

Exploring Consumer Acceptance of Refurbished Smart Phones in the Sri Lankan Market: Circular Economy Adoption in Sri Lanka

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Abstract

The circular economy is a paradigm of production and consumption that incorporates sharing, leasing, reusing, repairing, refurbishing, and recycling existing resources. Due to environmental contamination, the majority of economies are transitioning from linear to circular economies. Refurbishment is a procedure in which a professional firm collects and repairs used things before reselling them to new customers. In this study, researchers focused on identifying the factors that influence consumer acceptance of refurbished smartphones. This study is qualitative since there is a lack of knowledge about the circular economy concept in the Sri Lankan context. Researchers conducted eight semi-structured interviews to collect data for the study. Purposive sampling technique was used to select respondents for the study. The interviews lasted for 20 to 30 minutes and were transcribed into a Word document. Thematic analysis was used to analyze the interview data. Researchers discovered the factors under the topics of personal factors, advantages, obstacles, and risks of accepting refurbished smartphones by Sri Lankan mobile phone consumers. Finally, researchers discovered that consumers prefer brand-new smartphones over refurbished smartphones. However, consumers choose refurbished smartphones over second-hand smartphones

Keywords: *Circular economy, Consumer acceptance of remanufactured products, Refurbished smartphones*

1. Introduction

Many countries are concerned about the safe disposal of electrical and electronic trash, or E-waste. E-waste contains a variety of dangerous elements and substances that are harmful to both human health and the environment (Peluola, 2016). Until recently, the most well-known economic model was the linear model, which was based on continuous expansion and the use of numerous resources (Kirchherr et al., 2023). The linear economy model focuses on transforming natural resources for wastes after production processes rather than using concepts such as recycling. “The Circular Economy is a paradigm shift attempting to replace the end-of-life concept with reducing, reusing, recycling and recovering materials and to slow down, close and narrow material and power loops” (Graces Ayerbe et al., 2019). (CE) is a viable solution for the linear model because of the positive role played by this model which is beneficial for the environment as well as its healthy interaction with the economic system (Ghisellini et al., 2016). Since the CE has a positive relationship with the environment, it is becoming more and more popular among academics, corporations, and government organizations.

CE prioritizes the use of renewable resources, reducing wastage and extending the lifespan of products and materials to develop regenerative and restorative economies (Vidal-Ayuso et al., 2023). The stylish and technological market has begun to invent new mobile phone trends frequently. This affects customer attitudes and reduces the useful life of mobile phones (Thavalingam & Karunasena, 2016). This will result in a large amount of mobile phone e-waste worldwide. According to the Waste from Electrical and Electronic Equipment (WEEE) Forum, there are around 16 billion phones in use worldwide, with over 5 billion anticipated to generate e-waste this year (World Economic Forum, 2022). In CE, extending the life of a product is a viable strategy to reduce e-waste within an economy. Mobile phone refurbishment is a method of extending the life of a mobile phone and reducing mobile phone e-waste within an economy. The term ‘refurbishing’ refers to the process of restoring used products to a specified working condition in form and function (Hazelwood & Pecht, 2021).

Approximately 45-50% of Sri Lankans currently own a smartphone (GSMA Intelligence, 2023). There are frequent fluctuations and changes in the Sri Lankan smartphone market. However, a considerable amount of people in Sri Lanka is unable to afford the newest and most expensive smartphone models available because of the economic downturn in the country (ikman. lk, 2023). As a result, the intriguing trend of the used smartphone market reaching unprecedented heights has emerged lately (ikman. lk, 2023). The market for used smartphones in Sri Lanka is growing at the moment. Furthermore, customers who buy reconditioned devices in developing nations have access to comparatively newer smartphones at attractive prices (Hazelwood & Pecht., 2021). Since Sri Lanka is

also a developing country, Sri Lankan consumers can buy newer refurbished smartphones at a reasonable price. Therefore, it is preferable to be aware of Sri Lankan consumers' purchasing intentions for refurbished mobile phones on the market.

