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# Mobile Applications and their Use in Journalism

#### ABSTRACT

This theoretical-empirical contribution deals with mobile applications and the various ways in which they are used in current journalism. The aim is to analyze and then to compare mobile applications of typologically different media - newspapers, magazines and television. In the first part of the contribution, the author deals with brief characteristics of mobile applications and opportunities for their application. The second part of the study deals with the analysis and the resultant comparison of three mobile applications from selected Slovak media according to predefined categories. In this contribution we specifically focus on the category of researched mobile application frequency. The result of the research is the definition of the individual aspects in which applications differ from each other.

#### **KEY WORDS**

The Internet. Mobile Device. Online Journalism. Mobile App. User.

### 1. Mobile applications and their use

A mobile app is software that is created for mobile devices like smartphones or tablets. Applications are either pre-installed in the operating system or downloaded from online stores and installed directly into the phones where they appear as stand-alone programs. Some are free, while others are available for a fee. The first mobile apps were typically small games, calculators or calendars. For example, in 1970 NOKIA was famous for its video game Snake in some of its first phones. After introducing smartphones to the market, users have begun to require a wider choice and more options to adapt their devices according to their own discretion. Manufacturers have tried to bring the most attractive products to their customers by introducing more and more applications.<sup>1</sup> According to statistics, the global downloading of mobile apps in 2009 amounted to about 2.5 billion and it is expected to reach 268.69 billion downloads this year.<sup>2</sup> Increasing the popularity of mobile apps is determined by the fact that nowadays we can find apps for anything and users can use them anytime thanks to the Internet. Some even without access to the Internet.

Mobile apps offer many features to their users, from weather forecasts, through social networks to recipe storage. Based on these options, many people consider their mobile device to be self-expanding. Smartphones have become our personal items that we usually carry in our hand, pocket or in some other immediate proximity. According to the recent study Trends in Consumer Mobility conducted by Bank of America, nearly one in two people is not able to withstand the whole day without using a phone, with 60% of respondents saying their smartphone is more important than coffee addiction. People who use mobile apps more than 60 times a day are considered to be addicted to their mobile phone. While currently accounting for only 13% of the total number of users worldwide, this group is growing rapidly and the number has doubled in recent years. However, more than half of the population is in the category of regular users who open an app less than 16 times a day.<sup>3</sup>

#### Types of mobile apps

In practice, we usually encounter three types of mobile applications: native, web and hybrid.

A native application is a program designed to run in a computer environment for a specific platform, Android, iOs or Windows Mobile, so that it is developed separately for each operating system. The app is either on the device from the seller, or users can download it to their mobile phones from the app store and have instant access to information. It also offers the possibility of using so-called push notifications that graphically alert the user to news.<sup>4</sup> The advantage of native applications is that they can also use the latest technology available on mobile devices, GPS (Global Positioning System) or camera. Depending on their nature, some are accessible even without an Internet connection.<sup>5</sup> We can include, for example, Skype, Twitter or Shazam.

A web application is an application which does not need to be installed on a user's device, so the user does not have to update anything (as e.g. native applications). It is possible to run it from any device using a web browser because it runs on the server side. However, it requires an internet connection and the speed depends on the quality of the connection. At first glance it can look like a classic website and their separation is quite challenging. However, typically they are more complicated and database-based applications. The best known examples of web

statista.com/statistics/266488/forecast-of-mobile-app-downloads/>.

<sup>&</sup>lt;sup>1</sup> CLARK, F. J.: *News Values*. [online]. [2018-02-16]. Available at: <www.owenspencer-thomas.com/journalism/newsvalues>. <sup>2</sup> *Number of mobile app downloads worldwide from 2009 to 2017 (in millions)*. [online]. [2016-12-25]. Available at: <www.

<sup>&</sup>lt;sup>3</sup> LINNHOFF, S., TAKEN SMITH, K.: An examination of mobile app usage and the user's life satisfaction. Released on 5th July 2016. [online]. [2016-12-25]. Available at: <a www.tandfonline.com/doi/full/10.1080/0965254X.2016.1195857>.</a>

<sup>&</sup>lt;sup>4</sup> Mobilné aplikácie. [online]. [2016-12-25]. Available at: <www.sumap.eu/mobilne-aplikacie/>.

