### pages: 14-22

# IMPORTANCE OF ECONOMIC AND NONECONOMIC FACTORS IN COLLABORATIVE CONSUMPTION



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#### ABSTRACT

The main goal of this paper is to point out the awareness and activity of young consumers in the area of collaborative activities and to indicate what factors condition such attitudes and behaviours. The study performed has comparative character and was conducted on the group of active user of one of the forms of collaborative consumption and on the control group with a use of questionnaire. Results show clearly that people who do not use this form of collaborative consumption consider economical aspects more important. Active users, on the other hand, value higher ecological, social and psychological benefits. Additionally, the research shows the profile of collaborative consumption users as well as factors that drive their activity. This research aims at answering hypotheses spread about collaborative consumption being a trend corresponding only to economic crisis.

KEY WORDS

consumer behaviour, collaborative consumption, sharing economy, mesh

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### INTRODUCTION

In modern world social, economic, cultural, environmental or technological transformations have a huge impact on everyday life of consumers as well as their behaviour on the market. This is happening due to high dynamics of consumer markets, globalization, rapid development of new technologies and the ability to immediately react to changing conditions. At the same time, consumers, especially young ones, increasingly require individual communication with companies, instant feedback and offers adapted to changing situations. They become more aware of the impact production and consumption exercise on environment. In the era of high urbanization consumer trends tend to develop rapidly. On the other hand, consumption plays definitely more important role in peoples' lives than decades ago, determines their position in society and shapes their image. Thus, consumption dictates rhythm of consumer's life and is in the spotlight of interest. Under specific economical circumstances these long-term changes gave life to the trend widely known as collaborative consumption. The goal of this paper is to estimate awareness and activity of young people in the area of collaborative initiatives and what influences and motivates such attitudes.

### 1. LITERATURE REVIEW

The phenomenon of collaborative consumption (co-consumption, shared consumption, sharing, mesh) appeared in US literature for the first time in 1978 in context of the research concerning lending cars (Felson, Spaeth, 1978), but spread widely during the economic crisis in 2008, when the model of individual consumption, where people buy what the need individually or in small communities, mainly in families, proved to be hard to maintain. Economic crisis spreading over the world forced people to think about resources they use, and how they spend their money (Gansky, 2010). At the same time some

researchers observed (Bardhi, Eckhardt, 2012) that the relationship between affection to possession of goods and wellbeing became problematic and hard to resolve for consumers. A result of these changes was the development of alternative consumption (Bostman, Rogers, 2010), defined as an economical model based on lending, exchanging, barter trade or paid access as an opposition to possession. It allows consumers to maintain access to products and services at lower financial costs but with greater use of other resources, for example time (Lamberton, Rose, 2012; Sacks, 2011).

Bostman and Rogers (2010) suggest that apart from economical aspects main driving forces of consumer collaboration development are technology, urbanization and ecology. Such model could progress due to rapid development of internet-related technologies, since the majority of collaborative initiatives take place on Internet platforms. Urbanization, in turn, leads to a situation where accumulation of people in one area on one hand facilitates access to goods and services, on the other one imposes limits on consumption and accumulation of goods due to shrinking living space. Third aspect, pro-ecological initiatives are important driver of collaborative consumption, since reflection on natural environment and sustainable development imposes restrictions on production and in consequence on creating waste (Lehmann, Crocker, 2012). Similarly, sustainable development is based on common facilities like public transportation. In turn, Owyang (2013) marks out three main reasons for such growth of collaborative consumption: funded in society (for example increasing density of population, need for being member of community), related to economics (for example sell superfluous goods, increase financial cushion) and technological (for example development of mobile technologies and modern payment systems, social networking).

