

# CONSUMER BEHAVIOUR CONSEQUENCES WITHIN THE ONLINE ENVIRONMENT IN CONTEXT OF MULTISCREEN

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## Abstract

*The interaction of consumers and marketers within the Web environment, particularly for purchasing is a growing area of importance. The expansion of the online environment and its gradual integration into ordinary people's lives caused that businesses have moved their marketing activities into the Internet or digital sphere. Nowadays people are able to catch more information from more than one screen at the same time. This phenomenon is called as "multiscreening". When marketers think of multiscreening, they often see it is a new challenge or obstacle. It unlocks the golden age of digital advertising. It is interesting mainly for online campaigns. Business online communication and its impact on consumers can therefore be considered as the current topic to be addressed. Presented paper deals with a comprehensive review of multiscreen marketing opportunities. The purpose of this paper is to evaluate the marketing communication in online environment as well as its effects on consumer behaviour. To fulfill the aim of this paper, marketing research was conducted (a total of 338 respondents were involved). The results showed that it is extremely relevant in today's digital era that businesses make use of the opportunities of the online environment and benefit from the advantages they offer.*

**Keywords:** *Consumer behaviour, device, multiscreen, online environment*

**JEL Classification:** *M31, M39*

## 1 Introduction

Nowadays, consumers face the information flood that is being generated and transmitted by all types of media (Miklošík, 2015). With the development and increased use of the internet together with the constant growth in the number of its users, it is commonplace that the companies present themselves on the internet and also use the internet to acquire new information, ideas, as well as feedback from their customers (Berčík, Virágh & Šimončíč, 2015). With the expansion of the Internet, social networks and mobile technologies, consumers are having much more possibilities to gather information regarding their planned purchases (Solík & Lahuová, 2013). In today's markets, companies have greatly shifted their focus towards customers as the entities creating the demand for companies' products and sources of the revenues. The consumers shape and influence the current market trends with their desires and preferences; this requires reassessing and reshaping the offers and communications from companies (Kuchta & Miklošík, 2017). Over the past few years, the way of looking for information within purchasing decision-making has changed a lot, and nowadays consumers tend to research information more actively using inter alia websites and social media. To get information, consumers search online and access many sources via search results (Zach, 2015). However, new media outlets have created a multitasking way of life. Consumers' attention is divided between several media types and the digital environment is 'stealing' an increasing number of people from television to mobile and desktop devices connected to the Internet (Kuchta & Miklošík, 2017).

Marketing managers need to stay in touch with current changes in consumer behaviour. It is crucial for them to identify and respond to recent trends and reflect them in their marketing strategies (Miklošík, 2015). Consumer behaviour is driven by both emotions and cognitions (Solomon, Russell-Bennett & Previte, 2012). Consumer behaviour has changed substantially over the past 8 years (Šugrová, Šedík, Kubelaková & Svetlíková, 2017). Because a number of technologies have become more mature, companies are getting new possibilities for fulfilling customer needs. On this basis, it was reflecting about what consumer expectations are in such a new world. Authors came up with 4 characteristics.

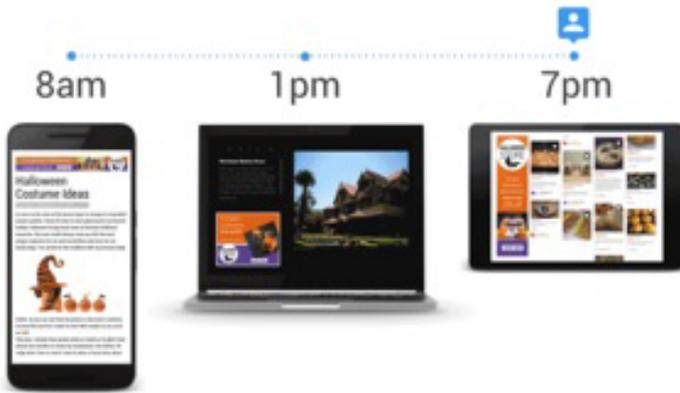
There are undoubtedly more of them, or different ones, but these work well for today's customers. They are (Belleghem, 2015):

1. Personalized products and services.
2. Convenience as the new loyalty, as the new norm.
3. Personal treatment.
4. Desire to buy from 'awesome' companies.

