

The Role and Importance of Shortening Product Life Cycle with A Planned Obsolescence Strategy in Green Marketing

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Abstract

The study was designed to investigate the relationship between green marketing, which has recently come to the fore, and the negative effects of shortening product life as a result of the product obsolescence strategy used in marketing. The exploratory research design was adopted in the study. While obtaining the data, primary and secondary sources considered to be useful and relevant for the study were used. Planned obsolescence can lead to heightened resource consumption, waste generation, and negative ecological impacts. It can contradict the principles of sustainable production and consumption, which emphasize durability, longevity, repairability, and responsible end-of-life management. In order to make the negative aspects of product obsolescence more evident, the importance of the subject was emphasized by giving place to case studies from different sectors and products at the end of the study. As a result of the literature review and observations made for the study, it was deduced that the objective and subjective information of today's consumers is higher than before therefore they attach more importance to green marketing issues and they react more to strategies such as product obsolescence. All literature studies and observations were evaluated at the end of the study and suggestions were made for both consumers and producers.

Keywords: Planned Obsolescence, Green Marketing, Product Life Cycle, Marketing Strategy, Consumer Perception

1. INTRODUCTION

Today, due to consumers becoming more conscious, increasing sustainable consumption, consumer environmentalism and ecological problems in society, companies have had to focus on providing environmentally friendly products and services to meet environmental needs (Ishaq and Di Maria, 2019). With the increase in consumption awareness in individuals and institutions, companies has faced increasing public sensitivity, stricter regulations and increasing stakeholder pressure to protect the natural environment while producing. Therefore, "green" issues have become increasingly important to corporate decision makers (Nguyen-Viet, 2022). But in today's competitive market, businesses can use many different methods to make as much profit as

possible. One of these methods is planned obsolescence, in other words, making the products more demanded by shortening their useful life. Planned obsolescence can basically be expressed as designing the products not for too long in order to increase profit maximization and survive in the competitive market by reducing the lifetime of the products they produce (Hartl, et al. 2023). While planned obsolescence may benefit businesses in terms of short-term profits and market competitiveness, it raises ethical concerns and can have negative implications for consumers and the environment. Some critics argue that it fosters a throwaway culture, promotes excessive consumption, and contributes to the generation of electronic waste (Maggiolino, 2019). As a result of shortening the life of the products, consumers feel the need to change products frequently, and therefore businesses need to put products on the market much more frequently to meet the demand. Businesses can determine the service life of their products; It can be reduced by regulations made in product quality, by rapid technological renewals or by creating a new and old product perception in the minds of the consumer (Trienekens and Zuurbier, 2008).

It is seen that planned obsolescence applications are reacted by consumers in countries such as Brazil and the USA, which is considered as the starting point of the strategy, and companies that shorten the product lifecycle by implementing the strategy are sued by consumers (Pope, 2017). Such reactions, which increase with the effect of developing communication networks, can be considered as a sign of global awareness in consumers. In addition, green marketing, which has recently developed and is becoming more and more widespread among consumers (Nekmahmud and Fekete-Farkas, 2020), is seen in more consumers who is very careful and sensetive about; green products, green labels, interest in green products, sensitive to environmental and social issues, questioning the events ethically, knowing and seeking their rights, conscientious and more has revealed the existence of a conscious consumer group that approaches consumption rationally by displaying rational consumption behaviors (Szabo and Webster, 2021). In recent years, there has been a growing consumer demand for sustainable and durable products (Vătămănescu, et al. 2021). Consumers are increasingly conscious of the environmental impact of their purchasing decisions and are seeking products that align with their values (Kumar and Dubeyi 2023). This shift in consumer behavior, along with stricter regulations and stakeholder pressure, has pushed many businesses to adopt more environmentally friendly practices and develop sustainable product offerings (Khan, et al. 2023).