Main aspects of collaborative initiatives are concentrated around three categories: product services systems (paying to access the benefit of product instead of having to own it), collaborative lifestyles (non-product assets such as space, skills or money are exchanged and traded in new, non-obvious ways) and redistribution markets (redistribution of unwanted or underused goods), (Bostman, Rogers, 2010). In the Tab. 1 main aspects of collaborative consumption in Poland broken down by categories are presented. Product services systems contain initiatives that exchange products with services corresponding to usage of these products ("use rather than own"). Redistribution markets category covers actions that aim at extending lifespan of products and avoiding production of new ones and in consequence limiting produced waste. Collaborative lifestyles category covers initiatives where the main good to share are intangible assets (like time or place) and the main form of execution is building social relationships through exchange on local and global levels.

Tab. 1. Main aspects of collaborative consumption in Poland

CATEGORY	COLLABORATIVE INITIATIVES
Product Service Systems	Car sharing (Blablacar, Carpooling, Zipcar)
	Peer-to-peer lending & loans (loans executed between strangers through social networking portals)
	Time banks (exchange of services)
Redistribution markets	Clothswap
	Exchange of toys (toyswap) and products for children
	Book & DVD swap
Collaborative lifestyle	Couchsurfing (accommodation at private homes, at various locations around the world)
	Gym co-rental
	Cohousing & roomsharing (shared accommodation, renting apartments together)
	Coworking (co-renting office space or other space to work)
	Crowfunding (co-raising money for social, artistic or business projects)

Source: own research based on the literature listed in the bibliography and categorization of collaborative portals operating in Poland.

The basis for collaborative consumption model is the need of consumers to gain temporary access to goods and services without having to own these goods, according to "use rather than own" (Leismann et al., 2013) or "access-based consumption" (Bardhi, Eckhardt, 2012) scheme. At the same time, consumers entering the relations of exchange or lending base their behaviour on trust (Gansky, 2010), since the activities are often informal and involves some risk. For that, some researches are disputing what are the main drivers for consumers to participate in collaborative initiatives. Some of them (Walsh, 2010; Bardhi, Eckhardt, 2012) look for these drivers in economical reasons and argue that economic benefits, that is low costs of such activities are the main reason for consumers to take part in such initiatives. Also, perceived lack of economic benefits may prevent consumers from participating in collaborative consumption (Buczynski, 2013). This view is supported by the fact that the majority of forms of collaborative consumption developed economic crisis. Additionally, polish surveys from 2012 (Wardak, Zalega, 2012) show that the main motivations for consumers are economical benefits (cost reduction or possibility of earning money) and with improvement of economical conditions, consumers would be willing to give up such initiatives. At the same time, however, researchers admitted that the collaborative consumptions form they had examined was not even near to popular.

On the other hand, there are researchers who do not consider economical reasons as important in collaborative consumer behaviour. Botsmanand and Rogers (2011) argue that collaborative consumption is rather motivated by more than just cost-savings. Gansky (2010) suggests that consumers' attitude towards consumption is changing in general and is in fact main driver of the sharing economy. Consumers enjoy trying out new brands (Gansky, 2010) and are open to modern and new ways of meeting their needs (Botsman, Rogers, 2011; Bardhi, Eckhardt, 2012). Additionally, activity in areas of sharing economy is often associated with pro-environmental attitudes (Leismann et al., 2013) or voluntary simplicity (minimalism), (Bostman, Rogers, 2010).

These premises allow for judging that the collaborative consumption trend will remain in mainstream even once the economy comes fully out of the crisis. It seems that due to the fact it has been eight years since the beginning of world economic crisis and the development of the new forms of

collaborative initiatives is still on the rise, there are premises to examine whether financial and nonfinancial factors affect this situation.

### 2. Reseach methods

Verification of awareness and activity of consumers in the area of collaborative consumption among young people and identification of influences and motivations behind such attitudes and behaviours was carried out with the use of questionnaire research.

While such research has not been carried out exhaustively, the experiment design took into account results obtained in international research concerning collaborative consumption. Therefore the importance of the following aspects was verified:

- consumer attitude towards ownership/usage of goods (evaluating how important is the ownership, and how important is only the access to these goods);
- motiviations to participate in collaborative consumption (studying economic factors versus other factors);
- confidence and past experience (designing experiment to consider two groups – active, regular users of one of Polish collaborative services and control group);
- self-assessment of respondents' financial status.

