

# IMPROVING BRAND RECOGNITION AND ATTRACTIVENESS FOR BIODEGRADABLE PHONE CASES: CICLO CASE BRAND IN 2024

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## ABSTRACT

This study examines strategies to enhance brand visibility and consumer appeal for biodegradable phone cases, focusing on Ciclo Case, a Malaysian company that specialises in sustainable alternatives that replace conventional plastic cases. The study is to establish Ciclo Case as a top brand in the expanding market for sustainable products by addressing significant problems such as poor branding, limited product variety, and ineffective marketing. Using quantitative methodologies, data collected from 105 respondents aged 18–30 highlight consumer awareness, design preferences, and the importance of environmental sustainability in purchasing decisions. The results indicate the significance of appearance, usefulness, and efficient marketing while exposing a notable knowledge gap about biodegradable phone cases. Recommendations include rebranding with a strong identity, diversifying product designs, and launching targeted marketing campaigns to communicate the environmental benefits. By embracing Sustainable Development Goals (SDGs 11 and 13), Ciclo Case may take the lead in minimising plastic waste and attracting environmentally conscious customers. This study emphasises how important branding, creative design, and education are to influencing consumer behaviour and making sustainable decisions.

**Keywords:** Biodegradable phone cases, brand visibility, consumer appeal, sustainability, marketing strategies.

## 1. Introduction

Phone cases were commonly utilised electronic accessories that held significance for most users due to their provision of protection and uniqueness for devices. However, the cases that were made from a conventional type of plastic used in most mobile phones posed a major threat to the environment. These cases were primarily manufactured from nonrenewable materials and were disposed of after minimal use, contributing to increased landfill and marine pollution that persisted for many years. Ankarlid (2022) stated that an estimated 6.37 billion individuals utilised smartphones globally, and each individual replaced their phone approximately every 20 to 27 months. Throughout a lifetime, an individual who commenced purchasing phone cases at the age of 16 and continued until reaching the age of 70 would have acquired approximately 27 phone cases. Over 1B phone cases are thrown away each year. That's a lot of plastic pollution added to our already overflowing landfills. Despite this, there are sustainable solutions that have already evolved as better alternatives to this issue, like biodegradable phone cases, and the major problem here is that consumers are not aware of these products. Consumers are still not fully aware of the fact that conventional phone cases are still a concern to the environment or that green products exist. The problem is perpetuated this way because consumers remain unaware of the consequences of their actions and carry on buying and throwing away plastic phone cases without thinking about recyclable options. Ciclo Case, founded by Latika Ishwar, is a company that presents an opportunity to decrease the amount of plastic waste with manufacturing biodegradable phone cases from the PLA that originates from corn-based composite materials. These cases disintegrate naturally, are non-hazardous when the material is disposed of, and emit relatively less hazardous emissions throughout the production cycle than the conventional plastics. Still there are several disadvantages; for example, the brand faces a hard time in the market because consumers are not conversant with the product or its role in solving some issues affecting the environment.

The problem statement is poor branding and lack of awareness among Malaysians. The advantages of the company's biodegradable phone cases have not been adequately conveyed, causing a sizable segment of Malaysian consumers to be ignorant about Ciclo Case's presence. Next, limited design selection. The brand's present product lineup is constrained in terms of design, available colours, and phone model compatibility. This restriction is a significant barrier to drawing in a larger consumer base in a market. The last problem statement is ineffective marketing. The company has trouble bringing in consumers, mostly because of poor marketing initiatives. Therefore, the aim of this study is to diversify the product range by introducing a wider variety of designs, colours, and models for the Ciclo Case. The objective of this study is to enhance brand awareness and visibility for Ciclo Case among Malaysian consumers, the goal is to develop compelling marketing strategies that effectively communicate the benefits of biodegradable phone cases and enhance brand differentiation.

A comprehensive literature review was conducted to analyse existing research on the pollution crisis, sustainable product branding, consumer behaviour, and eco-friendly practices. Case studies on biodegradable materials and branding tactics, industry reports, and scholarly journals were among the sources used. This review offered a theoretical framework for comprehending market trends and difficulties while highlighting the increasing significance of environmental consciousness in consumer purchase decisions. It also supported the study's examination of how branding and marketing can drive consumers to interact with sustainable products. One significant environmental problem in Malaysia is the plastic issue, particularly the use of single-use plastics such as bags, packaging, and phone cases. The Malaysian Department of Environment (2023) reported that a current estimated amount of plastic waste produced in Malaysia is about 0.9 million tonnes per

year, and most of the waste is often disposed of inappropriately and causes pollution. This plastic waste obstructs water sources, pollutes water sources, and endangers many sea creatures. Despite some attempts made by the government, the issue of plastic waste management is still difficult, particularly due to the increased use of plastic products, especially in big cities. The longevity of plastic products and their inherent quality of being non-degradable only add to an already worsening problem of disposal. To avoid these effects, people should be informed as to better alternatives, for instance, biodegradable phone cases.