2. LITERATURE REVIEW

2.1. Green Marketing

Green marketing can be expressed as the adaptation of products designed and developed to all marketing processes in order to eliminate or minimize the destruction on ecological balance and the environment (Yaşar, 2019). Green marketing is a platform that brings together the concepts of sustainability, ecological and environmentalist marketing (Dangelico and Vocalelli, 2017). There is a need for green marketing to address issues that affect all humanity, the natural atmosphere and eventually sustainability (Djaadi, 2016).

In today's world, the concept of green marketing shows its effect more and more (Vilkaite-Vaitone, et al. 2022). The awareness of not only consumers but also companies towards the environment is increasing day by day. When looked at, many companies such as Toyota, BMW,

Apple, Nike, Sony, IBM, Siemens, Starbucks, Coca Cola, Vodafone follow an environmentally friendly policy and carry out their advertising and marketing activities within the framework of environmental awareness. Thus, it is seen that environmental products find their place in almost every product category (Günay, 2019). When the importance of green marketing is examined from two different perspectives, there is society on one side and businesses on the other (Bakar, 2015). As a result of the gradual decrease of natural resources, which are seen as inputs of production activities, consumers who increase their awareness of environmental problems have preferred to use environmental products (Sterner, 2003). The consumer shift toward environmental products is driven by the desire to conserve resources, minimize environmental impact, prioritize health and well-being, and support socially responsible businesses. This trend has pushed companies to adapt their practices and offerings, leading to a broader availability of environmentally friendly products in the market (Nekmahmud and Fekete-Farkas, 2020). However, some companies that want to produce and sell more products and make a profit by keeping the life cycles of the products as low as possible contradict this situation (Bajwa, et al. 2019).

The amount of products and services consumed in recent years has increased tremendously around the world, causing rapid depletion of natural resources and serious damage to the environment (Balderjahn, et al. 2013). Global warming, increasing environmental pollution and decreasing plants are some of the effects of environmental damage (Goggins and Rau, 2016). Concern for the environment has produced developments that emphasize the need to promote sustainability and minimize negative impacts on the environment. When thinking about green marketing, one of the biggest misconceptions is to focus solely on promoting green product characteristics or designing products that cause less ecological damage. Even though these movements are tactically involved in green marketing, businesses should always consider with a holistic approach how they can achieve these common goals and meet consumer needs in the long run (Ayyıldız and Genç, 2008). On the other hand, it is necessary to minimize the potential damages caused by the implemented strategies (Kuppelwieser, et al. 2019). Planned obsolescence is one of these strategies.

2.2. Planned Obsolescence

Planned Obsolescence is a strategy that has increased in recent years and is also a threat to sustainability (Nilsson and Lobo Perez, 2022). Planned obsolescence is a profound strategy in which products with low durability are designed, which are used by companies selling durable products and are characterized by gradually decreasing consumer value over time (Agrawal, et al. 2015). In 1954, industrial designer Brooks Stevens referred to the concept of planned obsolescence as "instilling in the buyer the desire to have something a little earlier than necessary, a little newer, a little better" (Adamson and Gordon, 2003). As a central marketing strategy, the purpose of planned obsolescence is to encourage consumers to buy as much as possible (Guiltinan, 2009). To elaborate, planned obsolescence should encourage consumers to purchase the newest products by making them incompatible or partially compatible with the older version, and thus depreciate the previous versions (Miao, 2011). By designing products with a short product life cycle, companies plan to achieve higher revenues and profits in markets that are saturated and highly competitive (Gershoff et al. 2012). Consumers, who try to keep up with the

movement of the products in a sense, cannot remain unresponsive to this process and perform planned obsolescence when they renew their existing products (Tüfekçi, et al. 2014: 592). The emergence and adoption of planned obsolescence dates back to the early 1900s, when the Dupont brand reduced the durability of early versions of nylons to cause them to change (Slade, 2006). Also, Xerox and Kodak have reduced the durability of products such as copiers and micrographic equipment by designing their core components to become obsolete faster (Borenstein et al. 1995).

