

# ABSTRACT

the thesis

## **Research on evaluating the effectiveness of support infrastructures needed in the field of BI applications using "cloud computing" technology**

Researchers and practical studies revealed how ICT investments affect organizational characteristics and outcomes and the way the activities are performed and the organizations ability to exploit the connections between activities inside and outside the organization. Organizations, especially those who have a lack of information leading to action to get a better understanding of internal and external forces that drive business to measure and improve performance, business intelligence systems (BI) is the type of ICT investment on which to focus.

Today, BI has an important role in creating the current information for operational and strategic decision making.

Although business decisions are made on different organizational levels, in the ordinary everyday activities they are based on one hand on business policy and BI rules, and on the other hand, supports especially decision processes at analytical level. Even though BI provides tools to improve decision-making within organizations, it provides no systematic means of planning, monitoring, control, management and implementation of strategic business objectives. This can still be done by adopting an enterprise resource planning system (ERP). The application by companies of both types of applications provides clear benefits for the current activity. Developed thesis demonstrates these advantages through a detailed presentation of how the organizations can use two types of applications.

As a result of natural evolution in ICT, Cloud Computing technology provides through its business models such as Software as a Service (SaaS) solutions optimized for using BI and ERP applications. SaaS it's able to offer companies the possibility of reducing the difficulties they face in managing their IT architecture that can produce inadequate or inaccurate data. This reduces manual and redundant processes and employees can focus on activities that are producing value. Last but not least may be mentioned the advantage of reducing total cost of ownership (TCO) that SaaS model provides because its subscription-based use. This model provides scalable resources that companies pay only for what they use. The evaluation model of BI and ERP applications, comparing on-premises acquisition versus SaaS developed as a result of research is presented in the thesis.