

Tiffany: Ukay-Ukay Online Shop

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Abstract: *Tiffany: Ukay-Ukay Online Shop is an emerging e-commerce platform that specializes in the sale of secondhand clothing and accessories, inspired by the long-standing tradition of ukay-ukay in the Philippines. This study presents a comprehensive analysis of Tiffany and its position within the broader ukay-ukay market. The research delves into the challenges and opportunities faced by this online platform and investigates the factors influencing customer behavior and preferences when shopping for secondhand clothing online. Drawing on both primary and secondary data, the study evaluates Tiffany's current state and performance, examining its product offerings, pricing strategies, and online presence. Through surveys and interviews with online ukay-ukay shoppers, customer preferences and shopping habits are explored, revealing insights into the drivers behind purchasing decisions in the digital thrift store setting. This study contributes valuable insights into the digital transformation of the ukay-ukay industry and the opportunities it presents for promoting sustainable fashion practices and reducing textile waste. Furthermore, the research sheds light on the potential growth and future prospects of the online ukay-ukay market in the Philippines*

Keywords: e-commerce, sustainable fashion, customer behavior, online shopping, thrift store

I. INTRODUCTION

Tiffany: Ukay-Ukay Online Shop is an emerging e-commerce platform specializing in the sale of secondhand clothing and accessories. Derived from the Filipino term "ukay-ukay," which means "to dig" or "to search," ukay-ukay shops have been a longstanding tradition in the Philippines, where thrift stores offer a wide array of pre-loved items at affordable prices. Tiffany, as an online ukay-ukay shop, aims to capitalize on the growing popularity of sustainable fashion and the convenience of online shopping to provide customers with a diverse selection of quality used garments and accessories.

The ukay-ukay industry has deep roots in the Philippine culture and economy. Historically, it traces its origins back to the 1980s when used clothing donations from foreign countries, primarily the United States, found their way to local Philippine markets [1]. These donated items were sold at affordable prices, making fashion accessible to a broader segment of the population.

Over the years, the ukay-ukay industry has evolved and become an essential part of Filipino shopping culture. Thrift stores and ukay-ukay stalls have become common sights in various urban and rural areas, offering a cost-effective alternative for consumers seeking fashionable clothing without breaking the bank. The industry not only caters to budget-conscious shoppers but also promotes sustainable fashion practices by extending the lifespan of clothing items and reducing textile waste.

II. BACKGROUND OF THE STUDY

The online shopping industry has experienced remarkable growth in recent years, fueled by technological advancements, changing consumer preferences, and the increasing availability of internet access. E-commerce has become a significant driver of retail sales globally, providing convenience and accessibility to a wide range of products and services. According to Statista, the global e-commerce market is projected to reach 4.9 trillion US dollars in 2021, with Asia being a major contributor to this growth [2].

Several studies have explored the ukay-ukay market in the Philippines, shedding light on its historical roots, evolution, and socio-economic impact.

Smith conducted a comprehensive study on thrift stores in the Philippines, including ukay-ukay shops, and highlighted their role in promoting affordable fashion and reducing clothing waste [3]. Gonzalez investigated consumer behavior in secondhand clothing e-commerce in the Philippines, providing insights into the motivations and preferences of ukay-ukay shoppers [4].

The online ukay-ukay sector presents both challenges and opportunities. One key challenge is building and maintaining customer trust in the quality and authenticity of secondhand items sold online. Lopez examined the impact of e-commerce on sustainable fashion practices, emphasizing the need for transparency and effective quality control in the online ukay-ukay market [5]. Additionally, logistics and delivery issues, as well as the competition from traditional brick-and-mortar thrift stores and other e-commerce platforms, are factors that require consideration in this growing sector.

On the other hand, there are ample opportunities for growth and expansion in the online ukay-ukay market. The rising awareness of sustainable fashion and the growing trend of thrift shopping among environmentally-conscious consumers present a favorable environment for online thrift stores. A study by Tan explored the market potential of the ukay-ukay industry in the Philippines, emphasizing the positive response from younger generations who prioritize affordability and ethical consumption [6].

Several e-commerce platforms have played a significant role in the proliferation of secondhand clothing sales. Platforms like Poshmark, ThredUP, and Depop have gained popularity internationally, offering users the ability to buy and sell pre-loved fashion items. Studies by Chen and Greenfield assessed the success factors and strategies employed by these platforms, highlighting their impact on the second hand clothing market and their role in promoting sustainable fashion practices [7] [8].

