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Consumer-to-consumer e-commerce - Outcomes and implications

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Consumer-to-consumer e-commerce – outcomes and implications

Abstract: One outcome of the digitised retail environment is the emergence of consumer-to-consumer (C2C) electronic commerce. Existing research has extensively addressed C2C commerce in an offline environment, while relatively little is known about consumers' online reselling behaviour. Thus, there is a need to deepen the understanding of how and why consumers engage in C2C e-commerce as well as the implications that C2C e-commerce holds for retailers. To address this gap, a comprehensive survey targeting Finnish consumers was conducted. The survey yielded a total of 2823 respondents who had used C2C e-commerce platforms either as buyers or sellers. The data is used to profile C2C e-commerce with demographics, product categories and key retail outcomes. This analysis provides a well-grounded basis for discussing the implications of C2C e-commerce for retailers.

Keywords: C2C; e-commerce; online auction; consumer behaviour; platform business

Word count: 5600

Introduction

One characteristic of the strongly digitised retail environment is the emergence and development of consumer-to-consumer (C2C) e-commerce platforms. C2C e-commerce can be defined as consumers transacting – both buying and selling – electronically (Leonard 2011) directly from one to another. It is already a significant retailing phenomenon. For instance, C2C is estimated to represent roughly 80% of all electronic commerce in China (Hoffman et al. 2012). On one hand, this provides access to a vast array of used goods, and on the other, it offers a channel through which to sell excess goods. While C2C commerce has been studied for decades in a brick-and-mortar environment (e.g., Sherry 1990; Belk, Sherry, and Wallendorf 1988), research on the multifaceted nature of C2C e-commerce is still in its infancy, although some perspectives on its relevance and potential have already been reported (Chen, Su, and Widjaja 2016; Chu 2013; Leonard 2011).

Digitisation is strongly shaping the nature and content of C2C commerce. Through various C2C e-commerce platforms, consumers are given efficient and convenient access to an affordably priced assortment of product categories such as clothes, accessories, electronics, sports equipment, furniture and home decorations. Consumers are able to find the products they need, compare prices and feel ecologically conscious, as through their own decisions they are able to lengthen the life of the goods they use. Consequently, e-commerce is making the connection of C2C demand and supply far more efficient in comparison with traditional C2C commerce.

C2C e-commerce is taking place on various platforms, such as social media (e.g., Facebook), advertisement websites (e.g., Craigslist) and online auction sites (e.g., eBay). While all these platforms are aimed at transacting used goods, they also have unique characteristics and differences. For example, while online auctions are based on consumers bidding for an item, Facebook groups are more local and social and often built around specific product groups or brands. As the channels differ by nature, they can also guide different kinds of consumer behaviour. Similar to retail concepts that have differing value propositions (see, e.g., Rintamäki et al. 2007), the distinct characteristics of the platforms can result in differing customer perceptions of the platform's utilitarian or hedonic benefits (Abdul-Ghani, Hyde, and Marshall 2011). Moreover, Fan et al. (2012) found that both the platform content and convenience of C2C affect consumer satisfaction, which further emphasises the role of the platform itself.

Altogether, C2C e-commerce is evolving into an interesting form of retailing, and it is also exerting new competitive pressure on many retailers. In addition to the success of major C2C e-commerce players such as eBay, more targeted niche markets are emerging around specific brands or product categories of used goods. Thus, the C2C e-commerce market is in a dynamic phase, where

an increasing number of new players are entering the market with the aim of addressing consumers with an increasing intention to use C2C e-commerce as a complementary way of purchasing.

Despite the increasing relevance of C2C e-commerce, the consumer perspective on it has remained largely unexplored. Recent research on C2C e-commerce has focused on important issues such as impulse buying (Chen, Su, and Widjaja 2016), consumer decision-making processes (Ariely and Simonson 2003), consumer demographics (Black 2005) and the role of consumer trust in C2C e-commerce. Nevertheless, there have been few attempts (see, e.g., Abdul-Ghani et al. 2011) to explore and address the consumer perspective on C2C e-commerce. Consequently, the purpose of this study is to explore the relevance and implications of C2C e-commerce for consumers and retailers.

To achieve this, we specifically focus on addressing and understanding the role of the C2C e-commerce platform and product category in shaping consumers' perceptions of value. Basic demographics and key outcome measures are used to complement our findings. We aim to contribute to the evolving research domain by empirically exploring platforms and product categories in C2C e-commerce. We provide a discussion of the main findings and conclude the study with key implications for retailers.

Theoretical framework

While existing research has addressed C2C commerce for decades, the studies have largely focused on offline environments. As observed by Chu (2013), scholars know relatively little about consumers' online reselling behaviour. Further, C2C electronic commerce is distinct from B2C e-commerce. For example, Jones and Leonard (2007) found that the determinants of satisfaction differ for C2C and B2C e-commerce: compared to B2C, the reliability and responsiveness of the service significantly affect satisfaction in a C2C setting. Previous studies of C2C e-commerce have focused on investigating consumer resale behaviour (Chu and Liao 2007), consumer resale motivations (Chu 2013), the relationship between consumers' auction bidding behaviour and price (Kim 2005), the utilitarian and hedonic benefits of C2C e-commerce (Abdul-Ghani, Hyde, and Marshall 2011) and auction platform mechanisms (Wang, Wang, and Tai 2002). Nonetheless, we still lack insights on how and why C2C platforms are used, or what motivates consumers to engage in C2C commerce (Chu 2013). Further, there is a need to deepen the understanding of the implications that C2C e-commerce holds for retailers.