A typical feature of a modern consumer is that it uses multiple devices at once, it means multiscreen. For example, during watching TV consumers are watching an email box, chatting on social networks or searching for information that has interfered them in the broadcast as well (Krnáčová & Benkőová, 2016). In the digital age of a two-second attention span, multi-screening has become more prolific than ever. As the name suggests, multi-screening refers to the use of multiple digital devices at once, for example, mobile phones and the television. Sequential screening occurs when you move between devices, whilst simultaneous screening involves the use of two devices at the same time (Mediavision, 2013). Multiscreen is explained as "the situation in which the consumer is exposed to information and campaigns on multiple screens". Information can be accessed through combination of various channels including many kinds of screens: TV, computer, tablet or smartphone. It is precisely this fact that points out to businesses that it is important to be aware of all ways in which they can reach their target groups (Labská et al., 2014). The boom of smartphones and tablets has caused that it is possible for people to be in a store and virtually on the web at the same time. Separating online and offline is losing meaning. Consumers want to shop in stores and on the Internet as well. Seller website serve as a source of information for buyers who do not usually buy immediately on the Internet, their aim is to get information and then make a purchase in the shop (web-to-store). 70% of Europeans realize their purchases in this way. Half of Europeans said they were using cost comparators to find the best deal. Even in this case, the website plays a big role (Třebuřová, 2014). The aim of online marketing is to increase website traffic and increase seller sales. To properly set up campaign, it is essential to well know the customers well and be able to reach them at the right time on the right devices they use. This also shows the topicality of solved problems within online marketing (Třebuřová, 2014). Advertisers are able to reach users across devices with Google remarketing campaigns. Google announced an important update concerning their *Google Analytics Remarketing Audiences* which will change the way advertisers and marketers target audiences online (Figure 1). This is a significant development, as Google did not support cross-device retargeting. For example, currently, if a user comes to an advertiser's site on a mobile phone, the advertiser

is not able to retarget that user later on a desktop, unless they also visit the site on desktop. If that happens, the user is effectively listed twice, and the frequency capping and negative list exclusion is set at the browser or mobile ID level on each device. That was true even for users signed into a Google account on multiple devices because Google has relied on cookies and mobile IDs to identify users for remarketing lists (Marvin, 2016).

Figure 1 **Cross-device retargeting**



Source: Marketing land. 2016. Retrieved from <https://marketingland.com/google-cross-device-remarketing-launches-192819>.

As with Facebook, Google is taking a deterministic approach, and cross-device remarketing is limited to signed-in users (Gmail alone has one billion monthly users). Essentially, Google will now start showing ads to users across multiple devices for advertisers using Remarketing Audiences built with Google Analytics. Cross-device remarketing has existed for some time now for advertisers using remarketing audiences built within AdWords, however this method was a manual and laborious task, requiring considerably more time and technical 'know-how' to achieve (Mach, 2017). This new method, using the very simple audience-building tool in Google Analytics, gives advertisers the ability to reach more customers across their omni-channel buying journey, a change which has brought this method in line with platforms like Facebook who have been doing this for some time.

## 2 Data and Methods

The aim of the presented paper is to make a comprehensive review of multiscreen marketing opportunities and evaluate the marketing communication in online environment as well as its effects on consumer behaviour. We present the outcomes of research produced by MillwardBrown – a multinational agency which works with many local and global brands – including 90% of the world’s leading brands – to help define brand purpose, develop winning advertising, engage consumers, and drive brand growth. These outcomes provided basic worldwide overview of online environment, multiscreen and consumer behaviour, based on which we were able to perform a comparative analysis in SR conditions.