III. METHODOLOGY

This study adopts a mixed-methods research design, combining both qualitative and quantitative data collection techniques, to gain comprehensive insights into Tiffany: Ukay-Ukay Online Shop and the broader online ukay-ukay market. The quantitative component involves conducting an online survey among a diverse group of previous online ukay-ukay shoppers, aiming to gather data on their shopping habits, preferences, and the factors influencing their decision-making process [9]. Concurrently, the qualitative aspect comprises semi-structured interviews with selected online ukay-ukay sellers and customers, exploring their experiences, challenges, and perspectives related to the online ukay-ukay market. Participants for the survey will be recruited using convenience and snowball sampling methods, while purposive sampling will identify interviewees based on their expertise and experience in the industry [10].

The sample for the survey will consist of a diverse group of online ukay-ukay shoppers, encompassing different age groups, genders, and geographical locations across the Philippines. Recruitment will be conducted from online ukay-ukay communities, social media groups, and relevant online platforms. For the interviews, a purposive sampling technique will be applied to select online ukay-ukay sellers and customers with varying levels of experience and knowledge [11]. The inclusion of both established and new sellers and customers will offer a comprehensive understanding of the market dynamics.

Data analysis will involve the use of both quantitative and qualitative methods. The survey data will be analyzed using statistical software, such as SPSS, to perform descriptive statistics and present the findings [12]. On the other hand, the qualitative data obtained from the interviews will undergo thematic analysis. Transcribed interviews will be scrutinized to identify recurring themes and patterns, providing deeper insights into the participants' experiences and perspectives [13]. By triangulating the results from the survey and interviews, the research outcomes will be validated, offering a comprehensive view of Tiffany: Ukay-Ukay Online Shop and the broader online ukay-ukay sector.

IV. RESULTS AND DISCUSSION

The development of the Tiffany: Ukay-Ukay Online Shop application was carried out using a prototyping approach, which enabled iterative development based on continuous feedback from stakeholders.

This approach involved creating prototypes or early versions of the application to gather valuable input from users, sellers, and other stakeholders. By receiving feedback early in the development process, the team could make necessary adjustments and improvements, ensuring that the final product met the needs and expectations of its intended users.

Fig. 2. Example of an unacceptable low-resolution image

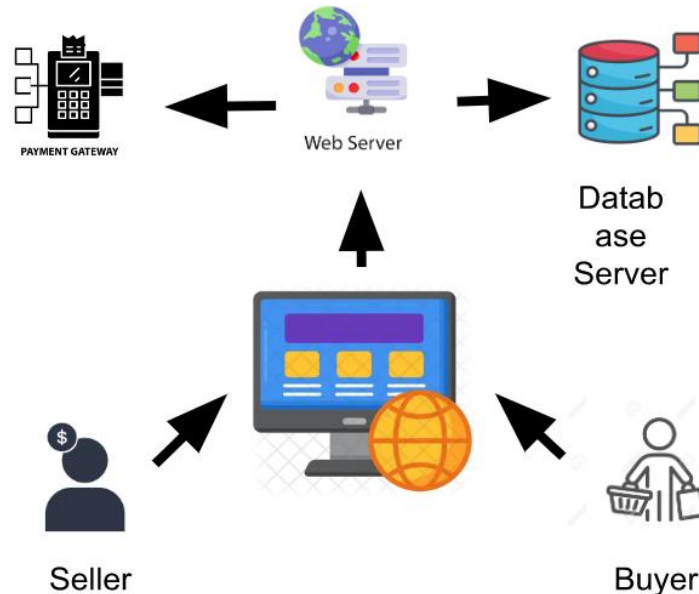


Fig. 1. System Architecture

4.1 System Architecture

The system architecture of the "Tiffany: Ukay-Ukay Online Shop" follows a three-tier structure, which includes the Presentation Layer, Application Layer, and Data Layer. At the Presentation Layer, the user interface (UI) is responsible for providing an interactive and user-friendly platform for both buyers and sellers. This tier encompasses web pages or mobile app screens that enable users to browse products, view product details, manage their accounts, and handle the shopping cart functionality.

The Application Layer acts as an intermediary between the Presentation Layer and the Data Layer. It consists of the web server, which processes incoming requests, retrieves and stores data, and sends appropriate responses to the user interface. The Application Logic, a crucial component within this layer, holds the core functionalities of the online shop, including user authentication, product listing, order processing, and payment integration. It ensures the accurate implementation of all business rules and processes.

Within the Application Layer, other modules include User Management, handling user registration, login, and user profile details; Product Management, responsible for product listing, editing, and deletion, as well as search and filtering capabilities; Order Processing, which manages the entire order lifecycle from creation to confirmation and tracking; and Payment Integration, a critical component handling secure payment processing through external payment gateways.