Consumer behaviour on C2C e-commerce platforms

Relatively little is known about the consumers who engage in C2C e-commerce. First, demographics influence e-commerce use and intention in a B2C context. For instance, Chiu et al. (2014) found that females hold larger repurchase intentions than males, while Joines et al. (2003) found that younger consumers are more prone to engage in searching for online product information and shopping. Yet it is not clear how the user demographics of C2C e-commerce vary between buyers and sellers and across product categories. A person's age or gender might influence, for instance, their perceived satisfaction with a C2C platform (Jones and Leonard, 2007, p. 51). As one example, Wang and Zhang (2014) surveyed sellers on the Chinese C2C e-commerce platform Taobao. Their sample demographics suggest that both genders engage in selling behaviour equally (49% male, 51% female) and that most sellers are between 21 and 35 years of age. Gender, age and income are all likely to influence consumer behaviour in this domain.

In addition to demographics, the usage frequency of C2C e-commerce platforms has not been thoroughly examined. For some consumers, logging in to C2C platforms has even become a part of their daily routines, and they might lose track of how much time and money they spend on these platforms (Cheung et al. 2014; Cameron and Galloway 2005; Peters and Bodkin 2007). In Chen et al.'s (2016) survey of Facebook users, roughly 46% of the respondents reported that they often bought products or services from C2C Facebook groups. A better understanding of the usage frequency of C2C e-commerce platforms would provide insights into consumers' use of such platforms (e.g., some users might use these platforms as a primary source of purchases in a given product category).

Second, many different types of platforms for C2C e-commerce exist, ranging from groups in social media sites, such as Facebook, to auction-based platforms, such as eBay. These platforms differ in their design, audience and rules for exchange as well as in the product categories offered. For instance, Fan et al. (2012) found that the website quality of C2C e-commerce platforms affects consumers' satisfaction and the ability to reach a flow state while shopping, while Cheung et al. (2014) found that customer engagement helps in building customer loyalty to online C2C shopping platforms. Jones and Leonard (2007, p. 51) specifically call for research investigating the differences "between C2C online auctions and the other forms of C2C e-commerce." Especially interesting are the possible differences between traditional C2C platforms (such as auctions) and social media-based ones. Platforms that have social elements are likely to provide more emotional value than traditional platforms, because users can engage with peers who are similar, likable or knowledgeable (Lu, Zhao, and Wang 2010; Xiang et al. 2016). Moreover, since the content is completely user-generated in these

platforms, social media-based C2C platforms are likely to be perceived as offering unique benefits in relation to traditional C2C e-commerce platforms (Chen et al. 2016).

Third, the product category or product type (low-touch vs. high-touch) may influence consumers' willingness to engage in C2C e-commerce. For instance, Wu et al. (2015) found that price dispersion has more negative effects on perceived value for high-touch products. Similarly, Jones and Leonard (2007) suggest that product complexity could have an effect on consumer perceptions and behaviour in C2C e-commerce.

Clearly, more research is needed to extract insights on consumers and their C2C behaviour across different platforms and product categories. More specifically, further research is needed to understand how the demographics differ between consumers across C2C e-commerce platforms and across product categories.

Customer value as a driver for consumer behaviour

Customer perceived value is a focal concept in retailing, as it is strongly linked with key outcome measures such as customer satisfaction, intention to use and word of mouth. While there is little consensus among scholars about the exact definition of customer value, the existing research has included a debate on the structure and nature of customer value (Holbrook 1999; Khalifa 2004; Woodall 2003). More recently, attention has also been paid to the multi-dimensionality of customer value (Sánchez-Fernández and Iniesta-Bonillo 2007), including the utilitarian and hedonic dimensions of customer value. Both utilitarian and hedonic value have been found to affect repurchase intention in B2C e-commerce (Chiu et al. 2014). Furthermore, Rintamäki, Mitronen, and Kuusela (2007) discussed four customer value dimensions that play a pivotal role in contemporary retailing: economic (focus on price), functional (focus on convenience), emotional (focus on experience) and symbolic (focus on meanings) customer value (see also Rintamäki and Kirves 2016). In more detail, economic value is about decreasing customers' monetary sacrifices, i.e., providing them with low prices, promotions, special offers and discounts. Functional value refers to consumers perceiving savings of time and effort as well as feeling convenience while shopping. Emotional value is characterised by positive emotions and is often linked with pleasure (Jung Choo et al. 2012), entertainment and exploration (Rintamäki et al. 2006) and aesthetics (Holbrook 1999) (see also Talonen et al. 2016). Finally, symbolic value highlights the social characteristic of customer value, as it stresses the role of the meanings of products and services.

The multidimensional nature of value provides a well-grounded lens through which contemporary C2C e-commerce can be viewed. Traditional forms of C2C commerce, such as flea markets and swap meets, are characterised as offering consumers more than economic or functional value: consumers derive benefits from elements such as discovery, freedom and socializing (Belk et al. 1988; Sherry 1990). Thus, C2C e-commerce is also likely to offer a wide range of customer value dimensions. For example, Chu's (2013) study on C2C resale motivations is reflected in the multi-dimensionality of customer value dimensions. Chu categorised resale motivations into four categories: utilitarian (earning profit, convenience), hedonic (fun, achievement), guilt (mental and financial) and socialising (relationships). Thus, although economic value, i.e., low prices, is a key driver of C2C e-commerce, it does not explain or capture the phenomenon in its full diversity. Consequently, other complementary customer value dimensions provide theoretical means for exploring the nature of C2C e-commerce from the consumer perspective in depth: why consumers eventually choose to buy and sell in C2C e-commerce, what kind of value they eventually perceive and, consequently, what fundamentally drives consumer behaviour in C2C e-commerce. For retailers, the key outcomes of interest are satisfaction, word-of-mouth behaviour and repurchase intentions.

