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# **Circular model/economy and sustainability strategies for long-term prosperity for a retail sector in India: A study on clothing consumerism**

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**Abstract**---India, with its 622 million active net users, a key marketplace for clothing firms. Its e-commerce market was projected to soar 84%, going from roughly \$60 billion in 2020 to \$111 billion by 2024, (FIS report). It is safe to mention in 2021 that no-one is ignorant regarding the numerous advantages of sustainability in each side of our lives as we tend to battle rising temperatures and melting glaciers. A circular economy, therefore, isn't simply the wise issue to pursue, create awareness regarding the worth of re-wear and selling, particularly in fashion. This study dives deep into the clothing resale model to know the motivation and behavior of shoppers and also, study further highlights on Indian consumers are ready for circular model in cloths consumption.

**Keywords**---circular economy, sustainability, retail, textile sector, clothing, resale model, shopper behavior.

**Introduction**

The linear economy that follows the approach of “take, make, and dispose” has evidenced to be extremely resource inefficient. The property efforts inside a linear economy area unit targeted in the main on minimizing the ecological impact, once the assembly cycle is completed. Waste generated within the current model interprets into not simply pollution however additionally lost revenues. to

understand the gravity of the case, a World Economic Forum (WEF) report suggests that fifty of plastic packaging material, price \$80–120 billion annually, is lost to the economy once a brief 1st use. This range signifies the number of resources wasted that might are simply wont to generate profits in another manner.

Circular Economy (CE) will facilitate address the challenges of a linear economy—mitigate resource depletion and pollution, explore avenues for price reductions, enhance revenues, and supply higher risk management. Circular economy holds wide potential to contain waste within the economy and stop cutback its passage onto the surroundings. The conception has gained a great deal of momentum presently, given its application wherever convenience of resources is restricted. The conception is presently promoted by many massive businesses and developed countries, like Finland, Sweden, and The Netherlands. The growing quality of circular economy are often attributed to the business chance it offers that is calculable presently at \$1000 billion annually (McKinsey, 2014).

**The concept of circular economy can be best illustrated in figure 1.**



Source: European Union

(<https://www.europarl.europa.eu/news/en/headlines/economy/20151201STO05603/circular-economy-definition-importance-and-benefits>)

The circular economy framework has the potential to deal with the basic reason behind the matter, that is unsustainable production and consumption, and cut back environmental impacts. The transition to a circular fashion system from the present wasteful and polluting “linear” fashion business will facilitate confront consumption, decouple a company’s success from resource use, and conjointly transcend the elite few. customers round the world, as well as in Republic of India, square measure showing interest in circular business models like selling, rentals, and subscriptions, that build wear use do able, rather than the wasteful linear business model (WRAP 2020).

Estimates recommend that buyers discard over half quick fashion created in beneath a year (Ellen Douglas MacArthur Foundation 2017). it's necessary to notice that quick fashion is meant to create wear obsolete once a couple of uses so brands will maximize profits by marketing additional clothes, as customers would obtain additional attire to interchange obsolete ones. Increasing wear utilization

at scale is needed to make a big impact, which may be achieved by creating longer-lasting garments and maximizing their utilization by adopting circular business models like wear selling that makes it doable for businesses to come up with profits through use. selling is one in every of the wear use business models that's gaining momentum—in 2019, selling of wear grew twenty five times quicker than typical retail, and within the next 5 years up to 2024, selling is poised to grow 5 times (\$64 billion in value), whereas typical retail is predicted to visualize a drop of regarding 4% (ThredUP 2020). Within the wake of the availability chain disruptions caused by COVID-19, the expansion of typical retail turned negative (–24 percent) from its pre-COVID-19 growth levels, whereas ThredUp, a United States-based secondhand wear platform, maintained growth at +20 % (ThredUP 2020). The wear selling market is poised to be value \$80 billion by 2029, virtually doubly the scale of quick fashion, which is able to be value \$43 billion.