Research questionnaire contains 10 queries with two of them in the form of matrix of questions. Queries concerned the aided awareness of specific forms of collaborative consumption, participation and frequency as well as perceived advantages and consequences of participation in these initiatives. Respondents were also asked about their perspective on their own profile towards ownership (own over use), as well as self-evaluation of their financial status. Demographic profiles were also acquired.

Studied population consisted of 434 respondents, where 108 of them determined the group of active and systematic users of collaborative consumption initiatives, while the remaining 326 people constituted the control group. The former was obtained by examining active consumers of pilkanahali.pl platform, which unites people who play together indoor sports. Access to these respondents was possible as a result of scholarship granted through "Nauka-Biznes-Kooperacja" project, carried out under the supervision og the Mazovian Unit for Implementation EU Programmes by the Institute for Enterprise Development and Social Initiatives under

Operation 8.2 Transfer of knowledge, Sub-operation 8.2.1 Support for cooperation between science and business of the Human Capital Operational Programme.

Examined population consisted of 235 women and 199 men. The core of the group was young people (78% under the age of 25) mainly from large cities (58% of respondents). Random sampling and random sampling with filtering were applied to construct the control and active users groups. Due to the fact, that the majority of platforms providing collaborative consumption services is addressed to young people living in cities, obtained population profile is consistent with the assumptions behind the design of the research population. Subsequently, the majority

of respondents have high school (60%) or higher education (32%). Questions about family statues revealed 7% of people with children and 93% childless. There were 43% of people in relationship and 57% singles. These profiles were consisted between active collaborative consumption users and control group.

Respondents were also asked to self-assess their financial status and their attitude towards ownership/usage of goods. Majority (54%) consider their financial status as good or very good, 37% as average, while 9% of respondents find their situation with respect to finances as bad or very bad. As much as 75% of population admitted that it prefers to own the goods it uses. Consequently, 25% of people do not feel the need to own things they use and the most important is access to them.

# 3. RESEARCH RESULTS AND DISCUSSION

# 3.1. FORMS OF COLLABORATIVE CONSUMPTION

In order to assess the extent of the phenomenon of collaborative consumption, respondents were asked to indicate which forms of collaborative consumption their aware of (aided awareness) and in which of them they participated at least once. The list of

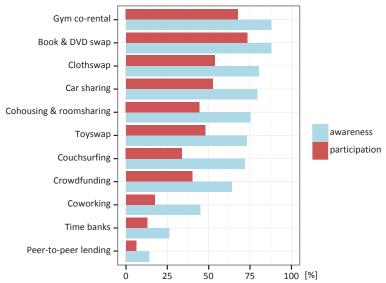


Fig. 1. Consumer awareness and participation in forms of collaborative consumption [%]

recognized forms of collaborative consumption presented in Tab. 1 of this paper was used for this purpose. In the Fig. 1 the aggregated responses from the questionnaire are presented.

Results presented in the Fig. 1 show, that the most recognized forms of collaborative consumption are those related to lifestyle (gym co-rental) and redistribution markets (books, DVDs and clothes swaps). Interestingly, the only well recognized form of product service systems is car sharing. The popularity of this idea in Poland increased widely due to the involvement of Blabla car - large car-sharing portal. The project consisting in arranging joint rides was free for both passengers and drivers through first years of operations. Since April 2015, the company introduced a new business model with fees charged on ride arrangements and at the same time invested further funds to promote the service. This study was made before the fees were introduced and it is interesting how the perception and results change over coming months.

It is also worth adding that the redistribution markets considered in the study are particularly popular among consumer from the 25-30 age group, especially those who live in relationships and have children. It is worth noting as well, that these people often organize collaborative initiatives informally, without awareness of the collaborative consumption trend instead of using dedicated exchange services.

