

# Digital Ecosystem of Major Subjects in the *Customs* Educational Program

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**Abstract**—The paper presents the experience in the use of information technologies in teaching major subjects of the *Customs* educational program at Samara State Technical University. Information technologies contribute to building of digital competencies provided for the learning outcomes in the Educational Standard for the specialty 38.05.02 *Customs* and for digital skills specified in Professional Standards that meet the demands of the modern labor market.

**Keywords**—Information technologies, digital competencies, customs.

## I. INTRODUCTION

The relevance of applying knowledge and skills in the field of information technologies while training the specialists in the field of Customs is justified by the Customs Service Development Strategy of Russia until 2030, which determined the direction of the Federal Customs Service development in Russia from *Electronic Customs* in 2020 to *Intellectual Customs* in 2030 [1,2,3]. To implement these directions, ‘digital’ competencies of future specialists are required.

The digital competence ‘ability to understand the principles of modern information technologies and use them to solve the tasks of professional activity’ provided by the *Educational Standard 38.05.02 Customs* determines the application of IT technologies in the training of customs specialists [4,5].

## II. PROBLEM STATEMENT

To build digital skills, the lecture course, practical and laboratory classes of major subjects include the introduction of both universal information and communication technologies (Google forms, Trello, Miro, VooV, Zoom) and specialized software products and services (Alta Soft: *Rate, Commentaries on Incoterms* www.alta.ru, technical regulations of EEC in EAEU eec.eaeunion.org, customs legislation customs.gov.ru, contract system in the sphere of procurement zakupki.gov.ru). These tools build collectively a ‘digital ecosystem’ for the training of future customs specialists.

Therefore, the pedagogical task in the implementation of major subjects is to develop the students’ motivation by

application of implemented information and communication technologies and specialized software products and services in solving the professional problems.

## III. DETAILS

One of the major subjects in the Customs education program is *Contracts and foreign trade documentation*. To achieve the educational goals to build the digital competence, the lecture course is supplemented with the topic *Organization of remote collaboration on drafting a foreign trade contract*; standard sales contracts are analyzed based on the contracts posted on the portal zakupki.gov.ru); the legal regime and functions of the foreign trade contract are studied according to the information of the portals eec.eaeunion.org, customs.gov.ru, the structure of the foreign trade sales contract using the Alta Soft application: Rate www.alta.ru.

The use of mentioned information technologies at the training stage allows future specialists to get not only knowledge about information and communication technologies used to solve professional problems, but also to build skills for their use. For example, the course *Contracts and foreign trade documentation* for skill building in organizing the collaborative remote work provides the following:

- assignments for setting, distributing and monitoring the tasks for the development of a foreign trade contract using Trello board in a mini-group format;
- organization of students’ collaborative work on the development of various sections of the contract using Miro online whiteboard;
- creating an archive of documents used by students in the development of a foreign trade contract on Google Drive: creating tables and documents for collaborative editing, document access modes;
- organization and holding online conferences by students to discuss the development results of foreign trade contract sections in Zoom and/or Voov.

Open presentations of the developed projects of foreign trade contracts is carried out using Zoom or Voov online conferences to ensure the presence of representatives of industrial partners and all interested parties.

#### IV. RESULTS AND CONCLUSIONS

Educational goals of digital competence building are revealed in the descriptors of major subjects:

to know:

- information and communication technologies used to solve professional tasks in the collaborative remote work format;

- internet portals of reference information used for solving professional tasks: [www.alta.ru](http://www.alta.ru), [eec.eaeunion.org](http://eec.eaeunion.org), [customs.gov.ru](http://customs.gov.ru), [zakupki.gov.ru](http://zakupki.gov.ru);

to be able to:

- use information and communication technologies in collaborative remote work to solve professional tasks: Google forms, Trello, Miro, VooV, Zoom;

- perform effective information search on Internet portals [www.alta.ru](http://www.alta.ru), [uus.ufa union.org](http://uus.ufa.union.org), [customs.gov.ru](http://customs.gov.ru), [zakupki.gov.ru](http://zakupki.gov.ru), for solving professional problems;

to have:

- skills of setting and monitoring the implementation of tasks for collaborative remote work in solving professional tasks using Trello board, exchanging information using Miro online whiteboard, posting draft solutions and accompanying documentation on Google Drive, organizing online conferences to discuss the results of collaborative work using VooV, Zoom platforms;

- skills to develop and analyze solutions to professional problems using Alta Software: *Rate, Commentaries on Incoterms* of EEC technical regulations of the EAEU [eec.eaeunion.org](http://eec.eaeunion.org), customs legislation [customs.gov.ru](http://customs.gov.ru), contract procurement system [zakupki.gov.ru](http://zakupki.gov.ru).

Therefore, it is possible to solve the pedagogical task of building the digital competencies of future specialists by supplementing the lecture course and the funds of assessment tools of major subjects with topics involving the development of information and communication technologies in the amount of 20-30% of the total labor intensity of the discipline.

#### REFERENCES

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