

# AD-BLOCKING AS NEW FORM OF THE IMPACT OF ELECTRONIC SPACE ON BUSINESS ORGANIZATIONS

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**Abstract:** *The paper concerns a phenomenon with significant economic effects known as ad-blocking that has been rapidly growing for several years. The paper analyses the causes and the scale of this phenomenon and its economic effects. In addition to the analysis of reports on ad-blocking, the survey conducted on a targeted group of individual Internet users was an important part of this project. An analysis presented in the paper was conducted taking into consideration, developed by Author, typology of the impact of elements of electronic space on business organizations.*

**Keywords:** *Ad-filtering, on-line advertising, e-space influence.*

**JEL classification:** *M1, M10, M15*

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## 1. Introduction

Along with dynamic growth of organization expenditure on various forms of digital advertising, fast growing phenomenon of blocking ads by Internet users, who are the same time the recipients of these advertisements, is being also observed. This phenomenon is referred to as ad-blocking. At the beginning of the second decade of the millennium we could see this phenomenon beginnings, however its rapid growth became the fact in 2013 and intensified in next years (Ryan et al., 2017). This phenomenon has raised concerns not only among advertisers but also among whole advertising industry affecting each part functioning in the ecosystem of digital advertising. What is more it causes increasing economic costs reaching the level of billion dollars (eMarketer, 2015; Aboob & PageFair, 2015).

Thus, taking into the consideration the meaning of ad-blocking in the context of its impact on whole electronic commerce and its operating entities, primary purpose of this paper is to analyse the causes, scale and dynamics of this phenomenon development as the new form of the impact of

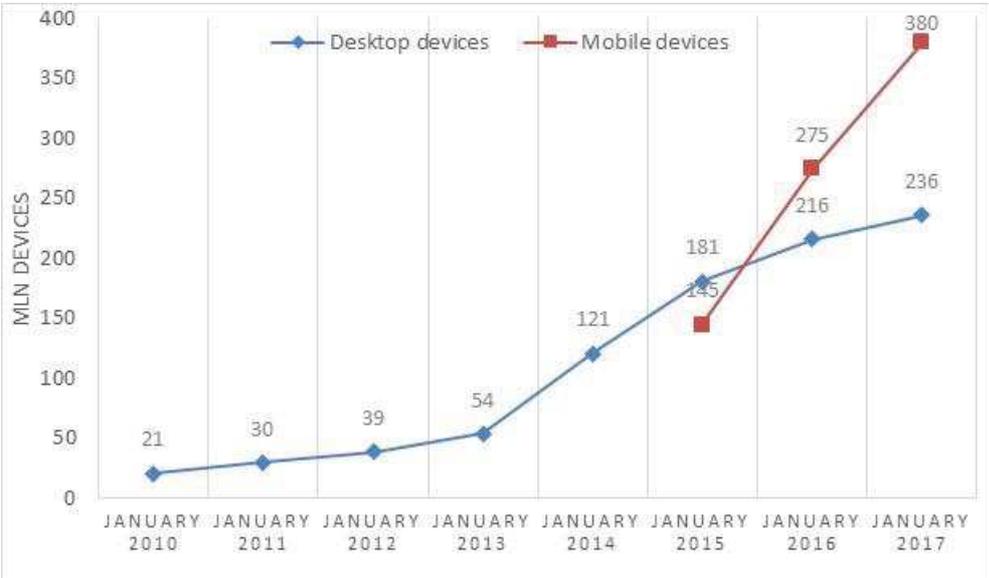
elements of electronic space on organizations, which are basing their functioning on one of the key business models used on-line, advertising model.

**2. The essence and the scale of ad-blocking phenomenon**

The phenomenon of ad-blocking is associated with using by end users various ad-blocking software which removes or changes ads content displayed in the websites and web pages or in the mobile apps (Adobe & PageFair, 2015). According to eMarketer an ad-blocking user is each Internet user who accesses the Internet at least once per month via any device that has an ad-blocker software installed (eMarketer, 2017).