While using plastic accessories such as phone cases for protection purposes is liked by many, the products are a dangerous contributor to the destruction of the environment. Most of the conventional stylish phone cases are made from plastics, which include polycarbonate, thermoplastic polyurethane (TPU), and acrylic and which remain as waste for more than 300 years. Jambeck et al. (2025) provides estimates that recommend almost 1 billion phone cases are thrown away each year, deepening the increasing waste problem. In this regard, increasing the visibility of biodegradable options like biodegradable phone cases to consumers is the solution. Creating awareness around these undesirable effects of traditional plastic phone cases and sensitising consumers and bringing them into the understanding of Ciclo Case products increases customer awareness and acceptance.

Polylactic acid (PLA) is another eco-friendly substitute for conventional plastics made from corn-based composites. They disintegrate naturally by exposure to biological systems and hence are environmentally friendly. PLA, which is used in the manufacture of items such as phone cases and cutlery, breaks down to harmless by-products such as water, carbon dioxide and biomass. A study by Green Business Benchmark (2024) shows that materials such as PLA generate lower levels of greenhouse gases than regular plastics, thus making them environmentally friendly. In addition, the materials made from biodegradable materials like Ciclo Case disintegrate at a faster rate in the environment, thereby decreasing the number of plastics that end up in the environment. Education on the benefits of biodegradable products is hence very important to change the market to the use of sustainable green products and drive the world to the circular economy system. Brand communication can enhance consumer knowledge regarding the benefits of biodegradable materials that should help in the creation of a sustainable product environment.

Different products like biodegradable phone cases need to be marketed, and this can present several issues, especially where awareness and elimination of doubt are concerned. Kotler et al. (2021) also argue that the key to consumers' trust is values such as transparency and authenticity, especially in the green space. Those firms that effectively convey this message, for instance Ciclo Case's announcement on the use of biodegradable materials, can set themselves apart from rivals. Moreover, the presentation of the decrease in the carbon impact of production together with the positive effect on the environment from the use of sustainable materials can enhance the awareness of the consumers about the benefits of green products. Marketing and seller communication through social networks and influencers are interesting practices for targeting environmentally friendly consumers and using viral marketing to popularise sustainable habits. Another advantage of a partnership with environmental organisations is also the possibility to enhance brand credibility and profile through active participation in sustainability projects. Education and market transparency also apply here as a means through which these brands can create awareness, establish credibility, and thus grow the market for sustainably sourced goods and services (Kotler et al., 2021).

Every company needs to strive to make sure that it creates awareness of its brand, especially when it comes to promoting its brands, such as the Ciclo Case that deals in biodegradable phone cases. As will be seen in this paper, brand awareness determines the level of recognition, trust, differentiation, loyalty, and sales of a brand, which over time has a very positive impact on the growth and sustainability of a firm.

Initially, consumers need to recognise the brand for them to consider patronising the firm. Consumers find it easier to choose the brands that are known to them, and hence brands that have high recall are likely to be chosen. Keller, in his publication of 2003, defined brand awareness as the first level of consumer dedication towards the brand. In the case of Ciclo Case, increasing the brand recognition maximises the chances of a consumer selecting its environmentally friendly flip cases when in the process of searching for cases other than the conventional plastic ones. Such recognition is especially appreciated in the given marketplace, where the decision about the choice of the product is made based on the familiarity with it (Aaker, 1991).

Moreover, brand awareness provides tangible organisational and consumer benefits, including recognition, credibility, and trust. An established brand is considered better, and this is a very vital issue when selling products that claim to be environmentally friendly when the market is filled with companies who just put a green facade on their marketing strategies. Chernatony (2001) provides findings suggesting the relationship between trust and familiarisation, insisting that consumers trust familiar brands. Understanding of sustainability, product quality, and transparency may also enable Ciclo Case to develop brand identification as its major strategic advantage that can be used to enhance the company's reputation and consumer trust.