In order to achieve the formulated aim of the paper were collected and used primary and secondary sources of information. Underlying secondary data were obtained from available literature sources, i.e. from professional publications from domestic and foreign authors and organizations. When processing of individual underlying data and formulating conclusions of the paper were used methods of analysis, synthesis, induction, deduction and the comparative method. In order to meet the objectives of the paper, marketing research was conducted. Marketing research was conducting in the period from September 2017 to December 2017 by method of interview using a structured questionnaire. The questionnaire was processed in *Google Forms* and people were asked to fill in on social networks and in emails. Some questionnaires were filled in printed form by personally meeting. The research was focused directly on online environment, multiscreen, online advertisement and purchasing behavior via Internet. Finally, in the research outcomes were involved 338 respondents from Slovak Republic (Table 1). Some of the processed questions are presented in this article.

Table 1 **Characteristics of respondents**

| Category of respondents | Number | Age structure of respondents | Number |
|-------------------------|--------|------------------------------|--------|
| Male                    | 161    | 15–20 years                  | 81     |
|                         |        | 21–30 years                  | 83     |
| Female                  | 177    | 31–40 years                  | 66     |
|                         |        | 41–50 years                  | 55     |
|                         |        | Over 51 years                | 53     |

| Economic activity of respondents            | Number | Educational structure of respondents | Number |
|---|--------|--------------------------------------|--------|
| <b>Employed</b>                             | 176    | Primary education                    | 0      |
| <b>Unemployed</b>                           | 10     | Secondary education                  | 81     |
| <b>Student</b>                              | 139    | without A level                      | 119    |
| <b>Other (retired / on maternity leave)</b> | 13     | Secondary education                  | 138    |
|   |        | Higher education                     |        |

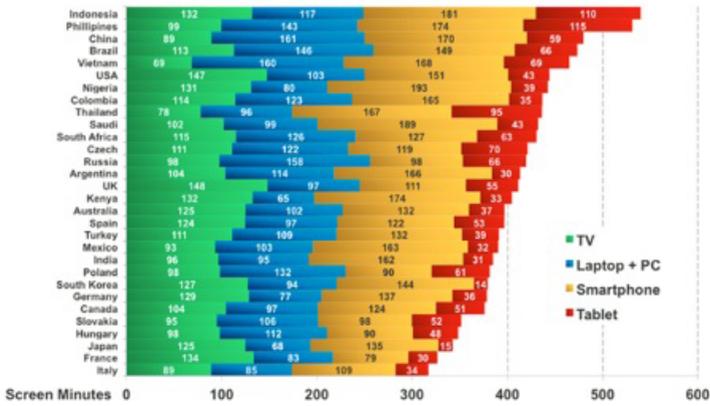
*Source:* Results of the research.

The questionnaire was evaluated with the use of contingency tables, which were prepared by Excel, under which they were subsequently developed graphic representations. For a deeper analysis of the obtained results, there were set out two assumptions (assumption no. 1 – There is a preference for multiscreen devices by age group; assumption no. 2 – Reasons for simultaneous multiscreening differ by gender) and four hypotheses. To test the formulated hypotheses, the methods of Pearson's chi-square test, Cramer's contingency coefficient, Phi coefficient and Kruskal-Wallis test were used.

### 3 Results and Discussion

When considering consumer behaviour, there is a significant difference in the distribution of time spent across devices on various markets. Overall screen minutes vary significantly by country, from 9 hours in Indonesia to just over 5 hours in Italy. The average user spends "on screens" up to 7 hours per day and thereof approximately 2 hours per day on multiple screens. This is the result of a study by *MillwardBrown Agency* (2014), which analysed consumer behaviour in 30 countries of the world, including Slovakia (Figure 2). The research also shows that the average Slovak user spends the most time by watching TV screen (totally 106 minutes), followed by smartphone screen (98 minutes) and TV (95 minutes), while tablets are the least popular screen among Slovak users (52 minutes). The Slovak trend is different unlike the world where users spend time on smartphone 147 minutes per day, 113 minutes on TV, 108 minutes on PC and 50 minutes on tablet. However, it can be assumed that similar development will occur in Slovakia, as consumers are increasingly use mobile phones to search for information.

