Applications for ordering food: the specifics of choice for installation on computers and laptops

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Abstract. This article explores the factors influencing user preferences when choosing applications for remote food ordering. Based on a survey of users, three main factors were established that affect the choice of users of certain applications installed on desktop computers of users located both in the office and at home, laptops were also taken into account. The survey did not take into account applications installed on smartphones. The survey was conducted in three age groups. The survey data shows three determining factors influencing the choice of a particular application used by a user for remote food ordering.

1 Introduction

In the modern world, time is becoming an increasingly valuable resource for people. New technologies developed and developed in recent years allow people to reduce their time spent on traditional activities such as transportation, communications, training, work, etc. [1-8], while nutrition is also one of the activities for which a modern person still spends a lot of time. In this regard, the comparison and selection of the optimal application that allows you to minimize the time spent by a person on food delivery is becoming increasingly important in the modern world. Studying the factors influencing the choice of a particular food delivery application by users will allow the marketing and technical services of application companies and food supply companies to jointly develop and offer users more and more advanced applications and methods of food delivery, both to the office and to the home. Modern applications for ordering food are presented in three main groups:

- applications for personal computers;
- applications for laptops;
- applications for smartphones.

The first two groups can be combined into one general group, since such applications are built on the same software platform, have a single installation and use algorithm. In this study, it is food ordering applications installed on personal computers and laptops that will be the subject of study.

2 Materials and Methods

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To obtain quantitative data on the factors influencing user preferences when choosing applications for ordering food, a user questionnaire method was chosen. The survey was conducted in three age groups of users of food delivery applications using for this purpose applications installed on personal computers located both in the office and in the home of users, as well as applications installed on laptops. Surveys were conducted in the following age groups:

- 18-25;
- 26-40;
- 41-60.

Users were asked questions about the three main factors that determine their choice of a food delivery application to be installed on a personal computer or laptop.

The following answers were offered to choose from:

- ease of use of the application (including no need to constantly enter a password, simple interface, etc.)
- variety in food available to order;
- delivery speed;
- availability of constant discounts for users;
- availability of promotions and prize draws for users;
- the presence of a selection function from the "permanent list of orders";
- other.

To conduct the survey, all users were given questionnaires containing the questions listed above.

From the factors chosen by the users, the three most significant ones that received the largest percentage of user votes were selected.

The methods proposed and described in [9-29] were used to process the obtained data.

3 Results and discussion

3.1 Results analysis of influencing factors

3.1.1 The first group (18-25 years old)

The most significant factors noted by the first group of surveyed users (18-25 years old) are presented in Figure 1.

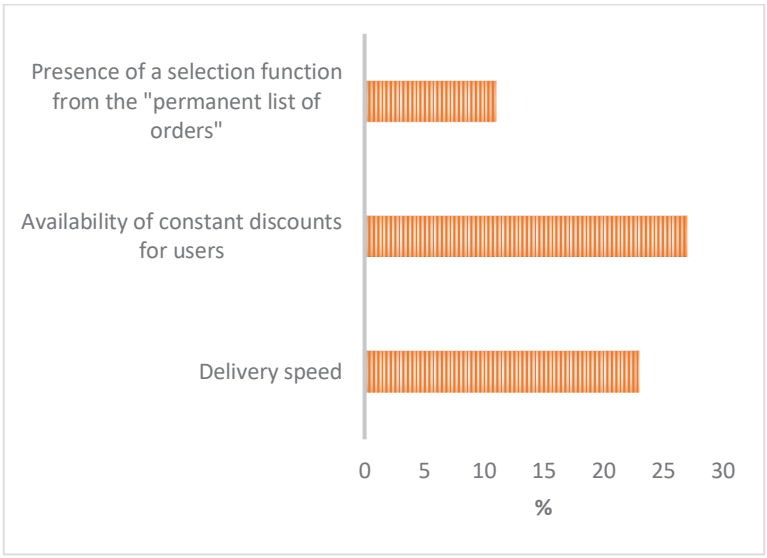

Fig. 1. The most significant factors noted by the first group of surveyed users (18-25 years old).

3.1.2 Second group (26-40 years old)

The most significant factors noted by the first group of surveyed users (26-40 years old) are presented in Figure 2.

Fig. 2. The most significant factors noted by the first group of surveyed users (26 - 40 years old).

3.1.3 Third group (41-60 years old)

The most significant factors noted by the first group of surveyed users (41-60 years old) are presented in Figure 3.