Brand awareness is also a reason that helps distinguish a brand from the competition. In a market where commonly found plastic phone cases are a norm, Ciclo Case can differentiate itself through a brand point of view. Kotler and Keller (2016) noted that brands which can develop relative brand awareness can develop a competitive edge. Because Ciclo Case has developed a product which is biodegradable, the consumers can be informed that environmentally conscious phone case producers exist, hence being able to appeal to the conscience of the consumers.

Secondly, brand familiarity is essential for nurturing consumer loyalty among the population as well. Customers who know about a brand are likely to stick with it especially if they share a similar sense of the brand. Aaker (1996) asserts that brand equity always arises from positive brand associations as well as brand familiarity. Ciclo Case needs to ensure that it is continually the brand in the outer market, which can help it build rapport with consumers and hence patronage. Those consumers who have remained loyal to a brand directly promote the product by creating awareness through recommendations, hence promoting the growth of the brand.

The brand awareness has a positive impact on the sales and market share of the brand. The study by Iyer and Mahajan (2001) concluded that brand familiarity leads to purchase intentions, especially in new competitive markets. Ciclo Case – Many consumers, especially the youths, are now aware of environmentally friendly phone cases; hence, the likelihood of shifting from using the traditional plastic ones and using a Ciclo Case brand will increase. This feature is important because a rise in the level of consumer engagement based on improved awareness of the brand means that the company will experience bigger sales volume since sustainability aspects influence consumer decisions to a very large extent.

## 2. Methods

The method of interview and survey was used to investigate the company's background and commitment. It was used to analyse the target audience, consumer perceptions, preferences, and awareness about biodegradable phone cases. This approach allows for the collection of measurable data to evaluate Ciclo Case's branding, design offerings, and marketing strategies. The next segment explains how to properly assess Ciclo Case's current state and develop solutions.

### 2.1 Interview

A semi-structured interview was used in this study's qualitative research approach to examine Ciclo Case's branding, sustainability initiatives, and problems. Latika Ishwar, the founder of Ciclo Case, was interviewed online to obtain firsthand knowledge of the business's goals and operations. This approach was selected because it can gather genuine and in-depth comments that give the study's conclusions greater validity. The interview comprised 14 open-ended questions, focusing on themes such as brand identity, target audience, sustainability initiatives, and marketing strategies.

### 2.2 Survey on Phone Case Design

The secondary research instrument used was a self-administered questionnaire designed to capture quantitative data. A questionnaire is simply a list of mimeographed or printed questions that is completed by or for a respondent to give his opinion (Roopa, S., 2012). It enables quantitative data to be collected in a standardised way so that the data are internally consistent and coherent for analysis. Constructing the questionnaire is a smart approach to ensure its validity and reliability when measuring the data collected (Krosnick, 2018). Validity refers to the correctness or credibility of a description, conclusion, explanation, interpretation, or other sort of account (Maxwell, 2010, cited by Phil, C., et al., 2021), while reliability refers to the application and appropriateness of the methods undertaken and the integrity of the final conclusions (Noble & Smith, 2015, cited by Phil, C., et al., 2021). The questionnaire consisted of multiple-choice questions focusing on consumer awareness of biodegradable phone cases, design preferences, and factors influencing purchase decisions. A total of 105 respondents participated in the study. The sample was selected using non-probability sampling methods, targeting individuals familiar with phone cases and sustainable practices. Most respondents were aged 18-30, representing a key demographic likely to engage with eco-friendly products.

Data was collected using online surveys sent via social media. This technique made participation more accessible and convenient, promoting a wide range of responses. The survey period lasted 3 months, during which respondents provided input on their awareness of Ciclo Case, preferences for phone case designs, and feedback toward biodegradable products. The collected data was systematically organised and analysed to provide insights into consumer behaviour and market opportunities for Ciclo Case.

### 2.3 Social Media Analysis

Social media data is the foundation of analysis aimed at understanding behaviour and interaction on any particular social media platform (Stewart, 2024). To assess Ciclo Case's brand visibility and consumer engagement, an analysis of the company's social media platforms, particularly Instagram, was conducted. Metrics such as follower count, post engagement, and content themes were evaluated. Findings revealed limited brand visibility, with low engagement on

marketing posts, indicating a need for improved social media strategies.

