
CHANGES IN PURCHASING DECISION-MAKING PROCESS OF CONSUMERS IN THE DIGITAL ERA

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Abstract

Nowadays, consumers face the information flood that is being generated and transmitted by all types of media. Higher availability of information used for purchasing decision-making process can be perceived as advantageous. However, possible drawbacks of the increased information density can be identified as well. Nevertheless, reasonably higher quantity of information is available to consumers to evaluate possible alternatives and assist them by their decisions. Information can be accessed through various channels including many kinds of screens: TV, computer, tablet or smartphone. This article aims at identification of changes in purchasing decision-making process of consumers in this digital era. Effects of these changes on companies are being analysed and presented.

Keywords: consumer behaviour, decision-making process, digital economy, mass media, purchasing behaviour

1. Introduction

In this digital era, consumers are having much more possibilities to gather information regarding their planned purchases. The availability of information increased dramatically with the expansion of the Internet, improving of algorithm of full text search engines, and development social networks and mobile technologies [1]. This situation enables consumers to assess their purchasing intention in more details and much faster than before. On the other hand, information noise can be counterproductive, because consumers do not know which source to choose and how trustworthy it is. Too many information from media and various information sources can be cluttering [2]. Nevertheless, the purchasing decision-making process is changing continually. The aim of this article is to identify changes in purchasing decision-making process in the digital era. This will be achieved by looking at the way how consumers collect information regarding their future purchase, evaluate them, how they progress along all the steps of decision making towards the purchase, the consumption of goods and services, and finally, the evaluation of purchase and dissemination of this assessment to other people.

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2. Theoretical background

2.1. *Purchasing decision-making process as a systemic activity with intrinsic character*

Purchasing process can be characterised as a systemic activity consisting of several steps that precede purchase, include the purchase and even happen after the purchase. In this process, the consumer moves from the initial feeling that he probably does not feel comfortable with the current state to the transformation of this desire towards active search for an available solution. This sense of conflict between the current and desired state is considered as motivation. Its strength depends on the size of this disparity. In many cases, the tension is too low to initiate the purchase decision-making process. In other cases, consumer may start thinking of possible solutions, however, the process will end somewhere in his first steps. We can summarise the following characteristics of the purchasing decision-making process:

- The process is variable in all respects. It can take a different time, from several seconds/minutes to months and years; it may proceed through all its steps or the consumer may jump from the bottom directly to the top; it may end by the final consumption of the purchased goods or it may be terminated at any time.
- The character of its progress and perception is predominantly intrinsic. Despite there are some external manifestations of the progress in the process, the decision-making takes place internally. Moreover, the process is usually unconscious and the consumer may not be aware that it has started or it is progressing. Finally, he will realise that it is over, once he has finally purchased and utilised the goods or service.
- The process is strictly individual. It is unique for each consumer and depends on his culture, habits, background, economic situation, environment and social situation. There is no universal procedure applicable for all consumers and situations, however, use cases and model examples can be constructed to illustrate the process.

2.2. *Standard purchasing decision-making process*

In general, we can define these eight major steps of the decision-making process regarding future purchases:

1. Perception of the need. The process is initiated once the consumer realises that he feels uncomfortable regarding some feeling or standing. Here, the type of the need is influencing the following progress. For primary needs, the progress may be quicker and more straightforward compared to secondary and tertiary needs. Internal and external goals are affecting this stage as well. As Lesakova's research regarding compulsive buying shows, "external goals such as financial success or attractive appearance are positively correlated with compulsive buying. On the other hand, internal

goals, based on self-acceptance or links to community have a negative impact on compulsive buying. The findings indicate the need of further research in compulsive buying and could contribute to revealing the motives in compulsive buying.” [3] In case the discomfort is strong enough, the consumer may move to next steps of the process. Otherwise he may end here and suppress and/or forget about the need. There are also other reasons for stagnation in this step. The most important is probably financial: In case he realises that there is probably no way to finally afford the desired goods or service, he may be forced to abandon his desire.

