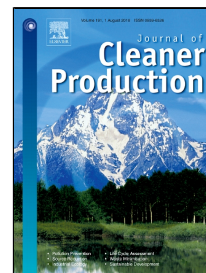


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Planned obsolescence or planned resource depletion? A sustainable approach

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ABSTRACT

Although much research has been done on ways to provide better conditions of environment and cleaner production, little attention has been paid to the impact of the short lifetime of the current products in sustainability and also to the necessity of providing natural resources to supply goods to a human population with a growth rate never seen before. Using literature review, secondary data and field research to illustrate this work with examples, the objective of this paper is to study the necessity of changing the paradigm of planned obsolescence to the one of long-lasting products and to present some suggestions found in the literature review on how to keep them updated under so many changes and innovation to which the products are subject in the present days. The practical implications of this research are to propose two mechanisms of planned obsolescence to complement the theory: **Design for fast consumption**, showing how industry designs products to artificially increase consumption of olive oil, perfumes, sunscreens, moisturizing creams, shampoos and other related products, and alert how a simple design change in toothpaste tubes with a mouth of internal diameter of 8 mm decreased to 5 mm can reduce consumption by 61% if frequency of brushing and length of toothpaste can be maintained; and **Design for restricted technological update**, approaching how industry uses this mechanism to force people to exchange their cellular phones and electronics in general every year; and also to propose solutions for a better benefit for consumers and the environment, and to arouse interest that global developing based on a consumption society is no longer sustainable, so a new and less consumerist society must replace the current one.

Keywords: Sustainability, Lifetime, Obsolescence, Consumerism, Innovation

Abbreviations: DESA, United Nations Department of Economic and Social Affairs, Population Division; DFX, Design for X; DOL, United States Department of Labor; EFFRA, European Factories of the Future Research Association; FAO, Food and Agriculture Organization of the United Nations; HYDE, Netherlands Environmental Assessment Agency, History Database of the Global Environment; MAM, Milwaukee Art Museum; OECD, Organization for Economic Co-operation and Development; SUV, Sports Utility Vehicle; UNFPA, United Nations Population Fund; WCED, World Commission on Environment and Development

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