

Consumption of Pirated Online Content in the European Union

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Abstract

The widespread incursion of the Internet into the daily lives of consumers, together with the COVID-19 pandemic, has contributed to a significant increase in the consumption of online content in the last few years. Opportunities for listening to music, reading e-books or watching favorite movies and series through the global network, the entertainment through online games and streaming leisure sports events are increasingly preferred in an epidemic situation and social distancing. In this regard, the problem of illegal downloading of digital content comes to the fore. The aim of this paper is to present the specifics and harms of the use of pirated online content, and based on a brief overview of this consumption within the European Union, the ways to limit it are outlined. The analysis uses data published in studies by the European Union Intellectual Property Office (EUIPO) for the period 2017 - 2020.

Keywords: digital piracy, online content, illegal sources of online content, consumption, Internet.

JEL Code: L81; L82.

Introduction

The development and mass introduction of digitalization and the new internet technologies enable the realization of a fast and easy communication between spatially remote subjects. In these conditions distances play an even minor role for business and the market agents strive maximally to make use of this advantage, expanding the territory in which they accomplish their activity. Thus they attract more and more buyers and can increase the value of the realized sales. This benefits to a considerable extent the supply of digital products, at which unproblematic delivery is realized, independent of the customer's location. Simultaneously modern consumers live actively, they are extremely mobile and connected with the new technologies and the global network, as they apply in their daily life the opportunities for remote work, online education, the conducting of virtual conference calls, publishing and looking for divers information, shopping through different electronic and mobile devices, entertainment, etc. Time acquires an even greater value for the people and is established as a valuable asset. They try to spend it in the best way, looking for a balance between work, rest and entertainment. Thus the number of the people surfing in internet is gradually increasing, consuming different digital products, which can be used immediately after their online payment.

The setting in of the pandemics with the coronavirus and the necessity to keep a physical distance accelerate the process of digitalization and contribute to the substantial increase of the consumption of online content in the last years. The opportunities for listening to music, reading of electronic books or watching favourite movies through the global network, the entertainment through online games and streaming leisure sports events are increasingly preferred in an epidemic situation and social distancing. In this regard, the problem of illegal downloading of digital content comes to the fore, which concerns a number of countries and acquires a global range. In 2020 there were over 130 billion visits to pirate sites around the world (Van der Sar, 2021). "Often considered a victimless crime by the 'pirates', online piracy results in billions of dollars in lost revenue. Besides artists, creators, publishers, and distributors, it hurts the entire media industry" (GO-Gulf Web Design, 2021). In this context, the aim of this paper is to present the specifics and harms of the use of pirated online content, and based on a brief overview of this consumption within the European Union, the ways to limit it are outlined. The analysis uses data published in studies by the European Union Intellectual Property Office (EUIPO) for the period 2017 - 2020.

The active development of digital technologies during the last years assists to a considerable

degree the improvement of the quality of the different e-products, changed the way of their creation and distribution, as well as the possibilities of access to them on the consumers' part. The given changes and innovations place the question about copyright protection and of the created works by writers, artists, composers, film agents and all the remaining creators, as well as about the opportunity the authors to receive their due compensations for the input labor at the realization of electronic transactions in internet environment. This concerns directly the music sector, the movie, radio and television industry, software business, including the one of video games, the publishing activity of books, newspapers and magazines. In connection with that, for the aims of the present paper under online content should be understood the protected with copyright digitalized products of the business activities enumerated above, which are offered electronically. Simultaneously, under consumption of online content is meant the realization of access, download or streaming of such e-content from different online sources.

The securing of comparatively cheap and stable high-speed internet connection on the part of the service providers, the decreasing value of the offered end devices, allowing an easy access to the electronic market, together with the frequent usage of information and communication technologies in the daily activity of the people, stimulates the consumption of online content. On its side, the main prerequisite for the growing interest in it are its specific characteristics, which distinguish it considerably from the physical products, bought electronically. They can be differentiated in the following directions:

- Durability - the created digital product can exist for an unlimited time, as it does not wear out during its usage. That is why the just created content does not differ from the analogical, which the customers already consume. The author competes not only with the remaining creators of online content, but with his previous works. In order to avoid this, a continuous renewal of the product is necessary, which creates the basis for long-term relations with the customers. Defense is also necessary from illegal copying or alteration of the content;