2. Transforming the need into goods description. In this step it is necessary that the unspecific need becomes tangible by realising, which kind of goods or service could help the consumer to satisfy the need. Prior to the specification, search for information can be performed especially in the event of first or non-recurring purchase.
3. Evaluation of alternatives. In this step, the consumer collects as many information regarding potential products as possible. The intensity of evaluation depends on various factors: the time available, intensity of discomfort, monetary value of products compared to available funds or income of the consumer etc. In this step, the consumer does not only compare directly competing products or brands, he also evaluates alternatives for fulfilling the need. For example, the need for everyday fast transport to work does not mean that he has to buy a car and compare different car models against their parameters. There are alternative ways that should be considered, e.g. using a taxi, train or commuting by bicycle. The result of this step is a specific product (producer, brand, specific service etc.).
4. Decision regarding purchasing conditions. Here, various options regarding the point of purchase are considered. Typically, there are more options available. The consumer can select between offline and online purchase, or between various retailers in the close or more distant neighbourhood. Similarly, there is a selection of payment methods occurring: paying by cash, credit card, leasing or a take a loan for example. Other conditions of purchase need to be considered as well: buying alone or invite someone, test the product on premise or just take it, how to get to the shop, which delivery method to choose by online purchase etc.
5. Purchase. The selected alternative (goods or service) is purchased and picked up or received.
6. Consumption of goods or service. Consumer enjoys benefits of the purchase, one time or long term, depending on the product character.
7. Evaluation of the purchase. This step can precede or follow the consumption. He can actively collect or passively receive additional information regarding the product, merchant or supplier from various sources. The aftersales dissonance is manifested through the feeling of discomfort from the purchase. If the dissonance is strong enough, it can initiate the eighth step to begin.

8. Return of the product: In case it is possible, the consumer may try to return the product and get back his money. This step includes the warranty issues including the reverse flow of goods.

In all these steps but especially in the third and fourth step, the consumer actively looks for available information. Despite the official resources published by the manufacturers or distributors should be relevant and valid, it sometimes occurs that they are old, invalid or even intentionally wrong. We could assume that this situation does not happen in case that the company is run by people of Christian faith. However, when looking at the information of several dozens of web sites operated by Christians we could observe that even here, a few misleading information could be found. It can be summarized that despite the character of the producer or business, the consumer has to be very cautious and should not rely on solely official resources. Social networks and user generated content helps here a lot to objectivize the information and/or product rating. In this digital era, changes in the before stated decision process can be identified. We will detect, analyse and process them in the following part of this thesis.

3. Research methodology

To achieve the defined objective of this paper, the following methodology was applied. To formulate assumptions about the assessment of the potential impact of changes in the digital age and the changing media landscape on consumer behaviour, the methods of identification, accumulation, critical analysis, and comparison were used. By creating a framework from available relevant scientific studies using secondary data, we prepared the ground for proceeding with primary research to confirm specified claims and further enrich the results with new findings. The primary research study was performed in January 2015 with the use of in-depth interviews with ten consumers. This qualitative method was selected because we needed to evaluate the intrinsic motives for behaviour that are many times not known for the consumer himself. A quantitative research would not reveal details regarding the decision-making processes. The interviews were performed with the use of a predefined interview template containing main areas for discussion. However, each interview was specific, and details were analysed that were unique for each of the analysed cases. The sample of consumers was diverse and contained consumers from different places of residence within the Slovak Republic and various socio-economic backgrounds.

4. Research results

4.1. Recent trends affecting consumer behaviour

We can sum up the following recent trends, affecting consumer behaviour: 1) facilitated access to information, 2) intensification of media exposure and 3) changing consumer habits when approaching media.

4.1.1. Fastened and open world of distribution of information

One of the most important factors affecting consumer behaviour is the fastened and open world of distribution of information. A decade ago, it was way more problematic to search for and find relevant information regarding future purchases. Nowadays, consumers can use various sources containing information from legal institutions, accredited test facilities, promotional information or opinions and attitudes of other consumers. Many of these sources are provided free of charge and are easily accessible via the Internet. Within this environment, a new phenomenon of crowdsourcing has emerged. Jeff Howe noted in this context: “Remember outsourcing? Sending jobs to India and China is so 2003. The new pool of cheap labour: everyday people using their spare cycles to create content, solve problems, even do corporate R & D.” [J. Howe, *The Rise of Crowdsourcing*, http://archive.wired.com/wired/archive/14.06/crowds.html?pg=2&topic=crowds&topic_set=] In 2006, this was one of the first captures of the arising trend. Over the past eight years, the meaning and application of crowdsourcing expanded from securing supply and content to application in funding of new ideas and organisations or using the power of mass aggregation of consumers to create highly noticeable and relevant information packages and reports. According to Merriam-Webster, crowdsourcing can be defines as “the practice of obtaining needed services, ideas, or content by soliciting contributions from a large group of people and especially from the online community rather than from traditional employees or suppliers” [Merriam-Webster, *Dictionary*, <http://www.merriam-webster.com/dictionary/crowdsourcing>]. Another view on this emerging trend and technology is: „Crowdsourcing is distributed problem solving. By distributing tasks to a large group of people, you are able to mine collective intelligence, assess quality and process work in parallel.” [Mashable, *Crowdsourcing*, <http://mashable.com/category/crowdsourcing/>] In context of facilitated access to information, crowdsourcing is considered as a powerful source of highly relevant information. These can be of various characters and of various topics. We can mention a mobile application of traffic monitoring as an example of a crowdsourcing application. Each user running this application (e.g. the most known Waze) is benefitting from the live data regarding traffic situation all over the world. This information are very accurate, because they are generated live according to real situation of all users of this application. By using GPS technology, the application tracks the speed of movement of each user. By the use of data aggregation and intelligent data analytics it is able to create live maps of traffic throughput. This enables users to evaluate alternative routes of travel including possibly considering a completely different means of transport in some occasions (e.g. all routes are jammed and thus, the consumer chooses an alternative product of train transport to meet the need of travelling home). As the reverse application of this tool, companies are able to research possible changes in consumer behaviour to adapt their communication and customer service. As study of Garcia Martinez and Walton [4] described the efforts of Dunnhumby,

