

A Survey on Garment Rental System

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Abstract — Due to the culture present in the Indian subcontinent, Indians are coerced to buy new clothes and jewelry for festivals and occasions. Many individuals have their wardrobe filled as they have purchased clothes or jewelry for one-time occasions which they no longer need. Individuals experience an impulse to buy new outfits which they will wear for a few times or probably not wear the outfit again, thus wasting a lump sum amount of money on them. The waste that is contributed by the individuals in the fashion industry is enormous and leads to many uncertain events.

According to recent statistics, the fashion industry contributes to the majority of wastage. Business enterprises in the fashion industry are responsible for significant negative environmental outcomes. Collectively, greenhouse emissions from textile production totalled one billion tonnes of CO₂ equivalent, more than that of all international flights and maritime shipping combined. As fashion value chains are globalized and the industry has a significant impact on the achievement of the UN Sustainable Development Goals (SDGs), international cooperation is important to foster sustainable fashion. Hence, it is necessary to build a green ecological civilization and one of the methods that can be implemented is the clothing renting system.

Ramp Ready is a website which provides rental services for clothes and jewelry on a daily or hourly basis. It will show the users the location of the shopkeepers or individuals nearby based on the filters that the users will apply. A chat option will be provided for the user to communicate with the rentee to discuss the price, size and the number of days the clothes will be required. Other features will be included in the website for the users like consulting fashionistas and virtual trial rooms. Rental validity extension and recommendations based on the user activity will be provided for the user's ease.

Additionally, environmental factors that relate to consumers' concerns about ethics and ecology also motivate second-hand luxury consumption. Research on consumer behavior towards luxury counterfeits suggests ego-defense is an important factor, as it allows consumers to obtain a desirable social image associated with luxury at a reduced cost. The uniqueness factor, which refers to finding unique products through second-hand or counterfeit consumption, is also an important motivation for luxury consumption.

I. INTRODUCTION

Ramp Ready is a website and a savior for all the fashion lovers who want to explore different clothes in various categories. Ramp ready was created to highlight the various issues faced by individuals for purchasing expensive clothes for fewer events which causes loss of money and increase in cloth waste. Clothes which are not frequently used/bought by the customers can be put up on rent by individuals and shopkeepers which will help them in income flow. Using Ramp Ready you can search and rent clothes from different categories on hourly or daily basis from nearby locations. Additionally, the users are provided with unique features like consulting fashionistas', virtual trial room, rental validity extension and chat with the shopkeeper or the individual.

Smart-shopping factors are important in driving consumers' motivations for second-hand consumption and hunting pre-loved treasures. Additionally, environmental factors that relate to consumers' concerns about ethics and ecology also motivate second-hand luxury consumption. Research on consumer behavior towards luxury counterfeits suggests ego-defense is an important factor, as it allows consumers to obtain a desirable social image associated with luxury at a reduced cost. The uniqueness factor, which refers to finding unique products through second-hand or counterfeit consumption, is also an important motivation for luxury consumption. After synthesizing these studies, the present idea identifies the following motivational factors influencing consumers' decisions:

- Economic Benefits
- Sustainability
- Smart Shopping
- Uniqueness

II. RELATED WORKS

As an arising product- service system(PSS) and part of a growing sharing economy, rental services of casual vesture for women are getting increasingly common in multitudinous countries around the world. Payment services of casual and formal wear and tear and gash have the eventuality to reduce the life cycle environmental impact compared to the conventional power model of consumption. Still, the environmental impact of rental services largely depends on the structure of business models and the performing consumption patterns, which therefore makes the environmental benefit uncertain. To clarify the environmental imputation of casual wear and tear and gash and incision and gash PSS, we analyzed the business model of furnishing companies in Germany and Japan through media disquisition and interviews with the business providers. [1]

In recent times, the emergence of colorful apparel reimbursement platforms makes the apparel reimbursement. The model has been well applied. Grounded on the premise of the rapid-fire development of participating frugality, this paper discusses the necessity of apparel reimbursement models in the smash of participating frugality. Grounded on the analysis of the investment scale, profit growth rate, operation mode and assiduity structure of the garment rental mode, this paper illustrates the problems of this mode in the force side, sale cost, health and safety and request positioning, and also puts forward the strategies to break these problems. In recent times, participating frugality, a new profitable model, has been extensively applied under the terrain of rapid-fire development of the Internet. The term "participated wardrobe" has surfaced as a result of the sharing frugality. The substance of a participated wardrobe is the apparel rental model, which was developed decades ago. In the Internet period, apparel reimbursement model develops fleetly. Currently, people can rent different styles of clothes they like more snappily and accessible. We can see this from numerous apps similar to YiErSan and Goddess Pai. In fact, although the model has been developed, it is still in the exploratory stage. [2]