According to the latest data from the Census and Statistics Department, Sri Lanka's digital literacy increased by 2% in 2018 to 42.4%, up from 42.4% 2017 with the Western Province leading the way but other provinces performing below average (Daily ft, 2019). Because of the higher digital literacy in the Colombo district the researcher used the Colombo district to collect the sample. Therefore, this research intends to explore the consumer purchase intention towards refurbished mobile phones in the Colombo district in Sri Lanka. When choosing the sample to generalize the results, cultural, geographic, market, and demographic factors may be considered (Tripathy et al., 2018). Investigating the customer acceptability of refurbished goods in various cultural situations would also be fascinating (Van Weelden et al., 2016). Because of these cultural and demographic differences, it is not possible to extrapolate the acceptability of refurbished smartphones from other nations to Sri Lanka.

The research related to consumer reactions to refurbished products is still in its early stages (van Weelden et al., 2016). Thus, more research is needed to uncover consumers' responses toward the purchase of refurbished products in an actual market setting (van Weelden et al., 2016). Therefore, the current research contributes to the literature by providing new knowledge related to product life extension by identifying the factors that are influencing the acceptance of refurbished mobile phones by Sri Lankan customers. Considering the above facts, the researcher developed the research problem as "What are the factors that influence on the consumer acceptance of refurbished Smartphones in consumers in the Colombo district, Sri Lanka?"

2. Literature Review

2.1. Circular Economy in Sri Lanka

The circular economy is becoming more and more popular worldwide because of environmental pollution. In Sri Lanka, there has been a discernible rise in e-waste over the last 20 years, and future growth is anticipated (Ranasinghe et al., 2019). It is evident, then, that Sri Lanka is having issues as a result of the large amount of e-waste that is building up in the country's economy. However, emerging countries such as India, Brazil, Bangladesh, Sri Lanka, Bhutan, and China are struggling to successfully implement remanufacturing and refurbishment processes (Govindan et al., 2016). The majority of Asian nations including Sri Lanka are having difficulties in implementing circular economy principles like refurbishment and remanufacturing practices within the economy.

2.2. Advantages of Adopting the Circular Economy

Adopting a circular economy gives several benefits to the economy as well as to the environment. A lot of nations and organizations are currently concentrating on CE strategies to make efficient use of resources to get rid of unsustainable ways of production and consumption (De Los Rios & Charnley, 2017). Reduction in carbon and greenhouse gas emissions is one of the main advantages of adopting circular consumption (Chaudhary et al, 2015). In addition, recycling-focused supply chains are more expensive but also have greater environmental advantages. Improvement of human health due to less pollution in the circular economy is another advantage of circular consumption (Sagarbossa & Russo, 2017). One method for implementing the circular economy concept is extending the product's life cycle. Regaining value from old products and encouraging a change to a more sustainable consumption model that reuses valuable resources and produces less trash are two major benefits of the circular economy (Ellen MacArthur Foundation, 2012). Thus, it can be stated that the circular economy provides several advantages for both the national economy and the environment.

2.3 Barriers to the Circular Economy's Adoption

Many obstacles exist when it comes to integrating circular consumption into an economy. The biggest obstacles to the circular economy include the need for increased financial support from the government, difficulties establishing an efficient circular supply chain, financial difficulties brought on by consumer behavior, and difficulties in redesigning products (Holly et al., 2023). Government support is essential to implement circular economic practices within a country. High investment related to circular economy practices is another barrier. The majority of Asian nations including Sri Lanka are having difficulties in implementing circular economy practices within the economy because of the above barriers.

