IMPACT OF CLOUD-COMPUTING ON THE DESIGN OF COST-PERFORMANCE AND RESULTS ACCOUNTING

Jawed Ghaffari

University of Library Studies and Information Technologies

Abstract: Cloud-Computing has a significant impact and some advantages on the way companies create and manage their cost, performance, and results accounting. The aim is to test this hypothesis by means of a literature review. In times of digitalisation, controlling is undergoing major changes. Cloud computing is repeatedly mentioned as one of the defining technologies. Significant impact on controlling – especially on cost performance and results accounting – can be identified in the literature. The results in the study show that cloud computing brings advantages to the controlling process. At the same time, this poses a risk to the competitiveness of companies that do not implement cloud-computing.

Key words: Cloud-Computing, Impact, Cost-performance and results accounting, Controlling, Digitalisation.

Introduction

In the course of digitalisation, the demand for computing power and storage capacity is constantly growing. Information systems and the volume of data thus present companies with many challenges. Cloud computing is one of these challenges. The cloud offers a solution for this, which is mainly linked to the expansion of storage and computing resources. The use of cloud solutions can offer a far-reaching expansion of these resources. On the one hand, this offers companies flexibility with regard to the expansion of the IT structure, and on the other hand, it often provides the basis for a series of optimisations within business processes. The cloud can be used as an internal or external instance. Overall, the technology is considered to be one of the main drivers of digitalisation and the foundation for being able to store, utilise and process the enormous amounts of data [1]. In addition, cloud computing offers easy and flexible scalability. Companies can expand and shrink computing power as needed [2].

Like other areas of controlling, cost, performance and profit accounting contributes strongly to the planning, management and

control of respective business processes. The procedure provides management with rational information, so that this contributes in particular to the decision-making process of the company management. Cost, performance and profit accounting is strongly fact-based, which is particularly important for operational and short-term business – usually up to one year [3].

The main task of cost, performance and profit accounting is the identification of costs and services with the respective goals. This involves the recording, distribution and allocation of these. For example, the calculation of costs or the short-term measurement of successes can typically be cited. The economic efficiency of products and services can also be determined, which at the same time is often a basis for management decisions [4]. The cost accounting is generally divided into three areas: cost type accounting, cost center accounting, and cost object accounting.

Cloud computing offers the possibility to digitally connect different data and store them online on a cloud. Controlling is increasingly exposed to enormous amounts of data. This fact already shows the great importance and potential that the technology of cloud computing offers. In today's controlling, the continuous accessibility of relevant data is indispensable for success-oriented corporate management. Furthermore, innovations can develop in the companies on the basis of the new technologies. These seem to have a major impact on the design of cost, performance and profit accounting[1].

Research methodology

As already mentioned, this paper aims to systematically analyse existing and published knowledge. In the context of research methods, this is a literature analysis. Basically, literature analyses can be described as a summary of existing knowledge. The subject of these research projects is already published works that are examined with regard to a certain question. The added value provided by these literature analyses thus results from the accumulation and systematic consideration of existing works on the topic. First, the current state of research is reviewed. Finally, a look into the future is given.

Results

Cloud computing offers companies a simple, customisable infrastructure for various data sources that arise in the context of controlling. The respective cloud solution provides the companies with various platforms to dispose of an extended storage space, software or also a required computing power. At present, however, the future potential of cloud computing is classified by companies as moderate in

comparison. This cautious classification can be explained in particular by the lack of integration in the main controlling processes [5].

In the following, some further advantages can be named that cloud computing can offer to this controlling main process. The literature offers some indications for this.