Methodology

The empirical part of this paper aims to shed light on three key issues in C2C e-commerce: 1. What are the most important product categories and their user profiles? 2. How do traditional and social media-based C2C e-commerce platforms differ in their user profiles? and 3. How can the key outcome variables such as customer value, satisfaction and word of mouth be used in further profiling the use of C2C e-commerce? The data collection process and methods used are explained next.

Data collection

The survey was designed and conducted in collaboration with the Federation of Finnish Commerce. The data – representative of Finnish Internet users – were collected in October 2015 by a professional market research agency. The survey yielded altogether 2823 respondents who had used C2C e-commerce platforms either as buyers or sellers, which provides a well-grounded basis for discussing the implications of C2C e-commerce for retailers.

In designing the questionnaire, established scales for key outcomes such as customer value, satisfaction and word of mouth (WOM) were adapted for the C2C context. Customer value was operationalised, with 14 items measuring economic, functional, emotional and symbolic value (Rintamäki and Kirves 2016). Customer perceptions of value were derived from respondents' evaluations of C2C e-commerce in general. Satisfaction and word of mouth were based on three item scales adapted from Mägi (2003) and Jones, Reynolds, and Arnold (2006), respectively. Customer perceptions of satisfaction and WOM were derived from respondents' evaluation of a recent C2C e-commerce shopping experience. For the purposes of our paper, the respondents were also asked to provide information regarding their demographics (gender, age and income), product categories bought/sold, and online C2C e-commerce platforms used (traditional vs. social media).

Methods

Our use of methods is twofold. Firstly, to establish construct validity of the key outcome measures (customer value, satisfaction and WOM), we conducted confirmatory factor analyses in Lisrel 8.8. Secondly, as our goal is to illustrate the use of C2C e-commerce from various theoretically interesting perspectives addressed above, descriptive statistics (in SPSS, version 20) were used in profiling the customers, product categories, type of platform (traditional vs. social media)/channels used and the key outcomes (customer value, satisfaction and WOM). As a part of profiling, statistically significant differences were analysed by employing a Chi square test of independence and analysis of variance (ANOVA).

Results

Confirmatory factor analysis results

Customer value is a key concept in understanding the utility derived from engaging in C2C e-commerce. To establish construct validity for the value dimensions, we conducted confirmatory factor analysis using the diagonally weighted least squares method (Flora and Curran 2004, Forero, Maydeu-Olivares, and Gallardo-Pujol 2009, Rigdon and Ferguson 1991). Each construct included three or four variables measured with a five-point Likert scale. A four-dimensional reflective model of customer value was tested for total data (N=2180), and separately for those customers preferring traditional platforms (Huuto.net and Tori.fi, N=1800) and social media based platform (Facebook group, N=380). As can be seen in Table 1, the model fits well for the data in all three analyses. In

addition, all estimated loadings of second-order factor model were significant: the t-values were more than 9.6 in all three models. Reliability was assessed by calculating Cronbach's alphas for the four constructs, varying between 0.82 and 0.92.

A confirmatory factor analysis was also conducted to six indicator variables of constructs satisfaction and intentions to recommend C2C e-commerce to others. As explained above, satisfaction and WOM measure the perceptions based on a recent shopping experience, and are hence analysed separately from customer value dimensions. Cronbach's alphas for constructs were 0.83 and 0.93, indicating good consistency of the measures. All loadings were high (between 0.82 and 0.96) and t-values were at least 29.8. Goodness of fit measures indicate that the model fits the data ($\chi 2(8)= 4.46$, p-value= 0.794, RMSEA = 0.000, GFI = 1.00, SRMR = 0.017).

INSERT TABLE 1 HERE

Profiling C2C e-commerce with demographics and product categories

We used summed averages of the constructs validated by confirmatory factor analysis in profiling the demographic shopper segments, and on the other hand, product categories. The analyses aim for better understanding of how customer value, satisfaction and WOM differ (derived from respondents' evaluation of a recent C2C e-commerce shopping experience) along these dimensions.

Product categories were investigated by asking the respondents to indicate the primary categories of goods they purchase using C2C e-commerce. As Table 2 shows, the most popular product categories differ in demographics: gender, age and annual income. Fashion, Children and Furnishing are the most popular categories among women, whereas men more often prefer Electronics and Hobbies. Almost 60% of Fashion shoppers are under 35 years of age. Perhaps surprisingly, hobbies are favoured by older customers. The product category Children is most popular among 25- to 49-year-olds, as can be expected.

INSERT TABLE 2 HERE

The purchasing power of shoppers was investigated through two different measures: annual income and perceived economic situation. Whereas the latter did not significantly differentiate among groups, annual income is a demographic that helps in profiling C2C e-commerce shoppers. Here, the conclusion seems to be that shoppers with lower annual incomes are more likely to buy Fashion products from their peer customers. The product category Children, on the other hand, does not have this type of profile. On the contrary, it seems to attract customers with higher incomes to use C2C e-commerce in trading clothes, shoes and toys for children.