## **Literature review**

### **Exploring circular economy in Indian textile industry**

The Indian textiles sector is one among the most important contributors to India's exports (15 %, 2018-19), contributory a pair of % to the country's gross domestic product (2018-19).<sup>7</sup> with over forty five million individuals, the trade is one among the most important sources of employment generation within the country moreover. The dimensions of India's textile market in 2016 was around US\$ 137 billion and is predicted to the touch US\$ 226 billion by 2023, growing at a CAGR of 8.7 percent. On the opposite hand, the textile sector is additionally one among the most polluting sectors. Textile is that the third biggest supply of waste in most states of India. Some 60 % of Indian textiles area unit hooked in to cotton, which consumes twenty five % of the world's pesticides. The wet process of textiles generates a massive amount of waste sludge and with chemicals impure waters. Most of the large international brands, including those who have made commitments for promoting the principles of circular economy in their supply chain, source textiles and apparels manufactured by Indian suppliers. Upon interaction with experts, it was revealed that some of the brands have already started discussions with their suppliers on circular economy and have initiated action for promoting the principles of circular economy in the production of the textiles and apparel sourced from India.

### **India reverse commerce landscape in clothing**

India's textile and apparel sector is economically significant. In 2018–19, it contributed 7 percent to the industry output (in value terms) and 2 percent to the GDP. The sector is the largest employer in India; it employed more than 45 million people in 2018–19 (IBEF 2020). India is in the unique position of being both a major apparel-producing country as well as a consumption market. With a young population and a growing middle class, India is on track to becoming the sixth largest apparel market in the world in 2022 (McKinsey & Co. 2019). Factors such as an increase in income levels are expected to shift consumers from need-based purchasing to aspiration-based purchasing. With the growth of e-commerce and Internet penetration, consumers would have ready access to

apparel from all parts of the country. Changing Our Clothes, a consumer demand report by WRAP (2020), which is a part of the Clothing Reuse Market Makers (henceforth referred to as Market Makers) suite of knowledge products, provides consumer insights. According to the report, relatively wealthier urban Indian consumers tend to shop more frequently than shoppers in the United States and United Kingdom. However, their average expenditure equals that of shoppers in the United States. The survey also identified a segment of shoppers that “love shopping”; they comprise young, frequent, and high-spending shoppers. Thirty-two percent of the respondents from India belonged to the “Love Shopping” segment as compared to 4 percent in the United Kingdom and 14 percent in the United States. Although the survey results are not directly comparable across countries because the India sample is not representative—being skewed toward urban wealthier citizens—they do give an idea about the potential shopping behavior 8 | WRI-INDIA.ORG (WRAP 2020). As the emerging market grows, Indian businesses and consumers could adopt and scale new business models such as resale in order to leapfrog to a less wasteful fashion industry.

### **Methodology**

The study was aimed at finding out consumer attitudes, motivations, and behavior toward their purchase, use, and end-of-life handling of second hand clothing in India. As mentioned in the previous section, the authors wanted to capture insights by engaging with subscribers of Kiabza, as well as other existing and potential users of second hand clothing. Because the focus was on learning from this specific case, the sample was not intended to be representative of the Indian market. This note presents an initial understanding of the motivations and behavior of different consumers belonging to various segments toward the purchase of second hand clothing. The note also aims to help interested stakeholders understand an existing clothing resale model in the Indian market and the areas of further research. The survey is independent of any brands, and the authors anticipate that it will contribute to the ongoing discussions around circular business models in India

The objective of the study was to understand consumer motivation, attitudes and behavior towards use and reuse cloths among Indian Family. The sample, therefore, comprised of parents of age group 28– 35 years. The scales used were adapted from earlier studies on western consumers. It was important to understand the applicability of the scales in the Indian context. The pretesting of questionnaire was done on a sample of 120 parents’. After pre-testing of the questionnaire items, it was revised and a final questionnaire was administered on a random sample of parents between the age group of 28–35. The sample consisted of working professionals and self-employed parents. In the next step, metropolitan city Bangalore was conveniently selected in order to gain more insight on parents’ behavior on use and reuse cloths.

Table 1  
Demographic description of respondents

Variable	Frequency	Percentage
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Parents	568	96.4
Single Parent	21	3.5
Household Income (monthly)		
Below INR 10,000 (below \$218)	32	5.4
INR 10,000–20,000 (\$218–445)	119	20.2
INR 21,000–30,000 (\$446–667)	139	23.5
INR 31,000–40,000 (\$668–889)	178	30.2
INR 41,000–50,000 (\$890–1112)	92	15.6
Above INR 50,000 (\$1112)	29	4.9
Total	589	

### Analysis

Many other studies recommended (Fraj & Martinez, 2006; Park, Ko, & Kim, 2010), it was important to pretest the scales in order to ensure desired reliability of the constructs. Quantitative analysis included several exploratory and confirmatory factor analyses for the purpose of purifying each scale, and later, a structural equation model was proposed to find out whether social use and reuse, second hand, pre- owned behavior.