<sup>&</sup>lt;sup>5</sup> What is native app? [online]. [2016-12-25]. Available at: <a href="http://searchsoftwarequality.techtarget.com/definition/native-application-native-app-">http://searchsoftwarequality.techtarget.com/definition/native-application-native-app-</a>.

applications are, for example, Facebook, LinkedIn, postal programs such as Gmail or Yahoo, office programs like Google Docs and many others.<sup>6</sup>

*Hybrid applications* combine the best features of the two previous types. Its functioning is similar to that of native applications, but it offers several advantages. This application, as well as web apps, is created using web technologies. Like the native application, it provides access to hardware features of a device such as, for example, the camera and so on. It is also available to download via Google Play or the App Store. Unlike web applications, they are also available even though the device does not have access to the Internet and the development costs themselves are much lower than for native applications.<sup>7</sup> An example can be an app from one of the largest internet television providers such as Netflix.

### 2. Methodology of research

From the mobile app collection available in the App Store, we chose three mobile apps of typological different media. Applications from the News and Entertainment section, which were thematically covered by the focus of our thesis, were included in the selection file. This selection was deliberate and as a subject of the research we chose applications which publish news and articles: application of the daily Denník N - *Minúta po minúte*, application of the magazine .týždeň - .týždeň and application of TV Markíza - *TVNOVINY.sk*.

In the case of a daily, we chose the most popular and most interesting app from the point of view of innovation, since they were the first editorial office in Slovakia which brought an application of such kind. The magazine application was chosen because most magazine applications have similar character, and we wanted to analyze the application of the opinion-forming media. Among applications of television we chose this one because it focuses on publishing articles even though it is television. However, it also includes audiovisual works making the application more innovative. We analyzed all the listed apps using the iPhone, we used the iOS operating system. Applications were downloaded from the store with mobile apps - App Store, we analyzed and compared apps in the timeframe from February 20th to March 12th, 2017.

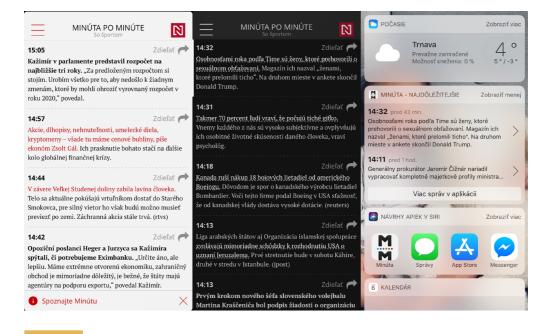
#### Application of Denník N - Minúta po minúte

Denník N is a Slovak daily that has been published in print since 2015 and its publisher is N Press, s.r.o. It also has its online version, which was launched in November 2014 and is charged. After two tested issues in 2016, the editorial office started to publish the monthly N Magazín. *Minúta po minúte* is the most downloaded news app in mobile app stores in Slovakia. It also won second place in the Apps RULEZZZ 2016 at the national app competition as a branded app and it also won the Google News Journal Prize 2015 for an innovative approach to online journalism.<sup>8</sup>

<sup>&</sup>lt;sup>6</sup> Webová aplikácia (Web application). [online]. [2016-12-25]. Available at: <www.ambitas.sk/blog/zaujimavosti/vyvojhybridnych-mobilnych-aplikacii>.

<sup>&</sup>lt;sup>7</sup> Vývoj hybridných mobilných aplikácií. [online]. [2016-12-25]. Available at: <a href="http://searchsoftwarequality.techtarget.com/definition/native-application-native-app">http://searchsoftwarequality.techtarget.com/definition/native-application-native-app</a>.

<sup>&</sup>lt;sup>8</sup> Krátke a rýchle správy Minúťa po minúte [online]. [2017-3-20]. Available at: <a href="https://dennikn.sk/aplikacie/minuta">https://dennikn.sk/aplikacie/minuta</a>.



Appearance of *Minúta po minúte* Source: Mobile app Minúta po minúte

#### Views

According to R. Augustín, the app *Minúta po minúte* is the most popular among all applications. On March 23, 2017 the application had 74,5 thousand downloads with approximately 30 thousand for iOS, 40 thousand for Android, and 4,5 thousand for Windows Phone. The year-on-year increase is about 60% for Android and 50% for iOS, which is a rapid growth compared to the web.