The primary C2C platforms for purchases were investigated by naming the most popular Finnish C2C e-commerce sites and platforms, among which the respondents could then choose based on their behaviour. The initial analysis indicated that Huuto.net, Tori.fi and Facebook groups covered close to 80% (77.2%) of all responses. Further, the differences seem to be related to more traditional vs. social media-based C2C e-commerce platforms. Illustrating more traditional platforms, Huuto.net is auction-based, whereas Tori.fi is an announcements site with fixed prices. In all cases, the C2C e-commerce provider acts as a platform: it aims to connect buyers and sellers but does not own, store or distribute the items offered for sale and/or purchase. All three of these platforms also operate without a direct revenue model from the consumer's perspective (i.e., they are free of charge for the consumer). The differences in demographics between traditional and social media-based platforms are presented in Table 3. The last column points out the statistical significance of distribution differences between groups. The $\chi 2$ test denotes whether distributions between groups are not equal. A p-value below 0.05 indicates that the distributions of all groups are not likely to be equal. Pairwise comparisons of the proportional results are shown in Table 3, where each subscript denotes the subset of categories whose columns proportions do not differ significantly from each other at the 0.05 level.

Differences in the user profiles of traditional (i.e., Huuto.net and Tori.fi) vs. social media-based (i.e., Facebook groups) channels are clear: Facebook groups attract female shoppers who are considerably younger and less well off in terms of both annual income and perceived household economic situation. On the other hand, traditional C2C e-commerce seems to serve a more heterogeneous group of shoppers in terms of the same demographics. This means that social media-based C2C e-commerce shoppers tend to be both women and men, older and with higher annual incomes and better perceived household economic situations.

Together with product category-level information, we can see rather clear C2C e-commerce profiles shaping up. In social media, customers consisting mainly of younger female shoppers who are less affluent choose Fashion (32.9%), Children (28.9%) and Furnishing (24.2%) as their most used product categories. The traditional channel has a less clear demographic profile and focuses on Furnishing (30.9%), Electronics (24.1%) and Hobbies (18.5%), respectively.

Profiling C2C e-commerce with key retail outcomes

Key retail outcomes were used in the second phase of the analysis. As seen above, there were clear differences in demographics in product categories and primary channel of purchase that aid in profiling the C2C e-commerce customer. Incorporating the key retail outcomes into these findings opens new ways for profiling. Based on demographic differences, we further analysed eight shopper groups by creating dichotomous variables: men vs. women who are younger vs. older (35 years or older) and less vs. more affluent (annual income over 30,000 euros). These key retail outcomes with refined shopper demographics are presented in Figure 1.

INSERT FIGURE 1 HERE

Whereas the differences in more utilitarian dimensions of customer value (economic and functional) and satisfaction are rather small, there are substantial differences in how shoppers perceive emotional and symbolic value and in their intention to recommend the purchase channel (WOM). Younger female shoppers with less income are more prone to perceive emotional and symbolic value, and their intentions to recommend are high. On the contrary, older male shoppers with higher income are less prone to perceive emotional and symbolic value and to engage in WOM activities. However, age and income seem to be more relevant than gender in evaluating these key retail outcomes.

Figure 2 presents evaluations of the same key retail outcomes along product categories. This analysis also shows interesting differences that further profile the C2C e-commerce shopper. Again, the biggest differences result in the perceptions of emotional and symbolic value. WOM intentions are less evident among product categories. Shoppers in the Fashion and Children product categories perceive the most emotional and symbolic value. Respectively, the Electronics and Hobbies product categories are clearly characterized by lower perceptions of emotional and symbolic value.

INSERT FIGURE 2 HERE

The purchase channel did not result in as clear of a difference in the key retail outcomes as did our demographic and product category-based analyses. However, it is evident that certain products and purchase channels are interlinked, and certain demographics seem to predict rather well which product categories are purchased. Importantly, adding the key retail outcomes allows us to better understand the contextual differences of C2C e-commerce.

We compared the perceived customer value in C2C e-commerce between those who were: 1. only buying; 2. only selling; or 3. buying and selling. Based on our data, 75% of respondents used C2C e-commerce to both buy and sell goods. As we see in Figure 3, those who had used C2C platforms to both buy and sell goods achieved more customer value than the others. Particularly the difference is discovered between emotional and symbolic dimensions of value. Those who used C2C only for buying goods perceive economical and functional value the most. The sellers perceive the least value compared with others. For them it is mostly the economical aspect that matters.

INSERT FIGURE 3 HERE

If we compare the users of the traditional and social media-based platforms, we see that people using social media are more engaged with C2C. As we see in Table 3, 83% of Facebook group users have used C2C for both buying and selling when the corresponding percentage of traditional platform users is 73%.

Discussion

Amplified by digitisation, consumers now enjoy convenient access to a vast array of products to match their varying needs. C2C e-commerce is one example of this transformation that is redefining the structure, boundaries and content of retailing, and it holds major value-creating potential both for consumers and retailers. To uncover this potential, we discuss three main implications emerging from the results that also characterise the evolving nature of C2C e-commerce.