It is not right to view planned obsolescence only from the consumer perspective (Echegaray, 2016). Planned obsolescence includes the determination of company policies in a way that will ensure that the products lose their function before the expected time from the front of the enterprises, as well as the consumers buying the new a little earlier (Maycroft, 2009). These policies include making designs in line with plans about how durable a product should be during the production phase and determining the quality of the material in line with these plans. In addition, although the products continue to work for the expected period, this time, through advertisements, users can be directed to their usage desires and thus obsolescence can be ensured. In addition, the fact that the spare parts of the products are not included in the market or the repair cost of the product is almost the same as buying a new one is considered within the scope of planned obsolescence (Aladeojebi, 2013: 1504).

Guiltinan (2009) "Creative Destruction and Destructive Creations: Environmental Ethics and Planned Obsolescence" and N. Maycroft (2009), "Consumption Planned Obsolescence and Waste" can be given as examples of his studies that deal with the subject with its environmental aspects. In addition, the documentary "The Light Bulb Conspiracy" shot by C. Dannoritzer (2010) and T. Cooper's book "Longer Lasting Products: Alternatives to the Throwaway Society" published in 2010 deal with the issue with its environmental dimension.

The main reason for the existence of planned obsolescence strategies is to establish a balance in the system as a tool that provides high consumption rate in response to increased production as a result of technological developments. In line with this basic purpose, the causes of planned obsolescence are examined under three headings: anthropological, sociological and economic (Pope, 2017). These three topics can be summarized as follows: from the point of view of humanity and its relationship with the environment, culturally placing human in the center of nature, giving a happy meaning to consumption activities with socially created false needs, and an economic system in which growth is adopted (Taffel, 2023). From this point of view, it can be stated that the behaviors of the firms in a growth economy and the consumer behaviors in the consumption culture are the two important motivations of planned obsolescence (Kanlıtepe and Özgül, 2021: 965).

Nowadays, businesses are influencing consumption behaviors with the desire to own the product by arousing the desire to consume in consumers with various methods. Due to the media and the internet, advertisements can reach large audiences (Özdemir and Yaman, 2015). As a result of the planned obsolescence strategy, consumers are materialized by using advertising as a marketing tool and are directed to buy even though they do not need it. Consumers are sold a lifestyle based on consumerism (Çelik, 2018). The most obvious and up-to-date example of this is the advertisements made on social media on TV and on the internet by taking advantage of Covid-19. As a result of the pandemic and the need for social distancing measures, individuals have had to rely more on remote and online transactions, conducting most of their activities from home (Zhu, et al. 2021). In this period, transactions in many fields from education to commerce began to be carried out online. Therefore, the need for screens from computers to TVs has increased (Kulular-İbrahim, 2021). In this period, as a result of the planned obsolescence strategy, advertisements forcing consumers to buy new products by influencing them have increased in a way that prevents them from self-questioning whether they need it or not. For many products, such as this example, which shows that marketing techniques have social effects in the form of both economic and social damage, various promotions are frequently on the agenda in order to increase the sales of new model products by evaluating the corona as an opportunity for many products (Torlak and Tiltay, 2017).

2.3. Product Lifecycle and Planned Obsolescence Types

The role and importance of shortening the product life cycle with a planned obsolescence strategy in green marketing is a contentious topic. The product lifecycle is a term that refers to the actions that take place from the time a new product enters the market until it leaves the market (Yüce, et al. 2019: 176). Each product has a certain life span. When a product idea is commercialized, the product enters the market and competes for sales and profits. Products have a lifetime just like humans. The life cycle in humans is defined as the life cycle and is referred to as the product / market life cycle as it depends on a specific market when applied to products. The product lifecycle may be short for some products and long for some products (Draskovic, et al. 2018). The life cycle of each product has distinctive features. The length of the product life cycle stages may vary depending on the sector, product or service it is dependent on (Kotler and Armstrong, 2018).