The current study aims to fete the main enablers and impediments in espousing the renting mode of cooperative fashion consumption. It employs a methodical literature review(SLR) system to enable identification, selection, critical assessment, and conflation applicable studies in this miracle. The process of SLR shortlisted 41 papers for further analysis of descriptive statistics and arising themes. The descriptive statistics analysis revealed that fashion renting is evolving presto, and therefore far, North America has contributed the most in scientific publications related to this field. latterly, the thematic analysis procedure uncovered the themes including motives, walls, personality traits, and part of culture in consumer relinquishment of fashion renting along with challenges and openings in fashion reimbursement business. Likewise, the study discusses the directorial counter accusations and assembles the perceptivity to illuminate implicit exploration directions in the area. [3]

The purpose of the exploration is to explore the crucial features of fashion reimbursement from a business model perspective with a focus on the part played by digital platforms. A qualitative exploration design was used grounded on multiple case studies of three Italian fashion rental enterprises. The findings reveal the crucial aspects characterizing fashion reimbursement business models and the centrality of digital platforms in value creation, configuration and prisoner conditioning. The study also set up that fashion reimbursement platforms are likely to parade further successful development in the future. The academic literature on fashion reimbursement has been substantially concentrated on examining consumers' provocations and enterprises, paying little attention to the enterprise's standpoint. To date, no former study has examined fashion reimbursement business models from the retailer's perspective. The exploration is the first to explore the crucial factors of fashion reimbursement business models and how digital platforms impact them from the perspective of retailers. The originality of the study is farther strengthened by the unique environment of analysis, videlicet, Italy, a leading country for global fashion.[4]

The purpose of the study is to find the request dynamics across administrative garments rental service for men and to assess the significance of determinants of the growing consumer preferences for renting the garments for particular consumption. Originally following a qualitative primary study and a literature review, five factors are linked as doable determinants of a preference for rental consumption. The determinants are examined through structured data analysis using multiple retrogression analysis and Cronbach's nascence. The results set up that the constructs " significance of possession, convenience, and experience exposure " were significant. Price and trend were insignificant. This exploration is contributing to a new area of participating frugality, which has been preferred by the ultramodern youngish generation. The empirical evaluation among ultramodern youngish generation has proposed several determinants for garment reimbursement preference.[5]

The growing popularity of online clothing rentals is fueled by the desire to keep up with the latest trends. Buyers all over the world know the product. Customers now prefer the purchase of online clothing due to easy access and the availability of great options at a low price, due to the increase in internet penetration. This also exacerbates the global demand for online rental clothing. The online clothing rental market is expected to grow due to lifestyle changes and popularity of party dresses, designer dresses, and dinner suits. Future Market Insights (FMI), a ESOMAR-certified market research organization and consulting organization, has released a new study examining key variables that drive the need for online clothing rental. This paper examines the worldwide need for more than 20 clothing brands online in the fastest growing markets. Therefore, product rental will be considered the most sustainable way to use clothing today, as industries use sustainability as their key business plan to attract more customers. Even according to research, every year, more than 350,000 tons of old clothes are discarded at landfills in the United Kingdom, and about 30% of clothing is

not worn at least once a year. Excessive use and indiscriminate disposal of unwanted clothing has become a global problem - and many of these items are discarded without purpose. This, in turn, demonstrates the potential for profit for players in the global clothing rental market, which helps to reduce carbon emissions while also extending the life of clothing. Wearing rented clothing can reduce carbon emissions and other toxic substances, which can benefit the environment and natural resources. Additionally, clothing manufacturers can improve their social performance standards by combining clothing hire in their business with sustainable strategies. [6]

The most important thing to consider before starting a business is the workplace, because the best location will attract more people. With the help of a search engine, customers can search for the nearest business location before visiting the business. For example, if a customer wants to buy jewelry, they use a search engine to find the nearest jewelry store. If an entrepreneur wants to open a new jewelry store, he must find the best area where there are no luxury stores nearby and where many customers want jewelry. In this article, they proposed an algorithm that can find the best place to trade when there is a high demand but not available (or small quantities). They evaluated the effectiveness of their new algorithm (based on average uptime, customer-to-business ratio) using it on test data, and the final results show that the algorithm outperforms existing kNN algorithms. [7]

Suggestions have found importance in many areas of human's lives, from helping us decide which products to buy to helping us find different genres of music. This article provides some details on recommendations and how to implement them using content-based collaboration and collaborative filtering. The model is based on understanding user ratings for books and generates best recommendations. It also discusses hybrid or hybrid recommendation systems and how they can provide advice to users. It identifies areas that need to be strengthened for future applications.[8]