First, it is important to realise that there is great variety between gender, age, annual income and perceived household economic situation in the way that C2C e-commerce is being used. For

example, while clothing and furnishing are largely dominated by females, electronics and information technology are used more by men. Furthermore, differences between product categories exist between age groups. The younger generation is more into children's clothes, while products related to hobbies are more popular among older individuals. C2C e-commerce can be thus regarded as a popular form of commerce among all generations – and not driven only by younger generations or households with lower annual income. Moreover, the results clearly suggest that the roles of product category and demographics are critically important for understanding the dynamics of consumer behaviour in a C2C e-commerce context. Hence, instead of general descriptions of the C2C e-commerce evolution, more focus should be placed on its popularity in different product categories and among different consumer groups. In that respect, this study deepens the existing understanding of the demographical differences (Black 2005), and the introduced categorisation of shopper groups provides a basis for further profiling and conceptualising consumer behaviour in C2C e-commerce.

Second, this study extends prior research on C2C e-commerce, which has been largely descriptive in nature (Cheung et al. 2014; Chen et al. 2016), by placing empirical focus on the platform where the actual transactions are made. Furthermore, while prior studies have identified the interlinkages between platform quality and consumer satisfaction (Fan et al. 2012), they have not empirically addressed how traditional platforms (auction and fixed price-based platforms) differ from social media-driven platforms (Facebook-based) in terms of consumer profiles and product categories. Our results demonstrate that these platforms differ in terms of who uses them and what is bought, thus empirically highlighting the important interlinkages between segments, product categories and the C2C e-commerce platforms. In that respect, retailers should take into account the distinct profile and potential of each C2C e-commerce platform in designing what to sell and to whom.

Third, from the consumer perspective, prior studies have addressed utilitarian and hedonic resale motivations (Chu 2013) or perceived benefits (Abdul-Ghani et al. 2011) but have not explored or addressed in more detail what kind of value consumers perceive from C2C e-commerce. Towards that end, this study used customer value dimensions as an important lens through which to better understand the nature of C2C e-commerce as a phenomenon. Exploring the different shopper groups through economic, functional, emotional and symbolic value provides empirical insight into why consumers buy certain products categories, and most importantly, what kinds of behavioural outcomes this results in. Our findings suggest that although economic value is a critical driver of C2C e-commerce, emotional and hedonic value dimensions are also influencing many consumers' perceptions, which may hold interesting implications for the future evolution of C2C e-commerce platforms. Approaching C2C e-commerce empirically from the perspective of customer value

dimensions also provides a basis, a common concept, to compare what consumers get from buying used versus new goods. Customer value dimensions provide theoretically sound and well-grounded means for analysing this shift in how and why consumers purchase used goods.

Conclusion

C2C commerce is evolving into an integral part of contemporary retailing. Consumers are using it as a complementary purchasing channel, which naturally exerts pressure on traditional retailers. To gain new insights and understanding of this emerging phenomenon, the purpose of this study is to explore the relevance and implications of C2C e-commerce for consumers and retailers. While existing research on C2C e-commerce is fragmented and still underdeveloped, this paper is among the first studies to empirically explore who transacts on C2C e-commerce platforms (and what they buy/sell) and to identify their value perceptions and behavioural outcomes. Overall, the study helps to demystify some of the preconceptions related to C2C e-commerce, which has major implications for practitioners.

First and foremost, although differences between age groups and product categories do exist, it can still be argued that C2C e-commerce is a surprisingly common and adopted phenomenon – not just a marginal activity driven by a group of lead users – nor is it limited to certain age groups. The results suggest that buying and selling used goods is an established form of commerce, which can also signal that the line between what is new and what is used is gradually becoming more blurred. Furthermore, this may indicate that the value associated with a product being new versus used may be in transition: consumer culture based on the ownership of products may be going through a transformation. Consumers might not perceive much value from buying or owning new products but instead become more inclined to buy used products or even to rent products or purchase usage rights. Buying and consuming used goods can result in unique consumer experiences that would not be possible through the consumption of new products. Many consumers may be moving away from the more materialistic focus on value-in-exchange towards value-in-use – an important theoretical issue that is emphasised in the recent developments within both marketing and service theory (e.g., Vargo and Lusch 2008; Grönroos 2007).

Second, while buying used goods might have been negatively stigmatised a few decades ago, it may be gradually turning into a source of symbolic value. In that respect, as suggested in this study, viewing C2C commerce also from the point of view of hedonic value offers complementary insight into this evolving phenomenon. Buying used goods may represent a modernised version of the smart

shopping phenomenon: in addition to buying good quality in affordable products, when using C2C e-commerce, consumers can align their shopping experience with their ecological motivations by buying used products. In this respect, retailers must reconsider their roles as suppliers of new products and more towards becoming suppliers of various dimensions of usage value – whether emerging from the use of new or used products. Using customer value dimensions to capture this experience can be a valuable source of information for both scholars and practitioners.

