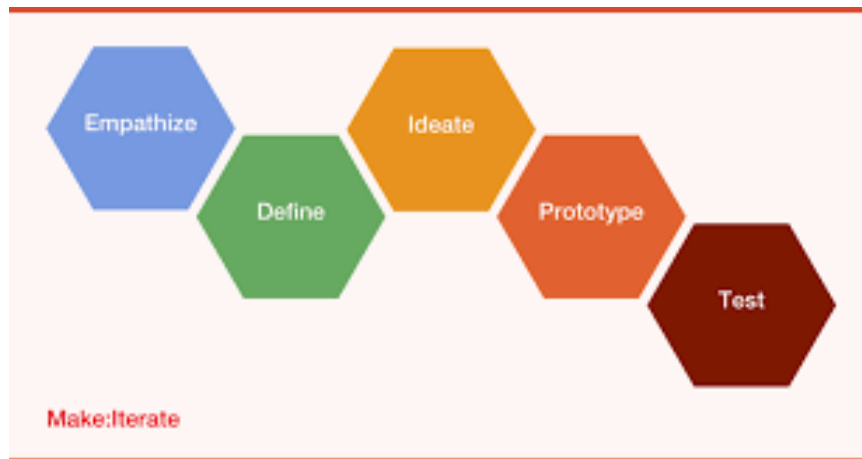
### 3.2.2 OPPORTUNITIES AND CHALLENGES

The Upcycle Chic project presents significant opportunities in the growing sustainable fashion market. With increasing consumer awareness around environmental issues, there is a rising demand for eco-friendly products, making the Upcycle Chic bag highly relevant to eco-conscious buyers. This trend toward responsible consumption and the circular economy provides a unique opportunity for the brand to tap into the upcycling movement, which focuses on reducing waste by repurposing materials. Furthermore, as sustainable fashion gains popularity, Upcycle Chic has the potential to build strong brand loyalty among customers who prioritize environmental responsibility in their purchasing decisions. The project also offers opportunities for innovation, with the multifunctional design of the bag allowing the product line to expand into other sustainable fashion items. Additionally, growing global interest in eco-friendly products opens the door for expanding into new markets, where partnerships with green initiatives and eco-conscious retailers could increase visibility and reach.

However, the project also faces several challenges. One of the primary obstacles is the limited availability of high-quality recycled materials, such as plastic and fabric, which may hinder consistent production. The fluctuating supply of upcycled materials could lead to difficulties in scaling the product. Moreover, competition from larger, established fashion brands that are now entering the sustainable market space is another significant challenge. These companies often have more resources and better supply chains, allowing them to produce similar products at lower costs. Speaking of costs, the process of collecting and transforming discarded materials can be expensive, making it difficult to maintain competitive pricing against conventional products. Additionally, the fast-paced nature of the fashion industry, where consumer preferences change rapidly, poses a challenge in staying relevant. Finally, raising consumer awareness about the environmental impact of their fashion choices and convincing them to opt for upcycled products over traditional ones requires substantial education and marketing efforts. Balancing these opportunities and challenges is key to the success of the Upcycle Chic project.

### 3.3 METHOD /PROCEDURE /PROJECT PRODUCTION TECHNIQUE

For the method we use the Design Thinking method. It provides a human-centered approach to solving problems and creating innovative products. In the context of the Upcycle Chic project, the Design Thinking process follows five key stages: Empathize, Define, Ideate, Prototype, and Test.