Lastly, the Data Layer houses the database, responsible for storing all application data, including user information, product details, orders, and transaction records. The database maintains data integrity and facilitates efficient retrieval and storage of information. The system architecture maintains modularity and scalability by facilitating well-defined interfaces between each layer, enabling easy maintenance, updates, and future expansions of the "Tiffany: Ukay-Ukay Online Shop" application.

4.2 Design and Development

To guarantee the fulfillment of the application's functional requirements, the researcher developed a use-case diagram and class diagram. These diagrams were meticulously crafted to encompass all the essential objects and classes needed to support the effective functionality of the application. The use-case diagram served as a comprehensive documentation of the system's requirements, outlining the interactions between actors (users) and the application's use cases (functionalities). It provided valuable guidance throughout the development process, ensuring that all necessary

features were addressed and implemented. On the other hand, the class diagram depicted the static structure of the application, illustrating the relationships and attributes of classes, enabling a clear understanding of how the various components of the system would interact. Fig. 2 shows the design use-case diagram. It shows the main interactions between the two main actors (buyer and seller) for the "Tiffany: Ukay-ukay Online Shop" application. There are two main actors: the "Buyer" who browses and purchases products and the "Seller" who lists and manages their products for sale. The use cases identified are as follows: "Register Account" allows both buyers and sellers to create new accounts, "Login" enables access to personalized features, "Search Products" allows buyers to find products using keywords or filters, "View Product Details" provides detailed information about a specific product, "Add to Cart" permits buyers to add items for purchase, "Manage Cart" enables buyers to view and handle their shopping cart items, "Place Order" allows buyers to finalize their purchase, "Manage Products" lets sellers add, edit, and delete their listed items, "Manage Orders" allows sellers to oversee and handle customer orders, and "Process Payment" handles secure payment processing during order checkout.

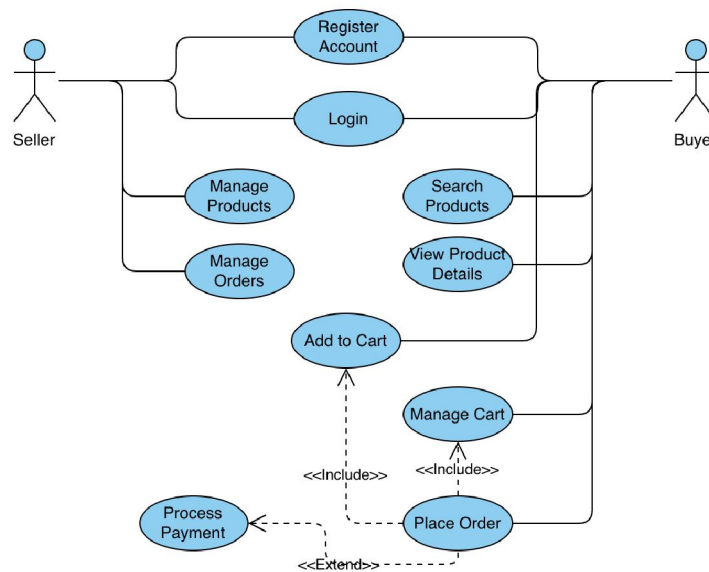


Fig. 2. Use Case Diagram

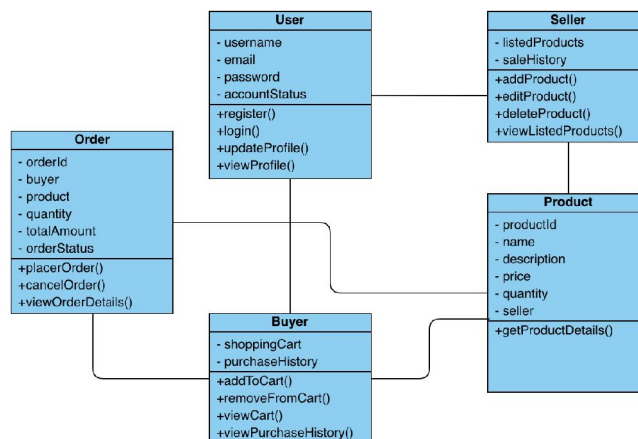


Fig. 3. Class Diagram

Fig. 3 shows the class diagram. It visually represents the system's architecture and the relationships between the different classes and entities within the "Tiffany: Ukay-Ukay Online Shop" application. It includes classes such as User, Buyer, Seller, Product, and Order, each with specific attributes and methods to support the application's functionality. The User class represents common attributes like username, email, password, and account status, with associated

methods like registration, login, and profile viewing. Both Buyer and Seller classes inherit from User and have additional attributes and methods to cater to their roles. The Product class holds information about products available for sale, such as name, description, price, quantity, and the corresponding seller. The Order class contains details about the orders, including the buyer, product, quantity, total amount, and order status, along with methods to place and cancel orders and view order details.