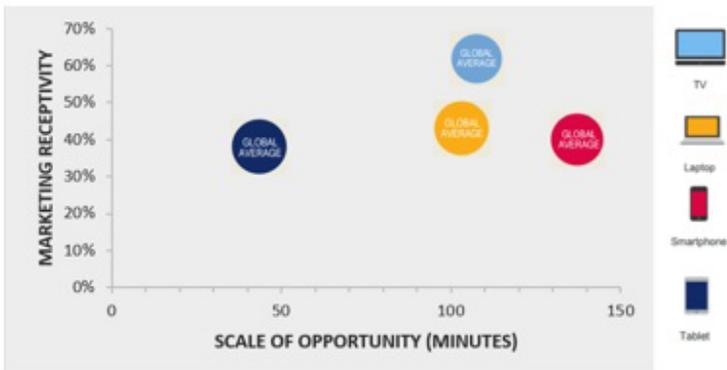
Figure 2 Daily distribution of screen minutes across countries



Source: MillwardBrown. (2014). *AdReaction: Marketing in a multiscreen world*.

All kinds of media screens can achieve every brand-building tasks, but various screens do imply certain attributes and can play specific roles. Overall, TV advertising is the more well received, while digital ad receptivity is lower across devices. Combining receptivity with screen time shows that TV remains the largest media opportunity due to highest overall receptivity and still strong minutes. Collectively, digital still adds up to a huge opportunity (bigger than TV) if low receptivity challenges can be overcome (Figure 3).

Figure 3 Multiscreen opportunity plot – screens

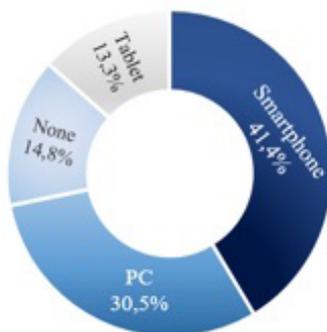


Source: MillwardBrown. (2014). *AdReaction: Marketing in a multiscreen world*.

Explanatory notes: Scale of opportunity = minutes per device. Marketing receptivity = average of favorability (very/somewhat favorable) and attention (pay at least some attention)

The graph below (Figure 4) presents the results of a research asking consumers which of the following devices, if any, do they use simultaneously while watching traditional live TV programming on a TV screen. It was found that 41.4% of respondents most often use a smartphone while watching TV. The second most favourite device marked by 30.5% of respondents is computer or laptop. We can say with certainty that tablet is not preferred screen device while watching TV programming on a TV screen for Slovak users. Totally 14.8% of respondents stated that they did not use any device simultaneously while watching a TV. According to worldwide surveys smartphones and laptops dominate daytime screen use while TV, the same situation is confirmed in our research. We consider that popularity in using smartphones and laptops varies by age of users as we document further in this paper.

Figure 4 **Devices used simultaneously while watching TV programming on a TV screen**

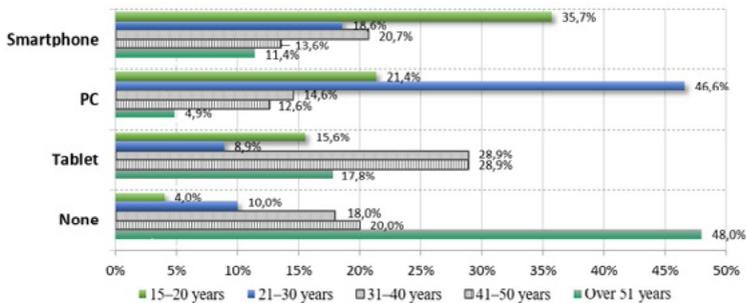


Source: Results of the research.

