

Prosumption among young consumers

Some research insights from Poland

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1 Introduction

Companies operating in mass markets engage in various collaborations with consumers that range from using customer feedback and word of mouth, through engaging customers in various standardised operations, to encouraging some product-related advisory between consumers themselves. Although studies on the antecedents of prosumption have advanced substantially, we do not know much about the specific features. The aim of this paper is to test empirically the association between selected customers' characteristics and their inclination to engage in prosumption. The research model assumes that consumer innovativeness, as well as consumer need for uniqueness, leverage consumer inclination to become prosumers, while advanced concerns about privacy discourage consumers from such an inclination. The estimation results provided support for all hypothesised paths in the research model. Practical implications, challenges and future research directions have been highlighted.

2 Theoretical background

The consumer–producer relationship has traditionally been conceived of as an exchange relationship in which each party trades one kind of value for another (Bagozzi 1975). However, contemporary customer culture departs from McDonaldisation's (Ritzer 2008) focus on passive consumers, showing instead that actively engaged consumers are strong assets. For companies, these changes offer the opportunity to apply customers' open innovation to their innovation efforts (Chesbrough 2013). By using new technological channels and richer knowledge assets, such as social networks, companies can seek external resources to develop or improve their offerings (Djelassi and Decoopman 2013). If one assumes that the contemporary consumer not only knows his or her own needs best, but can also contribute to his/her fulfillment in a competitive way in relation to the firm's employees, finding ways to facilitate and encourage the consumer to action has become the greatest challenge.

Such an approach is in accordance with the one proposed by Prahalad and Ramaswamy (2004, p. 121), who claim that ‘the new framework puts the spotlight squarely on consumer–company interaction as the center of value creation. Because there can be multiple points of interaction anywhere in the system (...) this new framework implies that all the points of consumer–company interaction may become the locus of value creation’. It is clear that companies operating in mass markets engage in various collaborations with consumers that range from using customer feedback, through to engaging customers in various standardised operations (e.g. self-service at cashiers), to encouraging some product-related advisory between consumers themselves (e.g. voluntary advisors at a company’s funpage). The exchange of skills and knowledge between companies and customers becomes essential.

The term ‘prosumer’ was originally used by Toffler (1980) to emphasise the novelty of asking individuals to simultaneously play the role of both consumer and producer. Toffler divides the whole of human productivity into two domains: sectors A and B. Sector A encompasses all works performed by individuals exclusively for their own needs, whereas sector B is manufacturing destined for exchange. All prosumers are always situated in sector A. At different waves (phases of economic and social development), dominates either sector A or sector B. Despite the fact that the term is relatively new, the issue itself is quite old.

The origins of prosumption date back to primitive times (Ritzer et al. 2012, pp. 379–398), being developed in agricultural society, where people produced goods mainly to satisfy their own needs. The economic process that dominated at the time was production to satisfy someone’s needs. Only in the case of surplus stock was it destined for market. In industrial society, prosumption stopped playing a vital role. Increased significance led to the production of goods for exchange. Most of the people produced goods not for themselves but for the market. The prosumer sector decreased, whereas the consumer sector began developing. The standard feature of industrial society became mass consumption. In spite of domination in the market exchange in the agricultural environment, prosumption never disappeared; rather, it simply changed its nature. It took the form of working for free, for example, working as a housewife and child-rearing, and became an unseen element of the economy.

Nowadays, prosumption is returning, although for different reasons to those observed in the time of agrarian civilisation: now it is not a must but a matter of choice. The reason for this is both internal, of an economical and technological nature, and psychological, being deeply rooted in human nature. It is connected with the appearance of discouragement of the mass market, but at the same time technological progress enables a departure from large-scale production. Toffler (1980) observed that the production of standard wares saturated the market. In order to continue the growth of production, companies must initiate the process of customisation in the form of mass production of very personalised products.

Prosumption itself is perceived as 'value creation activities undertaken by the consumer that result in the production of products they eventually consume and that become their consumption experiences' (Xie et al. 2008, p.110) Prosumption is characterised by constant changes in its form resulting from the development of new technologies and changes in consumers' value systems connected to their expectations of consumption. The original form of prosumption is related to fast-food restaurants, banking based on cash machines and people's own work using kits designed for home assembly (e.g. Ikea).

Denegri-Kont and Zwick (2011) describe an important role of the community consisting of buyers and sellers in the user-generated space. They describe platforms such as eBay as places where, akin to the concept, a customised product is received in return for consumers' time and the demand side is also partly the producer. A new form of prosumption that emerged recently is connected to Internet communication based on Web 2.0 tools (e.g. Wikipedia, Facebook, Second Life, eBay, YouTube, Amazon.com). Many terms have been used that communicate different perspectives, for example, 'produser' (Bruns 2008), 'working consumer' (Cova and Dallı 2009) and 'prosumer'. These terms combine the meanings of 'professional' and 'consumer' to refer to an expert user who demands advanced and/or high-performance features (e.g. from a camera) but who does not use the product mainly for business purposes (Kirsner 2005). Regardless of the terminology, essentially the new re-conceptualisation frames prosumers as co-creators of value (Bitner et al. 1997).

