

## **ABSTRACT**

Master`s thesis: 148 pages, 21 tables, 3 appendixes, 80 references.

**Topicality.** School students would like to find people who may tell them about the profession have chosen. These people can share experiences and provide quality advice. It will be useful if high school students can try their own profession at least for one day. Travelers and active people are interested in new experiences, in getting emotions, skills and information. These people need information about service providers, people who are ready to share their skills, experience on appropriate remuneration.

The solution of problems is to create an online platform that makes effective communication between providers and users of services. The purpose of the system is the ability for service providers to propose their help with the master classes about different skills and knowledge of the professional field. On the other hand, on the platform the user can view the available activities for development of new skills, fundamentals of work and also for entertainment purposes, cultural exchange.

Recommendation complex online platform helps to improve communication and efficiency in user interaction on platform.

**The work communication with academic programs, plans, themes.** Master's thesis are performed according to plan of the branch of the **Department of Computer-Aided Management and Data Processing Systems** at the V. M. Glushkov Institute of Cybernetics of the National Academy of Sciences of Ukraine in the frame of the startup project according to materials of Startup School "Sikorsky Challenge" at NTUU Igor Sikorsky KPI and academic course at the Polytechnic University of Valencia and realizes the theoretical knowledge in these schools.

**Aim of the research** – increase efficiency for communication between service providers and those who receive these services through the development of online platform and implementation of data mining on the participants of communication and rating of received services.

### **Tasks of the research**

To achieve the goal must perform the following tasks:

- complete review of existing sources, which partially solves the problem, their advantages and disadvantages;
- complete review of known communication platform participants in providing and receiving services;
- conduct Marketing Resource for needs of users and service providers;
- investigation of relevance of development of startup project, building business models, identify key components of a successful startup - creating and holding survey of representatives of each Customer Segments;
- review of known recommendation systems, data analysis based on users profile, received services and service ratings;
- formulation and formalization of tasks on automation communication participants in providing and receiving services;
- result analysis;
- software implementation of these tasks;

**Object of the research.** The process of communication between service providers and customers.

**Subject of the research.** Means and methods for online communication platform between suppliers and users of services.

**Aprovation of results of thesis.** Scientific conference of bachelor, master PhD students "Informatics and computer technology - ICT-2017". Section of the **Department of Computer-Aided Management and Data Processing Systems**. Graduation from Startup School Sikorsky Challenge. Startup contest of business incubator Sikorsky Challenge.

**Publications.** Work result are published in Scientific conference of bachelor, master PhD students "Informatics and computer technology - ICT-2017". Section of the **Department of Computer-Aided Management and Data Processing Systems**.

STARTUP, BUSINESS MODEL, CUSTOMER SEGMENTS,  
INTERECTIVE SOFTWARE, COLLABORATIVE FILTRATION,

RECOMMENDER SYSTEM, SINGULAR VALUE DECOMPOSITION,  
ALTERNATING LEAST SQUARES