WE-COMMERCE: EVIDENCE ON A NEW VIRTUAL COMMERCE PLATFORM
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ABSTRACT

The proliferation of the Internet and the latest mobile communication technologies have given rise to new forms of communication that made it easier for sellers as well as consumers to communicate and conduct business in real time and in virtual space with manufacturers, retailers or among each other. In addition, consumers are building social networks for interacting, and for collectively buying products (“We-Commerce”). From the sellers’ perspective, they are stepping away from traditional forms of a single buyer-seller relationship and formerly dominant group building processes. By tapping into consumer networks and using consumers as marketing assets, marketers can enhance sales volumes, save marketing spending, and increase profits. This paper (1) provides an overview of grouping phenomena in marketing. It then (2) points out different platforms of group commerce in virtual surroundings, and (3) elaborates the influence of group mechanisms onto the consumer’s decision-making process. Eventually, (4) further research questions are presented.

JEL: L81, M30, M31

KEYWORDS: We-commerce, consumer groups; consumer bundling/flocking; consumer behavior on the Internet; group/collective buying

INTRODUCTION

Marketing literature about grouping phenomena has been dominated for a long time by firstly a marketer-initiated perspective, and secondly by a one seller dealing with one consumer connection. Although the phenomenon of consumers’ buying products together has ever since existed (Dameron, 1928), and sellers always reacted with different kinds of group discounts (e.g. on family vacation trips as well as group discounts at museums or movie theaters, and as a business model for consumer co-operatives), it has long been underrepresented in literature. This situation has dramatically changed with the advent of the Internet, which in his early stages has mainly been used for either building up relationships between companies or companies and consumers as well as single transactions in E-Commerce (e.g. Deller, Stubenrath, and Weber 1999; Mahadevan 2000). The phenomenon of consumers’ buying products together on the Internet appeared first time with the second Internet hype in the early beginning of this century. Participating consumers received a discount on highly standardized products like printers or cameras by logging onto a seller’s website (e.g. Letsbuyit.com), typing in their reservation price, and just waiting till the offer was closed. Although these forms of group buying seemed to be a good idea at first sight, they apparently did not meet the expectations of consumers. Group offers on the Internet vanished only after a few years in business.

The situation has changed with the growing interactivity by a combination of former stand-alone technologies like the Internet and mobile telecommunication services as well as new social media platforms like Facebook or Twitter. They allow for an anytime accessibility worldwide and coevally bringing people closer together on a regular basis. At the same time consumer power, but also the chances for consumers to find other consumers with the same interests and the same need for specific products are rising drastically. Consumers are now flocking on the Internet; they are virtually meeting in blogs, special interest groups or chat rooms, and therefore establishing a huge market segment for sellers. At that point
in time new business models are stepping in. Consumers can now receive group discounts by undertaking marketing tasks of the seller in the area of communication and distribution in a much easier way than ten years ago. A phenomenon named We-Commerce.

The paper as follows first discusses an overview of grouping phenomena in marketing. This approach is helpful in understanding the change of perspectives from a marketer-initiated phenomenon to a consumer-initiated enhancement of the grouping context. In addition, a scheme of group buying on the internet is given before a switch to the consumer’s perspective is presented. Then, the paper proceeds toward the development of taxonomy on consumer groups in virtual commerce. Platforms for virtual commerce are discussed, based on two dimensions: initiator and duration. In this context, consumer bundling and consumer flocking is contrasted as well as the concept of We-Commerce introduced as a buyer-initiated and long-term phenomenon that is based on new social media. Eventually, the impact of We-Commerce on the consumer’s decision-making process is discussed in detail. This simultaneously offers opportunities to give advice to marketing practitioners about obstacles in future group business processes. Moreover, it points out which further research questions need to be addressed in We-Commerce surroundings.

LITERATURE REVIEW

The discussion on grouping phenomena in marketing started a long time ago. It began with product bundling or bundling of goods in general as a very common marketer-initiated phenomenon in marketing since many decades (Dansby and Conrad, 1984; McAfee, McMillian and Whinston, 1989; Venkatesh and Mahajan, 1993; Yadav and Monroe, 1993; Yadav, 1994; Janiszewski and Cunha, 2004; Sheng, Parker and Nakamoto, 2007). Academic research on the topic goes back to early works of Stigler, 1963 and Adams and Yellen, 1976. Nowadays it can be found on many markets for standardized consumer goods (e.g. computer with printer and/or software), but is also applicable to products in combination with services (e.g. car and maintenance service). Bundling describes a chance of differentiation in competition by creating a higher value for consumers with packages of different products and/or services (Lawless, 1991; Olderog and Skiera, 2000; Stremersch and Tellis, 2002), which contain several specific advantages compared to offers from competitors, e.g. a lower price (discount), a free delivery or special modes of payment. One usually accepted definition of (product) bundling is “… the practice of marketing two or more products and/or services in a single package for a special price” (Guilinian, 1987, p. 74).