The least popular forms of collaborative

consumption tend to be peer-to-peer lending and coworking, which are mostly related to reducing the cost of professional activity and were popular during economic crisis. It is clear then, that the trend that arrived in Poland from US and Western Europe is strongly anchored in local preferences since the very beginning.

## 3.2. ADVANTAGES OF TAKING PART IN COLLABORATIVE CONSUMPTION

Further results concern evaluation of advantages that could motivate respondents to use particular forms of collaborative consumption.

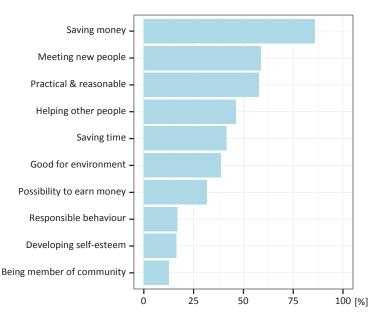


Fig. 2. Advantages of taking part in collaborative consumption [%]

In the Fig. 2 it is shown that the most frequent advantages pointed out by respondents are those with financial affiliation ("Saving money"). Worth noting is the fact that the social aspect of collaborative consumption is important to people. Meeting new people, helping other people, care for common natural environment are among the most important advantages. Surprisingly, individual factors seem to have lesser importance, what is interesting enough to be a premise for further research in the area of individual features of collaborative consumption users.

At first, it seems that high score of "Saving money" factor confirms the economical motivations of consumers seen already in studies conducted in Poland and US. However, additional analysis showed

that this result depends on several futher aspects.

In order to evaluate the degree in which economical factors are important to people, a specific group of respondents was seleceted. It contained people who indicated two economical advantages ("Saving money" and "Possibility to earn money") of total of three important factors they were asked to point out. There were 127 such respondents and their characteristics were compared to the rest of the research population. For this purpose further statistical analysis was performed including Chisquared test to evaluate differences of distributions of both groups. Graphical interpretation of these distributions is presented in Fig. 3 to 7.

First notable relationship was revealed between the groups of people actively participating in at least one collaborative consumption initiative. People who are already active members of collaborative initiative consider importance of financial aspects less often than those who are not active users (Fig. 3). It is therefore apparent, that financial aspects are more of an incentive for inactive people than a reward for active ones. Strong relationship was confirmed with statistic of Pearson's Chi-squared test equal to 15.44 with p-value around: 8.5e-05.

Another relationship, though slightly less significant, can be seen in the group of people differing in attitude towards ownership (Pearson's

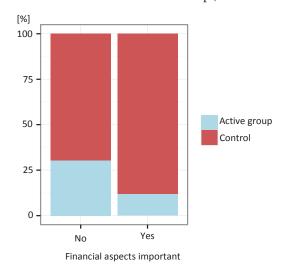


Fig. 3. Importance of financial aspects w.r.t. activity in collaborative consumption [%]

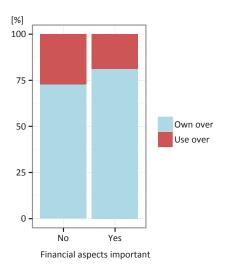


Fig. 4. Importance of financial aspects w.r.t. attitude towards ownership [%]

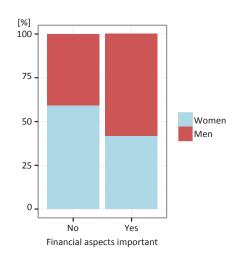


Fig. 5. Importance of financial aspects w.r.t. gender [%]

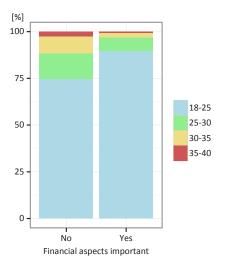


Fig. 6. Importance of financial aspects w.r.t. age [%]

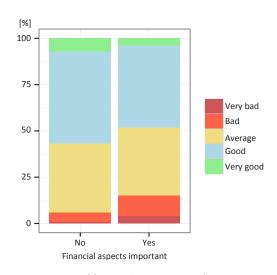


Fig. 7. Importance of financial aspects w.r.t. financial status [%]

