**ФАКТОРЫ, ВЛИЯЮЩИЕ НА ВЫБОР**

**МОБИЛЬНОГО ПРИЛОЖЕНИЯ У МОЛОДЁЖИ**

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*Данное исследование показывает, каким образом влияют социодемографические характеристики пользователей в возрасте от 13 до 24 лет на выбор мобильного приложения с фоторедактором по определённым элементам ASO. Результаты исследования могут быть использованы разработчиками и специалистам, работающим в сфере продвижения мобильных приложений.*

**FACTORS INFLUENCING YOUNG USERS MOBILE APP CHOICE**

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*This study identifies how sociodemographic background of 13-24 y.o. people influences the way they choose photo-editing mobile applications with help of ASO elements. These findings should help developers and people working in the field of mobile application promotion to make sociodemographic targeting for their applications more accurate and, thus, effective.*

According to adindex.ru (2016), during RIW-2016 Michael Raibman stated that an average resident of Russian megapolis from 12 to 64 years old spend in the mobile internet about 91-124 minutes every day. [1] It means that originated in 2009 year so called “apps culture” shows rapid growth. As the result, developers faced the need for better understanding of their audience to promote their products more effectively on the mobile applications markets since the number of smartphone users is constantly rising (Borison, 2013). [2]

The theoretical part of the paper is based on the recent works in the field of mobile business and marketing. Shankar and Balasubramanian (2009) gave the definition of mobile marketing. [3] Mirbagheri and Hejazinia (2010) distinguish several unique aspects of the mobile marketing channel: penetrative, viral, interactive, with high response rate and relatively low cost, available in any time and any place. [4] According to Kocaurek J. (2017), App Store Optimization (ASO) is the largest marketing channel for mobile applications that helps to achieve higher ranking in app store’s search results. [5]

Harris, Brookshirea and Chin (2017) conducted a survey that measured several perceptions users have about the market they usually use to download applications; however, the research does not represent how users make a choice in favor of a particular application among similar others. [6] Malik et al, (2017) proposed a conceptual model for eight factors influencing adoption and continuous use of an application: Performance Expectancy, Ease of Use, Social Influence, Enjoyment, Incentives, Facilitating Conditions, Aesthetics, and Trust. [7] While the focus of the research was shifted to adoption and continuous use of an application, rather than what influenced the choice to install it. It leads to the gap related to the factors, which influence the choice of a certain mobile app from the range of similar in different app stores.

Thus, the research question of this study is “How does sociodemographic background of people from 13 to 24 y.o. influence the way they choose photo-editing mobile. The main objective of the study is to identify whether there is a connection between sociodemographic background of user and the way he chooses a mobile application for photo editing.

The research is a mix of quantitative and qualitative methods of collection and analysis of information (primary data). It is based on a combination of two methods of collection: semi-structured interview and survey, and two methods of analysis: content analysis and method of binary logistic regression and t-tests provided.

Critical Constraints: The study may face problems with external validity as our findings are applicable mostly for the young users’ behavioral patterns in Russia, Saint-Petersburg, meaning that our results may be not applicable for the similar research in other countries, regions (for example, in the rural settings) and for other age groups as well. Another important constraint is that the research is devoted to the applications for photo editing, meaning the results might be applicable only for mobile apps with analogical functions. Besides, the respondents’ answers could be distorted, because of the interviewer’s presence.

Interested in the research people encompass application developers and marketers working in the field of mobile app promotion. The results of the research should help them to conduct sociodemographic targeting for their applications more accurate and thus effective.

There are five hypotheses in the research. They are:

(1) Gender / (2) Age / (3) Employment / (4) Level of education / (5) Specialty significantly influences the choice of mobile app elements as core reference points for the final choice of a photo editing app.

The data analysis consists of two parts: t-test and binary logistic regression. During the first part there were identified that there are significant differences between the following six sociodemographic groups and the way they choose particular ASO elements from suggested list (first screen, app description, average score, screenshots) as reference points for the final decision to download a photo editing app in an app store.

1. Groups divided by gender and their choice of an app by App Description. There in Group Statistics two different means can be compared for both gender: 0.217 for female respondents and 0.5 for male respondents. The tests demonstrated that this difference is significant at level less than 0.01 which can be observed in Independent Samples Test section.