Third, while the majority of retailers have focused on selling only new products, pressure is being exerted on these retailers to reconsider their approaches to what increasingly constitutes modern retailing. Especially in the durable goods context, the growth of C2C e-commerce points towards a wicked problem: To what extent can retailers' business logic in the future be based on selling only new products? C2C e-commerce is a widely adopted phenomenon among generations, and key output measures, such as satisfaction and WOM, signal that it will continue to grow. To address this market, should traditional retailers extend their focus toward C2C retailing? Retailers should consider the extent to which future stores should be designed around C2C commerce. These stores could offer consumers inspiration that goes beyond new products (e.g., through nostalgic products that are available only through C2C commerce), creating alternative and exciting consumption experiences (e.g., products with authentic and personal histories) or providing tools for modern consumers to build their identities (e.g., in terms of alternative, more ecological way of consuming). Moreover, in C2C e-commerce, business logic should not be based on gross profit but rather on the data that emerge when consumers interact on C2C e-commerce platforms. For example, knowing that a consumer has purchased a used bed will provide retailers with opportunities to cross-sell complementary products, such as bed sheets and pillows. In addition, consumer buying behaviour related to new products may be affected by the fact that consumers are increasingly aware of the strong and liquid aftermarket, which allows them to easily sell old products in order to buy new ones. Consumers may also be more willing to buy new – especially branded – products since they are aware that they can sell them in the aftermarket. Consequently, C2C e-commerce is evolving into a dynamic and interesting phenomenon consisting of various interlinkages.

Caution should be used in attempting to generalise the findings of this study, and there are limitations that should be taken into account. First, although the data were extensive (n=2823), they were collected from only one country. Cultural characteristics may be present that could impede the generalisability of the results. Second, the data were cross-sectional and based on self-reporting, which may have affected the results. Third, as the data were exclusively about C2C e-commerce, the results could not be compared either with brick-and-mortar C2C commerce or traditional retailing.

However, despite these limitations, the findings provide a good basis for exploring and analysing the implications of C2C e-commerce for retailers.

C2C e-commerce is still in its infancy, and ample future research opportunities exist. A complementary and deeper understanding of the interlinkages of the C2C e-commerce phenomenon through empirical research is needed. A more deductive and confirmatory approach would serve as a good future research opportunity. Moreover, as digitisation is rapidly changing the C2C commerce landscape, the role of the platforms is an interesting topic for investigation. Finally, exploring and analysing the various strategies through which traditional retailers incorporate C2C commerce – either as a threat or an opportunity – into their business models remains an increasingly relevant avenue for future research.

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Table 1. Reflective CFA model of customer value

	Chi square/df	p-value	RMSEA	GFI	SRMR
Total data N=2180	263.35 / 73	0.000	0.035	1.00	0.038
Traditional: Huuto.net or tori.fi N=1800	205.38 / 73	0.000	0.032	1.00	0.039
Social media: Facebook group N=380	133.52 / 73	0.000	0.047	0.99	0.052

Table 2. The most popular C2C product categories profiled along demographics

		Fashion: Clothing and shoes (excluding children's), accessories and bags (N=219)	Children: Children's clothing and shoes, toys and children's goods (N=218)	Electronics: Entertainment electronics, information technology, telephones, large and small household appliances (N=254)	Furnishing: Furniture, rugs, lighting fixtures, art, textiles and other interior decoration goods (N=364)	Hobbies: Goods related to hobbies (e.g. musical instruments, crafts, fishing, hunting, photography, collectibles) (N=227)	Total (N=1282)	
Gender	Female	90,0%a	83,0%a, b	29,5%c	79,1%b	41,0%c	65,10%	χ2(4) =321,3
	Male	10,0%a	17,0%a, b	70,5%c	20,9%b	59,0%c	34,90%	Sig.=.000
Age	15-24	28,8%a	5,5%b	14,2%c, d	17,0%d	7,5%b, c	14,80%	
	25-34	30,1%a	30,7%a	25,2%a, b	16,2%b	17,6%b	23,10%	
	35-49	25,6%a	49,5%b	34,3%a	33,8%a	30,8%a	34,60%	
	50-64	12,3%a, b	9,6%b	20,1%a, c	24,7%c	30,0%c	20,00%	χ2(16) =147,79
	65 and above	3,2%a	4,6%a	6,3%a	8,2%a, b	14,1%b	7,40%	Sig.=.000
Annual income	Less than 10000 €	23,2%a	11,2%b	15,0%a, b	15,7%a, b	13,0%a, b	15,60%	
	10 20000 €	23,2%a	17,6%a	25,8%a	19,8%a	18,2%a	20,90%	
	20 - 30000 €	25,4%a	25,0%a	23,9%a	22,6%a	26,6%a	24,50%	
	30 - 40000 €	17,1%a	22,9%a	12,7%a	21,7%a	19,3%a	19,00%	χ2(16) =32,931
	40001 € or above	11,0%a	23,4%b	22,5%b	20,1%a, b	22,9%b	20,10%	Sig.=.008
Perceived economic situation of household	We get along very well	7,3%a	4,2%a, b	6,0%a, b	5,6%a, b	1,8%b	5,10%	
	We get along quite ok	31,2%a	35,3%a	32,7%a	31,4%a	40,7%a	33,90%	
	We get along if we commerce with caution	34,9%a	37,7%a	35,1%a	36,7%a	35,0%a	35,90%	
	We have to spare sometimes	16,1%a	15,3%a	16,3%a	15,1%a	13,3%a	15,20%	χ2(16) =15,9
	We have to spare all the time	10,6%a	7,4%a	10,0%a	11,2%a	9,3%a	9,90%	Sig.=.459