the consumer insight company behind the success of the Tesco Clubcard, to find and lever the enormous potential of the collective brain to predict shopper behaviour. By adopting a crowdsourcing approach to data analysis, Dunnhumby were able to extract information from their own data that was previously unavailable to them. A lot of research is being performed on the topic of crowdsourcing and its impact on consumer behaviour and company analytics. For example, Kelleher et al. [5] explore the orientations of consumer and company participants who participate in online crowdsourced communities. They found out that organisations and researchers need to recognise and acknowledge that crowdsourcing both begets communal conflict and fosters collaborative behaviour due to contested commercial and social orientations. While mindful of their commercial objectives, organisations will succeed in implementing online crowd-sourcing initiatives if they make a sincere effort to understand and respect the diversity, culture and social norms of the particular crowd-sourced online community concerned [5]. Another research study from Yu et al. [6] analyses the importance trust management mechanisms to increase the trustworthiness of crowdsourcing solutions. This stresses the fact that this trend will be quite significant in influencing the consumer behaviour in the future.

4.1.2. Intensified media exposure

Intensified media exposure was identified as the second important trend affecting consumer behaviour. There is no dramatic surge in the media exposure; however, it is continually intensifying over the recent years. In TV, radio, newspaper, magazines, Internet, billboards and other means of mass media communication, the volume and intensity of advertising communication is on a rise. Consumer is able to compare solutions more intensively. Bezakova [7] has analysed the means of marketing communication and its changes over the recent years. Hrabackova and Sabo uncover range of offers searched by a Slovak consumer before final decision making across particular product categories: “Many significant differences of purchasing strategy have been revealed between demographic groups. As an example, results of this study reveal strong and direct relationship between education and number of offers searched by an individual. Additional findings are devoted to the influence of specific demographic variables as marital status or gender for the range of searched offers.” [8] Moreover, the marketing communication of producers and distributors often receives a new, hidden look. In magazines, people often read articles evaluating quality of a product. Below the article, with a small font it is stated that this article is categorised as public relations. Companies use social media infiltration to moderate discussions and force positive opinions regarding their product or service. Here, the Internet provides limitless possibilities for them to remain anonymous and share their messages to masses. If done intelligently, they can be very successful with these activities. Using the viral principle can enable them to reach hundreds thousands or even millions of

potential customers and consumers of their products. Here, various studies and successful campaigns uncover the potential of these techniques. For instance, the study of Hautz et al. [9] mapped the effects of dissemination of video content using two techniques: user-generated content (UGC) and agency-generated videos (AGVs). They explored the impact of user-generated videos (UGVs) vs. agency-generated videos (AGVs) on spectators' perceived source credibility and their intention to visit the tourist destination, as promoted in the video. In addition, they explored the moderating role of video quality. In contrast to conventional wisdom, their results indicate that there is no general superiority of UGVs over AGVs. Rather, "the influence of different video generators (user vs. agency) on spectators' perception and intended behaviour depends on the technical quality of the video. In the case of low technical quality, users as generators have a significantly stronger positive effect on source trustworthiness and expertise - and thereby on consumers' intended behaviours - than AGVs." [9] A study of G. Anghelcev [10] discovered the changes in motivation of consumers for sharing the positive information and recommendation regarding the product purchased. It tested the attitude in the context of an experiment about Apple computers. Participants (students) were asked to recommend the brand to a friend (1) in absence of any monetary reward and (2) for a small monetary incentive. Students who were promised a small monetary reward experienced a decrease in intrinsic motivation and wrote shorter recommendations than those who were not promised any incentives. Data also suggest that the quality of the recommendation may decrease when incentives are offered [10]. Fang et al. [11] were examining the influence of product type on both the effect and spread of related WOM information at the same time. WOM was found to be more influential and more widely spread for services than for goods. In addition, although the level of receivers' perceived risk (PR) is generally assumed to be a significant antecedent of WOM influence (WI), the results of the study indicate that PR is not a direct function of WI. Instead, WOM request (WR) mediates the effect of PR on WI. These and similar knowledge and techniques are adopted by companies to create the information and advertising buzz to permanently transmit their messages to customers in different ways and forms, and over various communication channels. Buzz Marketing and Word of Mouth techniques are evolving over time and most commonly, consumers are not able to detect them and distinguish them from organic information, generated by real users of products.