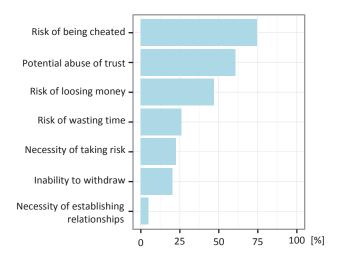


Fig. 8. Disadvantages of taking part in collaborative consumption [%]

Chi-squared p-value: 0.083, statistic: 3.01). People who prefer to "own" over "use" consider financial aspects much more important than people who appreciate access to goods regadless of their possession (Fig. 4). It means that own-oriented people are more focused on economical side of collaborative consumption then use-oriented ones.

In futher analysis demogrpahical factors were put next to the priorization of financial aspects over other advantages. There is a strong statistical relationship between importance of financial features and gender (Pearson's Chi-squared test, p-value: 0.001, statistic: 10.45). Men pay more attention to financial advantages of collaborative consumption then women (Fig. 5). This finding stands in oposition to results of Zawadzka (2006) research who observed that women more ofthen present materialistic orientation than men. This result however, could be connected with high level of risk linked to collaborative consumption initiatives, which in turn fosters more pragmaric attitudes.

In case of age it can be observed (Fig. 6) that younger people consider financial aspects of collaborative consumption more important (Pearson's Chi-squared test, p-value: 0.004, statistic: 13.11). The most evident motive behid it is that young people are more focused on controling and maintaining their financial status and translate this attitude also on activities in the area of collaborative consumption.

The last important element differentiating valuation of importance of financial aspects of collaborative consumption is financial status of population (Fig. 7). In this case the better financial status, the less important financial aspects are. (Pearson's Chi-squared test, p-value: 0.022, statistic: 11.39). The reason is similar to the one observed in case of age. Poorer people are much more concentrated on dealing with financial aspects and tend to translate it on other areas, including collaborative consumption. In conclusion, the results of the reseatch show that financial aspects are significant motivation for people to participate in various forms of collaborative consumption, however psycho-demographic features highly differentiate these attitudes. In this case strong positive relationship between importance of financial aspects and the following features was observed: male gender, age below 24, poor financial status, own over use (materialism) and lack of experience in any collaborative consumption form.

## 3.3. DISADVANTAGES OF TAKING PART IN COLLABORATIVE CONSUMPTION

Another considered feature of collaborative consumption were disadvantages of taking part in such initiatives. The most often mentioned barriers were the risk of being cheated and potential abuse of trust. This confirms previous observations that trust is the most important individual driving force in collaborative consumption (Gansky, 2010).

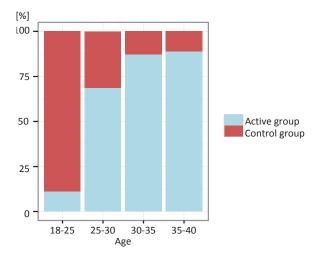


Fig. 9. Group membership w.r.t. age [%]

It is worth noting that the "risk of loosing money" was pointed out by less than half of the respondents. Considering that financial aspect was clearly more important among advantages, people consider possibility of earning money more likely than losing it.

# 3.4. PROFILES OF ACTIVE USERS OF COLLABORATIVE CONSUMPTION

In order to fully characterize the phenomenon of collaborative consumption further analysis was performed that compared active users of at least on collaborative initiative to control group.