This statistic shows the share of individual devices most commonly used while watching TV by age group (Figure 5). Respondents in age group 15-20 marked clearly smartphones as most often use device with 35.7% of total share in this age group. As second simultaneously use device is PC with 21.4% share followed by tablet (15.6%). Only 4% of this age group said, that they did not use any device while watching TV. Different results occurred in age group 21-30 years. Computer placed first in the total number of respondent answers (46.6%). It can be caused by the fact that people in this age mostly study at university, so they use computer

almost all day for searching information to prepare themselves for university studies. On second position in total share of answers was smartphone (18.6%) followed by tablet (8.9%) and only 10% of respondents argued that they did not use any other device. We mentioned that tablet was not common use device for Slovaks as well as in worldwide surveys. So, we interested which age group use tablet as multiscreen device most often. The results show that both age groups, people between 31-40 years and 41-50 years prefer tablet as multiscreen device while watching TV. We can claim that non-use of the multiscreen device increases with increasing age.

Figure 5 Devices used simultaneously while watching TV programming on a TV screen by age groups



Source: Results of the research.

Because of the need to determine whether there exists a statistical dependence between the preference of multiscreen device and age group we formulated zero hypothesis and tested it with the use of Pearson's chi-square test, Cramer's contingency coefficient and Phi coefficient (significance level of  $\alpha = 0.05$ ). The result of Cramer's contingency coefficient was equal to 0.4201477, what can be interpreted as a moderate relationship between tested variables. Based on the results of mentioned test, it can be stated, that the  $H_0$  hypothesis must be on the level of significance 5% rejected and adopted must be the  $H_1$  hypothesis talking about the interdependence between tested variables.

Although various studies demonstrate that TV remains strong in some markets, it's evident that consumers are becoming increasingly multi-device oriented, as we also demonstrate on Figure 6. TV is also often being viewed partially respectively passively. This statistic presents the most common activities which Slovaks do simultaneously while watching TV- totally and by gender. Respondents

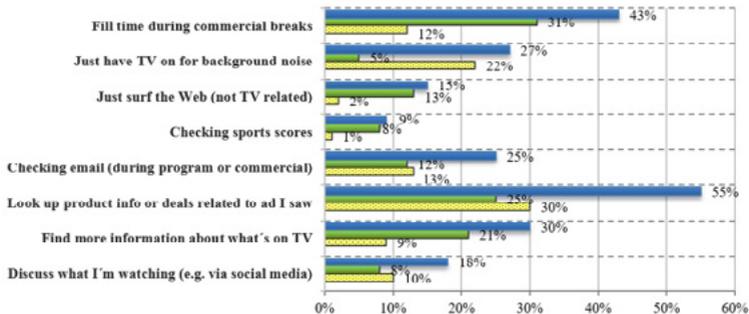
were asked, why do they use a second device (laptop, smartphone or tablet) when they are watching TV.

More detailed information shows the graph below. Respondents were asked to indicate max. 3 activities, according to their opinion, which activities they most often do simultaneously with watching traditional TV programming on a TV screen. ‘‘Look up product info or deals related to ad I saw’’ and ‘‘fill time during commercial breaks’’ were two the most performed activities with the highest percentage share. The least common activities were occurred ‘‘checking sports scores’’ marked only by 9% of all respondents and ‘‘surfing the Web not TV related’’ marked by 15% of respondents. An interesting result is apparent when comparing the responses of men to women. While for women is the most common to look up product info or deals (30%) for men it is filling time during commercial breaks (31%). The percentage structure of responses between men and women is almost exactly opposite in case of filling time during commercial breaks where is 19 percentage difference.

In addition, women reported engaging in TV just for background noise more than men, while men tried to find more information about what’s on TV more often. Based on these facts, we can conclude that our scientific assumption was confirmed. Advertisers should take note that while viewers may be splitting attention between two (or three) screens, high percentage of smartphone, laptop and tablet owners searched for product information and for coupons or deals while the television was on.

Figure 6 Reasons for simultaneous multiscreening

Figure 6: Reasons for simultaneous multiscreening



Source: Results of the research.

We also analysed the answers to this question by using Kruskal-Wallis test, the results are shown in Table 2. In connection with the evaluation of the question, we wanted to find out if preferred activities for simultaneous multiscreening differ

between the people by gender. For this reason, the following hypotheses were formulated:

$H_0$ : *There are no differences in responses by gender.*

$H_1$ : *There are differences in responses by gender.*

Based on the theoretical level of significance, which was compared with a significance level of  $\alpha = 0.05$ , the  $H_0$  hypothesis of the absence of differences in responses was rejected. Based on these facts, we can conclude, there are statistically significant differences in preferred activities for simultaneous multiscreening between men and women.