Table 3. The most popular C2C platforms profiled along demographics

		Traditional: Huuto.net or tori.fi (N=1800)	Social media: Facebook group (N=380)	Total	
Gender	Female	53,3%a	89,7%b	59,70%	χ2(1) =172,8
	Male	46,7%a	10,3%b	40,30%	Sig.=.000
Age	15-24	11,3%a	20,0%b	12,80%	
	25-34	17,9%a	25,0%b	19,20%	
	35-49	33,7%a	33,2%a	33,60%	
	50-64	24,8%a	18,4%b	23,70%	χ2(4) =55,0
	65 and above	12,2%a	3,4%b	10,70%	Sig.=.000
Annual income	Less than 10000 €	13,9%a	20,3%b	15,00%	
	10 - 20000 €	17,9%a	24,1%b	18,90%	
	20 - 30000 €	23,7%a	23,8%a	23,70%	
	30 - 40000 €	19,8%a	20,0%a	19,80%	χ2(4) =32,1
	40001 € or above	24,7%a	11,7%b	22,50%	Sig.=.000
Perceived economic situation of household	We get along very well	5,9%a	2,7%b	5,30%	
	We get along quite ok	35,5%a	31,5%a	34,80%	
	We get along if we commerce with caution	35,6%a	36,6%a	35,80%	
	We have to spare sometimes	14,2%a	16,9%a	14,60%	χ2(4) =13,0
	We have to spare all the time	8,9%a	12,4%b	9,50%	Sig.=.011
Selling and buying	Buying	15,1 %	10,8 %	14,3 %	χ2(2)=16,9
	Selling	11,6 %	6,1 %	10,6 %	Sig. =.000
	Both buying and selling	73,4 %	83,2 %	75,1 %	

Figure captions

Figure 1. Economic, functional, emotional and symbolic value, satisfaction and word-of-mouth along demographics

Figure 2. Economic, functional, emotional and symbolic value, satisfaction and word-of mouth along product categories

Figure 3: Economic, functional, emotional and symbolic value for buyers, sellers and both.

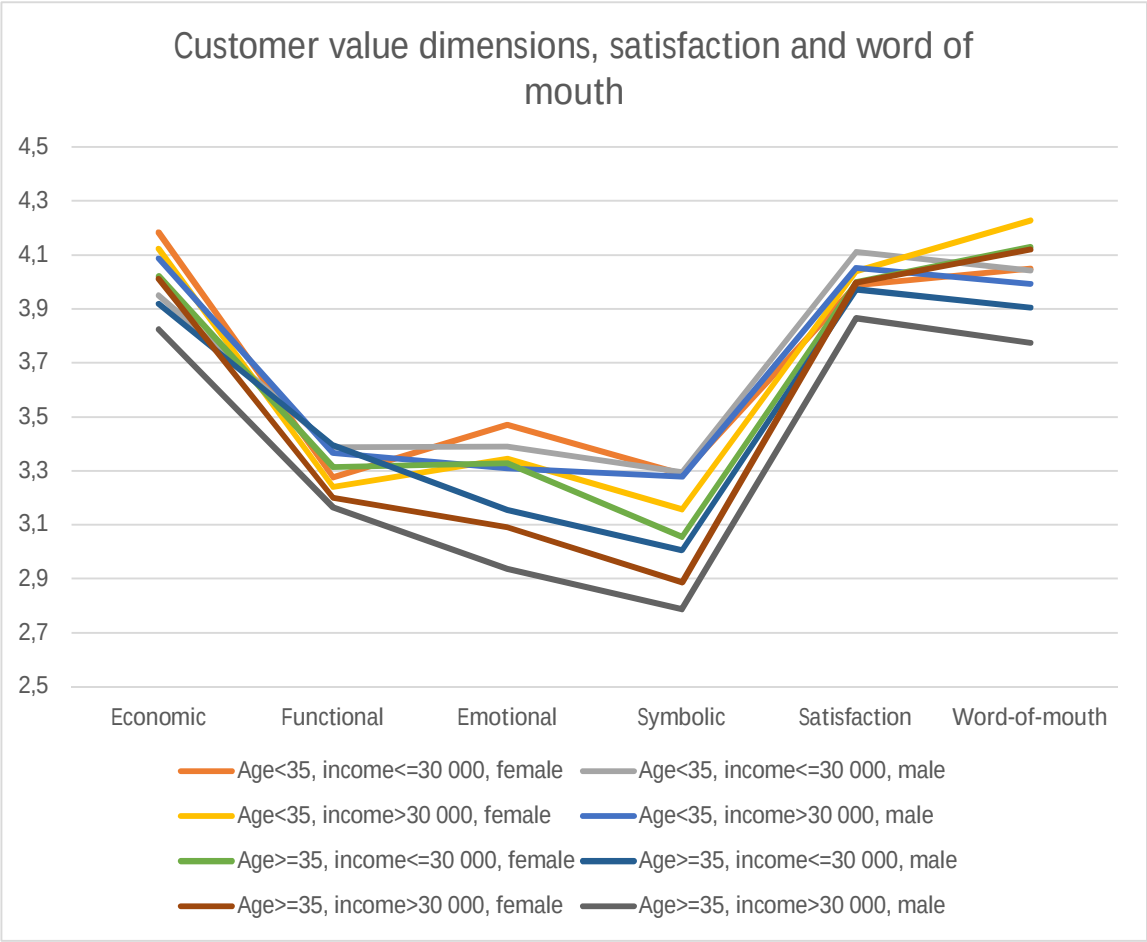


Figure 1. Economic, functional, emotional and symbolic value, satisfaction and word-of-mouth along demographics

