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The Impact of Ethical and Sustainability Issues associated with Planned Obsolescence on
Consumer Purchasing Decisions

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Abstract:

Against a background of increasing concern about ethical and sustainability issues amongst younger people, this developmental paper identifies a need for research into the effect that the adoption of strategy of 'Planned Obsolescence' by a manufacture has upon consumer purchasing decisions given the ethical, waste and sustainability issues associated with the practice.

A comprehensive review of existing literature relating to planned obsolescence has identified that almost all extant literature examines the phenomenon from the perspective of the manufacturer with little, if any, research examining the issue from the perspective of the consumer.

Given increasing interest in ethical and sustainability issues, particularly amongst younger more socially aware generations, this could be problematic for businesses adopting such a strategy and the lack of research into the subject from the perspective of the consumer represents a gap in current knowledge.

This developmental paper represents the first step in filling that gap.

Track: Marketing And Retail

Word Count (excluding abstract and references): 2072

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1.0 Purpose of Research

Ethical and sustainability issues are known to significantly impact consumer purchasing behaviour with a growing trend towards ethical spending resulting from better informed and more socially responsive consumers (Harrison *et al.*, 2005; Sheahan, 2005; Cheng *et al.*, 2011; Sharma and Lijuan, 2013) with younger generations such as Millennials believing they have a responsibility to make the world a better place and feeling that businesses should do the same (McGlone *et al.*, 2011). Indeed, concerns about sustainability and climate change are currently of growing concern to many individuals as reflected in activities such as the 'Just Stop Oil' and 'Insulate' protests that hit the headlines in 2022 with both organisations vowing to continue their protests into 2023 (Guardian, 2023).

These environmental and sustainability concerns extend into other realms of consumer purchasing including consumer electronics with the average person producing 7.3 KG of electronic waste each in 2019 adding up to a global total of 53.6 million tonnes, a figure which is predicted to grow (Financial Times, 2022). Consumer behaviour is often cited as significant cause of this electronic waste with a typical US consumer replacing their smartphone on average every 2.49 years (Statista, 2023).

However, this phenomenon may not be solely the responsibility of consumers, with smartphone manufactures such as Apple often being criticised for degrading the performance of older models of its iPhone (Forbes, Undated) if not actually 'killing off' those older models (Daily Record, 2022).

Product and marketing strategies designed to restrict the lifetime of a product are termed 'Planned Obsolescence' and usually undertaken by businesses attempting to either maintain sales growth or maintain competitive advantage (Guiltinan, 2009) with most academic research focussing upon the issue from the perspective of the manufacturer and very little focussing upon the issue from the perspective of the consumer (Kupplewieser *et al.*, 2019). However, consumer focussed research has found that planned obsolescence can adversely impact consumer perceptions of value (Kupplewieser *et al.*, 2019) and that consumers have ethical and sustainability concerns relating to the phenomenon which may in turn affect their purchasing behaviour (Poole, 2021).

Responding to calls for a deeper understanding of planned obsolescence by authors such as Kupplewieser *et al.*, (2019) and Poole (2021), this research aims to examine this issue further by focussing upon ethical and sustainability concerns relating to planned obsolescence that consumers may hold and the impact of those issues upon their purchasing behaviour.

2.0 Literature Review

As noted earlier, current academic literature relating to planned obsolescence focusses almost exclusively on the issue from the perspective of the manufacture (Kupplewieser *et al.*, 2019), a perspective which is widely reflected in the current definitions of planned obsolescence that are proffered by authors. However, an examination of those different definitions by Kupplewieser *et al.*, (2019) indicated that a common theme runs through most, specifically, that planned obsolescence is

a deliberate strategy adopted by manufactures to shorten the life span of products. The wider academic literature indicates that this strategy is essentially adopted by manufacturers to maintain sales growth and competitive advantage (Guiltinan, 2009) and therefore profitability (Rivera and Lallmahomed, 2016) despite it being wasteful of resources (King *et al.*, 2006) and contributing to significant environmental problems relating to the disposal of waste (Slade, 2006). Some authors also argue that planned obsolescence contributes to innovation and the advancement of technology with the associated benefits to society of this (Bulow, 1986; Guiltinan, 2009).