Figure 1: Forms of Aggregation in Marketing – Analogous domains

This figure shows different types of grouping phenomena in marketing. Besides the well-known instrument of product bundling and a strategy of consumer segmentation the angle of collective buying rose up in particular with the advent of the internet. In this context, consumer bundling is a marketer-initiated phenomenon, whereas consumer flocking is consumer-initiated and mainly empowered by new social media.
On the other hand, the idea of grouping consumers roughly appeared at the same time. Aggregating consumers by the marketer for planning purposes is widely recognized to be market and/or consumer segmentation (Smith, 1956; Bass, Tigert and Lonsdale, 1968; Frank, Massy and Wind, 1972; Wedel and Kamakura, 2000). In addition, clustering them into different groups (market segments) of similar characteristics and behavior for a strategic reason is nothing else but bundling them together. In terms of pricing theory, this differentiation is for obtaining a bigger part of the consumer surplus (Pigou, 1978), whereas the consumer gets products and/or services that better fit to his own specific needs. Product bundling as well as consumer segmentation are both marketer-initiated. Figure 1 gives the streams of research in the broad area of grouping of either products or consumers.

Nevertheless, the phenomena of product bundling as well as consumer segmentation implicitly consider each person separately buying one specific product and/or service (Klein, 2005). Following our broad understanding, this was the case for a long period. But one can also assume, that specific products or an assortment of goods are bought by different consumers at the same time (Voeth, 2002). This does not fit into the framework of consumer segmentation as well as it also does not appropriately fit into the classical understanding of quantity discounts, regularly given to a single consumer. Moreover, within this enhancement the focus changes to a certain amount of consumers rather than the bundle of products or services. It also changes to the purchase and its side effects (e.g. a group discount) rather than strategically dividing consumers into market segments.

In marketing literature this shift of view to multiple consumers being involved into a market exchange has been taken place in other areas of marketing whenever the ownership of a special good or purchase (e.g. through price discounts) affects the economic utility of other people (Voeth, 2003). Think about e.g. network externalities, critical mass phenomena or simply the purchase of a family vacation to Europe. The economic utility of these situations for each participating person depends strongly on the number and the behavior of the other members of the group (Li, Chawla, Rajan and Sycara, 2004), which share the market or go with each other. Focusing on that family trip one can say that if somebody within the group disagrees with the acquired compromise or the resolved action of the group the economic utility for the whole group as well as for each member will decrease. New services in telecommunication industries are of the same kind. MMS (Multi Messaging Service) is useless for a single user, because it is not of interest to send an MMS to oneself. This lasts until the market reaches a critical mass and lots of friends are joining the group of MMS users. Reaching a stage of critical mass, the utility goes up with something like a takeoff (Mahler and Rogers, 1999). The economic utility suddenly increases for each group member, because now it is easy to communicate with each other. In addition, the given example also shows, that there might be other factors, that influence the group building process and its maintenance (see also below). Those can be seen in sociological (e.g. need for socialization, see Moreland and Levine, 1982) as well as psychological reasons (e.g. reduction of the perceived risk, see Bauer, 1967; Roselius, 1971).

Another example, which is firstly based on group utility under an economic perspective, is group-buying phenomena. They came up in 2000 with the global proliferation of the Internet, e-business and the emergence of information-rich and savvy consumers. Such phenomena are also shown in Figure 1 under the term of so-called collective buying. The main consumer’s economic utility from those businesses has been the expected price discount when purchasing a specific product together with other consumers. However, its characteristics are distinctly different from the salient features of traditional consumer groups. Up to that time buying as a group of consumers was more or less a regional phenomenon in terms of group discounts at local stores or for services like theaters, the movies etc. Consumer co-operatives, consumer tribes, and consumer groups are some of the other names that have also been used in the literature to describe this hitherto existing phenomenon, which already started a long time ago (see e.g. Dameron, 1928). By and large, they were consumer-initiated, geographically confined, and their membership was relatively stable. Additionally, the consumer group size and scope were primarily determined by somewhat limited and sluggish flow of information to aspiring group members.
THEORY AND EVIDENCE

In the next sections the development from the group-buying phenomenon as an early concept of retailers on the Internet that tried to sell highly standardized products, to a switch to the consumer’s side will be discussed. Moreover, taxonomy of consumer groups in virtual commerce is given. Eventually, a phenomenon called We-Commerce, which is flanked by the proliferation of new social media, and its impact on the consumer’s decision-making process will be introduced.