2.4. Consumer Purchase Intention of Buying Smartphones.

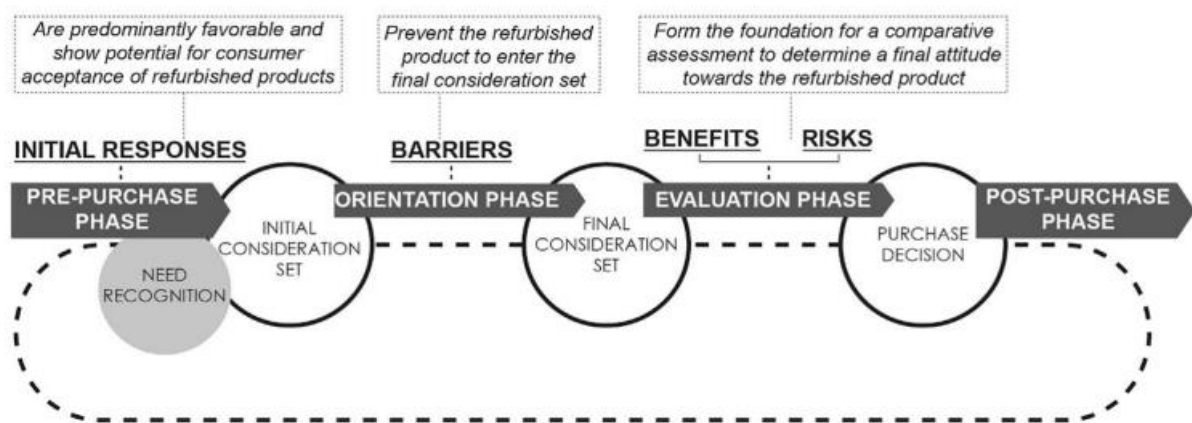
Since smartphones first became widely available in the 1990s, the industry has experienced some of the greatest growth rates, with over three billion users globally (Aytekin, Ayaz, & Tüminçin, 2019). Purchase intention is the deliberate decision made by customers to select goods or services, and it can be triggered when they feel that a company is meeting their expectations in terms of appearance or attitude ([Spears and Singh, 2004](#)). Wang et al. (2013) found that purchasing attitude, perceived behavioral control, subjective norm, and product knowledge all have a direct impact on purchase intention. Customers prefer a reputable brand when purchasing a new phone to minimize the risks associated with the purchase and remove the instability brought on by the variety of phones available

on the market (Surucu et al., 2020). This study is based on a theoretical model of consumer decision-making developed by E. Van Weelden et al. (2015).

This model uses multiple steps to illustrate the decision-making process of consumers. In the initial response stage, it shows the factors that influence to show the interest of consumers towards a certain product. In the orientation phase, consumers decide on alternatives to satisfy their unfulfilled needs. In the orientation phase, consumers identify the barriers to their purchasing decisions.

Finally, in the evaluation phase, customers evaluate the risks and benefits of purchase decisions before purchasing the product. Following an assessment of the risks and rewards, they will consider purchasing the product.

Figure 01: Model of the Consumer Decision-Making Process of Refurbished Mobile Phones



Source: E. Van Weelden et al., 2015

2.5. Product Life Extension of Smartphones

The topic of CE has recently gained popularity among academics and practitioners. Regaining value from old products and encouraging a change to a more sustainable consumption model that reuses valuable resources and produces less trash are two major benefits of the circular economy (Ellen MacArthur Foundation, 2012). In CE, prolonging a product's life is a workable way to cut down on e-waste within an economy. Within the framework of the circular economy, refurbishing is a method that holds great promise for achieving high original value retention rates by extending the life cycle of the product. This leads to a reduction of mobile phone E-waste within an economy.

2.6. Refurbished Smartphone Market

Refurbishment is the procedure by which an expert business gathers discarded goods and fixes them to a satisfactory and functional state before selling them to new customers (Rathore et al., 2011).

According to future predictions, consumption of refurbished products will increase by USD 97.2388 Billion in 2023 to USD 262.1891 Billion by 2032 (Market Research Future, 2023). Therefore, it's clear that refurbishment is an emerging consumer behavioral pattern in the whole world. Refurbishment is a more affordable and socially responsible way of creating low-end product versions for customers (Weelden et al., 2016). Purchasing a refurbished smart phone provides more advantages for the customers such as the affordability of high-end products at lower prices. Major Smartphone manufacturers, telecom providers, and numerous more third parties offer refurbished devices (Hazelwood et al., 2021). In 2016, smartphone manufacturers Apple and Samsung joined the market for "certified" refurbished smartphones (Benjamine, 2016). Consumers who buy reconditioned devices in developing nations have access to comparatively newer smartphones at attractive prices (Hazelwood et al., 2021). Since Sri Lanka is also a developing country, consumers can purchase refurbished branded smartphones for significantly lower price points.

2.7. Smartphone Market in Sri Lanka

There are frequent fluctuations and changes in the Sri Lankan smartphone market. However, a significant percentage of the population is unable to afford the newest and most expensive smartphone models available because of the economic downturn in the country (ikman. lk, 2023). As a result, the intriguing trend of the used smartphone market reaching unprecedented heights has emerged lately (ikman. Lk, 2023). The market for used smartphones in Sri Lanka is currently rising. Sri Lanka's smartphone sector is expected to generate \$0.7 billion in revenue by 2024 and it is expected to expand by 4.60% per year (CAGR 2024-2028) (Statista, 2024). Therefore, there is an increasing trend of purchase of smartphones in the Sri Lankan context and the smartphone industry is a highly growing sector in the world.