- Reproducibility – a basic advantage of the digital content is its ability to be reproduced, transferred and stored easily and unproblematically. After its initial creation, the marginal costs for each following year are comparatively low and an unlimited volume of sales could be generated. Due to its digital and non-material character, the expenses for storage, realization and delivery of the online content are almost zero, but one has to bear in mind, that the official producers of digital products incur expenses, connected with the payment of author's fees for each sold unit;

- Digital delivery – independent of the customers' location, the bought online content can be immediately delivered after a few clicks of the mouse. This allows the consumer to have immediate access and the opportunity of usage of the product almost immediately after its payment. The possibility that the digitalized content could transfer easily its consumer value without being necessary to exist on a definite physical bearer, which to be delivered to the buyer, allows the retailers to use this advantage, offering a part of the product as a bonus. Thus the added value for the customer is increased and his satisfaction respectively;

- Global market range – as an appropriate object of transaction sales and consumption, digital content is characterized by unlimited geographic range of the market. The characteristics presented above allow the exchange of online content to be performed unproblematically at any point in the world, as long as there is a stable internet connection, in order for the distribution process to be realized quickly;

- Technological dependence – the storage, distribution and access to online content are directly related to the development of new technologies. The e-products can be saved on a hard disk, optical disk or in a cloud storage, internet is necessary for the delivery, and their consumption itself demands the respective program availability;

- Life span - with the introduction and development of the information technologies a shortening of the life span is observed of the digital products, compared to the physical ones. A

typical example are the broadcast television formats and live sports events, which attract an enormous auditorium during the event, and several hours afterwards the consumer interest in them drops abruptly. With a short life span are characterized also the digital films and music, whose actuality and demand are extremely high in the moment of their introduction to the market, after which they rapidly diminish.

The presented distinguishing characteristics of the online content make it an attractive object for e-transactions, attracting the attention of legal and many illegal suppliers. In this sense it is purposeful to examine the nature of digital piracy, which, although it is not a new phenomenon, has considerably disseminated in the last years. The term ‘piracy’ strictly speaking refers to the distribution of content that violates copyright (EUIPO, 2020, p. 8). On its part, “digital piracy is the illegal act of copying digital goods – software, digital documents, digital audio (including music and voice) and digital video – for any reason other than backup, without explicit permission from and compensation to the copyright holder” (Gopal et al., 2004, p. 89). In connection with this, we can denote with ‘digital piracy’ a ‘digital infringement of copyright’ (Stryszowski and Scorpecci, 2009, p. 7), which means not allowed distribution and consumption of online content with protected copyright.

Consumers have known and taken an advantage of piracy even before the coming of the digital revolution and the mass usage of internet, but in this period due to the not good enough quality of the copies (predominantly movies and music) and the limited channels for distribution, the industries concerned are not that drastic with the violators. “Historical tolerance of piracy has been a direct reflection of limitations around content manipulation. As content format went digital and distribution moved to the Internet, online piracy exploded” (Sudler, 2013). There exist different opportunities for fast, easy and free of charge obtaining of pirate digital products, which considerably facilitates their consumption. Most commonly three basic methods for the download of online content are distinguished: (Petkov, 2015):

- From free or private zones and servers - they constitute computer systems, which give the users a free server space, in order to be able to upload information unproblematically. What is characteristic, is that the files are stored on a centralized server or on several servers;
- Through torrent systems - the files with them are distributed among the users (peers) and are not stored centralized at one place, as the information is under the form of torrent files. The exchange between the peers is realized with the help of a torrent tracker, which shows the users, providing files (seeders) and the ones downloading content (leechers). The tracker locates and coordinates the performed traffic without keeping information about the file content and their location;
- Through a network with equal access (P2P network) – this network uses a decentralized model, as each host plays the role of a client and server simultaneously. With its assistance an exchange of files between users’ computer is realized, communication between the users, etc. It has to be taken into account, that a big danger exists from spy- or malware in the P2P networks.

It is necessary attention to be paid to the circumstance, that unlike the counterfeited commodities and piracy at the physical market, where the customers pay an even lower price from that of the originals, at the electronic market, a considerable part of the transactions are free of charge. In this situation the price and quantity are not the main elements of the market mechanism. The focus is moved to the non-financial motives, leading the party of the supply, as gaining of a greater popularity and recognition among the users of pirate online content. Due to the specifics of some pirate distribution channels, the users of digital content are simultaneously suppliers at the same market, which does not allow their exact distinguishing and additionally makes their research more complex. At the same time, a part of the pirate digital products are received against payment, as two basic business models are applied. In one of the models, the revenues are realized by the paid fees for access to the illegally sold online content, and in the foundation of the other model is the

revenue from the sale of advertisement, transmitted to the audience, consuming free digital products, delivered by the supplier. The availability of different business models, connected with the distribution and consumption of pirate online content, confirms the broad range and the complex nature of digital piracy.