Group Buying on the Internet

Group buying on the Internet has been discussed under many different descriptors—e.g. group purchasing, co-shopping, and collective shopping—in numerous academic (Anand and Aron, 2003; Asselin and Chaib-Draa, 2006; Birchall and Simmons, 2004; Chen, Chen and Song, 2002; Chen, Chen and Song, 2007; Kauffman and Wang, 2001; Li, Chawla, Rajan and Sycara, 2004; Voeth, 2002; Voeth and Weißbacher, 2006; Matsuo, 2009) and practitioner sources (Bonello, 2000; Clark, 2000; Clark, 2001; Dodge, 2000; Jidoun, 2000; Perry, 2000). But it has never been systematically examined (Sharma, Klein and Bhagat, 2008). Most of the academic articles take a mathematical viewpoint of analyzing optimal bundle sizes, duration of the offer or bidding mechanisms. A search of the Internet and in databases like EBSCO Host’s Business Source Premier in the summer of 2009 shows clearly that only a few authors recognized and discussed the strategic potential of such new-media based group phenomena in Business-to-Consumer markets, e.g. the liquidation of inventory, achieving economies of scale or cutting marketing spending by using consumers as marketing assets (e.g. within communication and logistics). Moreover, only a few authors see group buying on the Internet as part of a dynamic pricing-mechanism in marketing strategy (Sahay, 2007).

Furthermore, most of the articles on group buying tend to take a Business-to-Business perspective (e.g. Forrest, 2006; for an example see UPowerBuy)—mostly using the term group purchasing—and/or discuss the formation of traditional groups. By contrast, group buying on the Internet happens in Business-to-Consumer markets and it is about buying specific types of standardized products at the same time, e.g. cameras, printers and so on. These kind of groups are also relatively unstable compared to classical consumer co-operatives (such as listed at www.ncba.coop), and the action takes place on the Internet because of its distinct advantages in communication efficiency. Not surprisingly, it is also not questionable that these so called buying groups on the Internet in fact most of the time did not meet the conditions of a group in a classical way, which is two or more people, having a relationship through repeated interactions over a period of time, developing a kind of group identity, and coming together to achieve particular objectives (see e.g. Robbins and Judge, 2008). Whereas the latter fits to the understanding of group buying processes, the rest does not. On the other hand, they are also more than a social aggregation, since they are not only a real or physical conglomeration of people with no connection or interaction as discussed in group socialization literature (Hare, 1962; Merton, 1968; Moreland and Levine, 1982).

While the concept of group buying on the Internet seemed great and even had a good initial support from investors, vendors, media and even buyers (Tang, 2008), it vanished after only a few years in business (e.g. Accompany, Letsbuyit, or MobShop). For a long time one could rarely find survivors—e.g. Groupgain (USA), Teambuy (China), or Neckermann “Catalog Aggregator” (Germany)—which encouraged consumers to actively form a group with the main purpose of obtaining a discounted price based on a larger quantity of purchased products, that is mainly affected by the group size. Moreover, former initiators have been retailers that tried to take advantage of such businesses. One can assume, that the economic advantages from the individual consumer’s perspective—mainly the stepwise reduced price—have not outweigh the transaction costs within the group building process in such forms of buying. As there are e.g. costs for collecting information about the product and the buying process, waiting for the
end of the offer—not knowing the final price—as well as waiting for the product to be shipped thereafter. In addition, the individual consumer mostly had to face a compromise onto one specific product offer within such group buying processes. This might have been only a few critical disadvantages of previous group-buying platforms on the Internet. Nevertheless, some authors think, and our given examples later on show towards the same direction, that online group buying seems to be again a growing trend (e.g. Heller, 2009).