4.3 Tiffany: Ukay-Ukay Online Shop Application

The following gives the important details of the "Tiffany: Ukay-Ukay Online Shop" application following the design and development process. Fig. 4 shows the homepage of the application. The homepage of "Tiffany: Ukay-Ukay Online Shop" is designed to offer users an engaging and user-friendly experience. At the top of the page, a main menu provides easy navigation with essential links like "Home," "Products," and "Stores". The center of the page prominently displays the brand logo, representing the identity of the online shop. A prominent "Shop Now" button serves as a call-to-action, encouraging visitors to explore the available products. Below, a fashion image banner showcases a selection of pre-owned fashion items, captivating users' attention and drawing them further into the website. At the footer, users find links to relevant information and contact details, along with a subscription feature to receive updates and newsletters. Overall, the homepage aims to create a positive first impression, guiding users smoothly through the website and encouraging them to become potential buyers or sellers in the online shop.

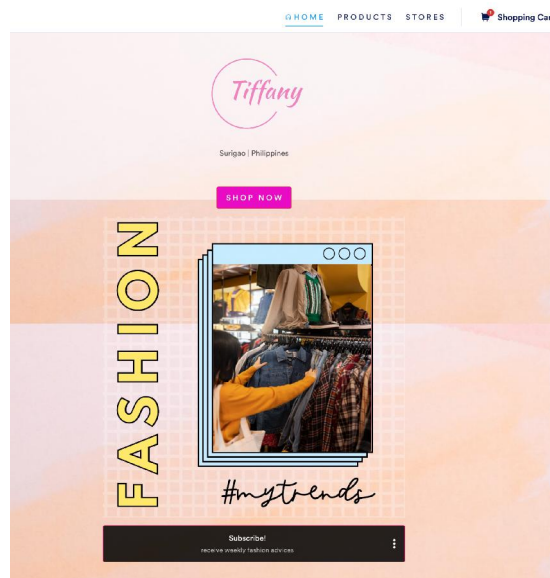


Fig. 4. Homepage

Fig. 5 shows the products page of "Tiffany: Ukay-Ukay Online Shop", it is meticulously designed to optimize users' shopping experience. The page features a consistent top main menu, allowing smooth navigation across different sections of the website. A shopping cart navigation menu enables users to view and manage their current shopping cart items conveniently. The header label "Featured Products" stands out at the top, highlighting the section that showcases popular or highlighted items. The search products functionality allows users to easily find specific items based on their preferences, streamlining the product discovery process. A well-organized list of products is presented with essential details, including product images, names, descriptions, and prices. For added convenience, an "Add to Cart" button is placed next to each product, allowing users to quickly add items to their shopping carts without having to visit individual product pages.

Fig. 6 shows the add to cart page of "Tiffany: Ukay-Ukay Online Shop". The page contains a shopping cart navigation menu that provides users with quick access to their current shopping cart, displaying the number of items and the total cost. At the top of the page, a prominent header label titled "Your Cart" clearly indicates its purpose, showcasing the contents of the user's shopping cart. The page features an order summary section, offering a detailed breakdown of the added products, including names, quantities, and individual costs.

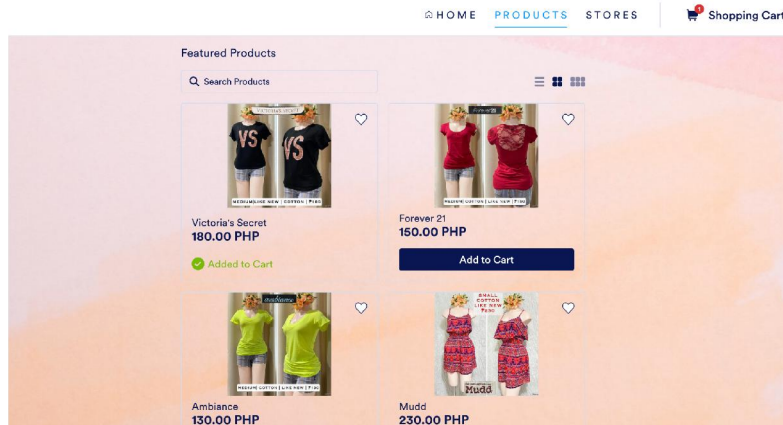


Fig. 5. Products Page

Additionally, some implementations may include a "Favorites" tab, allowing users to save desired products for future purchase. Each product entry is equipped with a "Remove" button, enabling users to easily manage their cart contents. The total cost of the ordered items is displayed prominently, allowing users to see the overall cost before proceeding to checkout.