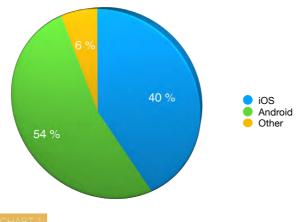


CHART 1:

The total number of the app *Minúta po minúte* downloads per minute to March 23, 2017 Source: E-mail communication with Radoslav Augustín, the project manager of the web and application of Denník N, 23.03.2017

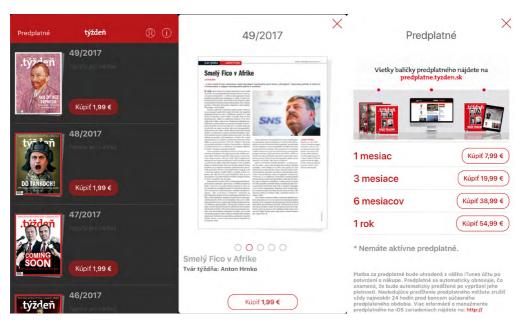




On regular days, the app is used by about 3000 users for iOS and Android, and 500 for WP. During occasional events the number is increased to 5000 users per day for both platforms and for WP to 700. There are approximately 16,000 active users a week and more than 20,000 per month. The average time spent on the app is over 2 minutes.<sup>9</sup> However, due to the high year-on-year growth, the given indicators are constantly changing.

#### Application of the magazine .týždeň - .týždeň

This weekly magazine is a political and social weekly that deals with investigative journalism. It has been coming out since 2004 and it is published by W PRESS a.s. The magazine also has an electronic version, which is also charged. In addition, the editorial office also provides the TV debate Pod lampou, releases books, and organizes various debates and media courses for young journalists. It has also developed its own mobile app with the same name aiming to spread its content. It is only a magazine application, but according to the marketing manager Veronica Pizano, they also thought about creating another application, but they are currently focusing on other projects. The application *.týždeň* is a native application and it was created in 2010 by the CoverPage company. It is available for iOS and Android operating systems, and it is possible to download it to mobile device as well as tablet. The application is charged and the existence of the application, as mentioned, did not change the organizational structure of the editorial office because it did not employ a new person who would be in charge of the application. The person who is responsible for the application is a graphic designer who had worked for the editorial office before.<sup>10</sup>



PICTURE 2: Appearance of application .týždeň

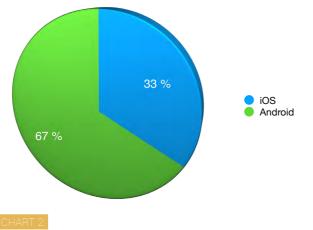
Source: Mobile application .týždeň

<sup>&</sup>lt;sup>9</sup> E-mail communication with R. Augustín, the project manager of the web and application of Denník N, 23.03.2017.

<sup>&</sup>lt;sup>10</sup> E-mail communication with V. Pizano, marketing manager of .týždeň, 28.03.2017

#### Views

According to V. Pizano, the magazine's cost is incomparable with the number of downloaded PDF versions in the application. On March 28, 2017 the application had 900 downloads, of which 600 were for iOS and 300 for Android. Each month the app is used by 1100 active users with an average time spent on an app of 11 minutes.<sup>11</sup>



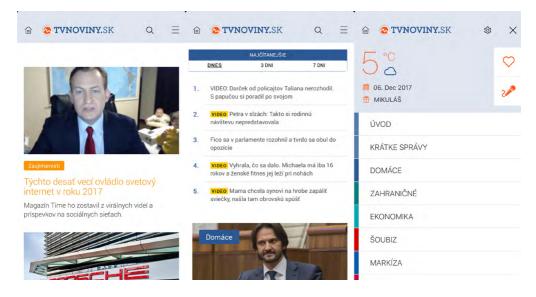
The total number of application .týždeň downloads on March 28, 2017 Source: E-mail communication with Veronika Pizano, marketing manager of .týždeň, 28.03.2017