Since collective buying opportunities can either be marketer- or consumer-initiated (see also Figure 1), such hitherto discussed grouping phenomena can be named consumer bundling (Klein, 2005; Sharma, Klein and Bhagat, 2008), whenever they are a marketer-initiated (e.g. DellSwarm), influenced, and controlled short-term voluntary aggregation of consumers into specific sized bundles. These consumers are collectively engaging in a marketing exchange on a seller's website which would provide each with a superior value on a per capita basis than obtainable individually from the same or other sellers. For example, a seller announces substantial quantity discount rates for a product on its website exhorting visitors to become committed consumers, and if the number of consumers reaches or exceeds a predetermined critical mass (bundle of consumers), every member of the bundle gets the merchandise at a substantial discount.

A Switch to the Consumer’s Perspective

There are also consumer-initiated buying processes, which are based on group building (e.g. Storemob). The process of the consumers’ self-organizing to increase value for themselves in the marketing transaction is termed consumer flocking in literature (Bhagat, Klein and Sharma, 2009). Since consumer flocking is consumer-initiated and therefore consumers take an active part in the marketing process by using their own social networks and by utilizing the power of new communication technologies like the Internet, this consumer effort might even better counterbalance the discount on an assortment of products and services given by the marketer than it was the case within the above discussed consumer bundling initiatives. Furthermore, while group formation in this constellation is consumer-initiated, the marketer can influence consumers’ behavior and use them to support sales by encouraging community building as well as internal communication of virtual communities (Wang, Wei and Kaarst-Brown, 2006). Marketers might now be able to offer a significant price reduction to a consumer flock. On this account, consumer flocking creates higher value for both market sides. We think that a systematic exploration of this new consumer-initiated phenomenon has tremendous implications for marketers for value-creation and value-delivery to the consumers—a significant pillar of the new AMA definition of the domain of Marketing.

Moreover, the current trend of social networking and user-to-user communications is being increasingly tapped by companies for purposes of commerce (Bernoff and Li, 2008). Calling it a groundswell phenomenon, Bernoff and Li, 2008, p. 36 state that “… consumers are now connecting with and drawing power from one another.” This increase in online social activities around the world (e.g. Facebook, Twitter, MySpace or eSwarm) would soon result in the formation of virtual communities for purposes of commerce—not just for sharing information as is currently the case for most of them. Think about e.g. virtual communities, special interest groups or chat rooms, where people come together on the Internet because of the same interests. While all social media provide a channel for consumer flocking, as well as doing business from the marketer’s perspective (see e.g. Weber, 2009), social network sites on the internet provide a powerful vehicle for consumer aggregation. The purpose of many-to-many communications is succinctly described thus: a social trend in which “…people using technologies to get the things they need from one another …” (Bernoff and Li, 2008, p. 36).

Following this understanding of a long-term oriented group building process for reasons of commerce, this phenomenon can also be called “We-Commerce” whenever there is a shift to long-term oriented groups of people on the Internet for buying purposes. Manufactures can address those groups with special
offers and obtain on this way those consumers who are possibly willing to take part in a group business. In addition, Schultz, 2009 states, that the shift of persuasion power within the communication process from the marketer to the consumer is an important fact which cannot be ignored within future advertising strategies. Consumers are no longer persuaded by strong brands and their promotional programs, but by other consumers within their own social networks. This situation is also supported by a recent study from ComScore about a marketers’ trend to buy into existing social networks (Loechner, 2009). Marketers are already addressing social networks with buying offers or public relations campaigns (see also Lindars and Bower, 2009).

However, it is common to both—consumer bundling as well as consumer flocking—that the existence of such grouping phenomena strongly depends on new information technologies and the global proliferation of the Internet over the last decade. Businesses can now directly communicate with each other in real time and create new and better value packages. Consumers can also communicate easier with manufacturers, wholesalers, retailers, third party information providers, or with other consumers. Besides seller-specific advantages of such consumer aggregations like stretching market share/volume, a quick turnover of inventory (advantages in production and financing) or a reduction of marketing and distribution costs. Moreover, these forms of marketing products additionally offer a broad access to the consumers’ social networks. In addition, the marketer is able to collect important information about consumer behavior that helps him to enhance the outcomes of further businesses.

Categorizing Consumer Groups in Virtual Commerce

After firstly pointing out various grouping phenomena in marketing, we can now distinguish its different platforms in the context of virtual commerce. We will subsequently discuss how the consumer’s decision-making process is influenced by the so called phenomenon of “We-Commerce”. Based on the systematization in Figure 1 as well as now shown by Figure 2, a first dimension within the purchasing process includes a differentiation into marketer- and buyer-initiated types of group buying phenomena (initiator), whereas a second dimension considers the short- or long-term orientation of the group (duration).