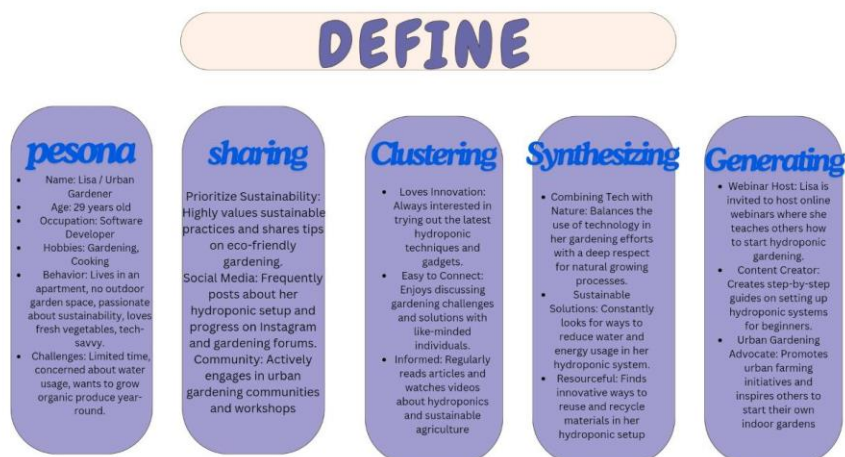
#### 3.3.1 EMPATHIZE

Empathize the first step involved understanding the needs and values of eco-conscious consumers. The team conducted interviews, surveys, and market research to explore the growing demand for sustainable fashion. This stage helped identify key insights about the target audience, such as their desire for eco-friendly products that combine practicality and style. The findings highlighted the frustration many consumers feel with the limited availability of fashionable, environmentally responsible bags, as well as the need for multifunctionality in their daily lives.



### 3.3.2 DEFINE







Define based on the insights gained during the Empathize stage, the problem was clearly defined: there is a lack of stylish and multifunctional bags made from upcycled materials that align with consumers' sustainability goals. The team framed the problem as: “How might we create a fashionable and practical bag that reduces waste through upcycling, while providing functionality for everyday use?” This step helped focus the project on addressing both environmental concerns and the practical needs of the target audience.









### 3.3.3 IDEATE

In the ideation phase, the team brainstormed various creative solutions to solve the defined problem. They explored different design ideas for the Upcycle Chic bag, including materials, functionality, and aesthetic appeal. Ideas such as incorporating a dedicated compartment for small items, making the bag modular, and using visually appealing upcycled fabrics were considered. The team also explored ways to repurpose discarded plastic and textiles in a way that enhances the product's uniqueness and sustainability. Multiple sketches and concepts were generated to visualize these ideas.

## FIRST ROUND

 <b>Team member 1</b> <ul style="list-style-type: none"> <li>Eco-friendly</li> <li>Less space</li> <li>Less use the water</li> <li>Suitable for house are such as apartment, condominium and etc</li> </ul>	 <b>Team member 2</b> <ul style="list-style-type: none"> <li>Fruit and Vegetable Peels: Apple, banana, potato, carrot, and other fruit or vegetable peels.</li> <li>Coffee Grounds: Used coffee grounds are rich in nitrogen.</li> <li>Eggshells: Crushed eggshells add calcium to the soil.</li> </ul>	 <b>Team member 3</b> <ul style="list-style-type: none"> <li>reducing green house emission</li> <li>reducing waste and pollution</li> <li>improving air and water quality</li> <li>reducing exposure to toxic materials</li> </ul>
 <b>Team member 4</b>	 <b>Team member 5</b>	<ul style="list-style-type: none"> <li>Each student writes or sketch an idea on his/her own space (2 minutes)</li> <li>Each student explains his/her sketch (3 minutes)</li> </ul> 

## FIRST ROUND

 <b>Team member 1</b> <ol style="list-style-type: none"> <li>Hydroponic plants             <ul style="list-style-type: none"> <li>water efficiency</li> <li>less space</li> <li>easy to plants</li> <li>can maintain the quality of ventilation</li> </ul> </li> </ol>	 <b>Team member 2</b> <ol style="list-style-type: none"> <li>Organic Fertilizers from Food Waste             <ul style="list-style-type: none"> <li>Description: Fertilizers created from composted food scraps, coffee grounds, or fruit and vegetable peels. These fertilizers enrich soil without the use of synthetic chemicals.</li> </ul> </li> </ol>	 <b>Team member 3</b> <ol style="list-style-type: none"> <li>Plant-Based Laundry Detergent             <ul style="list-style-type: none"> <li>This detergent is made from plant-based ingredients that are biodegradable and free from harsh chemicals like phosphates and synthetic fragrances..</li> </ul> </li> </ol>
 <b>Team member 4</b>	 <b>Team member 5</b>	<ul style="list-style-type: none"> <li>Each student writes or sketch an idea on his/her own space (2 minutes)</li> <li>Each student explains his/her sketch (3 minutes)</li> </ul> 