#### Application of TV Markíza - TVNOVINY.sk

TV Markíza is the most watched private TV channel in Slovakia. It has been broadcasting since August 1996. Its content is divided into several programming tracks, including the main news program Televízne noviny. The program has its own website tvnoviny.sk and moreover a mobile application with the same name, which we will focus on in this work. In addition to this app, TV Markíza also offers the apps TV Markíza, Markíza+Videoarchív and VOYO.sk to its percipients. The original version of TVNOVINY.sk was created in 2012 and it was a native type. However, it regularly went through changes according to current trends to which it wanted to adapt. The latest version of the application and its migration to a hybrid was in December 2016 and was implemented by TRIAD Advertising, s.r.o. This transition brought the app more consistency with the same time, television is less dependent on the application supplier and much more flexible when deploying content and visual changes or new functionalities. The app can be downloaded from the online store for iOS, Android and Android TV. It is free of charge because, as the New Media Operation Manager for TV Markíza Roman Kopecký said, the primary purpose of the application is to support the web portal of tvnoviny.sk and not monetization.



<sup>&</sup>lt;sup>11</sup> E-mail communication with V. Pizano, marketing manager of .týždeň, 28.03.2017

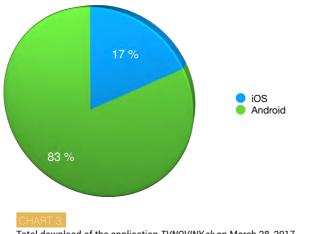


#### **PICTURE** 3

Appearance of the application .TVNOVINY.sk Source: Mobile application TVNOVINY.sk

#### Views

As stated by R. Kopecký, the application traffic is incomparably lower than the traffic of web. On March 28, 2017 the app was downloaded by 55,000 users for the Android operating system and 11,000 for iOS with an average time spent on the app of four minutes. However, the television channel could not provide us with the number of active users of the individual platforms.<sup>12</sup>



Total download of the application TVNOVINY.sk on March 28, 2017 Source: E-mail communication with Roman Kopecký, New Media Operation Manager for TV Markíza, 28.03.2017

<sup>&</sup>lt;sup>12</sup> E-mail communication with R. Kopecký, New Media Operation Manager for TV Markíza, 28.03.2017

#### Application comparison and research evaluation

The very specific features of the apps themselves point to the different ways which media can use to mediate their content. In the case of the daily Denník N and TV Markíza, we can see that, in addition to their typical media applications, they have also come up with another more innovative way to spread media products. However, basically all three media offer existing content which they also produce for their other platforms. Not in a single case did the existence of the application change the organizational structure of the editorial office, but only some existing members gained additional competencies. All three applications are accessible for iOS and Android users, but only *Minúta po minúte* is also available for Windows Phone users.

The main difference between applications lies in their very nature. The first two applications consist of the addition of articles on a daily bases and their content structure is divided into several categories, while the application of the magazine is aimed at publishing PDF versions of individual prints. However, as we have already mentioned, this is the way that most Slovak magazines function, whose purpose is to allow recipients to read their journal on their mobile devices or tablets. The advantage of the app is that the reader does not have to go to the newsstand and can buy a new edition on his device as soon as it is released.

The graphical representation of all three applications is minimalist. The ratio of text and photos varies from application to application. On the main page of the app *Minúta po minúte*, text is dominant, in the case of the app *TVNOVINY.sk* the ratio of text and pictures is roughly the same, but text also dominates by clicking on the article. In the app *.týždeň* there is dominance of pictures on the cover pages of the individual editions and after clicking on them, we will also see sample pictures of some pages of the magazine with short descriptions only. Apps of the daily and television use, in particular, a regular font and in some cases highlighted or colored font if they want to point out important information and facts.

The visits to each application vary considerably. *Minúta po minúte* has the highest number of downloads. 54% of this number are users of the iOS operating system. This is also the case of the app *.týždeň* where the amount of users of this operating system is 67% of the total number of downloads. Only in the case of the app *TVNOVINY.sk* does the amount of Android operating system users prevail. It is 83% of the app downloads. The lowest number of downloads is for the app *.týždeň*, which is determined by the very nature of the app and the fact that users can not use it every day, unlike the other two apps where editorial offices contribute new articles everyday.

However, at the same time, the users spent the highest average time (11 minutes), which is probably due to the fact that users can read articles only directly in the app and do not receive short messages in the form of push notifications, as in the apps *Minúta po minúte* and *TVNOVINY. sk*. In this case most people read only the notification and open the application only if they are interested in the message and want to learn more about the topic. The lowest average time spent on the app is for the app of the daily Denník N and it is just over 2 minutes.



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