First of all, collaborative consumption is strongly related to age (Chi-squared test statistic: 158.81; p-value < 2.2e-16). Very low value of p factor (lower than 2.2e-16, hence significantly lower than commonly accepted 0.05 level) allows for rejecting null hypothesis of independence of distribution of observations (respondents) in different groups of activity with respect to age. That said, age definitely influences how active in collaborative consumptions

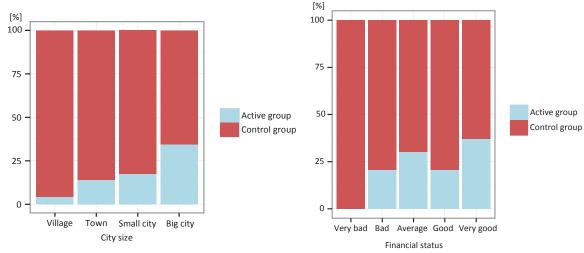


Fig. 10. Group membership w.r.t. city size [%]

Fig. 11. Group membership w.r.t. financial status [%]

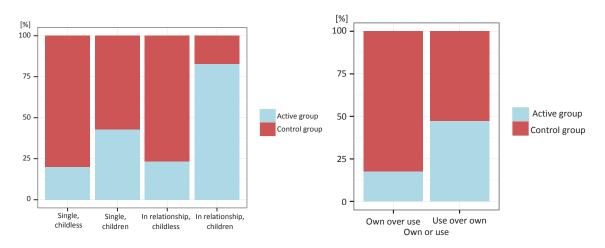


Fig. 12. Group membership w.r.t. family status [%]

Fig.13. Group membership w.r.t. attitude towards ownership [%]

are respondents. From distribution on presented on Fig. 9 it is clear that the least active group are people from 18-25 age group and with age the percentage of active users increases.

Another considered aspect was the relationship between being active and size of the city of residence. Statistically significant relationship was identified (Chi-squared statistic: 33.71, p-value = 2.2e-07). Similarly to age, the dependence is strong, and looking at Fig. 10 one can observe that the bigger the city, the more active are the respondents. It could be due to the fact, that many forms of collaborative consumption are associated with activities carried out in large urban centers (for example Co-working, gym co-rental) or requires efficient access to goods and services (all kinds of swaps, time banks).

Significant relationship was also observed between activity and self-assessment of financial status (Chisquared statistic: 9.52, p-value = 0.049). The distribution of groups (Fig. 11) show that the better financial status people declare, the more active they are. This result is strictly related to previously presented conclusions about economical advantages of collaborative consumption.

Interesting findings were revealed while analyzing relationship between the level of activity and family status. Statistically significant results (Chi-squared test statistic: 44.65, p-value = 2.01e-10) show that family staus greatly impacts the collaborative activity. Plots of distribution (Fig. 12) show that the most active are people raising children. One possible explanation could derive from observation that parenthood happens to bind with other social trends

related to responsible and ecological parenthood, more regular lifestyle, seeking relationship with other parents and more time for collaborative activities.

The last observed relationship concerned the dependence of collaborative activity and attitude towards ownership. Strong statistical relationship was observed between highly active people and attitude towards using over owning (Chi-squared test statistic: 36.81, p-value = 1.31e-09), what can be seen in the Fig. 13. It shows that people oriented more on "use" than "own" are more active in the area of collaborative initiatives. This clearly stands in line with the main idea of collaborative consumption, which emphasizes the importance of access to goods as a solution to dilemma of limited financial resources and pursuit of wellbeing.

### CONCLUSIONS

Results obtained in this research show that collaborative consumption in Poland involves all main forms of consumer activities known around the world, like service systems, redistribution markets and collaborative lifestyle. On the other hand, it has different unique aspect in contrast to countries from which this trend originated. Motiviations to participate in collaborative initiatives are more related to declarative financial and social aspects than to individual factors. It seems therefore, that the awareness of these trends in Poland along with activity of users is still more accidental than stongly related to particular profile of a user. The performed research does not confirm visibly increased activity among people already involved in at least one of the collaborative consumption initiatives.

On the other hand consumers orientated towards collaborative consumption are clearly different than those who do not take part in any of such activities. Features that reveal these differences are related to demographic profile (mature people, from big cities, raising children) as well as economical profile (positively assess their financial status, do not have high demands with respect to consumption. that is prefer using over owning). Possibility of conducting extended research on particular profiles of consumers seems to be particularly interesting. It could reveal answers to questions concerning individual factors and involvement in other forms of collaborative consumption and allow for anticipating directions of further development of this consumer trend.

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