Furthermore, Sri Lanka has also undergone a rapid increase in the generation of mobile phone waste (Thavalingam & Karunasena, 2016). Therefore, policymakers need to take necessary actions to reduce mobile phone e-waste within the country. According to the CE principle, the use of refurbished products is a viable way of reducing e-waste in an economy. Also, by adhering to circular economy principles like refurbishment, Sri Lanka can contribute to the global circular economy goals to preserve the environment. In response, (Wastling et al., 2018) claimed that the role of the consumer in CE should be questioned and has yet to be completely investigated. Thus, more research is needed to uncover consumers' responses toward the purchase of refurbished products in an actual market setting (van Weelden et al., 2016).

Therefore, this research intended to explore the factors that affect the consumer acceptance of refurbished smartphones by Sri Lankan consumers in the Colombo district.

3. Research Questions

1. What are the benefits that encourage consumers to accept refurbished mobile phones?
2. What are the obstacles that impact the consumer acceptance of refurbished smartphones?
3. What are the potential risks that have negatively impacted consumer purchasing intentions for refurbished mobile phones?

4. Research Objectives

1. To identify the benefits associated with purchasing refurbished smartphone phones.
2. To identify the obstacles that impact the consumer acceptance of refurbished smartphones.
3. To identify the potential risks that have negatively impacted consumer purchasing intention for refurbished smartphones.

5. Methodology

Qualitative research is mostly used to generate knowledge and comprehend respondents' experiences, expectations, and preferences (Anderson, 2021). Therefore, the primary goal of this study is to investigate the factors that contributed to a rise in the purchase intention of refurbished mobile phones in the Sri Lankan setting. This study utilized eight semi-structured in-depth interviews through the zoom platform is used to explore customer intentions for purchasing refurbished products, aligning with the exploratory objective of the research because in-depth interviews yield valuable insights into consumers' thoughts and experiences (Patton, 2002). Purposive sampling was used to select the respondents for the study. After interviewing eight respondents, the researcher reached to the saturation point. Interviews lasted for 20 to 30 minutes. Interviews are transcribed to documents and thematic analysis is used to analyze the data.

6. Data Analysis and Presentation

In this chapter, the researcher is focused on finding answers to the research questions. This study addresses three questions. The first question is focused on identifying the benefits of purchasing refurbished mobile phones, and the second research question addresses the obstacles that consumers experience when purchasing refurbished mobile phones.

The final research question concerns the potential risks of purchasing refurbished mobile phones. The study is based on the model developed by E. Van Weelden et al. in 2015.

6.1. Pre-Purchase Phase-Initial Response

During the initial reaction stage, we can determine whether consumers accept refurbished Smartphones or not. The interviewed respondents expressed their ideas as follows:

"Since I need the product to be original, I would rather buy a brand-new smartphone than a refurbished one." (Respondent 2)

"Purchasing a refurbished smartphone is very safe as compared to a used one, as refurbished phones come with a significant extended warranty period." (Respondent 01)

"I would go for the refurbished smartphone because I don't have money to buy a brand-new smartphone" (Respondent 06).

6.1.1. Personal Factors

Consumers' initial purchasing decisions are influenced by their personal opinions. Consequently, customers' personal opinions have a direct impact on their purchase decisions. The following are some of the personal factors uncovered by the researchers in this study that influence customer purchase decisions.

Brand Loyalty

The perception of the brand determines consumer acceptance of refurbished mobile phones. Some consumers choose to buy refurbished mobile phones from their favored brand rather than those from other brands.

"I will always choose an Apple phone over another mobile phone if I want to purchase a refurbished smartphone". (Respondent 1).

"If I'm going to purchase a refurbished smartphone, I prefer Apple smartphones over Android smartphones because I don't think the Android refurbished smartphones are reliable—there could be issues with the device." (Respondent 02)

Based on the above opinions, the majority of respondents choose to buy refurbished Apple iPhones over Android smartphones due to brand loyalty. Many respondents reject Android refurbished devices due to a lack of trust in them.

Lack of Originality of the Product

The company is replacing some parts of refurbished mobile phones because of defects. Some people opt not to purchase refurbished devices because they wish to use the phone in its original condition.