## FINAL ROUND

## UPCYCLE CHIC

Help to reuse items that can be used such as old clothes, plastic bottles or items that are difficult to extract from the ground. This can also reduce soil pollution and so on. Upcycle chic is a solution to help reduce the disposal of items that can still be used, it is made from used materials such as waste cloth, plastic bottles and used goods, this product is also specially designed with a unique and innovative shape that can attract customers to buy and use



## 3.3.4 PROTOTYPE

Once the design ideas were finalized, the team moved to the Prototype phase. They created several prototypes of the Upcycle Chic bag using recycled materials like old fabrics and plastics. These prototypes were used to test different aspects of the design, including durability,

[illegible]

In the final Test phase, the prototypes were tested by potential users to gather feedback on their usability, comfort, and style. Consumers were asked to provide input on the practicality of the bag, such as whether it met their organizational needs and whether they found it visually appealing. Based on the feedback, the team made iterative improvements to the design. The testing process helped refine the final product, ensuring that the Upcycle Chic bag not only aligned with the users' expectations but also met its sustainability and multifunctionality objectives.



### 3.4 MATERIALS AND EQUIPMENT

Materials:



Fabric cloth



Denim cloth



Button



Rubber band





Plastic bottle

Equipment:



Sewing machine

### **3.5 METHOD OF COLLECTING DATA**

The actual data for this study was collected from our students, lectures and staffs from Polytechnic Sultan Salahuddin Abdul Aziz Shah. Data will be collected using a questionnaire technique given to respondents. The questionnaire is made in the form of a Google Form. Therefore, we need to spread it through the link:

[https://docs.google.com/forms/d/e/1FAIpQLSeN0XjlF59bon1cv99Xv21NBHK9ApYMLK5u1YJ6qgDNmJUmcg/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSeN0XjlF59bon1cv99Xv21NBHK9ApYMLK5u1YJ6qgDNmJUmcg/viewform?usp=sf_link)

The number of respondents at the level is 20 people. With that, we produce products and achieve objectives based on that data. Other than that, we will consider the respondent opinion and produced the better product for them than their current one.

### **3.6 SUMMARY**

The methodology for the Upcycle Chic project followed a structured and human-centered approach, incorporating both the ADDIE and Design Thinking models to ensure a systematic and innovative process. The project began with an Analysis phase to identify the environmental problem of textile and plastic waste, focusing on creating a sustainable, multifunctional product. The Design and Ideation stages emphasized creativity, exploring different ways to upcycle discarded materials into a chic and functional bag.

Throughout the Development and Prototyping phases, recycled materials were sourced, and several prototypes were produced to test and refine the design. The product was iteratively improved based on user feedback to ensure it met both the practical and aesthetic needs of eco-conscious consumers. The Implementation phase involved finalizing the production process, with a focus on minimizing waste and maintaining quality standards.

Finally, the Evaluation and Testing phases assessed the product's effectiveness in terms of usability, durability, and alignment with sustainability goals. This feedback loop allowed for further refinement of the Upcycle Chic bag, ensuring it met both consumer expectations and environmental objectives.