The ultimate goal of planned obsolescence is to “stimulate replacement buying by consumers” (Guiltinan, 2009 p. 20) with five different types being identified in the academic literature (Guiltinan, 2009; Rivera and Lallmahomed, 2016; Kupplewieser *et al.*, 2019; Hatta 2020):

- I. Technological or Functional Obsolescence where a product becomes out of date with consumers becoming more interested in products with better performance brought about by improved technology.
- II. Psychological or Style Obsolescence where new versions of a product are designed to specifically trigger a desire on the part of a consumer to purchase that new version.
- III. Systemic Obsolescence where a system or component that an existing product is dependent upon to function correctly is changed or withdrawn.
- IV. Design Obsolescence where a product is specifically designed to last for a set period of time or to cease working after a specific number of uses.
- V. Repair Obsolescence where a product is specifically designed to be non-repairable in the event of failure.

Whilst many products with inbuilt obsolescence will fall into just one of these five categories, products can fall into more than one category (Rivera and Lallmahomed, 2016).

For example, a consumer may decide to replace their Smartphone with a newer model as they find that newer model to be more aesthetically appealing (i.e. Psychological or Style Obsolescence) or they may wish to use the improved functionality offered by that newer model (i.e Technological or Functional Obsolescence). Alternatively, a consumer’s existing phone may fail and require a repair using a replacement part that is not available such as a battery (Repair Obsolescence) or, as noted with Apple’s withdrawal of support from certain models of iPhone earlier (Daily Record, 2022) where the provider withdraws support for that model of phone, and it ceases to work (Systemic Obsolescence).

From this it can be seen that for some types of planned obsolescence there is a direct link related to the desires of the consumer for a more attractive product, either through style or psychological appeal or functional appeal, effectively offering the consumer at least some choice in the decision to replace or upgrade the product.

In such circumstances, the responsibility for the negative consequences of planned obsolescence can therefore be seen to be shared between the manufacturer and the consumer with consumers themselves acting in a manner that could be deemed ethically questionable by, for example, creating waste and environmental damage with their desire for the very latest product (Guiltinan, 2009).

However, in other circumstances, i.e. through systematic, design or repair obsolescence, the consumer effectively has no choice meaning the responsibility for any negative consequences lies

solely with the manufacturer. Where new product development includes designing in such obsolescence for corporate and possible personal gain, this is often at the expense of the environment and the welfare of consumers and could therefore also be deemed to be ethically questionable (Guiltinan, 2009). This is especially the case where promotional techniques are also used to build a belief amongst consumers that existing products are less useful simply because a new updated version of the product has been released, especially where the improvements offered by that new product are minor or even illusory (Giaretta, 2005).

2.1 Research Aims and Objectives

Based upon the above discussion, the aim of this research will be to examine consumer attitudes towards planned obsolescence to determine if they consider the practice to be 'unethical' and the effect, if any, that planned obsolescence may have upon their purchasing activity. The research question will therefore be 'what effect do ethical issues associated with planned obsolescence have upon consumer purchasing decisions?'

The objectives are therefore:

- I. To explore ethical issues that consumers associate with planned obsolescence
- II. To understand the range of responsibility that consumers take for such ethical issues themselves
- III. To identify the broad potential effect such issues might have upon consumer purchasing decisions
- IV. To explore why such issues might impact consumer purchasing decisions
- V. To test and measure the influence of specific ethical issues on consumer purchasing decisions
- VI. To measure the moderating effect of demographic and other control variables on the relationship between specific ethical issues and consumer purchasing decisions
- VII. To measure the moderating effect of brand strength on the relationship between specific ethical issues and consumer purchasing decisions

3.0 Methodology

3.1 Research Design

This study will follow a mixed-method sequential exploratory design with an initial qualitative phase of research being used to inform a subsequent quantitative phase of research. This design is a common approach in the field of academic marketing research when little is known about a subject area. Qualitative methodology will be used to initially explore the subject area before subsequently verifying and validating findings using quantitative methodology (Morgan 1996; Harrison and Reilly, 2011).