“Due to the addition of additional components to the mobile phone, the product lacks originality. Because of this, I would rather get a new smartphone than a refurbished one to retain the original features and the experience.” (Respondent 2)

Based on the opinions expressed above, it is apparent that some people prefer the product's originality and dislike the transformation process that occurs during refurbishment.

Environmental Consideration

E-waste is a massive global concern. Most countries are implementing circular economy principles. The refurbishment process is also tied to the circular economy notion, as it minimizes E-waste and helps to preserve the environment. Some respondents like to contribute to this environmental preservation by buying refurbished smartphones.

“These smartphones help to lessen the world’s increasing e-waste. So, I want to do my part to protect the environment and lessen e-waste”. (Respondent 02)

“It is beneficial to recycle batteries and other components rather than throwing them into the environment. As a result, the refurbishment procedure helps to preserve the environment by reducing E-waste within the country”. (Respondent 04).

Peer Reviews and Comments in the Social Media

The majority of respondents prefer to consider another person's prior experience when acquiring a refurbished smartphone. They consider social media remarks on the smartphone as well as the shop, which have a significant impact on the respondents' purchasing decisions.

"If I decide to acquire a refurbished smartphone, I will look into my friends' previous experiences with refurbished cellphones. I'd like to take them with me to the store if I'm going to buy a reconditioned smartphone." (Respondent 05)

“I would like to do my own research regarding the product which is intended model of smartphone and shop by using social media like YouTube, Facebook, and Instagram “(Respondent 06)

6.2. Final Consideration – Orientation Phase

If the customer chooses to proceed with the refurbishment product after completing the first stage, they will evaluate the obstacles to implementing the purchasing decision.

6.2.1. Obstacles

Lack of Awareness

Most individuals are unaware of the availability of refurbished mobile phones and do not know where to get one in Sri Lanka. The story of smartphone refurbishing is not well-known among smartphone buyers. Respondents shared the following opinions on the above factor.

"Until now I didn't have the awareness related to the refurbished smartphones in the market."

"I'm not sure if Sri Lanka has stores that sell refurbished smartphones." (Respondent 02).

"I don't know a specific shop to buy a refurbished smartphone in Sri Lanka. People don't know the real story behind the refurbished smartphones in the market." (Respondent 01).

Trust Over Smartphone Retailers

Smartphone purchasers don't trust smartphone sellers because of their unethical practices. Some participants expressed the view that smartphone retailers sell refurbished phones at brand-new prices without revealing about the refurbishment.

"I don't trust Sri Lankan smartphone shop vendors because they might offer refurbished phones for sale at brand new prices." (Respondent 02).

"Some smartphone members sell the repaired products as brand-new products at a brand-new price and it's an illegal thing". "By using the IMEI number, we can track refurbished smartphones." (Respondent 08).

While some respondents are aware that the smartphone's IMEI number can be used to determine whether it has been refurbished, some smartphone purchasers are unaware of this technique.

6.3. Purchase Decision-Evaluation Phase

During this phase, buyers assess the advantages and risks of their purchasing decision. Here, smartphone buyers evaluate the benefits and risks of purchasing refurbished models in comparison to new and used models. If the benefits exceed the risks, they make the final purchase choice.

6.3.1. Advantages

Price

When compared to a brand-new smartphone, refurbished smartphones are substantially less expensive. Electronic product prices increased as a result of Sri Lanka's economic recession prevailing in the country. Therefore, smartphone buyers can save money by buying a refurbished smartphone rather than a brand-new one. Respondents expressed their opinions on the above factor as follows:

"The cost of mobile phones is high due to Sri Lanka's economic recession, but purchasing a refurbished smartphone can save you 10% to 15% on costs." (Respondent 01).

"Buying refurbished mobile phones allows me to purchase a phone at a lower price point."

(Respondent 02).

“Advantages of purchasing a refurbished mobile phone include cost savings....” (Respondent 03)

Warranty

The refurbished mobile phones are attached to the manufacturer and come with a manufacturer warranty, which is an advantage of purchasing a refurbished smartphone over a used smartphone. The below opinions are expressed by the respondents.

“The refurbished devices are still linked to the manufacturer and come with a warranty. Consequently, I believe that purchasing refurbished smartphones is preferable to purchasing secondhand smartphones without a warranty”. (Respondent 01).