Using the concept of product lifecycle to develop marketing strategy can also be difficult because marketing strategies can be both a cause and an effect for the product lifecycle. The current product lifecycle position suggests the best marketing strategies to marketing managers, and the results can affect product performance in later stages, which in turn affects the market and the market cycle (Kotler and Armstrong, 2018). In fact, today's market for technological products requires the product or service to be renewed at most every two years. It has been stated that a business that does not immediately respond to the needs of consumers will become marginal in a rapidly growing market by replacing its competitorsr (Wiecek-Janka, et al. 2017). Products that are manufactured with a limited lifetime encourage the purchase of spare parts and thus generate stable sales and gains for producers (Slade, 2006). According to the researches made in recent years, the service life of the products has decreased significantly due to technological advancements, consumer demand for novelty, and economic considerations (Casals, et al. 2019). It is seen that the lifespan of the products is still decreasing despite positive feedback. Consumers want the new product more quickly, and use the old products for a shorter period of time. This leads to a decrease in the need for quality products that can be used in the long term and encourages consumers to have new products more quickly (MacArthur, 2016).

Continuous improvement in corporate strategies often involves introducing new components or features to existing products. This approach allows companies to enhance their products, address

customer needs, and stay competitive in the market (Saarikko, et al. 2020). Companies frequently update their technology to mitigate the risk of competition from the used goods market (Guiltinan 2009). However, there is a potential risk for producers who incentivize the release of new products. This risk arises when the value of older units diminishes as soon as the producer introduces the new product. Even if the improvements in the new product are not substantial, consumers may still perceive their current product as "out of fashion" due to the constant upgrading cycle (Rivera and Lallmahomed, 2016).

Consumers' purchasing behavior is influenced by the perceived lifetime of a product. A study suggests that consumers tend to believe that cheaper products have a shorter lifespan compared to more expensive ones (Cox, et. al. 2013). This perception leads customers to assign lower value to such products. Therefore, the perceived reliability of a product plays a significant role in shaping consumer behavior (Mansoor, et. al. 2022).

The obsolescence policy designed and implemented by manufacturers to shorten the life of the product and to encourage the purchasing of substitutes by consumers can be realized in several different ways. These are; technological obsolescence, psychological obsolescence and quality obsolescence (Guiltinan, 2009; Packard, 1960).

2.3.1. Technological Obsolescence

When a higher technology product is put on the market, it occurs as the previous product is considered to be obsolete. According to Packard (1960), it is the most appreciated and most useful form of planned obsolescence. Technological obsolescence, which is the most valid and widely used type today, increases the performance of a product with technological developments and increases the benefit to be obtained from that product. The first type of obsolescence was made as technological obsolescence (Solczak, 2013: 8).

Television screens that offer a better image quality, use less fuel running cars, longer-lasting phone batteries have always been appreciated by consumers. These product features align with consumer desires for enhanced performance, cost savings, and convenience (Bodart and Truyens, 2020). However, in smartphones that are launched every year, a real innovation is very rare. In addition, constantly renewed smart phones create the feeling that the product they have is getting old. Consumers think that they are following the technology by replacing their old phones with a higher model. Thus, while companies ensure the continuity of their production and sales thanks to their renewed models, consumers also feel psychologically satisfied (Aydın, 2018: 13-14).

2.3.2. Psychological Obsolescence

Psychological obsolescence is defined as the consumers' willingness to renew the products that they buy voluntarily, functionally working and have no problems (Kadıoğlu, 2014: 68). In psychological obsolescence, the product, which is still in good condition in terms of performance and quality, becomes less desirable due to the introduction of another product into the market, and becomes less desirable due to design or other changes (Maitre-Ekern and Dalhammar, 2016). There is an abstract obsolescence in psychological obsolescence, which is also called glamor obsolescence or style obsolescence. The consumer, for a subjective reason, is no longer satisfied with the product, although there is no disruption in the operation of the product (Packard, 1960). Two basic factors affecting psychological obsolescence and brand value in the eyes of consumers are; is advertising and fashion (Keeble, 2013). Advertising, as a form of persuasive communication is an effort to influence the target audience positively and to turn towards purchasing behavior by giving information about the product with the messages it sends to the target audiences for the purpose of communication it has while also affecting the attitudes and perceptions. While introducing a new product, the old product is devalued and the consumer is directed to the new one (Elden, 2003).