## **CHAPTER 4**

### **DATA ANALYSIS AND RESEARCH FINDING**

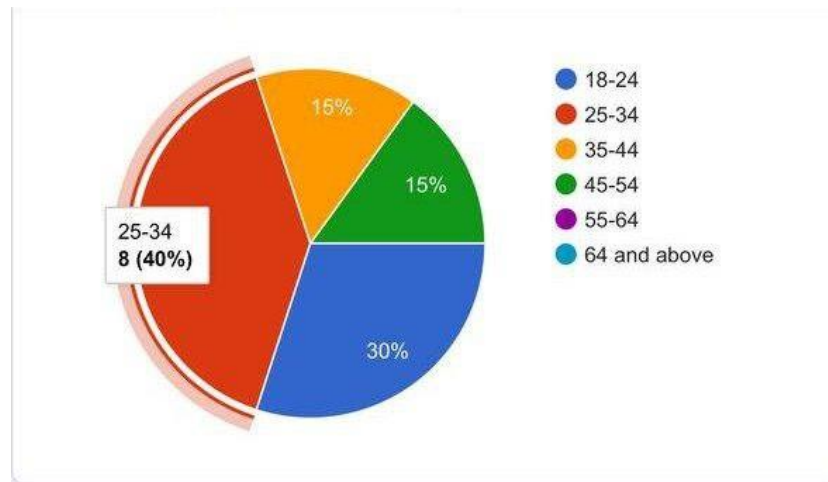
#### **4.1 INTRODUCTION**

This chapter presents the results of the data analysis conducted for the Upcycle Chic project. It includes a detailed examination of the findings gathered from the respondents through the questionnaire, reliability measurements, and descriptive statistics. The results are discussed in relation to the project's objectives, focusing on the impact of upcycled fashion on consumer preferences and environmental sustainability.

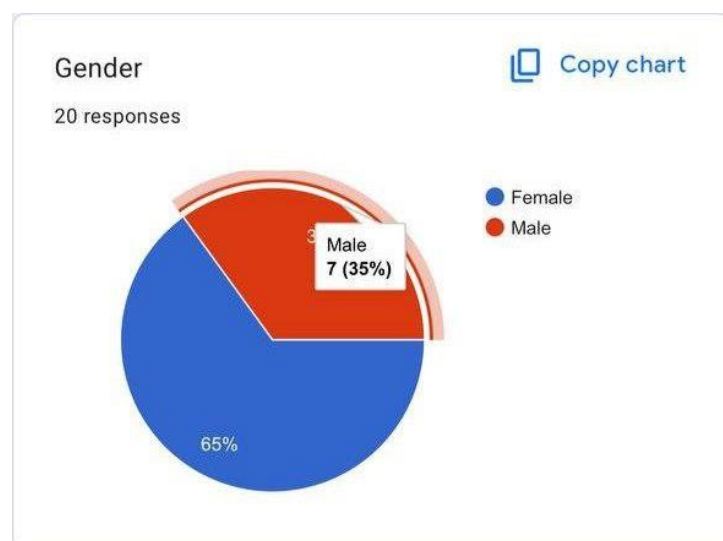
#### **4.2 SAMPLE AND PROFILE**

For our project, we collected feedback from students, lecturers, and staff at Polytechnic Sultan Salahuddin Abdul Aziz Shah. We used a Google Form to distribute the survey and gather responses. In total, 20 participants took part in our survey.

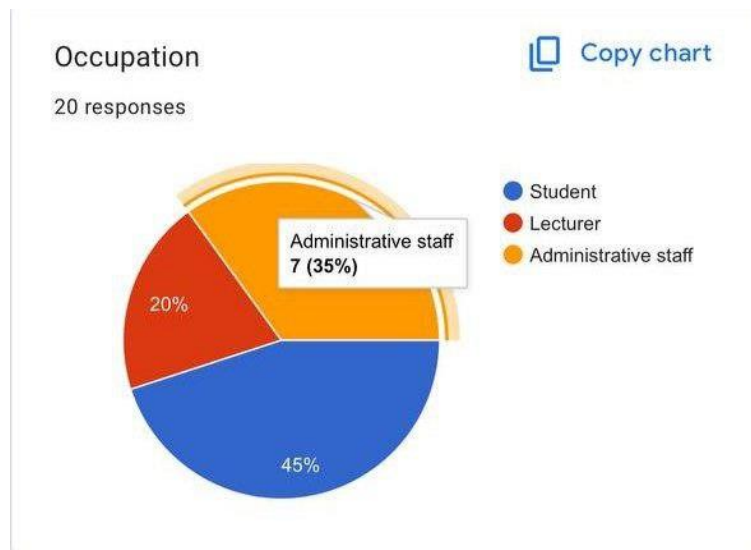
Respondent demographic		Frequency	Percentage
Age	18-24	6	30%
	25-34	8	40%
	35-44	3	15%
	45-54	3	15%
Gender	Male	7	35%
	Female	13	65%
Occupation	Student	9	45%
	Lecturer	4	20%
	Administrative staff	7	35%