Turning the attention to the demand for and consumption of illegal digital products, it is purposeful to start from the position, that the “study of users is based on the prerequisite of the economic theory about their rational market behaviour, i.e. the users collect the necessary information on the products, compare and assess the different variants for spending their incomes during a purchase” (Danchev and Hristova, 2017, p. 229). In the foundation of the optimal consumer choice, stands the obtaining of the maximum utility from a given product within the framework of the disposable limited budget, and this motivates the realization of exchange processes. When the object of transactions is online content, its utility depends on its ability to satisfy the consumer’s needs. It has to be specified, that the degree of utility of the respective online content is not equal for the different users and is defined by their subjective perception. On its part, the provided consumer utility, is defined simultaneously by the utility of the trade offer and the total costs of the consumers, which include the price and the transaction costs. In their essence, the transaction costs relate to the searching of information for the product, expenses for the transition from one to another supplier, expenses for negotiating and conclusion of the transaction, etc. In most cases the consumers of pirate online content make additional transaction costs connected with: availability of definite technical skills for the download of the files; the availability of the necessary antivirus protection in case of malicious software, which could cause great damage; expenses for resetting of the product; sanctions for the breach of copyright. That is why precisely the transaction costs appear to be fundamental about the consumer’s choice between legal and illegal online content, having in mind, that the pirate digital product is offered free of charge or at a much lower price than the legal one, since in its value no licence or other fees are included, connected with the protected copyright. Consequently, when the total costs for the acquiring of legal digital content are high, then favorable conditions exist for the distribution of digital piracy. It develops intensively especially at the lack of online content from legal sources at affordable prices.

Table 1. Demand drivers of digital piracy. (Stryszowski and Scorpecci, 2009, p. 54)

Driving factors	Characteristics that favour digital piracy
Product-specific	
Content	Attractive content
Technical quality	High technical quality or a copy
Consumption and storage	Easy consumption and storage
Price	Low or no price
Individual-specific	
Personal economic situation	Low disposable income (in case of young market participants)
Security awareness	Low awareness of potential malicious software risks
Attitude towards piracy	Permissive attitude towards digital piracy
Market-specific	
Product availability	Large availability of pirated digital content
Market risks	Inefficient legal infrastructure, lack of parental control

As it was pointed out, the consumer choice for the purchase of online content is defined by the total utility, obtained by the individual in the process of his consumption, by the demanded price

and the realized transaction costs. They on their side are formed by the action of different demand factors, which P. Stryszowski and D. Scorpecci appropriately summarize in three basic groups: product-specific, individual-specific and market-specific (Table 1).

With each elapsed year the problem of digital piracy exacerbates and leads to a number of unfavorable economic and social consequences. Copyright owners suffer considerable losses from unrealized profits, due to the big number of sites in the internet space, from which the people surfing in the global network could download or stream free of charge pirate online content. Thus the substitution effect is revealed, as the consumer abstains from the purchase of a digital product from a legal source or from going to the cinema. As a result of this, a number of working places are vacated, which influences negatively the whole economics. The lower economic activity of copyright owners causes the diminishing of the public revenue from taxes and social security contributions. A unpleasant consequence from the digital piracy, affecting consumers directly is the distribution of malicious software, which can cause great damage to the technical appliance or loss of data, as well as lead to identity theft. The fact should not be underestimated that every individual bears a personal responsibility for his or her actions and when violating the law they have to bear the respective financial punishments.

Alongside with the deduced negative effects, the consumption of pirate online content has a positive influence. Besides being connected with the obtaining of economic utility for the user, it assists the popularization of the created new music works, films, books and software programs. Thus their acceptance at the market is facilitated and their legal demand is stimulated. Very often consumers firstly get directed to illegal sources, whose content they download illegally and get to know it. If they consider, that the digital product is of interest to them and is useful enough, they turn to the official supplier and perform a purchase. “As a consequence of underlying individual preferences, pirates are much more likely to be legal users of each content type than are non-pirates, and the median legal consumption of pirates is typically twice that of non-pirates” (Poort et al., 2018, p. 11). In this respect a number of studies exist, which examine the availability of a positive relation between the digital piracy and the legal consumption of content.