“One benefit of buying a refurbished smartphone is that we can have a warranty period for them. Most used devices do not come with a warranty period like this”. (Respondent 03).

Connection to the Original Manufacturer

The original manufacturer is in charge of the smartphone's refurbishing process. Therefore, the trust in the smartphone is high due to the original manufacturer's involvement. Respondents expressed their opinion over the above factor as follows.

“For example, if I purchase a refurbished Apple smartphone, there is still a high level of trust in the product because it is still tied to the original manufacturer”. (Respondent 05)

Fewer Defects in Refurbished Smartphones

Refurbished smartphones may have fewer problems than used mobile devices because the original manufacturer is involved in the repair process. The respondents expressed their opinions as follows:

“When we buy used mobile phones from someone, we are unaware of defects in them. Some people hide their mobile phones' defects to sell them. Refurbished phones are company-certified phones, so we can obtain a considerable time as a warranty for the phone, but the warranty for used phones is only valid for a short period”.(Respondent 01).

“We will receive a device that is thoroughly tested and a device in brand new condition.”

(Respondent 07)

Some people prefer to buy a refurbished smartphone since the phone is in better condition than a used smartphone.

6.3.2. Risks

Performance Risk

There is a greater chance of having defects with refurbished smartphones compared to buying a brand-new smartphone. These are the opinions presented by the respondents.

“There is a significant risk when buying a refurbished smartphone because I’m not sure what kind of defects and problems caused the refurbishment. “Except for Apple iPhones, I don’t ‘trust other brands refurbished devices” (Respondent 06)

Therefore, some respondents prefer to buy brand-new smartphones rather than refurbished devices. Consumers perceived refurbished products as being of lower quality products. So, they are refraining from buying those products.

Unethical Practices of Smartphone Shop Owners

The majority of respondents do not trust the opinions of smartphone shop dealers due to their fraudulent actions.

“Some smartphone members sell the repaired products as brand-new products at a brand-new price and it’s an illegal thing. By using the IMEI number, we can track refurbished smartphones.” (Respondent 08).

“Before acquiring a refurbished smartphone, I would like to do my own research on the model I’m going to buy because I don’t want to be fooled by the smartphone store owner.” (Respondent 06).

Some respondents are aware of tracking the refurbished smartphone by using the IMEI number. Because of unethical actions by smartphone shop owners, the majority of respondents increased their knowledge of the smartphone they intend to purchase.

Most of the respondents are unaware of the circular economy concepts. However, some of them have a fundamental understanding of the circular economy concept and principles.

“I don’t know about circular economy and principles related to the circular economy.”

(Respondent 01).

“According to my opinion circular economy means a system where resources are used efficiently, products are reused or recycled, and waste is minimized”. (Respondent 03)

“Yes, I’m familiar with the circular economy principles, which include designing out waste and pollution, keeping products and materials in use, and regenerating natural systems” (Respondent 03)

Therefore, it is obvious that smartphone buyers have little awareness of Circular Economy principles.

7. Results and Discussion

In this study, the researcher focuses on determining the acceptability rates of refurbished mobile phones among Sri Lankan smartphone customers. Refurbishment is a procedure that adheres to the circular economy concept. In this study, the researcher revealed the smartphone steps of purchasing decision using the model of E. Van Weelden et al., (2015) and discovered that in this process, the refurbished smartphone purchaser evaluates the purchasing decision in several stages before making the final purchasing decision. In the pre-purchasing stage, consumers consider personal factors before going for a final purchasing decision. Personal aspects include brand loyalty, product originality, environmental considerations, peer reviews, and social media remarks.

In the second stage Final Consideration- Orientation phase, smartphone buyers consider the barriers influencing the purchasing decision. In this research researcher found the following factors as obstacles to purchasing a refurbished smartphone. Lack of knowledge about used smartphones and a lack of trust in smartphone shops are obstacles to purchasing refurbished smartphones. The study of E Van Weelden et al, 2015, shows that the majority of consumers do not purchase refurbished equipment due to a lack of information and misunderstanding of what refurbishing entails.

During the purchasing decision-evaluation phase, the refurbished smartphone buyer will conduct a risk-benefit analysis. The researcher identified price advantage, warranty, connection to the original manufacturer, and fewer defects as benefits of purchasing a refurbished smartphone. According to Xu et al. (2017), remanufactured products are 30% to 40% less expensive in China. Therefore, it's obvious that the remanufactured products are less expensive compared to the brand-new products.