Within both of the marketer-initiated phenomena marketers are able to reduce marketing spending by giving consumers the opportunity of either collective orders or group buying. This type of collective buying was already named consumer bundling (Sharma, Klein and Bhagat, 2008). However, the first subtype is a more long-term-oriented business relationship, wherein buyers are able to order either similar products or an assortment of products from a single seller. There is normally one person, also known as the catalog aggregator, which collects all orders, processes them, and stays in contact with the seller over a specific period of time (e.g. GermanShop24 or Woodland). In addition, this sometimes happens during multiple ordering processes, and in some cases, the intermediate person also decides how to share the given discount. Furthermore, a marketer can offer potential consumers the opportunity to buy as part of a short-term-oriented group; also either similar products or products from a seller’s assortment. Nevertheless, most offers that can be found on the Internet contain only a single product (e.g. Groupon). In this kind of group buying initiative, each individual receives the same discounted price that is shown on the marketer’s homepage. By logging onto the marketer’s website, it is also permanently clear to the single buyer how many people already signed up for the offer. Therefore, compared to collective orders, the order process is more transparent to every member of the entire group. Whereas collective orders can also be found within the old economy, the latter phenomenon appeared for the first time around the year 2000 within the boom of the so called new economy.
Figure 2: Platforms for Virtual Group Commerce

<table>
<thead>
<tr>
<th>Duration</th>
<th>Initiator</th>
<th>Collective orders</th>
<th>We-Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term</td>
<td>Marketer-initiated</td>
<td>Consumer bundling</td>
<td>Consumer flocking</td>
</tr>
<tr>
<td>Short-term</td>
<td>Buyer-initiated</td>
<td>Group buying</td>
<td>Consumer mobs</td>
</tr>
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This figure shows taxonomy of different types of virtual group commerce along the dimensions “initiator” and “duration”. It corresponds with figure 1 in terms of consumer bundling and consumer flocking. Whereas group buying as well as collective orders and consumer mobs can happen in the off- and online world, the We-Commerce phenomenon is based on new social media technologies.

From the buyer’s perspective there are existing buyer-initiated phenomena of collective buying that have been named consumer flocking so far (Bhagat, Klein and Sharma, 2009). On the one hand, single consumers or Internet platforms, mainly driven by consumers, are organizing consumer mobs. Those are based on a short-term aggregation of people for getting discounts either in online stores or also by using the Internet as a medium to arrange meetings in front of local stores (e.g. BuyWithMe, GroupMutual, StoreMob). On the other hand, long-term oriented groups of consumers—such as consumer co-operatives in agriculture, credit, farm, electric, grocery or housing sector—have existed for a long time (see www.ncba.coop). In recent years many of them maintain an Internet presence though still having only a local impact (e.g. Consumers Credit Union or Health Care). Nevertheless, the phenomenon of consumer flocking on a long-term basis rather refers to social networks. Social networks are of the same kind, but the difference consists of the medium that is used. Today’s social networks (e.g. Facebook, MySpace, or Twitter) are heavily based on new technologies like 3G cell phones and Web 3.0 applications. Within such existing groups there might rise up smaller units of people with a focus on the purchasing of goods (Bhagat, Klein and Sharma, 2009), though the group itself has a long-term life cycle. This new phenomenon we named We-Commerce, and marketers are already tapping into such social networks by displaying their advertisements respectively by offering buying opportunities in well known networks such as Facebook or MySpace. In this context, Letsbuyit recently started another attempt to establish a shopping community in Europe, without the concept of co-buying this time, but with the idea of a shopping community in general. Users can recommend products and stores to other users within the Letsbuyit-network. Marketers can enter into this community by placing ads or joining an affiliate partner program. In addition, social network sites like MySpace or Facebook also advising businesses of different options to reach their own user groups.

The Impact of We-Commerce on the Consumer’s Decision-Making Process

We will now discuss the implications of collective buying, and especially We-Commerce, onto the consumer’s individual purchasing process. In marketing literature the consumer’s decision-making is divided into a five step model (see Figure 3). Those steps, depending on different authors, contain problem recognition, information search, evaluation of alternatives, product choice/purchase decision, and
outcome/postpurchase behavior (see e.g. Solomon, 2009). There are a whole variety of theories and/or concepts in the area of individual as well as group consumer behavior, which can be related to different steps of the consumer’s decision-making process. Some of them are also focussing on influencing as well as moderating factors of interpersonal exchange processes with groups. Others, like e.g. economics of information, take a look from the outside under a given situation of asymmetric information. In the following section we will lead a first discussion to what extent they are able to give further advice about how the individual’s decision-making process in We-Commerce surroundings on the Internet is influenced by the group, or the group building process. In addition, those theories and concepts also offer some suggestions for the marketer how to deal with and how to tap into consumers’ social networks for the purpose of commerce.