2. A brief review of the consumption of pirate online content within the European union

In the last few years a multitude of different institutions as European Union Intellectual Property Office (EUIPO), Organisation for Economic Co-operation and Development (OECD), European Audiovisual Observatory (EAO), European Union Agency for Law Enforcement Cooperation (Europol), International Federation of the Phonographic Industry (IFPI) engage themselves with the conduction of studies within the member-states of the European union (EU) and the presentation of reports, regarding the consumption of pirate online content and the connected with it risks and damages, consumer attitudes, breach of copyright, etc. This demonstrates the exclusive significance and multidimensionality of the specified problem.

Digital piracy continues to be a significant topic, as it gets revealed to a different extent in the separate European states. According to a study of the EUIPO regarding online copyright infringement in EU the average internet user in the EU accessed pirated content 9.7 times per month in 2018, ranging from 27 times per month in Latvia to 4,6 times per month in Finland (EUIPO, 2019, p 53). Bulgaria is positioned immediately after the leading two countries with an access of 18,7 times per month to pirate content by the native online user, which is a too high indicator. On their part Germany, Italy, Denmark, Austria, Spain, Great Britain, Sweden and Slovenia do not exceed the established average access of 9,7 times (Figure 1). In comparison with the previous year, when this indicator is 11,5, a favorable decrease with a closely 15% is observed in 2018. There is a decrease of the consumption of pirate online content in all EU-28 states, with the exception of Slovenia, Malta and Latvia. Decomposing the access in different types, most often the Europeans monthly use illegal TV content - 6,1 times, followed by film content - 2,1 times and most rarely

have access to music - 1,6 times. The movie piracy is directed mainly towards mainstream films with a commercial success (EUIPO, 2020, p 9).

It has to be noted, that in 2018 Bulgaria takes the first place in the European union regarding the music piracy with an access per month averagely per one internet user, at the amount of 5,97 times, which considerably exceeds the average value of 1,6 times of this indicator for all 28 member-states (EUIPO, 2019, p 53). At the same time Bulgaria registers the biggest growth of the TV piracy within the EU as from 7,3 times monthly access in 2017 it reaches monthly up to 9,3 times during the next year, which constitutes an increase with 27,4 %. The presented results outline one comparatively unfavorable position of our country in relation to the consumption of copyright-infringing digital content. This behaviour could be explained with the low level of income per capita in our country, as well as the high degree of inequality regarding the incomes, which motivate to illegal behaviour.