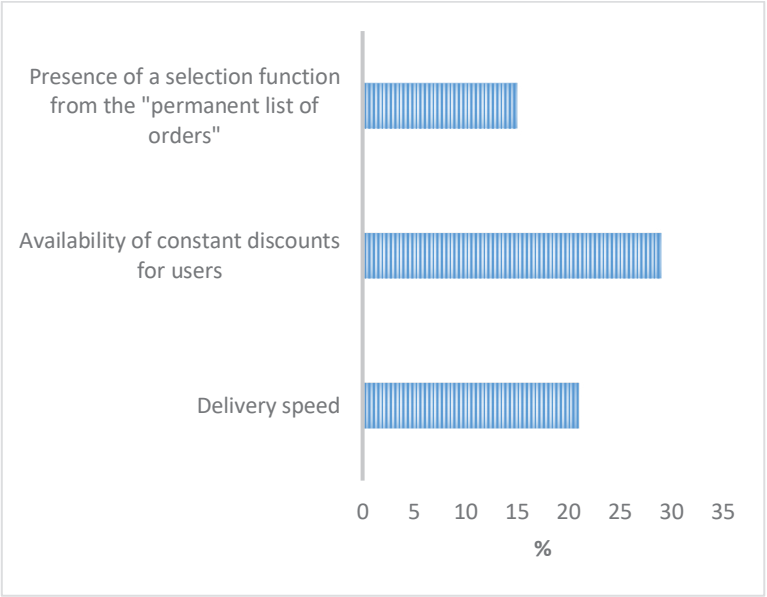

Fig. 3. The most significant factors noted by the first group of surveyed users (41-60 years old).

The distribution was estimated using two parameters:
1 - arithmetic mean value (*M*) calculated using the formula

$$M = \frac{X_1 + X_2 \ldots + X_i}{n} \quad (1)$$

where $X_1 \ldots X_i$ - the values of the quantitative attribute, n - the number of surveys;
2 - standard deviation calculated using the formula

$$\sigma = \sqrt{\sigma 2_{-}} = \sqrt{\left(\frac{(X_1 - M)^2 + (X_2 - M)^2 + (X_{\ldots} - M)^2}{n} \right)} \quad (2)$$

The results of calculations using formulas 1 and 2 show that the distribution of the survey data is Gaussian.

3.2 Discussion

The results of surveys of three groups of users provide data on three main factors influencing the choice of users of certain applications installed on desktop computers of users located both in the office and at home, laptops were also taken into account for remote food ordering. It can be concluded that the main factors influencing the choice of applications for remote food ordering by users are the following factors:

- delivery speed;
- availability of constant discounts for users;

• the presence of a selection function from the "permanent list of orders";

A generalized intergroup analysis of the most significant factors noted during the survey by users is presented in Figure 4.

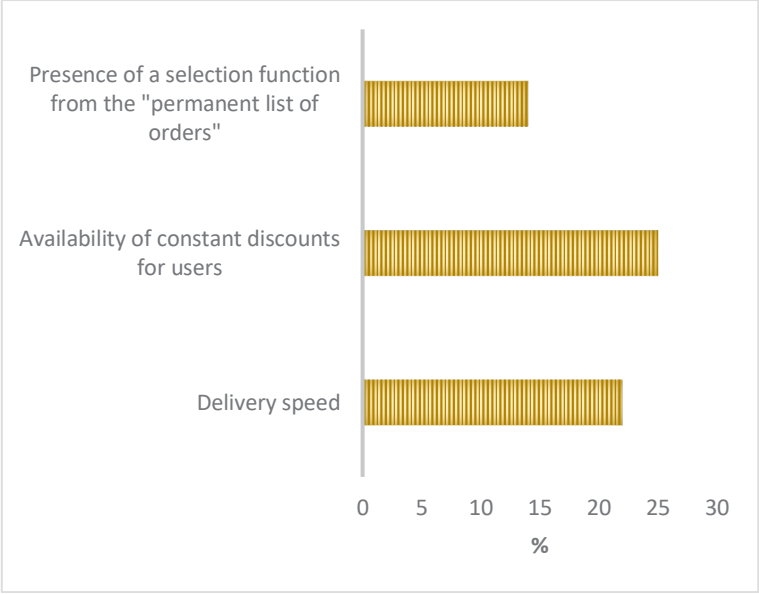

Fig. 4. Generalized intergroup analysis of the most significant factors noted during the survey by users.

From the data obtained (Fig. 4) it follows that the average value of the priority of factors is:

• “Speed of delivery” - 15%;
• “Availability of constant discounts for users” - 25%;
• “The presence of a selection function from a permanent list of orders” - 14%.

The coefficient of variation during surveys was estimated using the following formula

$$V = \frac{100S}{Y} \tag{3}$$

where Y is the result of a separate survey.

4 Conclusions

The conducted research presents data on the factors influencing user preferences when choosing applications for remote food ordering. Three main factors influencing the choice of users of certain applications have been identified. The first place is occupied by the factor - "Speed of delivery". The second place is occupied by the factor “Availability of constant discounts for users”. The third place is occupied by the factor - "The presence of a selection function from a permanent list of orders." Taking into account the data on the factors influencing the choice of a particular food delivery application by users will allow the marketing and technical services of application development companies and food supply companies to jointly develop and offer users more and more advanced applications and methods of food delivery, both to the office and at home.

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