One of the central advantages is the location-independent and real-time access to large amounts of data. The cloud solution offers users an infrastructure from which they can access relevant data worldwide. This provides a reliable basis for the company and especially for cost, performance and profit accounting. Furthermore, a certain standardisation of processes can be achieved with the help of cloud solutions, which is at the same time particularly desirable in the context of digitalisation and controlling, with their numerous interfaces. The fact that the introduction of a cloud system does not involve high set-up costs makes the barriers for companies to get started comparatively small. The speed of entry reinforces this effect. Experience shows that cloud computing can be set up quickly for cost, performance and profit accounting. The individual adaptability of the technology underlines the advantages in terms of flexibility and barriers to entry. It can be seen that cloud computing can effectively drive digitalisation and offers opportunities for use especially in controlling[2].

The design of the cloud systems can go as far as an innovative IT operating model. This can contribute to the long-term and sustainable success of the company. Explicitly in the area of cost, performance and profit accounting, an increase in efficiency is shown through the connection of different data volumes and the simultaneous constant access to them. Furthermore, cloud computing has the necessary flexibility to adapt optimally to individual processes and thus to serve the resource requirements adequately for the respective situation. The increase in efficiency and productivity can be seen at various levels. The platforms of cloud computing usually offer a central intersection to various services that can support in the context of cost, performance and results accounting. Here, transparency can be increased through the close provision of data between the various departments and people within the company. Any downtimes can thus be prevented and finally there is even the possibility of creating cloud solutions for individual needs and business processes [6].

Other positive factors of cloud computing technologies are, for example, that they help companies to increase their credibility. Controlling can thus present itself as timely and modern, thus increasing trust within and outside the company. It is generally accepted that the technologies can support planning and budgeting. Controllers can be

relieved of time-consuming data preparation tasks. Thus, the focus can be placed entirely on analysis and cost accounting [7].

Another advantage is the reduction of costs. Cloud computing can help companies reduce their capital expenditure on IT infrastructure because they do not have to buy and maintain expensive hardware and software. Instead, they can use cloud infrastructure as a service from a provider and pay for what they actually use. A study by Gartner found that companies using cloud computing services can reduce their capital expenditure by an average of 15 percent[3]. This factor, which is also called "pay-per-use", appears several times in the literature. Cloud computing can be used flexibly, depending on current requirements, and can thus offer improved cost management [8]. Moreover, cloud solutions are inexpensive to purchase [9].

In addition, cloud computing can also reduce the ongoing costs of running the software and hardware. Using cloud computing services can also lead to lower operating costs, as companies do not need expensive IT experts to maintain and update their infrastructure. Instead, they can transfer the responsibility for maintenance and updating to the cloud provider. According to a study by Deloitte, companies that use cloud computing services can reduce their operating costs[4].

Cloud computing technologies can also significantly support other technologies. For example, in the area of big data – the efficient use of enormous amounts of data – cloud computing is often mentioned as a basis. Cloud solutions help to make these data volumes available for further use. The literature thus underlines the importance of cloud computing in supporting and complementing digitalisation [10].

With all the opportunities and benefits mentioned, cloud computing also presents some risks. Particularly in relation to data security and cybercrime, a weak point can be identified. This seems to trigger reluctance, especially among large companies [11]. In addition, competitive disadvantages can arise for companies that do not embrace technological change. This shows that many companies still need to take action and underlines that there are some challenges to be overcome [12].

Conclusion

All in all, it can be said that cloud computing plays a major role in the context of cost, performance and profit accounting and that further potential can be expected in the future. The hypothesis was confirmed by the literature analysis. Almost every area of application of this controlling process can be supported with the help of cloud solutions.

Therefore, this technology can have a major impact on the future design of this main controlling process and make a significant contribution to further development, especially the availability of enormous amounts of data[5]. Companies that do not engage with the technology can suffer a significant competitive disadvantage in the medium and long term. Therefore, cloud computing simultaneously presents many opportunities but risks for practice.

Notes

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About the Author

Jawed Ghaffari has a Master's degree in Finance & Controlling. After graduating, he worked in a BIG4 auditing firm. He is currently responsible for finance and purchasing at a real estate company in Cologne. In the course of his doctoral studies at ULSIT, he is conducting research in the areas of digitalisation and controlling.

To contact the Author: jawed@global-act.de