

IMPLICATIONS OF ADOPTING CLOUD ACCOUNTING ON THE QUALITY OF INFORMATION PROVIDED BY THE ACCOUNTING MODEL

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Abstract

From accounting model perspective, the information provided contributes to the knowledge of the entity, and determines useful elements in the economic strategy for decision making.

The basis for measuring economic and financial performance at the level of economic entity is represented by the accounting model as a source of specific information. The complex work involved in organizing the accounting model at the level of the economic entity is done in an easy way by choosing one of the many traditional software. The use of a classic accounting software does not imply the use of an internet connection to access the information, the activity taking place offline.

The performance of the accounting model depends directly on the use of an information system that provides useful information to substantiate the decisions taken. Within this system, accounting information occupies the most important share. The accounting model involves a lot of data produced during the activity and before the actual development of the transactions, aiming at directing the commercial activity from the perspective of the economic conjuncture, a special situation being that of the crisis periods.

The purpose of the article is to analyze the technological progress in accounting and its impact on the accounting model.

Keywords

Accounting model, cloud accounting, economic performance, accounting information.

JEL Classification

D83, M41.

Introduction

For an entity that acts and performs in the economic environment, the elements become more and more important: access to information, speed of communication, speed of decision making and flexibility in managing accounting activities. The obvious

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advances in the last years registered in the field of Cloud Computing, have made the expectations regarding the benefits produced to be in an ascending evidence. In the economic environment it is known that a strong accounting system contributes significantly to business and is a critical component of the information system. For this reason, moving the accounting model to the Cloud is an innovative solution that allows, among other important logistical advantages and saving significant funds.

Accounting has been present in human society since the division of labor. Over time, accounting, which is the technique and science of accounting, has adapted to the technological level and the limits of each era, especially through the evolution of the alphabet, numbers and writing (Țugui, 2015).

The accounting model includes all data, procedures, flows, means of information processing designed to contribute to the establishment and implementation of economic and financial management through the mentioned elements specific to accounting. The pandemic period was and is a moment that forced the adoption and adaptation of data management procedures in an online manner. Over time, researchers have analyzed the link between economic crises and accounting, the latter being seen both from the position of crisis trigger and as a buffer of their effects. An economic entity cannot survive without the existence of information obtained in real time. The collection, processing, storage and provision of information is the responsibility of the entity's information system, which must use the most appropriate information and communication technologies to support the creation of an information-advanced entity. Currently, in the field of information system specific to the digital economy, concepts such as Cloud Accounting, e-accounting have appeared.

The concept of Cloud Accounting meets another trend, namely the outsourcing of accounting. Since 2012, a study conducted by KPMG in relation to Cloud trends highlighted the fact that globally more and more entities were prepared and expressed their agreement for the transfer of accounting activity in the Cloud. The accounting process supports the measurement of economic activity at the entity level by collecting and recording chronologically and systematically specific information that has an economic impact by communicating to all categories of users.

In a broad sense, the research provides an overview of the evolution of accounting techniques over time, to the increased involvement of technology in accounting, studying the particularities of the interaction of technology in accounting through Cloud Accounting applications. It is good to avoid the erroneous impression that the role and tasks of accounting have been moved entirely in the computer system, this being done sequentially to determine modern information systems.

This paper, after reviewing the elements highlighted by the scientific literature, identifies the advantages and limitations of Cloud Accounting implemented at the level of the accounting model within economic entities.

1. Literature review

The current national and international business environment is extremely dynamic and competitive. The main objective of an economic organization is to generate financial benefits for its shareholders (Geambașu, 2012). The articles published in Romania on

this subject are both theoretical and empirical and consist of approaching different perspectives.

Since their inception, the concepts of Cloud Computing and Cloud Accounting have raised a special interest for researchers working in the field of accounting and bookkeeping management (Mihai, 2015).

