

SAP Analytic Cloud: a tool for the formation of professional competencies of business analyst

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Abstract. The role of information technology has become so important. The technology has transformed the traditional economy into an information economy, then into a collaborative one, and finally into a digital. The process of digitalization of the educational system began in this regard. This process is causally associated with at least two important trends: the development of digital technologies and organizational and substantive changes in the education system. The entire education system of Russia is indeed in a state of renovation due to the transition to new federal state educational and professional standards.

The authors offer a set of laboratory works in the form of situational tasks and cases that contribute to the formation of professional competencies and labor functions of a future specialist (business analyst) as part of the development of SAP Analytic Cloud technology. The use of situational tasks and cases helps to effectively implement the development of a complex of professional competencies, which are elements of generalized labor functions. Moreover, the material in question is not associated with any particular discipline. As part of the implementation of situational tasks and cases described in the article, students learn to use the basic elements of the SAP Analytic Cloud technology, receive skills related to the application of the studied technology in performing standard professional tasks stipulated by the professional standard. The format of the description of the methodology is presented in the form of the traditional KeybyKey technology widely used in obtaining professional competencies in the field of IT.

Keywords: professional standards, competencies, case, business analytics, Sap Analytic Cloud, labor functions.

1 Introduction

The relevance of studying cloud software products is associated with two trends. The first trend is the relative ease of implementation in the educational process. The second is the rapid transition of the entire business intelligence system to cloud platforms in the business environment. Teaching students modern digital cloud technologies, therefore, becomes an important component in the formation of professional competencies.

The purpose of the article is to demonstrate the possibilities of building professional competencies using the tools of SAP Analytic Cloud - one of the leading tools in the digital economy.

1.1 Experience in the use of professional and federal state educational standards in the field of «Business Informatics»

In the framework of educational activities, it is necessary to focus on the system of professional competencies within the framework of the Federal State Educational Standard for Higher Education in the relevant field of training and the system of labor functions provided for by the professional standard. When developing the content of education, starting from the main educational program and ending with the work programs of disciplines, teachers should focus on the dual-link: “labor market requirements (professional standards) - education system requirements (FGOS 3 ++)” [5, 6,7,8] .

1.2 Cloud service SAP Analytic Cloud

SAP Analytics Cloud is a business intelligence product from SAP. This is a SaaS application (software as a service), entirely based on the new HANA cloud platform [1]. The service combines the needs of business analytics, predictive analytics, and organizational planning in one solution.

The main functions of the service: data modeling, visualization, business analytics, version control, Smart Discovery (controlled analysis), time series forecasting, R visualization, Smart Insights (intelligent detection [2, 3]. SAP Analytic Cloud implements a new approach to the analytics process by combining the traditional stages of data processing in a corporate environment with elements of intellectualization of conclusions on data analysis, such as identifying key factors of influence, building models according to the “if ... then” principle, and automatically choosing the type of visualization based on the data architecture. All this suggests that this product helps to form the professional competencies of future specialists in the field of business analytics, and requires the preparation of methodological materials intended for training bachelors and undergraduates.

1.3 Methodology for the formation of business analytics competencies as part of the study of SAP Analytic Cloud (on the example of Ural State University of Economics)

The study of the software product begins with a lecture entitled «Key data mining capabilities in SAP Analytic Cloud». It gives an understanding of the current state of the analytics process in the corporate environment, identifies the stages of this process, and each of them is associated with the product toolkit.

The purpose of this lecture is to identify the boundaries of applicability of SAP Analytic Cloud technology, to show the development of modern digital technologies using SAP products as an example.

This lecture implements the formation of the «knowledge» part of professional competencies and generalized labor functions provided for by the professional standard.

To build competencies in the practical use of SAP Analytic Cloud, a laboratory work system is provided on the following topics [1-3]:

Lab 1. Introduction to SAP Analytic Cloud Introduction. Tools. Possibilities of work with data. System objects (1 hour).

Laboratory work 2. Implementation of the ETL-process of data processing using SAP Analytic Cloud (2 hours).

Lab 3. Intelligent Discovery Module SAP Analytic Cloud (2 hours)

Lab 4. Creating responsive pages. (4 hours)

Lab 5. Analyzing the SAP Analytic Cloud Geodata (4 hours)

Next, the technology of working with data will be described (fragment 1 from laboratory work).

2 Conclusion

The complex of laboratory works presented in this article contributes to the formation of general professional and professional competences in the aspect of processing data of various types using SAP Analytic Cloud technology. This approach contributes to the formation of part of the labor functions stipulated by the relevant professional standard. The training methodology consists of updating the traditional and well-studied process of business analytics using SAP technologies, which allow automating the data processing process quickly. Students master the basic and unique toolkit of SAP Analytic Cloud technology as part of the implementation of the proposed tasks and cases.

The experience of implementing such an approach to the formation of competencies during the fall semester in the framework of modular technology has confirmed the effectiveness. This showed that the proposed set of laboratory work can be independently used in different disciplines, at different courses, and at different educational levels. This can be achieved by changing cases, tasks for independent work, and increasing the number of elements of SAP Analytic Cloud technology for study. As a result, as part of the product training, the following students were trained:

18 undergraduate business analysts. The result of their training was methodological product development in the course of teaching practice based on the DataSet.

19 undergraduate economists who completed 2 laboratory work on SAP Analytic Cloud

34 bachelors of business analytics, who included in their term papers on data mining a paragraph on the application of SAP Analytic Cloud to data analysis.

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