The garment industry has many and varied forms. At every step in the supply chain, information is collected and stored by all the participants in the supply chain. Using this information wisely can help solve many business problems. In this context, this article has been devoted to the application of data mining on business data products. Information about the garment, such as fabric, embellishments, prints, shapes and forms. The purpose of this article is to use data mining and symmetry-based learning techniques to construct a classification model with two subsystems: predicting clothing groups and predicting clothing subcategories. Classification techniques such as decision trees, pure Bayesian, random forests and Bayesian forests are used for "deep learning" in open source databases. The database includes three clothing categories, 50 clothing subcategories, and 1000 clothing attributes. The two subsystems are first studied separately and then combined using soft classification. Random forest classification was found to perform well with 86%, 73%, 82% and 90% accuracy for garments and groups of overgarments, undergarments and full body garments. [9]

With the rise of the sharing economy, Luxury Fashion Rental (LFR) services have seen significant growth by selling expensive goods, offering healthy options for new entrants to the market. Various studies have identified consumer motivations for luxury

goods and partnerships; however, a few studies have examined LFR's consumer behavior, focusing on the collaborative perspective while ignoring the properties and value of luxury goods. Therefore, this study focuses on identifying consumer motivations for LFR from the perspective of luxury consumption and collaboration. This study specifically aimed to: identify motivation for LFR by reviewing the relevant literature; revealing the classification of LFR motivation (intrinsic and extrinsic) on the basis of self-determination theory; and verify and confirm said classification. Information from 359 U.S consumers through online research. After that, the second order proved key analysis to confirm the validity of the second order hierarchy. Findings show that LFR's motivations include interests, diversity, and stability, while extrinsic motivations include financial gain, leadership, good shopping, and personal protection. To conclude the paper, theoretical concepts and ideas are discussed and recommendations for future research are given. [10]

Augmented Reality expands our physical world and adds digital processes into it. Augmented reality works by using cameras or sensors to add digital content to the live view. The main purpose of this project is to create a virtual locker room using reality, which allows users to try on virtual clothes. The Kinect sensor is used to calculate the distance between the sensor and the user standing in front of it. Depending on the distance, we can determine how the clothes appear on the wearer. [11]

Today, online shopping, known as e-shopping, is growing all over the world with the development of advanced technology. Advances in e-commerce sparked the shopping revolution, where customers can purchase products anytime, anywhere. Despite the advantages of online shopping, the disadvantage is that it is difficult for online customers to try products, especially clothing. That's why we propose to create a virtual locker room using AR as a mobile app, allowing buyers to understand how clothes will look and clothes will not. This is to develop the market by giving buyers the opportunity to try on the clothes in order to check their size, fit or style. In this development, AR, human detection and motion tracking are integrated, and tracks the wearer's body movements with a smartphone camera, ensuring that the clothing pattern fits the wearer's body in a timely manner. In addition, size and clothing dimensions are analyzed and interpreted to assist with the seamless fit of virtual apparel. [12]

III. CONCLUSION

The findings of this study enrich the collaborative consumption literature by accentuating that both theories contribute to the understanding of the intrinsic and extrinsic motives involved in adopting online fashion renting from consumers' perspectives. According to the Innovation Diffusion theory, this study focused on one of the five attributes involved in learning about online fashion renting services. Previous literature has posited that relative advantage is the most important motivation for individuals to adopt innovations. In fact, the current research demonstrates that environmental awareness is also considered a critical motive for innovation adoption, which expands the scope of knowledge on online fashion renting. More importantly, this study is one of the few to examine the different motives that trigger perceptions of the relative advantages of using online fashion rental services. To understand the determinants of perceived relative advantage in online fashion renting, three motivations were examined. Previously, these three motivations (personal innovativeness, fashion consciousness, and price consciousness), were found to be key factors that stimulate participation in fashion consumption as they are related to status consumption and sustainable consumption. Within the context of online fashion renting, perhaps surprisingly, our findings suggested that personal innovativeness and fashion consciousness play important roles in consumers' perceived relative advantage of such business practices, which reflects the unique psychological characteristics of consumers in the online apparel rental market. Unlike other sustainable consumption practices, consumers who value innovation and fashion are more likely to perceive online fashion renting as having advantages; however, consumers who are price conscious can barely perceive those relative advantages from online fashion rental services. Today, with the rapid development of the sharing economy, the clothing rental model plays an important role in the construction of ecological civilization, the promotion of economic operation efficiency and the innovation of new business models. After analyzing the current situation and problems of the garment rental mode, this system puts forward the strategies of developing the garment rental mode. It is believed that in today's era of changing science and technology, the model will be developed and mature rapidly, and it is only a matter of time. There are endless possibilities in the clothing rental model, waiting to be explored.

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