### Scale reliability and validation analysis

After the pretest, two items from consumer susceptibility to correlation- ship influence, one item from pre-owned cloths behavior and one item from second hand clothes knowledge scales were removed because they failed to meet the desired 0.5 factor loading recommended by Nunnally (1967) for internal consistency for scale development. The scale validation methodology followed in other studies was used (e.g., Fraj and Martinez, 2006). Cronbach Alpha values for all the scales were above 0.6 and passed the recommended threshold level (Hair, Anderson, Tatham, & Black, 1995).

### Results of quantitative analysis

Quantitative analyses were initiated with Confirmatory Factor Analysis (CFA). Results of the CFA are presented in Tables 2–6, with the corresponding factors. Some items were removed as they had factor loadings of less than 0.5 and failed to fit Nunnally's (1967) recommended level of internal consistency for scale development. For pre-owned behavior scale, two items having factor loadings less than 0.5 were removed. For second-hand knowledge scale, two items were removed, while from the second buying behavior scale, one item was removed. CFA indicated that all factor loadings and corresponding t-values were statistically significant ( $p < .001$ ) and provided support for convergent validity. Cronbach Alpha values for scales ranged .609 to .788 (See Tables 2–6). In relation to goodness of fit scales, the residuals were inferior to .05 for all components, which suggested

that the adjustment of the factor analysis was acceptable (Fraj & Martinez, 2006; Grande, 2000). Chi-square significance level ( $p$ ) for all factors is .000. This is usually the case for sample size greater than 200. Goodness of fit indices were within the acceptable range (Hair et al., 1995). These outcomes confirmed the adequacy of the analysis. The scales did not display the exact same number of dimensions as in earlier studies (Kim & Damhorst, 1998; Lee, 2009; Phau & Ong, 2007). The results suggested different cultural environments can influence characterization of items under different dimensions. Scales need to be validated in different cultures according to cultural and consumer behaviour nuances (Fraj & Martinez, 2006)

Table 2  
Influences Consumer Choices When Buying Second hand Clothing Scale  
validation KMO and Bartlett's test 5 .608

Influences Consumer Choices items	Cronbach's alpha
Environmental footprint can be reduced by purchasing pre-owned clothes.	5 .866
Used clothes are Lower price point compared to brand-new clothing	5 .646
Being able to purchase more branded clothing with the same amount of money	5 .736
You get to try out clothing from a brand at a low price before you buy brand-new clothing from it	5 .776
You get to wear new styles every few weeks in a pocket-friendly manner	5 .704

Goodness of fit:  $\chi^2$  5 29.328, df 5 5; CFI 5 .944, GFI 5 .988; AGFI 5 .965; RMSEA 5 .070. Note: GFI, CFI, AGFI should be beyond .90 and RMSEA should be between .05 and .08 (Hair et al. 1995). Following this procedure, a structural model was established in which the relationship between the identified factors could be tested as input variables.

## Discussion

Circular economy could be a comparatively new conception, and its implications for the Indian textile sector square measure immense. One cannot ignore the emanating opportunities posed by such AN approach. The preceding sections highlight many disparities in approach by suppliers in adhering to such practices and restricted relevancy of circularity within the Indian textile sector. However, time is ripe to introduce interventions through varied neutral efforts and fast the understanding of circular economy edges. Asian nation could be a vital supply of sustainable materials and this provides the required impetus for furthering the approach.

## Conclusion

Several studies have discussed the relationship of used clothes, trust and second hand clothes buying. However, in emerging countries such as India, this is an upcoming area of research. The current study examined only a limited variables to understand second hand clothes buying behavior. Since there are several individual factors that could influence second clothes buying, focusing on few factors may not provide robust results. Further, demographic factors such as income, gender and marital status were not considered as the focus of this study was parents of age group 28–35years. Second hand buying behavior of youth or youngster maybe a different set of results. Only three cities were selected for the study and focusing on a larger sample may be useful in terms of understanding consumers' ecological beliefs. Green apparel attributes such as price, style, design and brands could potentially be considered in future studies. The relationship between fashion consciousness, variety seeking behavior and innovativeness with second hand clothes purchase could also be examined

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