Figure 3: We-Commerce and the Consumer’s Decision-making Process

Problem Recognition
In the problem recognition stage, consumers become aware of a specific need. Following to this some people have a higher propensity to flock onto social network sites than others. They are chatting about e.g. their problems in finding appropriate products and/or they are just talking about their own product experiences. This form of communication helps them in the problem solving process (Newell, Shaw and Simon, 1958; Newell and Simon, 1972). Moreover, people are ever since social connectors, and they have a need for socialization as well as social exchanges in their daily lives (Homans, 1974; Blau, 1964). The wide variety of advancements in communication technology has enabled them to discover interpersonal commonalities across space and time, e.g. common ideas, views on a subject matter, activities, common interest, opinions, and even pattern-discussion of product attributes, usage behavior and posting of product views (Chayko, 2007; Chayko, 2008). Moreover, socialization is a process of mutual adjustment that produces changes in behavior over time (Moreland and Levine, 1982).

According to Robbins and Judge, 2008, there are different reasons for joining groups, e.g. security, status, self-esteem, affiliation, power, and goal achievement. Security reduces individual self-doubts, and makes people more resistant to threats. In this context, buying products on the Internet in We-Commerce might help consumers in figuring out what products are of good quality. In addition, power and goal achievement helps them to accomplish a particular buying task, and therefore to get a better price than the
average market price. Therefore, with the growth of the Internet and the increasing number of products available all around the world, social network sites may help the average individual consumer within the problem recognition stage. Senecal and Nantel, 2004 found out, that e.g. consumers who consulted product recommendations selected recommended products twice as much as other consumers. Marketers should try to guide chatrooms and discussion sites, plus they should offer their own products as problem solvers. In addition, marketers should offer group discounts to increase the number of sold products and reward consumers for their communication activities within the purchasing process. This helps the marketer to generate not only reliable communicators in the market place, but also committed consumers for further exchange processes as well as.

The fact that cyberspace enables people to join together based upon common interests and experiences provides a substantial foundation upon which environments of business cooperation can be created. Nevertheless, the harmony of the group that emerges on the Internet can be tenuous and fragile because the elements that contribute to the harmonious group interaction in real life are weaker (Feng, Lazar and Preece, 2004). In that context, the construct of online trust is one of the key drivers, not only in E-Commerce (Bart, Shankar, Sultan and Urban, 2005), but also in We-Commerce surroundings. Online trust is based on consumer perceptions against expectations, believability of the information and confidence in the site (Urban, Amyx and Lorenzon, 2009). Marketers have to make sure that they act trustworthy from the consumer’s viewpoint (Gefen, Benbasat and Pavlou, 2008). Destroying the group cohesion right away at the first stage of the problem recognition is always a possible as well as a serious threat.

Information Search and Evaluation of Alternatives

The process of information search and the evaluation of alternatives are closely related, since the amount of information that the individual consumer gathers simultaneously determines the number of given product alternatives. Economics of information (Stigler, 1961; Nelson, 1970; Darby and Karni, 1973) provides helpful insight into the concept of asymmetric information. Individuals do not have all necessary information about a specific product category, since information is not available for free. Their information processing (Miller, 1956; Miller, Galanter and Pribram, 1960) is also limited in terms of making rational choices (Simon, 1955; Simon, 1959). Besides, time also works as a constraint. Collective buying might help the individual consumer to ease the search for information as well as it might simplify the overall buying decision. If a friend within a social network, who is told to be a market maven and who is also widely accepted by others, recommends a specific product, this person can act as a salesman on behalf of the marketer. He might be able to convince others of the product value or of the product as a problem solver. Since the source attractiveness of another consumer is significantly higher than the manufacturer’s communication, the marketer should treat him as a marketing asset in the information search and evaluation stage.