According to KPMG (network of consulting and auditing firms), as the cloud ecosystem matures and expands, companies of all sizes and sectors engage in numerous ad-hoc initiatives in Cloud Accounting. The unique criteria and needs of the economic entity require the identification of cloud solutions and services appropriate to its specificity. The impact of the advantages of cloud technology on the accounting model is accompanied by challenges but also by the need for continuous optimization, changing costs and also the need for security. This demonstrates that the use of cloud accounting involves more than just connecting to an application, which emphasizes the need for a flexible and secure system, with the challenges of a business guiding the identification of the necessary optimizations. Cloud accounting can be widely adopted, the pioneer in this field assuming, at that time, the existence of a mentality primarily inclined towards automation. Cloud-based accounting and simply connecting to this technology will not generate value directly on the results. IT functions must work in order to achieve a reliable, secure and flexible cloud ecosystem to accelerate the results specific to a successful business by optimizing the accounting model in the cloud. The analysis of the evolution of information technology that has taken place rapidly in the last decade, produces the need for a new approach to computerization of accounting, which can have a positive impact on the business.

A study conducted by Aberdeen Group, a research and market company, in 2013 shows that Cloud applications implemented in the flow of accounting processing lead to an immediate increase in productivity by 25%, a 50% reduction in document processing costs and a 91% improvement in customer satisfaction (Ionescu et al., 2014).

Traditional accounting systems are proving to be inefficient in relation to technological alternatives in the market (Arslana & Karan, 2009).

The accounting model in the cloud version creates long-term competitive advantages by offering managers and employees the opportunity to access data, with the ability to update information at any time and location. Thus, Cloud accounting is emerging as a simple method of centralizing information content and account management.

As a rule, the costs involved in using Cloud applications are lower than those of applications running locally on their own equipment (Beckham, 2010; White, 2010).

In situations of economic and financial crisis, such as the one felt in recent years, technologies such as Cloud Computing and Business Intelligence (BI) are becoming increasingly important in order to obtain advantages at the expense of the implementation of expensive and complex systems (Pugna & Boldeanu, 2013).

Romanian accounting firms cover the entire accounting flow of data processing on a monthly basis, from the collection and storage of supporting documents from customers to the preparation of verification balances, centralization and transposition of data into tax returns. A special situation that has demonstrated the need for remote activity is the COVID-19 Crisis. This is exactly what highlighted the Cloud Accounting platforms that can be accessed from anywhere there is an internet connection, the difference compared

to a standard application / program being the lack of installation and management on their own servers. The capitalization of Cloud Accounting within the accounting model presupposes that the expectations regarding the economic benefits are aligned with the organizational objectives, projecting a future in the cloud-accounting area as active and complex as possible. The approach of the economic-financial strategy through the vision of the cloud concept encourages the collaboration and maybe even the unification of the team that manages the business with the IT team in order to offer a cohesive strategy. Planning for change from this perspective is seen as an important element in terms of the indirect effects expected from the integration of the cloud system in the accounting model. Cloud initiatives must be clearly articulated and well integrated, with users' vision adding value to the application supported by the influence of leaders who decide to change. The sustainability and success of a cloud platform in the field of accounting requires its selection from the perspective of utility for the particularities of each economic entity. The transfer to the cloud involves changes, improvements of the accounting activity of an entity, but all in a varied context related to the complexity, purpose and elements of the activity itself. The optimization of the accounting model through the Cloud causes a real business capacity available for the entire economic entity under the influence of organizational challenges, directly associated with the management and expansion of the cloud in this field.

2. Research methodology

The current research started from the following two questions:

- Does Cloud Accounting make a positive contribution to the quality of accounting information by increasing trust and interaction in Cloud Accounting?
- Is the transition to Cloud Accounting related to outsourcing accounting?

In this study, we intended to analyze the implications of Cloud Accounting through the advantages and disadvantages of applications, which are identified by consulting the websites of suppliers. To identify various such products was used the Google search engine. I used keywords like: accounting software, Cloud Accounting, ERP SaaS and I checked the first 20 returned results. The main limitation of the research is the lack in most situations of the distinction between the terms Cloud Computing and SaaS.

The analysis of accounting software from the perspective of the Cloud environment is closely related to the concept of Enterprise Resource Planning. The flexibility and efficiency of the Cloud Accounting platforms emphasize the need to adapt the accounting to the client's activity to the detriment of the opposite situation, namely that of aligning the client's activity to the accounting. This determines the coverage of the information needs of the clients in relation to their wishes.