3.2 Qualitative Methodology

Semi-structured qualitative interviews will be used to collect data during the initial qualitative phase of research aimed at identifying ethical issues that may affect the decision to use a particular technology. Semi-structured interviews allow research participants to share rich descriptions of phenomenon of interest with a researcher, are an established means of investigating a complex area, and an appropriate technique for exploratory studies (Mason, 2002; DiCicco-Bloom and Crabtree, 2006; Hughes, 2006; Saunders *et al.*, 2009).

As ethical values are influenced by different environmental, cultural and personal development backgrounds (Sharma and Lijuan, 2013) and generational influences (McGlone *et al.*, 2011), a wide

sample of individuals representing different generations and backgrounds will be included in the research with participants selected on a purposive convenience basis. The use of such purposive samples is typical of qualitative research (Miles and Huberman, 1994). Whilst academic literature suggests sample sizes of around 12 to 15 for such research (Miles and Huberman, 1994; Madden and Perry, 2003), this research will follow the principle of saturation whereby interviews will be conducted until no further significantly different insights are emerging (Saunders *et al.*, 2009).

The qualitative data will be analysed using thematic analysis, which is a flexible means of analysing data that is independent of any particular ontological or epistemological perspective and provides a detailed and rich account of qualitative data (Coffey and Atkinson, 1996; Braun and Clarke, 2006).

3.3 Quantitative Methodology

An online questionnaire will subsequently be used to quantify and confirm the findings of the qualitative phase of research as this method enables standardised, relatively structured data collection (Matthews and Ross, 2010). Given the nature of ethical values identified above, a stratified random sampling technique will be used to ensure that all sections of the wider population are included in this phase of research with the sample size being determined by the requirement for a high degree of statistical accuracy for the findings and the needs of the chosen analysis technique(s), most likely Structured Equation Modelling (Saunders *et al.*, 2009; Bryman and Bell, 2011). Appropriate care will taken to ensure reliability and validity throughout.

4.0 Anticipated Results

In addition to identifying ethical and sustainability issues that consumers have with planned obsolescence, the results of this study are also expected to show the likely effect of those issues on consumers purchasing decisions where manufacturers are known to practice such a strategy. Furthermore, the results are also expected to show generational differences in attitude towards planned obsolescence along with further differences based upon other demographic factors such as income levels and education given that ethical values are influenced by different environmental, cultural and personal development backgrounds (Sharma and Lijuan, 2013).

5.0 Discussion

5.1 Implications

This research will contribute to the business ethics literature and general business management literature by identifying the ethical and sustainability concerns that consumers have when companies adopt a strategy of planned obsolescence and the effect of those issues on their consumer behaviour, including purchasing decisions .

This research will enable managers to consider those issues prior to making a decision about following a strategy of planned obsolescence and adjust their decision making in order to minimise the possibility of an adverse consumer reaction. This may be of particular importance when the product in question is targeted at a market segment that is known to have strong ethical or sustainability concerns.

5.2 Proposals for next research steps

The next stage of this research will be the identification of a suitable sampling methodology for the qualitative phase of research, specifically the identification of characteristics that differentiate individuals with differing ethical viewpoints and stances. This could be based upon demographic factors such as age, education, and income level as well as factors such as cultural background.

Once this has been completed, the process of identifying and recruiting potential participants for the semi-structured interviews will begin, with a view to conducting those interviews in mid to late 2023 with the aim of preparing initial results for presentation at BAM 2024.

5.3 Advice sought

Advice is sought in three areas:

- I. Potential conceptual frameworks that may be used to support and develop this research
- II. Are there existing obsolescence scales that can be adapted for use in this research or should new scales be developed
- III. Which product categories could this research focus upon.

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