4.1.3. Changing consumer habits by approaching media

Finally, consumer behaviour is significantly influenced by changing consumer habits by approaching media. Over the past 3–4 years, a trend of parallel and/or sequential consumption of media was identified. According to this change in habits, consumers are no longer fixed to one media at a time. For example, when watching TV, people tend to use tablet or mobile phones to research information or socialise with friends. These parallel interactions cause

that results of product evaluation are sharing over social media instantly. For example, if a TV advertising promotes a new cell phone, consumers watching the ad already discuss its features and their attitude online with friends.

Table 1. Changes in the process of purchasing decision-making

Step No.	Step Name	Changes Identified
1.	Perception of the need	Media are fostering generation of new needs. Artificial needs are created and communicated to consumers to support their awareness and feeling of high intensity of the need.
2.	Transformation into goods	Widely available information sources shorten this stage reasonably. Consumers are researching online to identify goods that can be appropriate to their intentions.
3.	Evaluation of alternatives	Most big e-shops implemented the capability of instant comparison of product features through a tabular matrix. Online product comparing services and tools, such as Pricemania, enable instant comparison of various product parameters by different suppliers.
4.	Decision regarding purchasing conditions	Online purchase intensity and volumes are continually increasing. Users have greater trust in this way of purchase and often prefer it to shopping in traditional shops or shopping malls. Changes in legislation in Slovakia support this shift, for example by prolongation of the possibility of product return to 14 days. On the other hand, the massive expansion of supermarkets and hypermarkets ruined many small traditional local shops. Consumers, however, start preferring local shops again because of their atmosphere, location or the speed of purchase.
5.	Purchase	Changes can be identified by purchase as well. By online purchases, e-shops are successfully using the strategy of packaging and recommendations to increase the overall amount of purchase.
6.	Consumption of goods or service	Results of consumption are instantly shared not only with family members, but over the social networks as well. Users are looking for tips from other users of the product to increase their added value or avoid problems with usage.
7.	Evaluation of the purchase	In this stage, references from other users are used intensively. If other users are not satisfied with the product, the discrepancy between expectations and reality increase dramatically, and vice versa.
8.	Return of the product	By product returns or claims, the culture and willingness of merchants is improving slowly. This is the result of digital media and information availability as well. Merchants know that negative opinions spread very fast over the Internet and thus, try to improve level of their services, e.g. by offering free shipping for product returns, extended warranty or other services.

The recent study from Google revealed eight most important facts regarding the contemporary media consumption [Google, *The New Multiscreen World: Understanding Cross-platform Consumer Behavior*,

http://think.withgoogle.com/databoard/media/pdfs/the-new-multi-screen-world-study_research-studies.pdf]:

1. Most of consumers' media time today is spent in front of a screen – computer, smartphone, tablet and TV.
2. The device they choose to use is often driven by the context: where they are, what they want to accomplish and the amount of time needed.
3. There are two main modes of multi-screening: Sequential screening where consumers move between devices. Simultaneous screening where they use multiple devices at the same time.
4. TV no longer commands full attention as it has become one of the most common devices that is used simultaneously with other screens.
5. Portable screens allow consumers to move easily from one device to another. Search is the most common bridge between devices in this sequential usage.
6. The majority of the times that devices are used simultaneously, the attention of consumers is split between distinct activities on each device.
7. Smartphones are the backbone of daily media interactions. They have the highest number of user interactions per day and serve as the common starting point for activities across multiple screens.
8. Finally, multiple screens make consumers feel more efficient because they can act spontaneously and get a sense of accomplishment – this results in a feeling of 'found time'.

4.2. Changes in perception and execution of elementary purchasing decision-making steps

Following the identification on main trends and influential factors on consumer behaviour, we analysed their reflection in the decision-making process. Results from the in-depth interviews with consumers were aggregated to represent the general situation regarding process of purchasing decision-making. They are presented in Table 1.

5. Conclusions

New digital age, as we have proven, reasonably influences the behaviour and habits of consumers. Consumer behaviour is changing, and the evaluation time for steps in the decision-making process tends to shorten. Positive and negative reviews are spreading instantly and thus, a lot of user-generated information is available before, through and after the consumption of the product. Intensified information smog, disseminated by the media, forces consumers to understand how to filter the information and evaluate the credibility of sources. It is hoped that these changes will finally lead to further increasing quality of services, as was pointed out in our thesis. As a possible future expansion of scope of our research, we see the possibility of

implementation of quantitative research to precise measurement of effects of our findings and their verification on a larger sample of consumers.

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