Moreover, the concept of word-of-mouth is driving product diffusion processes in the marketplace (Dodson and Muller, 1978; Godes and Mayzlin, 2004; Sun, Youn, Wu and Kuntaraporn, 2006; de Matos and Rossi, 2008). Strength of commitment to the group and strength of the ties are thereby important factors (Johnson Brown and Reingen, 1987). As long as the consistency with other information, as well as its clarity and its credibility are high, the individual might put more trust into word-of-mouth than into the official marketer’s communication instruments. Again, social network sites typically provide a higher trustworthiness than the communication of the manufacturer. Price and Freick, 1984 found that consumers planned to use especially friends, relatives, and acquaintances as information sources (even before salespeople and publications such as consumer reports). These findings are also supported by Kiel and Layton, 1981, who reported numerous studies concerning the dimensions of consumers’ information seeking behavior. Overall, other consumers act as a filter in We-Commerce surroundings. They are
providing product information as well as they are helping in getting better deals from manufacturers when it comes to collective buying opportunities.

Product Choice/Purchase Decision

Social comparison (Festinger, 1954) and social learning (Burnkrant and Cousineau, 1975; Bandura, 1977) are two well known theories from sociology, that can be used to describe the influence of others onto the individuals purchasing behavior. Individuals tend to compare themselves on various attributes with other individuals in order to judge the consequences of their behavior (Moschis, 1976). Social comparison increases the stability of one's evaluation. Moreover, it offers an occasion for expressing affection and also stands for interpersonal rewards, an important fact in We-Commerce situations. Along with the theory it can be stated that special interest groups guide the individual’s product choice (Burnkrant and Cousineau, 1975). This social influence has generally been referred to as conformity and looked upon as the relatively simple act of going along with or agreeing with a visible majority. Other authors have examined the role of preference revision and concession in group decisions (Aribarg, Arora and Bodur, 2002). Following the group decision as well as being a group member might also defend the single consumer from negative outcomes of a purchasing decision (see also Briley and Wyer, 2002). Because of the power of social influence, social networks are an excellent way to influence single buyer behavior. Therefore, comparison with peers within a social network can help the marketer to sell multiple units of a specific product to different consumers who are part of that group. By offering group buying opportunities on discounted rates, marketers can easily multiply their sales likewise counterbalance the given discount.

In addition, perceived risk is an important concept in consumer behavior (Bauer, 1967; Cox, 1967), and especially in online shopping. It is obvious, that group buying is able to reduce the individual’s perceived risk of an Internet purchase, since the mere fact, that other consumers are also buying the same product reduces uncertainty, e.g. about product quality. Based on the theory, consumer’s perceived risk results from the uncertainties and potential undesirable losses as some consequences of a purchase. Perceived risk of a decision is thereby based on the individual’s general risk propensity simultaneously driving up the perceived costs of a purchase. Moreover, perceived risk has multiple dimensions, e.g. financial, performance, social, psychological, safety, and time risk (Cunningham, 1967). All of them are important in online shopping environments, since the consumer has no opportunity to physically touch, feel and test a product, which, as a result, lowers the consumer’s shopping intention. In order to reduce the perceived risk, consumers take measures, such as searching more information or getting a better knowledge about a specific transaction. Roselius, 1971 names different risk reduction strategies, such as store image or private testing. Among them, endorsements from testimonials or a peer, as well as word-of-mouth are the most important in We-Commerce surroundings. Moreover, theories in the domain of information processing and memory suggest that group relationships and website features such as customer reviews simplify the information processing task and encourage group formation and continuity.

Outcome/Postpurchase Behavior

After a purchase the consumer regularly feels cognitive dissonances. When making a difficult decision, such as buying something, there are always aspects of the rejected choice he also found appealing. These features are dissonant with choosing something else. Thus, not all attributes of other offers have been inferior compared to the accomplished business. Along with the theory, such an uncomfortable feeling is caused by simultaneously holding two contradictory cognitions (Festinger, 1957). People have a motivational drive to reduce such dissonances. In business environments, the consumer needs direct feedback of friends, family, and peers, or even from feedback, e.g. brochures, manuals or leaflets, that the marketer or his salespeople are giving away. Buying products within a group can reduce cognitive dissonances more effectively through direct feedback of other members of the consumer’s social network.
according to the findings about word-of-mouth. Moreover, the group purchase itself might also reduce
cognitive dissonances right away from the beginning, since the consumer can be sure, that other
consumers bought the same product. That helps him additionally justifying or rationalizing the purchase.
If the marketer adds his own information to that situation and overall the buying process, by above all
giving group discounts, he might be able to enhance the reduction of cognitive dissonances.

