

DEVELOPMENT OF MODELS AND SOFTWARE SOLUTIONS OF A MOBILE APPLICATION FOR BEAUTY SALONS

Pasichnyi, O.S., Lutenko, I.V.

National Technical University «Kharkiv Polytechnic Institute», Kharkiv

This report gives an overview of the stages of analysis of the subject area of the beauty industry, as well as the design and development of an Android application for automating the interaction between masters and clients of beauty salons. According to various studies, the beauty industry is developing rapidly in Ukraine and beyond [1]. That is why it was decided to develop an application that will greatly facilitate the routine work and self-organization of craftsmen. Purpose. Reducing labor costs and improving the efficiency of planning and organizing the master's work. In this paper mathematical models to analyze statistics and identify trends in the use of the application, as well as to forecast the development of the beauty market were used. An analysis of such parameters as the average master's bill, popularity of services, price-quality ratio, demand forecasting, as well as analysis of repeated purchases of services and forecasting of price trends was carried out. In addition, tips have been developed on the adequacy of pricing and relevance of services in the catalog, as well as tips on optimizing business processes in the beauty industry to increase competitiveness and meet customer needs. The report uses mathematical models to obtain statistics and analytics of application use, as well as to identify trends in the beauty industry. The following parameters were calculated:

- average master bill – analysis of previous services and demand forecasting;
- the most popular service;
- price to quality ratio;
- demand forecasting;
- price forecasting;
- clues about whether the market price is too high or too low.

At the beginning of the work, several hypotheses were identified, which were expected to be confirmed. However, some of them turned out to be wrong, which allows us to adjust the implementation plans, target audience and marketing strategy for the application. For example, it turned out that the application does not allow attracting new customers, although this was emphasized during the agreements with the masters. Based on this, it is necessary to focus more on the benefits for customers, because now they have almost no motivation to use the application. However, another hypothesis regarding the reduction of the organizational errors of the masters was confirmed, which means that the application is useful for the reputation and efficiency of the masters. The developed software can already be used in the work of masters, which will allow them to reduce the number of errors, increase efficiency and receive relevant and useful statistics about their work. However, the benefits for customers should be refined.

References:

1 Тимофеев С. В. Аналіз ринку косметологічних послуг в Україні та світі. // <http://dspace.nuph.edu.ua/handle/123456789/22596> , 23.04.2024