The quality and warranty of remanufactured products are somewhat similar to those of brand-new products, making them appealing to purchase (Thierry et al., 1995). In this research also researcher found the above two factors as advantages of purchasing refurbished smartphones. Researchers identified the performance risk and unethical practices of smartphone shop owners as the potential risks of purchasing refurbished smartphones. According to Wang et al., 2013, performance risk is identified as a risk of purchasing refurbished products. Consumers make a purchasing decision if the advantages outweigh the risks. Another important result of this study is a lack of consumer awareness of the circular economy and related concepts.

8. Significance of the Study

8.1. Theoretical Significance

The circular economy has not been widely recognized in Sri Lanka. As a result, this study aims to investigate the factors influencing customer acceptance of refurbished smartphones in the Colombo

district in Sri Lanka. People in South Asian countries are not aware of the circular economy principles. Refurbishment is one of the main Circular economy concepts that reduces the E-Waste within a country. Research in consumer response related to the acceptance of refurbished smartphones in the early stages specifically in South Asian countries including Sri Lanka. The findings of the other contexts do not apply to the Sri Lankan context due to cultural differences, geographical differences, and consumer preferences. Hence, the purpose of this study was to contribute completely add new knowledge regarding the circular economy to the current literature from the perspective of smartphone consumers in Sri Lanka. Therefore, in this research uncovered the advantages, obstacles, and risks of accepting refurbished smartphones by Sri Lankan consumers.

8.2. Practical Significance

Every year, millions of electronic items are discarded as a result of manufacturing defects or obsolescence. Therefore, E-waste is a global issue in today's context. Circular Economy concepts are gaining traction in today's economy as a result of global warming and pollution. Most countries throughout the world are transitioning to a circular economy. The people of Sri Lanka are unaware of the circular economy concept. Refurbishment is a circular economy idea that extends the product life cycle while reducing environmental pollution through the reuse of existing resources and reducing the demand for natural resources. This will reduce environmental pollution by slowing down the replacement cycle. Sri Lankan consumers are unaware of the refurbished smartphones available in the Sri Lankan market. The findings of the study provide some understanding regarding the circular economy concepts and advantages, barriers, and potential risks of acceptance of refurbished smartphones. Therefore, the consumers use the findings to do risk-benefit analysis before purchasing refurbished smartphones over brand-new smartphones. Mobile phone E-waste is a major concern for Sri Lanka as well. Policymakers in Sri Lanka also need to adopt circular economy principles like refurbishment to reduce Mobile phone E-waste in the country by promoting refurbished products. The Sri Lankan government can have contracts with smartphone vendors to establish refurbished facilities in Sri Lanka to promote refurbishment as well to earn income for the economy. However, in order to prevent unethical practices by smartphone retailers, the government must implement suitable legislation to manage this industry.

9. Conclusion

The refurbishment is a circular economy principle, and it extends the product life cycle. The circular economy is an emerging concept, and many economies are transitioning to circular economies. In this study, the researcher utilized the model of E. Van Weelden et al.'s (2015), consumer decision-making

model to investigate the factors influencing the adoption of refurbished smartphones during various decision-making phases. During the initial reaction stage, personal factors impact the decision to buy refurbished smartphones. Brand loyalty, product originality, environmental considerations, peer review, and social media comments are all personal aspects that impact purchasing decisions.

In the final consideration-orientation stage, consumers consider the barriers to the purchasing decision of refurbished smartphones. During the final consideration-orientation stage, consumers consider the obstacles to purchasing refurbished smartphones. Lack of awareness, and trust over the smartphone retailer are the obstacles to the purchase decision of refurbished smartphones. In the purchase decision stage, consumers evaluate the risks and advantages of purchasing refurbished smartphones.

The advantages of purchasing refurbished mobile phones are price, warranty, connection to the original manufacturer, and fewer defects when compared to second-hand devices. The risks of purchasing refurbished smartphones are performance risks and unethical practices of smartphone owners. Most of the respondents choose brand-new smartphones over refurbished smartphones. However, respondents prefer to purchase refurbished smartphones over second-hand smartphones. The majority of respondents are unaware of the circular economy and associated concepts, and others have a fundamental understanding of the concept.

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