2013 is the year when the phenomenon of ad-blocking on desktops devices has started its dynamic widespread. Since 2015, a significant growth is observed in the context of mobile devices (FIG. 1).

**FIG. 1: Increase in number of desktop and mobile devices which use ad-blocking**



Source: PageFair, 2016; PageFair, 2017b

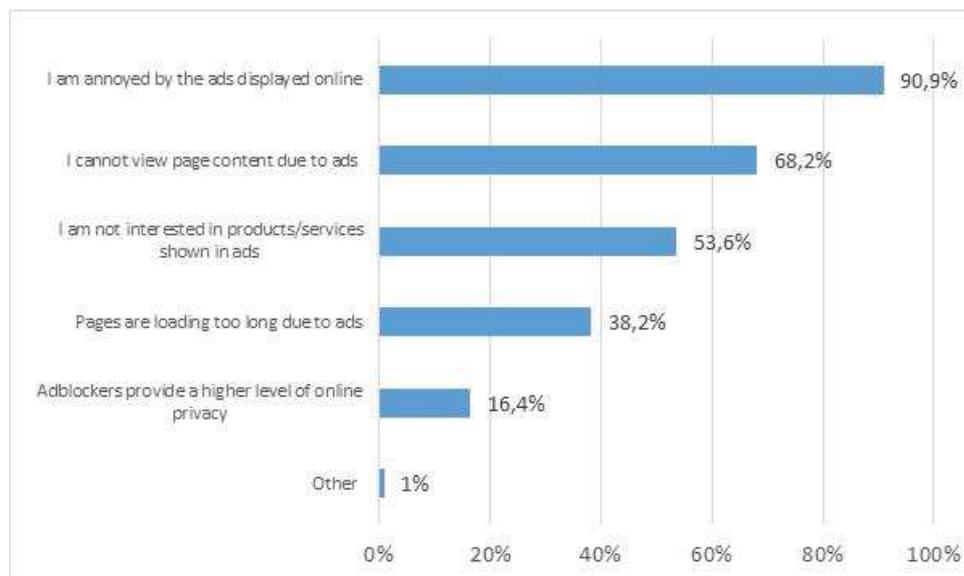
When taking into the consideration mobile devices, users from Asia and Pacific area are in majority. Up to 94% of global use of mobile ad-blocking solutions derive from mentioned before area (PageFair, 2017b). Data from November 2016 indicate that users coming from following three countries: China, India and Indonesia, are in the majority (PageFair, 2016). On the other hand Internet users from Europe are the largest group of those, who block ads on their desktop devices. Greece, Ireland (39%) and Poland (33%) are the countries with the highest rate of Internet users who block ads (PageFair, 2017b). Usage of ad-blockers is significant also in the United States. It is estimated that in 2017 the rate will amount 27,5% and in 2018 – 30,1% (eMarketer, 2017).

### 3. The causes of ad-blocking phenomenon development in the context of secondary data and own research analysis

Despite some differences related to causes of ad-blocking development, there are elements that are common, regardless of the author of conducted research. The key issues are: increasing number of ads and developing throughout the years the level of their intrusiveness which inhibits users' access to the content of his interest. Issues of security and on-line privacy are also significant (eMarketer, 2016; eMarketer, 2017; PageFair, 2017b).

Having only the secondary data from the reports about the phenomenon of ad-blocking and the users' motivation for employing such solutions, it was decided to, for comparative purposes, obtain primary data by conducting own research on a targeted group of individual Internet users. While matching group the following indicators were taken under the consideration: age of participants, educational background, country of origin. The main aim was to survey such group of users who intensively or very intensively uses the Internet and in the same time come from the country with high rate of users using ad-blocking solutions. Taking under the consideration three of mentioned before features of research group, people between 19 and 25 years were selected, assuming that they use Internet intensively or very intensively. At the same time, as the reports' data indicate, ad-blocking solutions are more often used by better-educated users (PageFair, 2017b). Therefore, students of first, second and third degree from countries with high rate of people using ad-blocking solutions for example Poland were chosen to sample survey. The research was conducted between 01.02.2017–19.05.2017. It was survey for which purpose the Google Forms service was used. 178 full-time students of Opole University of Technology participated. They constituted the largest share of respondents in this survey.

