

Prosumers' behavior model and sustainable consumption

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Abstract

Phenomenon of sustainable consumption refers directly to the concept of sustainable development (Harrison et al., 2005). It is a complex category and a subject of interest to various scientific disciplines, international organizations and state institutions. According to the OECD (2008), sustainable consumption is the use of goods and services that meet basic needs and improve the quality of human life, while using natural resources, toxic materials and emissions from waste and contaminants during the life cycle, that they would not diminish the needs of future generations.

We can look at sustainable consumption from two perspectives: macro and micro. Sustainable consumption analyzed in the macroeconomic perspective takes into account mainly issues of the place of consumption in the concept of sustainable development (Defila, et al., 2014), sustainable consumption policy (Reisch and Thøgersen, 2017), as well as its' tools and indicators (Polonsky et al., 2014). Macroeconomic approach do not refer on the other hand, to issues related to consumer behavior. The second approach is microeconomic and is part of the trend of research on consumer behavior. Initially, only the ecological consumer behavior - green, pro-ecological consumption was examined in this note (Straughan and Roberts, 1999). Then the interest of researchers was also extended to the social aspect of sustainability, which resulted in the analysis of ethical behavior and ethical consumption (Cherrier, 2007), and only in the latest publications began to use the term sustainable behavior (Szmigin et al., 2009). Research carried out in this trend focuses mainly on the assessment of consumer awareness (McDonald and Oates, 2013), on their pro-ecological and ethical attitudes (Peattie and Peattie, 2009), and on explaining the problem of non-compliance of declared attitudes with real behaviors (Newholm and Shaw, 2017).

Currently, the important stream of research on sustainable consumption is related to consumer's engagement and involvement in co-creation of product and services offer by companies on market. This activity of consumer is recognized as prosumption. The phenomenon was first referred to by Toffler in the book from 1970 entitled: "The Shock of the Future", and was further developed in other publication from 1980 called „The Third Wave”, where he defined the concept of prosumption. In his works Toffler characterized two types of attitudes which identify the consumer as a prosumer (Toffler, 1997):

- 1) a situation in which the consumer, focused mainly on acquiring new goods and exchanging the old/broken articles for new ones or concentrated on using a multitude of services, undertakes individual activities related to renovation, maintenance and assembly of purchased goods/ equipment and decides to individually perform an increasing number of

- services which, so far has been restricted to agents outside his or her household,
- 2) a situation in which the consumer meets his or her needs of conscious involvement in the process of designing and preparing/performing production of goods and delivery of services. This is demonstrated in consumer's participation in the processes of designing goods and services – in cooperation with producers whereby the consumer becomes the so-called creative consumer.

Toffler does not claim, though, that the prosumer approach will dominate the economy. Consumers' active involvement in the production of goods or in the provision of services will only be a process leading to balance between the production oriented on satisfaction of other people's needs and the production oriented on consumer's own needs combined with consumption (Toffler, 2003).

The contemporary consumer can be defined as a proactive and confident consumer who is capable of shifting the power of influence from producers and sellers to the final user of goods/services (Euro RSCG, 2010). I. Mathia (2004) indicates that with the growth of products, distribution and communication channels and with a wider access to information, the contemporary consumer is able not only to affect more effectively the buying process, but also the values created by a company, and consequently by a brand.

However taking in consideration the phenomenon of sustainable in future more focus should be on first concept of prosumer proposed by Toffler, where consumer concentrated on using a multitude of services, undertakes individual activities related to renovation, maintenance and assembly of purchased goods/ equipment and decides to individually perform an increasing number of services as well on consumer's engagement in business projects in accordance with sustainable development.

The purposes of the paper were to identify prosumption behavior of consumer on retail market, as well define role and influence of sustainable consumption phenomenon on prosumption behavior of consumers. And finally to build model of the prosumption behavior of consumers in sustainable environment

The research was conducted by means of a questionnaire distributed online among the group of 200 respondents. The main focus in questionnaire was on distinction of variables of consumer prosumption activities. In this case the identifiers comprise:

- 1) attitudes towards active entering into social relations with:
 - a. other consumers,
 - b. company which offer definite products,
- 2) demonstration of definite buying behavior, including:
 - a. buying and consuming definite product according to sustainable consumption rules,
 - b. co-designing of definite product according to sustainable consumption rules,
- 3) demonstration of definite communicative behavior, including:
 - a. providing information about needs and market offer assessment to companies or initiation of new solutions,
 - b. sharing information with other consumers about a market offer of companies.

The variables were presented to respondents on Likert's scale in order to determine the performance (achievement) of prosumers' behavior. After collecting data from respondents, for identification of area describing prosumption behavior of consumers in sustainable

environment, exploratory factor analysis was employed. This, in turn, resulted in development of descriptive model (Antonides and van Raaij, 2003).

On the basis of the research it can be stated that prosumer behavior mainly relates to the so-called information activity. Consumers prefer to share their knowledge about products, and their relation with sustainable development phenomenon with other consumers rather than to voluntarily contact companies with information about possible product modifications, the manner of consumer service, etc. With respect to the so-called product activity, only a limited number of consumers are actively involved in individual and unassisted purchase of products, whereas majority of them are more interested in an individual and on-line purchases, mainly very basic ones. Few consumers design their own individually-tailored products, and even fewer consumers are engaged in active development of long-lasting and multilateral relations with companies and other consumers on the market. Market prosumers are predominantly represented by women, young people, secondary- or tertiary- school graduates and single-household members. Majority of prosumers live in big cities and work as office clerks or as self-employed workers whose financial household condition can be described as good or very good. The analyzes allowed for development and verification of prosumer behavior model. The model has demonstrated statistically significant relations between consumer engagement in prosumer behavior and separated variables i.e. active building of relations with other consumers and companies, individual and unassisted use of products or participation in product designing, as well as active provision of information to other consumers and active communication with companies.

Whole paper will start with introduction, follow by theoretical background, methodological part, and finalize with empirical chapter and conclusions.

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