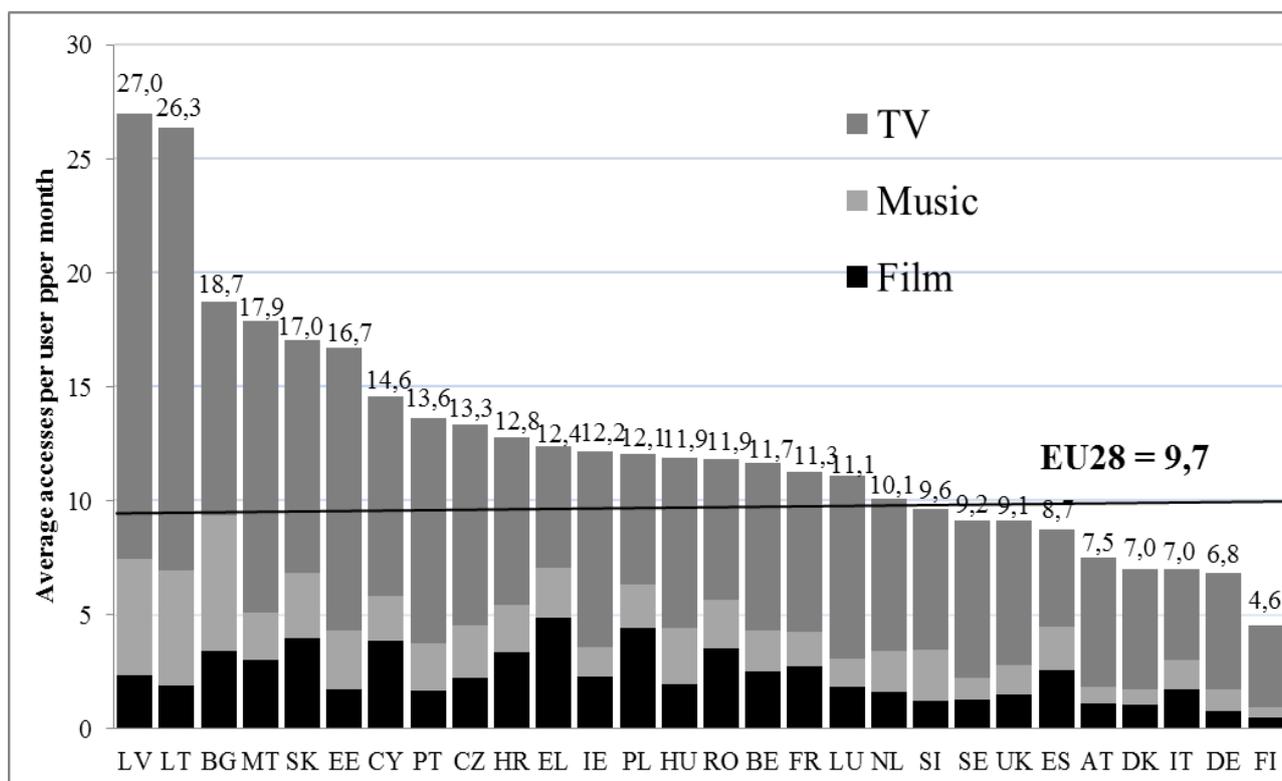


Figure 1. Total digital piracy by country and content type, 2018. (EUIPO, 2019, p. 24)

In the latest study of EUIPO in 2020 regarding “European citizens and intellectual property: perception, awareness and behaviour” the high degree of understanding of the concept of intellectual property of users in the EU is clearly outlined. This means that people support the creators, authors and performers, the necessity of protection of their rights and the obtaining of a compensation for the exercised labour. Eighty-one percent from the interviewed, who do not realize intentional access to illegal digital content sources and 73% from the ones, which use such access deliberately, know the nature of intellectual property (EUIPO, 2020, p 6). These competences influence directly the consumer behaviour and as is seen from the results, the persons with less knowledge in this sphere are more inclined to make violations against it.

Exceptionally important for the digital products market is the confirmation of 42% of the Europeans, that in 2020 they have paid for legal services, in order to use online content, protected by copyright (Figure 2). In comparison with 2017 this share is 25%, which means, that within a three year period an increase of 17 pp is observed. The achieved considerable increase in the

relative share of the persons, who performed a payment towards legal online content suppliers during the last year, is due mostly to the offered better quality and diversity compared to the illegal sources. Still, when there is a legal option at affordable prices 89% from the interviewed prefer the usage of authorized platforms (EUIPO, 2020, p 50). That is why the availability of legal offers of online content at reasonable prices is a leading factor in the consumers' decision to prefer them. Certainly, it should not be forgotten as a motivating factor, the occurred pandemics of the coronavirus, which assisted the increase of the consumption of subscription services. As far as the presence of confusion regarding the distinguishing by the consumers of the legal and illegal music or video sources from Figure 2, it becomes clear, that the share of this segment is relatively constant, as since 2017 it has been diminishing with 1 pp and in 2020 amounts to 23%. It makes an impression, that in the last year of the research, one of five interviewed investigates the legitimacy of the source, which he/she can use. This is a signal for the consumers' desire to get informed about the origin of the offer.