**Table 2 Results of Kruskal-Wallis test**

| <b>Kruskal-Wallis test:</b> |          |
|-----------------------------|----------|
| <b>K (Observed value)</b>   | 27,3281  |
| <b>K (Critical value)</b>   | 5,9915   |
| <b>DF</b>                   | 2        |
| <b>p-value (Two-tailed)</b> | < 0,0001 |
| <b>alpha</b>                | 0,05     |

Source: Own processing, XLStat.

## 4 Conclusion

The aim of the presented paper was to make a comprehensive review of multiscreen marketing opportunities and evaluate the marketing communication in online environment as well as its effects on consumer behaviour. In the theoretical part, we tried to explain why people use multiple screens. There are many reasons for multiscreening. Some people focus mainly on the TV and fill downtime (ad breaks etc.) with digital distractions. Other people focus primarily on a digital device, and delays on this device can drive attention to the TV. Some experts view multiscreen proactively and are trying to capitalize on the opportunity to amplify experiences between brands and consumers. Others view it more defensively and worry that multiscreen could potentially result in a “lack of attention” for traditional approaches. Those in the middle are not yet sure if it presents opportunity or threat, but are investigating curiously and adjusting their approaches accordingly. In order to meet the objectives of the paper, marketing research was conducted. For a deeper analysis of the obtained results, there were set out two assumptions (assumption no. 1 – There is a preference for multiscreen devices by

age group; assumption no. 2 – Reasons for simultaneous multiscreening differ by gender).

The average user spends "on screens" up to 7 hours per day and thereof approximately 2 hours per day on multiple screens. It was found that 41.4% of respondents most often use a smartphone while watching TV. The second most favourite device marked by 30.5% of respondents is computer or laptop. We can say with certainty that tablet is not preferred screen device while watching TV. Totally 14.8% of respondents stated that they don't use any device simultaneously while watching a TV. According to worldwide surveys smartphones and laptops dominate daytime screen use while TV, the same situation is confirmed in our research.

Subsequently, we focused on individual devices most commonly used while watching TV by age group. Respondents in age group 15-20 marked clearly smartphones as most often used device with 35.7% of total share in this age group. As second simultaneously used device was PC with 21.4% share followed by tablet (15.6%). Different results occurred in age group 21-30 years. Computer placed first in the total number of respondent answers (46.6%). We can claim that non-use of the multiscreen device increases with increasing age.

Finally, we found out which are the most common activities Slovaks do simultaneously while watching TV- totally and by gender. Respondents were asked, why do they use a second device (laptop, smartphone or tablet) when they are watching TV.

Looking up product info or deals related to advertisement and filling time during commercial breaks were two the most performed activities with the highest percentage share. While for women was the most common to look up product info or deals (30%) for men it was filling time during commercial breaks (31%). The percentage structure of responses between men and women was almost exactly opposite in case of filling time during commercial breaks where was 19 percentage difference. Because of the need to perform a deeper analysis of the issue, in the part Data and Methods, two assumptions were formulated, which have been tested with the use of the methods of Pearson's chi-square test, Cramer's contingency coefficient, Phi coefficient and Kruskal-Wallis. From their evaluation we can conclude that both assumptions were confirmed. TV is generally more of a starting point and digital devices are generally used more to continue/complete tasks. Multiscreen sequences are most likely to start on TV and continue on a smartphone. However, all screen sequences are possible. Receptivity is higher for TV than for ads on digital screens, but brands cannot rely TV ads alone. Consumers expect brands to be present on multiple devices and are impressed by those who find entertaining and useful ways of delivering across

screens. Different channels play different roles, both in terms of their effectiveness and implied messaging.

Marketers around the world are trying successfully put these principles into practice, as well as the perspectives of industry experts.

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