2.3.3. *Quality obsolescence*

Quality obsolescence, refers to the intentional use of poor quality materials or manufacturing processes during the production phase, resulting in products losing their functionality or becoming obsolete in a relatively short period of time. This practice is often associated with planned obsolescence, a strategy aimed at stimulating repeat purchases and increasing profitability (Azamfirei, et al. 2023). Quality obsolescence can be explained as causing the product to lose its functions in a short time by using poor quality materials during the production phase. The priorities that support this in consumer behavior are that the product is suitable for visual tastes and fashion trends. Features such as the quality and longevity of the product, which will likely change in a short time, are considered unnecessary (Kadıoğlu, 2014: 65).

Guiltinan (2009) states that quality obsolescence, which he refers to as concrete obsolescence, is seen in three ways. The first is that the product life is designed to be limited. Portable radios, whose lifetime is reduced to 1000 hours, are designed as a light bulb and a product life of three years are shown as examples of this type.

The second is that the product is designed to allow limited repair. Repair of the broken product is either not possible or unreasonably high cost. This motivates the user to buy new products.

Guiltinan (2009) shows the deterioration of the aesthetic design of the product in time to reduce the satisfaction of the product as the third and last form of quality obsolescence. Damage to the appearance of the products during daily use in a short time can cause users to dispose of the product and replace it with a new one (Cooper, 2005).

2.4. Planned Obsolescence Principles

Planned obsolescence operates on the premise that the design process intentionally favors the creation of more fragile goods. Engineers are motivated to design products with a limited lifespan. As a result, both products and their components become outdated over time (Rivera and Lallmahomed, 2016). Unless there is an extended producer responsibility program in place, these items are typically disposed of rather than being reused. However, it's worth noting that in certain markets, such as the automobile industry, remanufacturing plays a significant role, allowing for the reuse of components and extending the lifespan of certain products (Kojima, et al. 2009).

As a result of the various crises that have devastated the global economy, manufacturers have found that the problems of the global economy are caused by the oversaturation of the market with goods that have a very long life. Manufacturers have realized that high quality goods cause situations such as economic crisis and unemployment. They also analyzed that consumers are reluctant to spend too much money on quality equipment, but low-quality, efficient product designs make the purchaser emotionally happy (Niklewicz-Pijaczynska, et al. 2021). With this thought, manufacturers have started to use the planned obsolescence method and this method contains some basic principles. In summary we can say that planned obsolescence depends on certain basic principles and those principles are (Damianov, 2019; Damianov and Vlahova, 2019; Maitre-Ekern, E., and Dalhammar, 2016):

• The duration of use of the product (warranty period, expiration date, useful life, etc.) is deliberately planned according to a certain limit.

• Planned limitation of the features of the product for later improvements (an example of products locking (freezing) in a non-functional way over time.)

• Always developing better alternatives and offering products with poor qualities to encourage the consumer to these alternatives (e.g. screen sizes, pixel counts, video stream rate, capacity, data stream rate, etc.)

• Requiring consumers and producers to update the product and buy a new one after a while, with the imposition of mandatory legal sanctions.

• Expanding the design of product design, creating a design influenced by trendy marketing and seasonality factors.

• Suspension of the supply of industrial products that are exploited by endless production resources (particularly the feature of computer equipment).

• Integration of product components with life cycle constraints, but includes more than 50% of the product value.

• Complex irreparable items are useless. Failure of a single component of the device causes complete change.

• Incompatible newly introduced software with old devices or the production of new accessories that are incompatible with old products.

• Shortening the shelf life and life cycle of the product.

• Use of low grade and low quality materials. It means more supplies, more energy, and more water for every new device or product purchased. And this leads to more pollution and greenhouse gas pollution for the planet.

Especially, the last item indicates a very important point for the green marketing issue, which the study also emphasizes.