### 3. Result and Discussion

The interview provided essential insights that enriched the research. When asked about the background of Ciclo Case, the founder said that the business was founded to give eco-friendly alternatives by producing biodegradable phone cases and to increase awareness of plastic pollution. The brand mainly targets environmentally concerned working people between the ages of 25 and 35 who are open to adopting sustainable practices. The founder also emphasised how the logo, which was derived from the term "Ciclo" (cycle), embodies the industry's goal of ending the cycle of plastic pollution.

In terms of materials, Ciclo Case uses PLA (polylactic acid), which is made from corn processing wastes and lowers harmful emissions and keeps them from burning. Despite these initiatives, the brand still must contend with issues including low brand awareness among Malaysians and a price-sensitive consumer base. Notably, Ciclo Case only sold 100 cases in its first 48 months, demonstrating the brand's promise despite its difficulties.

Next, an extensive interpretive evaluation and a summary of the online survey, which featured a dependability evaluation and descriptive analysis conducted in Google Forms. A self-administered questionnaire was distributed to 105 respondents between April 2024 and December 2024.

#### A. Demographic Data Analysis

Demographic analysis is a must in any research to provide a thorough description of participants to allow readers or researchers to determine to whom research findings are generalised and allows for comparisons to be made across replications of studies (Hammer, 2011).

Table 1  
Statistics for the age of respondents.

Age	Frequency (f)	Percentage (%)
18-30	82	78.1
31-40	11	10.5
41-50	9	8.6
51 & Older	3	2.9

Based on the findings, the majority of respondents are aged between 18 and 30 years old, representing 78.1% of the study population as compared to other age ranges. This reflects a young, tech-savvy demographic who are likely more inclined toward mobile phone use and accessories. Given that this age group is highly active in digital spaces and environmentally conscious, their choices are crucial in evaluating market trends for products like biodegradable phone cases. This age group's predominant representation suggests that future product developments and marketing strategies for biodegradable phone cases should prioritise the preferences and behaviours of younger consumers.

Table 2  
Statistics for the occupation of respondents.

Occupation	Frequency (f)	Percentage (%)
Student	73	69.5
Office Worker	18	17.1
Professional	3	2.9
Service Industry	11	10.5

Most of the respondents are still students at 69.5%. This is an important finding, as students often have limited income but are highly receptive to sustainable trends. While the remaining occupations of respondents suggest a broad range of backgrounds that could potentially expand the target market for biodegradable phone cases.

#### B. Descriptive Data Analysis

A statistical technique called descriptive analysis is used to list and explain the essential features of a dataset. Descriptive analysis aims to provide a clear and intelligible understanding of the dataset with the use of statistical measures and visual aids. In order to get the information required on sustainable phone cases from respondents, descriptive analysis involves generating a variety of summary statistics.

Table 3  
Statistics for types of phone case respondents use.

Type	Frequency (f)	Percentage (%)
Plastic	24	22.9
Silicone	63	60
Biodegradable	16	15.2

Table 3 shows that 99% of the respondents are using phone cases. Most respondents are choosing to use a silicone phone case at 60%, followed by a type of plastic phone case at 22.9%. Only a few wear biodegradable phone cases, which is at 15.2%. The popularity of silicone and plastic cases may reflect the accessibility, cost, and familiarity of these options. This proves the lack of awareness of biodegradable phone cases and presents a challenge to compete in terms of consumer preference, which emphasises the importance of educating the market about environmental alternatives and making biodegradable options more appealing.

Table 4  
Statistics for question “How important is environmental sustainability to you when choosing a phone case?”

Answer	Frequency (f)	Percentage (%)
Not important	24	22.9
Somewhat important	56	53.3
Very important	25	23.8

However, the respondents also state that environmental sustainability is somewhat important when it comes to choosing a phone case, at 23.8%, while the remaining respondents are either

somewhat important or not important, at 53.5% and 22.9%, respectively. This is significant, as it suggests that while there is some concern for the environment, it does not dominate the decision-making process for most consumers. It is therefore crucial for biodegradable phone cases to align with aesthetic and functional considerations, making sustainability an added benefit rather than the sole selling point.

Table 5

Statistics for question “Are you aware of biodegradable phone cases as an alternative to traditional plastic ones?”

Awareness levels	Frequency (f)	Percentage (%)
People aware	42	40
People Unaware	63	60

Moreover, the majority of respondents say that they are not aware of biodegradable phone cases as an alternative to traditional plastic types, with data recorded at 60%, while only 40% of respondents are aware of this alternative. This highlights a significant knowledge gap that needs to be addressed.