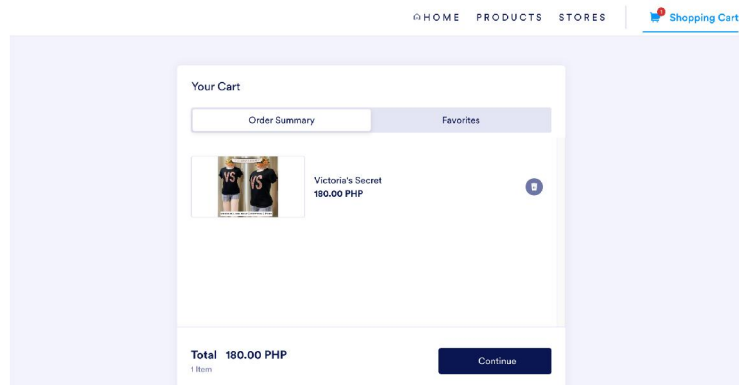


Fig. 6. Add to Cart Page

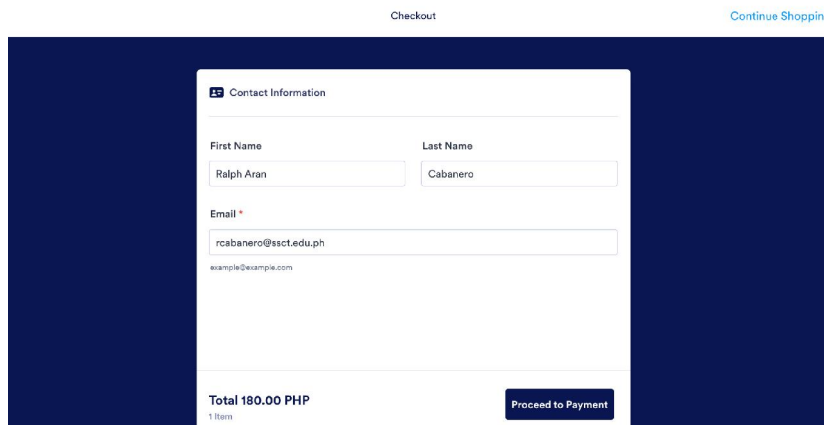


Fig. 7. Checkout Page

Fig. 7 shows the checkout page of "Tiffany: Ukay-Ukay Online Shop". The page is strategically crafted to facilitate a smooth and efficient order completion process. At the top, a prominent "Checkout" label is centered, indicating its purpose to users. In the top-right corner, a "Continue Shopping" button is provided, offering users the option to return to the previous page and continue browsing before finalizing their purchase. The page features a contact information form with labeled input fields for "First Name," "Last Name," and "Email," ensuring users can easily provide their details for the order. The total cost of the items in the shopping cart is clearly displayed, allowing users to review the

final amount before proceeding to payment. The most vital element on the page is the "Proceed to Payment" button, prominently positioned to initiate secure payment transactions for the order.

4.3 System Evaluation

The user interface (UI) and navigation of "Tiffany: Ukay-Ukay Online Shop" are visually appealing and user-friendly, with an easy-to-use main menu and shopping cart navigation. Functionality-wise, the core features for buying and selling pre-owned fashion items work seamlessly, though additional improvements like advanced filtering options could enhance user convenience. The system's performance is generally good, though during peak periods, there might be occasional lags. Security measures, such as secure payment gateways and password hashing, are commendable, but implementing HTTPS and regular security audits can enhance the system's robustness. Customer support channels are satisfactory, but providing a comprehensive knowledge base could empower users further. The platform's mobile responsiveness is impressive, offering a seamless experience on various devices. However, further improvements in mobile app development, if available, could be beneficial. The system provides good accessibility features but can aim for full compliance with accessibility guidelines. In terms of future development, introducing innovative features like personalized product recommendations or social media integrations can boost user engagement.

V. CONCLUSION

In conclusion, this research has delved into the design and development of "Tiffany: Ukay-Ukay Online Shop," a web-based application aimed at facilitating the buying and selling of pre-owned fashion items. The study successfully employed the prototyping approach, allowing iterative development based on stakeholder feedback. Object-oriented analysis and design were utilized to model the application's functionality and data, leading to a user-friendly and efficient system.

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