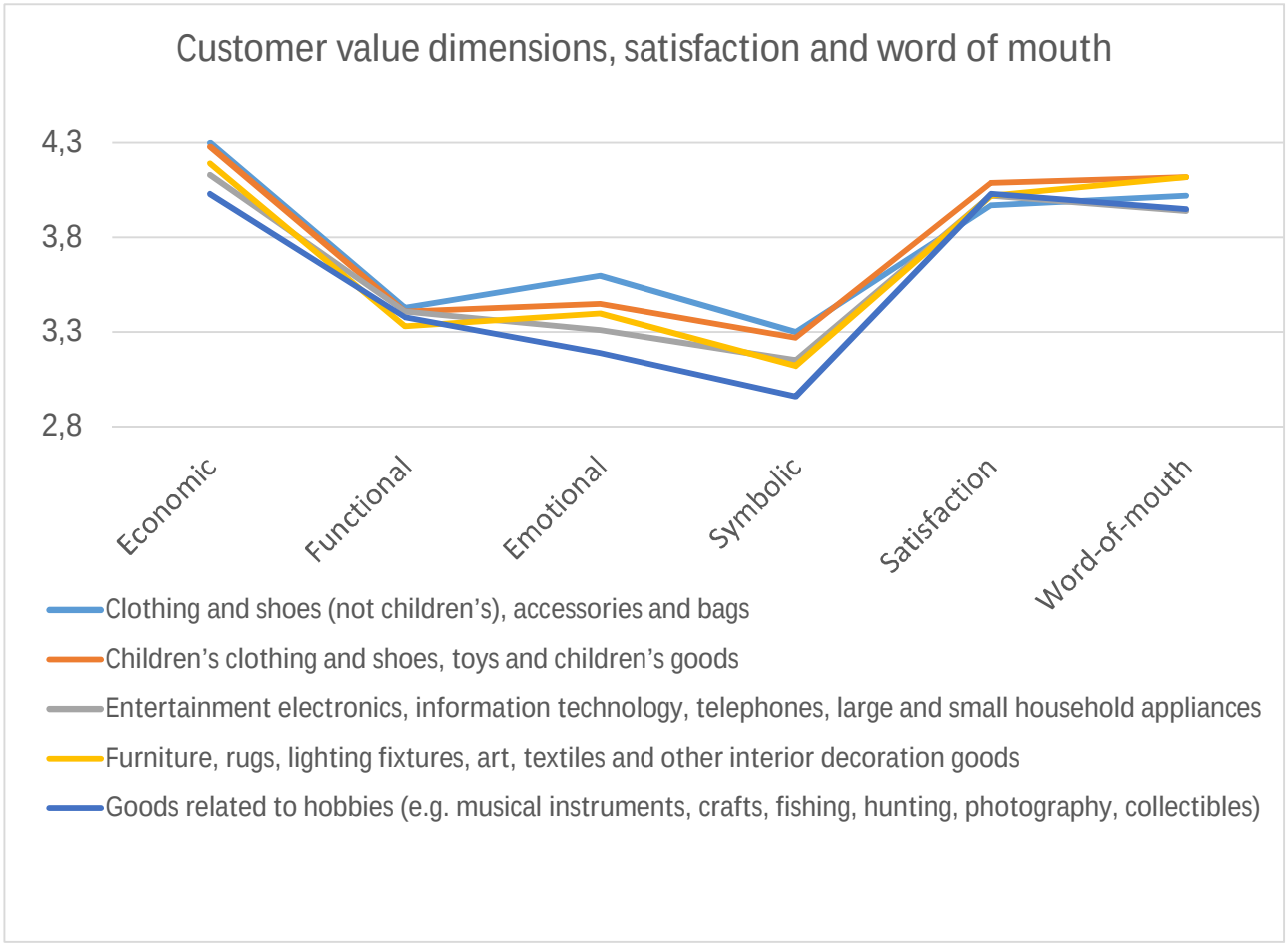
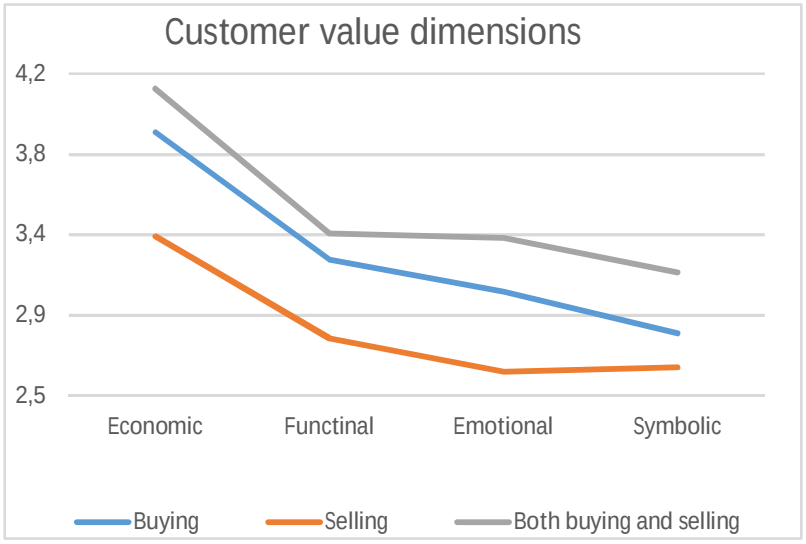


Figure 2. Economic, functional, emotional and symbolic value, satisfaction and word-of mouth along product categories



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