CONCLUDING COMMENTS

The idea of consumer’s collectively buying products on the Internet to increase their own economic value
out of a market transaction has become more and more popular over the last few years. On the one hand,
basic drivers for such phenomena have been new information technologies like faster mobile networks as
well as the rise of the Internet and its growing social network sites. Unlike in the 1990ies, access to the
World Wide Web for the individual consumer is much easier and cheaper today. It has already been
growing up to one fourth of the total world population, which equals a growth rate of about 363 percent
over the last nine years (see www.InternetWorldStats.com). On the other hand, currently declining
western economies are forcing an increasing rate of consumers to constantly seek bargaining
opportunities to make ends meet in daily life. Both of those factors similarly helped increase the
individual consumer’s propensity to come together with other people on the Internet, and to commonly
engage in We-Commerce worldwide. The goal of this paper was to introduce the concept as well as
explaining its origin. Therefore, it started with analogous domains of grouping phenomena in marketing.
The paper then discussed the switch to the consumer side as a main trigger for making We-Commerce
surroundings possible, and developed taxonomy of different consumer groups in virtual commerce. In this
context, We-Commerce is positioned as a buyer-initiated and long-term phenomenon that is mainly based
on new social media. Eventually, the impact of We-Commerce on the consumer’s decision-making
process has been discussed in detail.

From a marketer’s viewpoint, We-Commerce offers new chances as well. In declining economies, they
can (1) utilize consumers as marketing assets. By tapping into consumers’ social network sites with their
product advertisements, coeally offering group-buying opportunities, marketers might significantly
reduce marketing spending; especially in communication and logistics. Likewise, service providers can
fill up their unsold services during lean periods, thereby smoothening the peaks and valleys of service
production and consumption at much lower costs. Furthermore, marketers can (2) take profits based on
resulting economies of scale by simply selling a larger amount of products (expanding the market) or by
clearing shelves and getting rid of unsold inventory (stretching market shares). Apart from these benefits,
collective buying can enable marketers of innovations to accelerate the arrival of late-adopters and
laggards into market. In addition, they can (3) gather important information about consumer behavior and
group building processes to likewise advance market segmentation processes, and therefore increase
revenues. This creates a win-win economic scenario for the marketers as well as for their consumers.

There are also some limitations of this concept. First, marketers have to address the issue of increasing
consumer power on the Internet as well as in We-Commerce surroundings. Therefore, it seems to be a
narrow ridge between economic profitability and failure. This mainly depends on the type of target group
the marketer is focusing on. It can be proposed that on the one hand, the higher the price sensitivity of the
target group, the lesser the profitability for the marketer, since consumers will ask for a higher surplus
from the group building process. On the other hand, this economic situation can be outweighed by a target
group, that has a higher proneness to flock in the market. This simultaneously calls for a higher amount of
sold units. Therefore, a closer investment into We-Commerce surroundings from the marketer’s
viewpoint goes along with a cautious screening of advantages and disadvantages in specific markets.

Nevertheless, there are also further research questions that still need to be solved in the consumer’s
decision-making process. First, the understanding of the flocking processes and its mechanisms that
enhances the consumer’s propensity to build a group for the purpose of commerce, have to be further examined. In this context, it also raises the question about the optimal amount of various incentives (e.g. group discounts, a free shipping etc.). Moreover, consumers’ social networks have to be analyzed in detail to offer advice to marketers about how they are built up, how they function, and how to deal with the catalyzers on the network. Those are specific types of consumers, which are able to enhance the group building process or the growth of the network as well as its persistence, because of their ability to connect people through their communication efforts (Bhagat, Klein and Sharma, 2009).

All of those further research ideas might be brought forward by using agent-based modeling (Goldenberg, Libai and Muller, 2001). Optimization models have been studied for a long period in marketing theory. As computer became more powerful, agent-based computer models became also more and more popular for the simulation and control of marketing and sales problems (Delre, Jager and Janssen, 2005; Gilbert, 2008; Pavón, Arroyo, Hassan and Sansores, 2008). In a competitive and dynamic environment such models have the advantage that the impact of different marketing variables can be tested and optimized at the same time, even before they are applied to a specific market-environment (Farmer and Foley, 2009). Such an environment can be found e.g. within social network sites (Janssen and Jager, 2003). Agent-based models are also helping in visualizing the marketing decision process, which might result in better outcomes (Bakken, 2007). In addition, specific parameters about individual consumer behavior as well as consumer group behavior can be represented with the help of a rule-based decision-making process. First ideas have been already studied and documented in marketing literature (Axelrod, 1997). Outcomes of an agent-based modeling process can then be used to optimize the marketer’s effort in offering collective buying opportunities by simultaneously optimizing his own profits.

REFERENCES


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