Recent study results show that people value more highly the objects they produce on their own even when those things do not have a higher exchange value (Norton and Ariely 2007, cited in Humphreys and Grayson 2008); and the pleasure that the customer experiences by purchasing the product adjusted to his or her individual expectations can be seen as the main motivation for participation in the product's co-creation (Prügl and Schreier 2006). From a company's perspective prosumer participation in value co-creation can be a mechanism for cost externalisation (Toffler 1980; Bendapudi and Leone 2003; Cova and Cova 2012). Pan and Holland (2006) find that these types of service experience can reduce risk for the firm and increase customer satisfaction. As a result, ideas about producer–consumer cooperation have recently garnered significant academic attention.

3 Hypotheses

Consumer innovativeness has origins in the literature on innovation diffusion (Hagerstrand 1968; Mahajan, Muller, and Srivastava 1990) and describes the extent to which consumers tend to buy new products, accumulate knowledge about these products and share this knowledge with other consumers (Goldsmith and Hofacker 1991). It was found that such innovators are usually opinion leaders through systematic and spontaneous word-of-mouth (Goldsmith and Desborde 1991; Sun, Youn, Wu, and Kuntaraporn 2006). We assume that, at least, a part of this communication takes the form of sharing information about the products, not only with other consumers but also with selling companies. Therefore, we hypothesise (H1): 'Consumer innovativeness (INNOV) is associated positively with prosumption.'

Consumer concern about privacy have become very important for today's companies, because marketing communication is extremely intrusive, and increasingly consumers are trying to protect their privacy with regard to various communication channels: telephone, email, social media and computer games (Mitręga 2013; Mitręga 2012). The results of a recent study by Li et al. (2013) demonstrate that privacy concerns restrict consumer willingness to register at

company websites, which may be treated as one of the forms of communication. Generally, we assume that consumers that are strongly protective of their personal data are less likely to become prosumers, as there are few types of prosumption that allow people to remain anonymous. Therefore (H2): ‘Consumers’ privacy concern (PRIV) is negatively associated with prosumption.’

The need for uniqueness in the consumption pattern is somehow similar to ‘consumer innovativeness’ in the sense that it also manifests in buying certain categories of product; however, in this case these products do not necessarily have to be new to the market, but they should rather express a consumer’s identity and distinguish that consumer from all other consumers (Cheema and Kaikati 2010; Simonson and Nowlis 2000). We assume that consumers with a strong need for uniqueness will seek relationships with these brands that provide customised products and services, and, consequently, they will more willingly co-create products with companies. Chellappa and Sin (2005) found that consumers’ value for personalisation is almost two times more influential than consumers’ concerns for privacy in determining usage of personalisation services. Therefore (H3): ‘The consumer need for uniqueness (UNIQUE) is positively associated with prosumption.’

4 Research design and research results

The aim of this research was to test empirically the association between selected customers’ characteristics and their inclination to become prosumers. A structured questionnaire was used to collect the data. The following constructs were measured using appropriate scales for each of the variables: consumer innovativeness using a three-item measure based on a scale developed by Goldsmith and Hofacker (1991); consumer privacy concern using a three-item measure based on the research of Gao, Rohm, Sultan and Huang (2012); and consumer need for uniqueness using a three-item measure created on the basis of Cheema and Kaikati (2010) and Wang, Yu and Wei (2012). All of these constructs somehow describe ‘consumer character’, because, instead of focusing on general personality, they concentrate on specific behavioural and cognitive

patterns of individuals with regard to such activities as selecting products for purchase and sharing information with market players. Additionally, these constructs assume that such behavioural consumer characteristics take the form of continuous variables, so they assume that all consumers may somehow be ordered along a given scale representing concrete consumer features. All items were measured on a five-point Likert scale, from 'strongly disagree' to 'strongly agree'. A number of demographic questions were included.

To test our hypotheses, we conducted a survey using a non-random sample of Polish consumers who use social media ($n = 625$). The majority of these consumers were young people (73.6% were no more than 25 years of age), generally students and women (62.9%). Before estimating the research model, we first tested the measurement models, as well as assessing their reliability and validity. We conducted exploratory factor analysis (EFA) with Varimax rotation for all multi-item research constructs. After purification of the measurement model, all constructs received support for their validity and reliability, as tested by average variance extracted (AVE), scale composite reliability (SCR) and the item factor loadings.