The table shows the profile of respondents for the questionnaire. According to age, the number of respondents is 6 (30%) in the categories of 18- 24, 8 (40%) in the categories of 25-34, 3 (15%) in the categories of 35-44, 3 (15%) in the categories of 45- 54. The total respondents are 20.



According to gender, 13 (65%) are female and 7 (35%) are male.



According to occupation, 9 (45%) are students, 7 (35%) are administrative staff and 4 (20%) are lecturer.

### 4.3 RELIABILITY OF MEASUREMENT

The Cronbach's Alpha Coefficient was used to measure the consistency of each item in the instruments. For ease of comprehension, each question's dimension was determined independently. The consistency of a measuring instrument in measuring whatever notion it is measuring is then determined through reliability analysis. The idea of reliability of measure refers to the consistency and stability with which the instrument applies the concept and aids in determining the "quality" of a measure.

Number of items	Number of items discard	Cronbach's Alpha
8	-	0.716

As a rule of Nunnally, 1978 the variable show on the result of Cronbach's Alpha is in a good level value which is above then 0.7. Due to our result for Upcycle Chic shows above, we achieved above than 0.7 which is 0.716.

#### 4.4 DESCRIPTIVE ANALYSIS

Code		N	Mean	Std. Deviation
POL1	Soil Pollution and waste pollution affects me.	20	4.30	0.750
POL2	I am concerned about the effects of Soil Pollution and waste pollution on my health.	20	4.30	0.750
POL3	The public and Industries should switch to environmentally friendly lifestyle.	20	4.30	0.794
POL4	Government and others should take responsible for waste management.	20	4.30	0.702
POL5	Improving the environment is every citizen duty.	20	4.30	0.702
POL6	Soil, waste pollution and other type of pollutions does not impact any member of the society	20	4.43	0.568
POL7	The government must take initiatives in promoting and encouraging environment friendly options even if, they have to increase the taxes slightly high.	20	1.17	0.379
POL8	The Public and Industries should be fined for Soil and Waste Pollution.	20	4.30	0.794
	Valid N (list wise)	20		

Table 2: SSPN Analysis of Respondents



UPCYCLE CHIC provides important statistical information to analysis and make a decision that enables us to accomplish tasks. Table 2 shows that the highest mean score is POL6 which is "Soil, waste pollution and other type of pollutions does not impact any member of the society with a mean score of 4.43. The standard deviation for the questions is 0.568 which means a standard deviation shows that the data are clustered closely around the mean (more reliable). The lowest mean score is " The government must take initiatives in promoting and encouraging environmentally friendly options even if they have to increase the taxes slightly high ", with a mean score of 1.17. The standard deviation for this question is 0.379 which means a standard deviation shows that the data is widely spread

#### **4.5 SUMMARY**

Based on the data we received from distributed questionnaires responded consist of student of Polytechnic Sultan Salahuddin Abdul Aziz Shah. We have done a data analysis using SPSS and the result is mostly the respondents is satisfied with Upcycle Chic because the objective was to produce a product that can filter out the pollutants in the soil and waste were successfully produced with reasonable price.