**FIG. 2: Users motivation in the context of using ad-blocking solutions**



Source: own research

The assumption about the total time spent using Internet by respondents was correct. Surveyed group in majority uses Internet intensively. In case of 39,3% of respondents it is more than five hours, and 27% of respondents uses Internet for three to five hours a day. At the same time more than half, 54,5%, of respondents declared that they are always-on. Regarding the usage of ad-blocking solutions, it occurred that the vast majority of respondents, 61,8%, uses those solutions. They are widely widespread on laptops, 90,9%. In the case of smartphones, which are the second popular Internet access devices, 84,3%, the rate is quite low, less than 14,5%.

Regarding motivation issue of respondents in the context of using by them ad-blocking solutions, the most important issue turned out to be the fact that on-line ads are irritating for Internet users, 90,9%. Significant share of respondents, 68,2% was indicating the fact of inhibiting access to the content because of ads (FIG. 2).

#### **4. Ad-blockers as the new group of stakeholders of modern organizations**

##### **4.1. Types of ad-blockers influence on economic organizations**

From the point of view of stakeholder theory, the entities operating in electronic space can be divided into three main groups [Wielki, 2007, pp. 321-333]:

1. Known and identifiable entities which influence organization operating in e-space.
2. Unknown and/or hardly identifiable entities which operate in e-space and have real impact on organization functioning.
3. Identifiable and unidentifiable entities which operates in e-space and are neutral form the point of organization functioning.

From the standpoint of mentioned above typology, ad-blockers should be included to the second group. At the same time all entities, which operate in e-space, could influence organization in many ways. Two major types of this influence can be distinguished:

- direct,
- indirect.

Direct influence of e-space entities is understood as targeted intentionally at particular organization resources. On the other hand indirect influence of e-space entities is not intentionally targeted at resources of particular organization, but, in the end, it affects them. In this context ad-blockers fit in the second type of influence.

Simultaneously entities which operate in e-space, influencing directly or indirectly, may affect two kinds of organization resources:

- tangible (e.g. financial resources),
- intangible (e.g. brand, reliability, trustworthiness, reputation or clients trust).

Described above types of influence could be divided into:

- “physical”,
- “non-physical”.

First type of influence of entities that operate in e-space occurs when their main influence and undertaken by those entities operations are targeted at IT system of organization. Whereas the second type occurs when undertaken operations are not targeted at IT system, in other words are not related to attempts to break into the system, infect it with malware or any form of attack on it. Ad-blockers operations classify into the second form.

#### **4.2. Economic effects of development of ad-blocking phenomenon**

Ad-blocking phenomenon is becoming increasingly widespread and causes particular and growing economic effects. Costs related to this phenomenon could be divided into two groups:

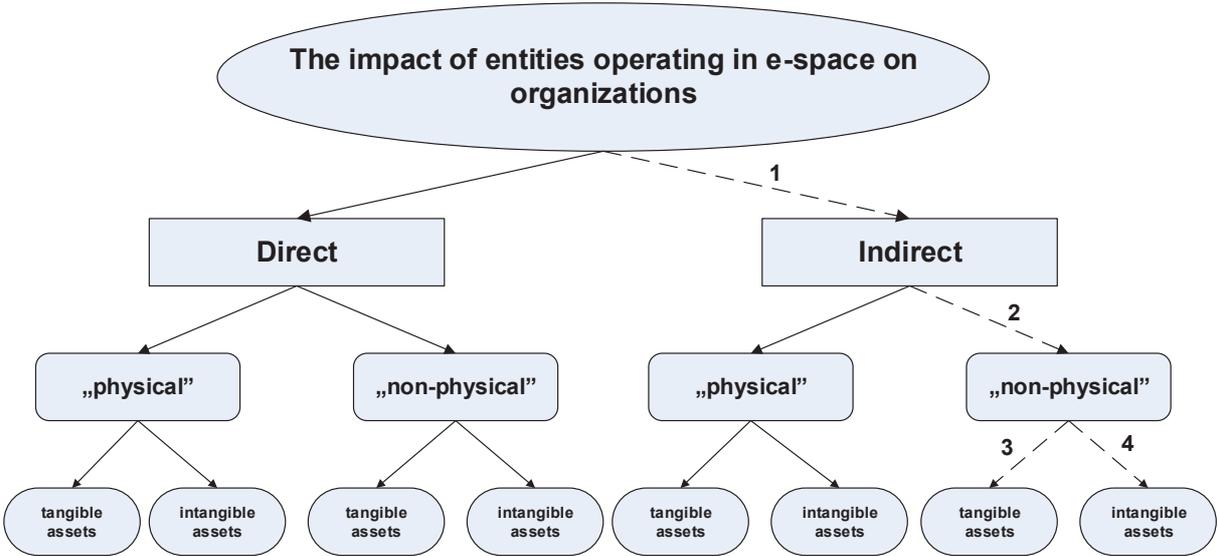
- direct costs,
- hidden costs.

First group of costs is related to reduction of advertisements publishers revenues. Such costs were on the level of USD 3,5 billions in the United States in 2013 and in the year 2016 rose to the level of USD 20,3 billions. The expenditure on the advertisements was on the level of USD 42,8 billions (2013) and USD 68 billions (2015). At the same time the global costs of ad-blocking amounted USD 7,2 billions in 2013 and in 2016 costs forecast suggested the level of USD 41,4 billions (Adobe & PageFair, 2015).

The second group of costs is related, in the first place, to small and local publishers. The mechanism is as follows: ad-blocking is leading to reduction of publishers revenues. Consequently, this situation reduces investment opportunities in the on-line content. As a result advertisements are becoming less attractive for viewers and readers and website traffic is decreasing, hence further reduction of revenues from on-line advertisements (Ryan J. et al., 2017).

From the point of view of the typology presented in the subsection 4.1, the ad-blocking phenomenon development clearly fit into the scenarios 1-2-3 and 1-2-4 (FIG. 3).

**FIG. 3: The ad-blocking phenomenon in the context of types of the impact of entities operating in e-space on organizations**



Source: own elaboration

**5. Conclusion**

The phenomenon of ad-blocking in short time developed into completely new form of e-space influencing on economic organizations and Internet users who use blocking solutions became stakeholders of broad spectrum of organizations. It concerns most of all those organizations which operate basing on advertising model with real impact on their functioning. This refers to advertising industry giants as well as to all small and local publishers who operate in the ecosystem of digital advertising.

Although the causes of ad-blocking development are quite clear, as confirmed by presented above analysis of secondary data and results of own research, different forms of actions used by companies against this phenomenon, following different directions, are, for now, unsuccessful with the growing dynamic of this phenomenon as the evidence of ineffectiveness (see FIG. 1). Thus, necessity of developing solutions counteracting or reducing this form of e-space influence on economic organization is becoming an urgent issue, though, similarly to other forms of its impact undoubtedly it will not be easy.

Unquestionably organizations working on counteracting solutions have to remember that the further development of ad-blocking phenomenon connected to its wide-spreading on mobile devices, could become potential danger for one of the most significant business model functioning on-line. Thus, development of systemic solutions taking under consideration both publishers and Internet users interest is of the utmost importance. It seems to be the only way that could reduce the scale of this phenomenon.

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