2. Groups divided by employment and their choice of an app by App Description. The Group Statistics demonstrates that the mean for unemployed respondents equals to 0.327 whereas the mean for the employed ones is 0.113. Independent Samples Test shows that this difference is statistically significant at the level less than 0.01.

3. Groups divided by employment and their choice of an app by User Comments. The means equal to 0.574 and 0.423 respectively (Group Statistics). This difference is significant at the 0.05 level which is defined in Independent Samples Test section.

4. Groups divided by level of education and their choice by App Description. According to Group Statistics, the mean for respondents with secondary education is 0.194 while for respondents with higher education this figure equals to 0.307. The statistical significance of this difference is at 0.05 level (Independent Samples Test).

5. Groups divided by level of education and their choice by reading Users Comments. Group Statistics provide two means for both groups: 0.387 for respondents with secondary education and 0.576 for those with higher education. Independent Samples Test points out that this difference is significant at 0.01 level.

6. Groups divided by age (under and above 18 y.o) and their choice of an app by Users Comments. Group Statistics shows the mean values: 0.387 for respondents aged under 18 and 0.576 for respondent older than 18 y.o. This difference is significant at 0.01 level.

Two binary logistic regression models demonstrated significant betta coefficients revealing the influence of sociodemographic users’ characteristics on a choice of App Description (Table 1) and Users Comments (Table 2).

Table 1. Binary logistic regression model for App Description

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Model Summary** | | | | | | | |
| Step | | -2 Log likelihood | | Cox & Snell R Square | | Nagelkerke R Square | |
| 1 | | 429,344a | | 0,13 | | 0,19 | |
| a. Estimation terminated at iteration number 5 because parameter estimates changed by less than 0,001. | | | | | | | |
| **Variables in the Equation** | | | | | | | |
|  | | B | S.E. | Wald | df | Sig. | Exp(B) |
| Step 1a | Male | 1,13 | 0,31 | 13,46 | 1,00 | 0,00 | 3,09 |
| Age | -0,14 | 0,10 | 1,87 | 1,00 | 0,17 | 0,87 |
| Work | -1,36 | 0,43 | 10,21 | 1,00 | 0,00 | 0,26 |
| Higher\_education | 1,53 | 0,59 | 6,82 | 1,00 | 0,01 | 4,64 |
| Humanitarian\_sp | -0,44 | 0,30 | 2,11 | 1,00 | 0,15 | 0,64 |
| Constant | 0,60 | 1,62 | 0,14 | 1,00 | 0,71 | 1,82 |
| a. Variable(s) entered on step 1: Male, Age, Work, Higher\_education, Humanitarian\_sp. | | | | | | | |

Table 2. Binary logistic regression model for Users Comments

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Model Summary** | | | | | | | |
| Step | | -2 Log likelihood | | Cox & Snell R Square | | Nagelkerke R Square | |
| 1 | | 540,184a | | 0,04 | | 0,05 | |
| a. Estimation terminated at iteration number 3 because parameter estimates changed by less than 0,001. | | | | | | | |
| **Variables in the Equation** | | | | | | | |
|  | | B | S.E. | Wald | df | Sig. | Exp(B) |
| Step 1a | Male | 0,10 | 0,28 | 0,13 | 1,00 | 0,72 | 1,11 |
| Age | 0,02 | 0,08 | 0,07 | 1,00 | 0,80 | 1,02 |
| Work | -0,81 | 0,29 | 7,86 | 1,00 | 0,01 | 0,44 |
| Higher\_education | 0,84 | 0,47 | 3,18 | 1,00 | 0,07 | 2,32 |
| Humanitarian\_sp | 0,02 | 0,29 | 0,01 | 1,00 | 0,94 | 1,02 |
| Constant | -0,84 | 1,37 | 0,38 | 1,00 | 0,54 | 0,43 |
| a. Variable(s) entered on step 1: Male, Age, Work, Higher\_education, Humanitarian\_sp. | | | | | | | |

Summing up the analysis results, the conclusions are:

1. App description as a reference point for the choice of a photo editing app is mainly used by unemployed male users with any specialty.

2. Users’ comments as a reference point for the choice of a photo editing app are mainly used by unemployed respondents of any gender, education level and specialty.

3. First screen and average score as reference points are not affected by social background.

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