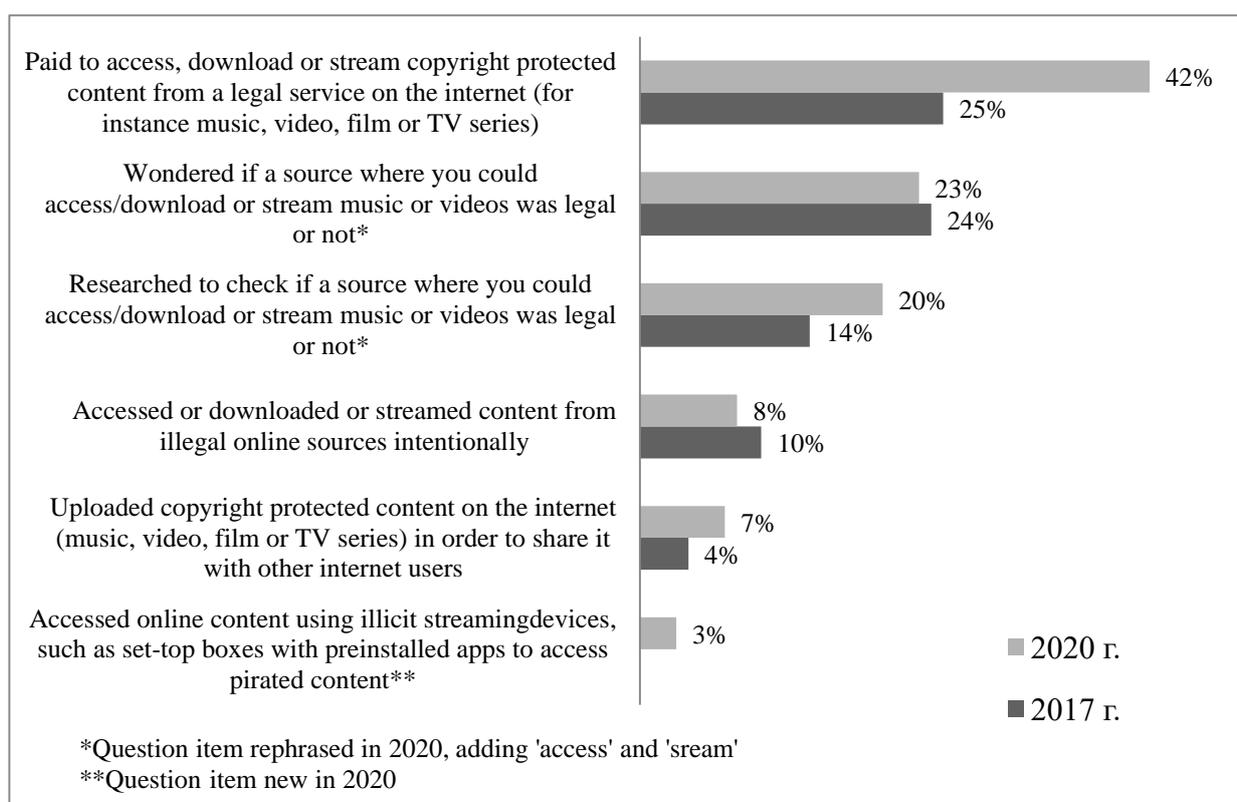


Figure 2. Consumption of pirated online content. (EUIPO, 2020, p. 43)

According to the presented results, 8% from the Europeans answer, that they have used intentionally pirate online content in 2020, while in 2017 this share amounts to 10%. (Figure 2). The established decrease with 2 pp is viewed as a favorable tendency in the development of the reviewed indicator, but should not necessarily be perceived as a decrease of the consumption of illegal online sources in its absolute size. Research in this relation show that in spite of the decreasing share of the online pirates, an increase of the volume is observed, of the consumed illegal content per capita of the population (Poort et al., 2018, p. 8). The digital piracy is concentrated in a smaller group of people, called 'heavy online content users'. For the separate EU member-states the highest is the level of consumers, who used pirate online content in Luxembourg (18%), Slovenia (17%), Belgium (13%), Lithuania (13%) and Slovakia (13%), whereas at the bottom of the chart under the average level of 8% are situated Romania (4%), Italy (6%), Poland (6%) and Greece (6%) (EUIPO, 2020, p 41). Bulgaria is situated in the middle with a share of 9% in

2020, which is relatively stable, since in 2017 it is just 1 pp bigger. The presented results reveal mostly the degree, to which users are inclined to declare, that they have used pirate online content, but it cannot be really judged how much such behaviour is widespread.

It should be born in mind, that violators of copyright on digital content appear to be the ones having access and using the information, as well as people who upload and share copyright-infringing digital content. In 2017 the share of the latter is 4% and in 2020 it increases to 7% and almost reaches the share of the really consuming ones. This could be explained by the circumstance, that every year the constant technologies development leads to the appearance of new channels of distribution of online content and to its ever easier sharing. Simultaneously the number of users rapidly increases, who are simultaneously suppliers of pirate digital products, due to their acquired IT skills. On Figure 2 can be seen, that during the last year 3% from the European citizens have answered, that they have gained access to online content via illegal streaming devices. This value should not be ignored, because it means, that one from every three violators has used a device for illegal streaming.