Table 6

Statistics for factors influencing consumers' decision when selecting a phone case.

Factor	Frequency (f)	Percentage (%)
Design	58	55.2
Durability	19	18.1
Price	16	15.2

Several factors have been identified that influence the decision in selecting a phone case, which shows that 15.2% of respondents decide based on price offers, followed by 18.1% of respondents who choose the durability factor and 55.2% of respondents who choose the design that influences their decision in selecting a phone case.

Table 7

Statistics for consumer's concerns to associate with biodegradable phone cases.

Concern	Frequency (f)	Percentage (%)
Limited design options	58	55.2
Durability	21	20
Higher cost	31	29.5

At the same time, respondents also choose several concerns that associate biodegradability with 49.5% of respondents stating that limited design options are their concerns, while 20% and 29.5% of respondents, respectively, state that durability and price are their concerns in choosing a phone case. This emphasises that product aesthetics and functionality are key drivers in purchasing decisions, even over price and environmental considerations. To compete, biodegradable phone cases must meet these design and functional expectations while also incorporating environmentally friendly materials.

Table 8

Statistics for the question “Are you familiar with the brand Ciclo Case and its biodegradable phone cases?

Awareness Level	Frequency (f)	Percentage (%)
People aware	24	22.9
People Unaware	77.1	81

The brand of Ciclo Case is designed to reduce environmental impact by using biodegradable or compostable material. However, almost all respondents are not familiar with the brand Ciclo Case and its biodegradable phone case, and only the remaining 22.9% of respondents state that they are familiar with the brand. Therefore, branding and marketing play an important role in influencing decision-making when purchasing phone accessories when the data show that half of respondent's state that branding and marketing are somewhat important in the decision-making process when purchasing a phone accessory, and 50.5% of respondents state branding and marketing are very important in influencing their decision-making.

Table 9

Statistics for how important branding and marketing in consumer's decision-making process when purchasing phone accessories.

Important Level	Frequency (f)	Percentage (%)
Very important	53	50.5
Somewhat important	43	41
Not important	9	8.6

Only 8.6% of respondents state that it is not important to look into when deciding to purchase the phone accessories.

Table 10

Statistics for question “What do you think Ciclo Case could do to improve its brand visibility and attract more customers?

Answers	Frequency (f)	Percentage (%)
Improve product design	29	27.9
Increase marketing efforts	51	48.6
Developing a strong brand identity	25	23.8

From the findings, 23.8% of respondents encourage the Ciclo Case to develop a stronger brand identity to improve its brand visibility and attract more customers. Meanwhile, 27.6% of respondents encourage the Ciclo Case to improve its product design, and lastly, 48.6% of respondents encourage its need to increase marketing efforts to make its brand visible and attract more customers.

In summary, the information reveals several important details for the creation and promotion of biodegradable phone cases. There is a need for instructional marketing methods because most of the target demographic is young and not very familiar with sustainable phone case alternatives.

Consumers prioritise price, design, and durability when making decisions, with environmental sustainability coming in second.

It can't be denied that studies indicate that boosting awareness, improving product design, and enhancing marketing activities are critical for securing a greater market share. Ciclo Case can appeal to both environmentally conscious consumers and those more concerned with aesthetics and functioning by addressing issues such as restricted design alternatives and ensuring sustainability. The role of branding and marketing in impacting customer decisions cannot be emphasised enough, making it an important area for improvement.

#### 4. Conclusion

Ciclo Case's vision for a greener earth was admirable, but its efforts have gone largely unrecognised. Biodegradable products have the potential to mitigate plastic pollution and protect marine life. The research was developed to address poor branding, limited design options, and ineffective marketing for biodegradable phone cases in Malaysia.

The study highlighted key issues hindering the brand's growth, including low consumer awareness, minimal product variety, and an inability to effectively communicate the environmental benefits of the product.

Findings indicate a growing interest in eco-friendly products among consumers, with significant potential for Ciclo Case to capture market attention through improved branding and product diversification. The figures state that Ciclo Case should be more advertised to attract consumers to be aware of this brand and its benefits.

In a nutshell, Ciclo Case is poised to lead the eco-friendly phone case market in Malaysia, provided it continues to innovate and address consumer preferences effectively. By aligning branding, design, and marketing efforts, the project not only achieved its objectives but also demonstrated the potential for biodegradable products to address environmental issues while appealing to conscious consumers.



Figure 1: Design Collection

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