2.5. Examples of Planned Obsolescence

The light bulb indeed serves as one of the earliest documented examples of planned obsolescence. In 1895, bulbs manufactured in Ohio, USA, featured a filament invented by Adolphe Chaillet that lasted approximately 1500 hours (Carles, et al. 2020). However, by 1924, advancements in filament technology had extended the bulb's lifespan to around 2500 hours. Rather than embracing the opportunity to produce more durable bulbs, manufacturers made a strategic decision to limit the lifetime of light bulbs to 1000 hours by modifying the filament. Patents that enabled bulbs to surpass the 1000-hour threshold were rejected. As a result, sales of light bulbs significantly increased as consumers were compelled to replace them more frequently (Rivera and Lallmahomed, 2016).

The business model of planned obsolescence aims to circumvent the "durable goods problem" by mitigating the adverse impact of market saturation, which can lead to reduced sales rates for the producer (Sankaranarayanan, 2007). The limited lifespan of products fosters a culture of replacement purchases, thereby generating consistent sales and earnings (Slade, 2006).

Apple is among the companies that incorporate planned obsolescence into their business model. Their devices, like the iPod, iPhone, or iPad, are intentionally designed to make it difficult for users to replace the batteries themselves. Consequently, when the batteries lose capacity, users are left with two choices: either purchase a new device or have Apple perform the battery replacement (Kessler and Brendel, 2016: 33). Apple employs various strategies to manage obsolescence, including the deliberate incompatibility between new and old products (Malinauskaite and Erdem, 2021). An example of this is evident in the second generation of Apple's in-ear headphones, which introduce new features such as remote control and a microphone (Apple, 2020). However, these features are only fully functional with newer models of the iPhone, iPad, or iPod. For instance, the headphones are completely incompatible with the first generation of the iPod shuffle and only provide audio playback for the second and third generations. From the fourth generation onwards, all features work properly. As a result, customers who own older versions of the iPod shuffle and desire to enjoy the benefits of the new headset and its functions face technological obsolescence and seemingly have no option but to purchase a newer model (Kessler and Brendel, 2016: 34).

Furthermore, recent research suggests that customers perceive their iPhones to become slower when new iPhone models are released (Mullainathan, 2014). Analysis using Google's data tool Trends reveals an increase in searches for 'iPhone slow' following new iPhone release dates. Several reasons could explain this phenomenon (Makov and Fitzpatrick, 2021; Wen and Zhu, 2019; Chumnumpan and Shi, 2019): Firstly, Apple may intentionally slow down older iPhone versions through updates to their iOS operating system, a form of qualitative obsolescence. Secondly, older iPhone models may lack the computational power required to handle newer versions of the operating system, leading to technological obsolescence. Lastly, customers may be seeking a justification to replace their older devices, indicating psychological obsolescence.

Printers and ink cartridges serve as prominent examples of planned obsolescence in consumer products (Amandam, 2020). Numerous lawsuits have targeted Epson inkjet printers, which were accused of prematurely suspending printer functionality before cartridges were fully used. Following the legal proceedings, Epson was found to be in the wrong and subsequently compelled to compensate consumers who purchased their products between 1999 and 2006 with \$45 coupons (Delaney, et al. 2009).

2.6. The relationship of planned obsolescence with green marketing

The relationship between planned obsolescence and green marketing can be complex. On one hand, planned obsolescence, with its emphasis on creating short-lived products and encouraging frequent replacements, can be seen as contrary to the principles of green marketing. Green marketing aims to promote environmentally friendly practices, such as sustainability, resource conservation, and reduced waste (Sarkar, 2012). Planned obsolescence often leads to increased consumption and waste, as products are discarded and replaced more frequently than necessary. This can have negative environmental impacts, including the depletion of resources, increased energy consumption in manufacturing, and the generation of more electronic waste (Satyro, et al. 2018).

However, some companies may attempt to integrate green marketing practices into their approach to planned obsolescence. For instance, they may emphasize energy efficiency, recyclability, or the use of eco-friendly materials in their products. They may also offer recycling or take-back programs to encourage responsible disposal (Maitre-Ekern and Dalhammar, 2016). Critics argue that these green marketing initiatives are often insufficient and merely serve as greenwashing, providing an illusion of environmental responsibility while still promoting a culture of consumption and waste (Scanlan, 2017).