## **CHAPTER 5**

### **CONCLUSION AND RECOMMENDATION**

#### **5.1 INTRODUCTION**

This chapter presents the conclusion, recommendations, and limitations of the Upcycle Chic project. These sections aim to assess the project's success in meeting its objectives and identify areas for future enhancement. We also reflect on the challenges faced during the project's implementation and suggest improvements to ensure its long-term sustainability and impact.

#### **5.2 CONCLUSION**

At the conclusion of the Upcycle Chic project, we successfully met our objectives of creating an eco-friendly, dual-purpose bag made from recycled materials. The product addresses the pressing issue of waste management by repurposing plastic and fabric waste into a functional and stylish bag. Feedback from users confirmed the practicality, design appeal, and eco-conscious nature of the product.

During the project's development, we faced and overcame several challenges, including sourcing suitable materials and optimizing the design for durability and versatility. Strong collaboration and persistence were vital to navigating these challenges and ensuring project success.

The Upcycle Chic project not only demonstrates the viability of using recycled materials in innovative ways but also contributes to raising awareness about sustainability. By promoting an eco-conscious lifestyle, the product aligns with broader environmental goals and encourages individuals to make sustainable choices in their daily lives.

## 5.3 RECOMMENDATION

Building on the success of Upcycle Chic, we recommend several steps for future development:

**1. Expanding Design Options:** Future iterations of the product could include various designs, sizes, and features to cater to a wider audience. Customizable options could also be explored to meet diverse user preferences.

**2. Enhanced Material Sourcing:** Establishing partnerships with recycling centers or other organizations could ensure a consistent supply of high-quality materials while reducing costs.

**3. Educational Outreach:** Incorporating educational campaigns about sustainability and the benefits of upcycling could increase awareness and demand for the product. Workshops or collaborations with schools and community groups could be effective in this regard.

**4. Technological Integration:** Using QR codes or labels to share the story of each bag—such as the materials used and the environmental impact reduced—could engage users more deeply and highlight the product's sustainability message.

**5. Scaling Production:** Securing additional funding or collaborations with eco-friendly brands can support larger-scale production and distribution. This would also make the product more accessible to a broader market.

## 5.4 LIMITATIONS OF THE PROJECT

Despite the achievements of the Upcycle Chic project, certain limitations were encountered:

**1. Material Availability:** Sourcing consistent and high-quality recycled materials proved challenging, occasionally delaying production.

**2. Durability Testing:** While the bag is designed for everyday use, extensive long-term testing was limited due to time constraints. Future versions should focus on rigorous durability assessments.

**3. Awareness and Marketing:** Reaching a larger audience was hindered by limited resources for marketing and promotion. Expanding outreach efforts through digital platforms and partnerships is necessary.

**4. Production Costs:** The initial cost of production, particularly for handmade processes, was higher than anticipated, which could impact pricing and scalability. Exploring cost-effective production techniques is essential.

## 5.5 SUMMARY

In summary, the Upcycle Chic project achieved its goal of creating an innovative product that blends functionality, style, and sustainability. By addressing environmental concerns and promoting the value of upcycling, the project has the potential to inspire broader adoption of sustainable practices.

Feedback has been overwhelmingly positive, validating the utility and design of the product. Moving forward, focusing on the recommendations and addressing the identified limitations will help enhance the project's impact and scalability, ensuring Upcycle Chic becomes a benchmark for sustainable innovation.

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**GANTT CHART**

<b>GANTT CHART</b>	<b>WEEK 1</b>	<b>WEEK 2</b>	<b>WEEK 3</b>	<b>WEEK 4</b>	<b>WEEK 5</b>	<b>WEEK 6</b>	<b>WEEK 7</b>	<b>WEEK 8</b>	<b>WEEK 9</b>	<b>WEEK 10</b>
<b>EMPATHY PROCESS</b>										
<b>PROBLEM DEFINTIONS PROCESS</b>										
<b>IDEATE</b>										
<b>PROTOTYPE</b>										
<b>TESTING</b>										