The model was tested using a partial least squares (PLS) structural equation modelling technique with the SmartPLS 2.0M3 software package (Ringle, Wende, Will, 2005). There are some advantages of PLS-SEM in comparison to CB-SEM (covariance-based SEM), which we followed, including non-normal data distribution (Hair, Ringle, and Sarstedt 2011). The results of the PLS estimation are presented below (Figure 1.).

This study provides the empirical evidence that there are three features associated with such an inclination: consumer innovativeness (+), consumer privacy concern (-) and consumer need for uniqueness (+), with statistical significance at the level of 0.01. This study also demonstrated the significant moderation effect connected with consumer incomes. Specifically, the positive impact of the need for uniqueness tends to decrease for consumers who receive higher incomes. Low incomes seem to prevent certain consumers from fulfilling their uniqueness need directly through buying expensive personalised products; instead, such consumers tend to fulfill this need through other actions, including product co-creation with companies or providing individual comments to selling companies.

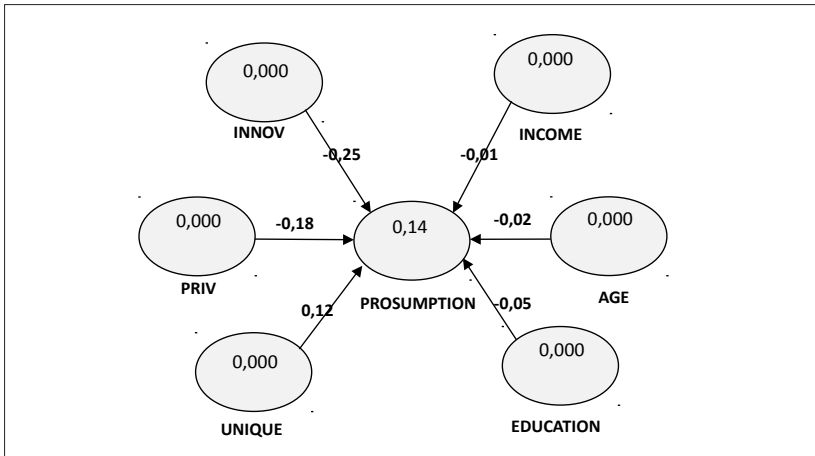


Figure 1: PLS Estimation of structural model. Source: Own elaboration using application SmartPLS 2.0M3.

5 Conclusions

This paper attempts to fill the gap existing in the literature on the determinants of the propensity to prosumption. Consumer innovativeness proved to be most strongly correlated with taking action in the field of prosumption among the listed constructs. This indicates that consumers who are most willing to reach for new products are also those who eagerly share opinions about them, which could have important implications for the development of the product. Interesting in this context seems to be the topic of whether, and how, to obtain information from consumers with lower levels of innovativeness.

It should be noted that this study included only those activities on the line: a consumer—a company such as engagement in new product creation, and sharing opinions about it with a company. Indeed, we do not know whether there is any relationship between the variables and those aspects of prosumption that are being created on the line: a consumer and other consumers, for example,

how the relationship between the variables and the tendency to share one's opinion with other consumers is shaped, especially taking into consideration the fact that nowadays a consumer has much more confidence in other consumers' opinions than in announcements sent by the company.

The dependence between the consumer's need for uniqueness and prosumption seems to be clear from the perspective of receiving one particular product in return for sharing information about a consumer's expectations. Sharing information itself after the purchase, however, is a separate issue. Defining the dependence of the taking-up of entrepreneurship activities in the field of mass personalisation and consumers' propensity to share information with others would be interesting from the viewpoint of their tendency towards prosumption, especially when we take into consideration the expectancy of cost calculation and the potential benefits of such actions.

Although prosumption is usually perceived in the literature as cooperation between the consumer and the producer aimed at a personalised solution, it is advisable to consider another aspect, namely, the taking over of some activities by the consumer, for example, in order to reduce the cost of purchasing a product or service (Xie et al. 2008; Mitreęa 2013). Thus, although the traditional view of prosumption typically assumes that prosumers desire to be involved with production, or 'making units of output' (Vargo and Lusch 2008, p. 7), it is clear that prosumers are value co-creators with specific motivations to participate in value co-creation (Chandler and Chen 2015).

Managers may learn from this study by targeting more precisely those customers that may enlarge the productivity of human resources. They should rather concentrate on opinion leaders and consumers seeking personalised products (e.g. via monitoring social media behaviours). Prosumers can affect the company's success and increase its resistance to negative external factors by cooperating in creating products that are perfectly adjusted to customers' and market needs. However, companies should rather neglect customers with strong privacy concerns, because they should avoid engaging in an 'extra role' in their relationships. Alternatively, managers could make special efforts to reduce privacy concerns among potential prosumers. Specifically, they should implement special consumer data responsibility programmes, as suggested by Wirtz et al. (2007).

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