3. METHODOLOGY

This study aimed to examine the relationship between green marketing and the negative effects of product obsolescence strategies used in marketing. Green marketing has recently emerged as an important concept promoting environmentally friendly products and practices. However, concerns have been raised about adverse consequences from shortened product lifecycles associated with planned obsolescence and other product obsolescence strategies.

A systematic review methodology was adopted to achieve the objectives of this study. Relevant academic databases and literature resources were searched to identify studies examining the link between green marketing and adverse effects from product obsolescence strategies. The literature review includes articles published in English and Turkish until 2023. Studies selected for the literature review will be evaluated against predetermined inclusion and exclusion criteria. Data extraction involves analyzing key information from selected studies, such as research design, methodology, variables studied, and findings on the relationship between green marketing and the negative effects of product obsolescence strategies.

With the synthesized findings, it is aimed to provide a comprehensive overview of the available information on this subject. The study highlights the complex interplay between green marketing and product obsolescence by identifying common themes, trends, and research gaps in the literature.

4. RESULTS

As a result, the link between green marketing and the negative effects of product obsolescence strategies such as planned obsolescence is a complex and controversial issue. Trying to reveal the link between green marketing and the negative effects of product obsolescence strategies, this study aimed to add to current knowledge and provide insights for policy makers, marketers and consumers. In line with the data compiled as a result of the research the following inferences were made;

- While addressing the problems related to product obsolescence in the context of green marketing, it has also been determined that responsible practices in line with sustainability goals should be encouraged.
- While green marketing aims to promote environmentally friendly products and practices, concerns arise when these efforts clash with the strategy of shortening product life cycles to increase consumption and profitability.
- Balancing several factors is essential to address potential conflicts and ensure responsible practices that benefit the environment. Innovations in product design, materials, and manufacturing processes can contribute to extending product lifecycles and reducing waste. By incorporating sustainable practices into their green marketing strategies, companies can enhance their environmental credentials and meet the growing consumer demand for eco-friendly products.
- In addition, consumer awareness and education play a vital role in influencing purchasing decisions. Educating consumers about the effects of product obsolescence strategies can empower them to make informed choices and support sustainable alternatives. Transparency in product labeling and certification systems can also help consumers identify truly eco-friendly products.
- Also, collaboration between stakeholders is crucial to driving change. Governments can implement regulations that discourage planned obsolescence and encourage sustainable product design. Industry associations and organizations can encourage companies to adopt responsible approaches by establishing guidelines and standards for green marketing practices.

• Addressing the complexities surrounding the intersection of green marketing and product obsolescence requires a multidimensional approach. By considering innovation, consumer demand, environmental concerns and sustainability together, it is possible to find a balance that encourages responsible practices and contributes to a more sustainable future.

5. DISCUSSION AND CONCLUSION

Today, the negative environmental impacts of planned obsolescence, such as increased consumption, resource depletion and waste generation, appear to far outweigh any potential benefits. A truly green marketing approach needs to prioritize longevity, durability, repairability and recycling initiatives to minimize environmental damage.

The relationship between planned obsolescence and green marketing is mostly negative in the eyes of consumers, but this may vary depending on the specific practices and goals of the companies. While planned obsolescence and green marketing may seem contradictory, some companies may try to harmonize both concepts, but the effectiveness and sincerity of such efforts will remain a matter of debate.

In conclusion, the role and importance of shortening the product lifecycle through planned obsolescence in green marketing is a complex and controversial issue. Balancing innovation, consumer demand, environmental concerns and sustainability is crucial to addressing potential conflicts and ensuring responsible practices that truly benefit the environment. Assuming that the concepts mentioned in the study are quite up-to-date in terms of both the producer and the consumer; surveys, observations, experiments, etc. can be used in future studies and more detailed, deep and important information can be obtained by doing analyze with these methods.

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