3. Main directions for the limitations of the consumption of pirate online content in the EU countries

The results from the performed short review of the consumption of digital content, violating the copyright within the European Union, outline a tendency of an increase of the usage of online content from legal sources, together with a slight decrease of the relative share of persons, using pirate online content during the last year. The illegal consumption of digital products is concentrated in the hands of ‘the heavy online content users’. In connection with this, the efforts of European citizens and institutions have to be directed to a systematic limitation of digital piracy and its maintenance in acceptable boundaries with regard to the affected spheres of activity, which could be achieved through:

- Improvement of the supply by the authorized suppliers of online content - the maintenance of a big diversity and high quality of the sold digital products is necessary, as well as their continuous update. Immediately after the premiere of a respective film, book or song, they have to be available for sale, since their life span is shortened and the period in which they are actively sought against payment is short. Recommendable is the intensive promotion in internet of the offered online content and the usage of different e-channels for the fast reaching of the consumers and distribution of the product;

- Special attention to the social networks, aiming the limitation of discussions connected with e-piracy - the social networks are suitable for the construction of online communities and interest groups, in which the users exchange opinions and lead concrete talks, connected with the acquiring of access to pirate online content. The suppliers of such content remain passive and rely on the users to take an active position and to distribute the information among each other. That is why it is purposeful that each platform should apply an effective approach to the finding and removal of any information, stimulating digital piracy, and at repeated violations to be undertaken stricter measures;

- The usage of modern technologies for fighting digital piracy - their main task is to protect the online content “through the implementation of control to the access or a protecting process such as coding, fogging or another transformation of the work or another object, protected by the law, or a mechanism of control of the copy, which achieves the protective aim” (Kostov, 2019). In order to secure a stable protection of their works, the holders of copyright and its similar rights have to periodically renew the used protection technologies, since violators continuously look for ways to break in the system and gain access to the content;

- The creation of a stable and simultaneously open legal framework and improvement

of the law enforcement - the European legislation in the area of copyright encompasses eleven directives and two regulations. Definite EU standards have been introduced, through which „national discrepancies are reduced, a level of protection required to foster creativity and investment in creativity is ensured, cultural diversity is promoted and access for consumers and business to digital content and services across the single market is facilitated“ (European Parliament, 2021). Aiming the better law enforcement, the conduction of a training is recommendable, for the officers of law enforcement authorities, participating in the fight with digital piracy and the implementation of a cooperation with the legal intermediaries, distributing online content, which are directly affected by the illegal activities of the violators;

- The implementation of an active information campaign on the significance of the protection of intellectual property rights - it is necessary the knowledge of European citizens to be increased in this subject, as a special attention to be turned to young people, which most often get oriented to gaining access to, downloading or streaming of pirate online content. Informative lectures and discussions have to be organized at school and university level regarding the harms, which digital piracy causes. To make public and electronically accessible the results from the conducted studies and all of the EUIPO publications.

Conclusion

В ерата на дигитализацията и Интернет технологиите, онлайн съдържанието се утвърждава като предпочитан обект за е-транзакции от потребителите. Някои хора се обръщат към оторизиран доставчик, който предлага голям избор и качествено онлайн съдържание, а други се ориентират към незаконни доставчици, водени от икономическата изгода да получат безплатно или на доста по-ниска цена определен дигитален продукт. Трети умишлено потребяват пиратско онлайн съдържание поради липса на достъпна законна алтернатива или за да демонстрират негативното си отношение към големите музикални, телевизионни и филмови компании, които печелят много от авторски права. Независимо от това какъв е водещият мотив за потребление на онлайн съдържание, дигиталното пиратство ще запази своята важна роля при вземането на решения от потребителите. Следователно вниманието на бизнеса и обществото трябва да бъде насочено към не към елиминиране на пиратството, а към неговото разумно управление. In the era of digitalization and internet technologies online content approbates itself as a preferred object for e-transactions by the consumers. Some people turn to an authorized supplier, who offers a big choice and online content of high quality, and others get oriented to illegal suppliers, lead by the economic utility to obtain free of charge or at a much lower price a definite digital product. Third ones deliberately consume pirate online content due to a lack of an accessible legal alternative or to demonstrate their negative attitude to the big music, television and movie companies, which win a lot from copyright. Independently of that what the leading motive for online content consumption is, digital piracy will keep its important role during the decision-making by the users. Consequently the attention of business and society has to be directed not towards the elimination of piracy, but to its reasonable management.

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