From an operational perspective, Cloud applications facilitate the efficient and secure processing and storage of data on information related to assets, the detail generally occurring in the case of receivables, debts, taxes and bank accounts. From a strategic perspective for reporting, the accountant has at his disposal dashboards, cash flow analyzes, reports, which he uses in the automatic processing of financial data. Cloud applications are gaining ground on the Romanian market to the detriment of installed applications, especially due to the advantages of Cloud technology, which is often easier

for specialized companies, which involves outsourcing the accounting process. The dynamics of Cloud Accounting is also followed by the awards for accounting software excellence in the United Kingdom. They also capture the modeling in this sense of the technological habits of professional accountants. Basically, the Net Promoter Score is used as a performance indicator.

3. Results and discussion

The accounting activity is influenced in size and complexity by the dimension of the economic entity.

The entity's activity from an accounting perspective is influenced in size and complexity by its size. A reduced accounting flow determines the volume of processed documents, the number of registered accounting operations, the level of control, the accounting processes expanding as the entity is more developed. Without violating the confidentiality of the entities' own data, Cloud accounting is the starting point for more complex reporting, through reports generated and early reporting of risks both in terms of tax and insolvency and the identification of vulnerabilities.

The trend of cloud computing results in 2021 shows that entities continue to adopt multi-cloud and hybrid cloud strategies and increase spending on service providers, leading to higher-than-expected cloud usage due to COVID-19 pandemic restrictions throughout the year. 2020 (Luxner, 2021).

The reception and electronic registration of documents determines the efficiency of the accounting staff's activity from the perspective by optimizing the time allocated to data processing and the elaboration of economic-financial analyzes in order to adopt decisions. One of the first functions in the Cloud version was that of invoicing, this naturally led to a reduction in invoice processing costs and a harmonization of the accounting-customer relationship through access to information of interest in real time. Accounting is a cumbersome and time consuming phenomenon for many entities. Data recording, information management, systematization of account information and reporting often prove to be costly, cumbersome as a way of doing things and especially prone to errors. These difficulties stem from the use of an outdated accounting system from the perspective of the involvement of information technology, with a risk of not providing information in real time and especially not arriving in a timely manner. This affects the entity's ability to react to the competitive environment and ensuring that economic activity operates below an optimal level.

Common access to certain accounting databases, real-time collaboration between accountants and the categories involved, security of online information storage, access from any location and from any electronic device with an internet connection projects the Cloud alternative as efficient and reflects the benefits. The financial connection of the business partners can be improved by reducing the activities regarding the physical exchange of data between the client and the accountant which is a time consuming and resource consuming aspect.

Today, Cloud Computing is becoming an increasingly fashionable concept in the IT environment. There is no unanimous opinion on the definition of this concept, as it covers several versions of the new stage in IT. In fact, Cloud Computing should suggest nothing more than simplicity (Mihai, 2015).

Cloud technology changes the accounting field by the possibility of streamlining the accounting system through services that will add value. Applications rise in complexity through fiscal planning actions, cash flow forecasts, even targeting artificial intelligence counselling.

In practice, Cloud Variants are made available to professional accountants in order to provide services in an innovative way. Of these, SaaS (Software as a Service) is a platform that describes any Cloud service where customers can access Internet applications that are hosted in the cloud and can be used in a wide range of domains, both for individual users and for the commercial area. The most common services that use such a space are billing, sales, budget planning and monitoring. Cloud accounting requires that when transferring to this concept it is good to evaluate the applications that will run in the Cloud and to review internal procedures, infrastructure and training of staff involved, highlighting, last but not least, the need to change mentality and attitude. In this situation, professional accountants need to adopt a new approach to work that simplifies repetitive processes.

A recent study, published by the Aberdeen Group, shows that the implementation of cloud solutions leads to a reduction in the average time spent solving repetitive tasks from 48 hours / week to 4 hours / month (Ionescu et al.,2014). A comparison of the characteristics of the traditional accounting model and the one that implements Cloud can be found in figure no.1

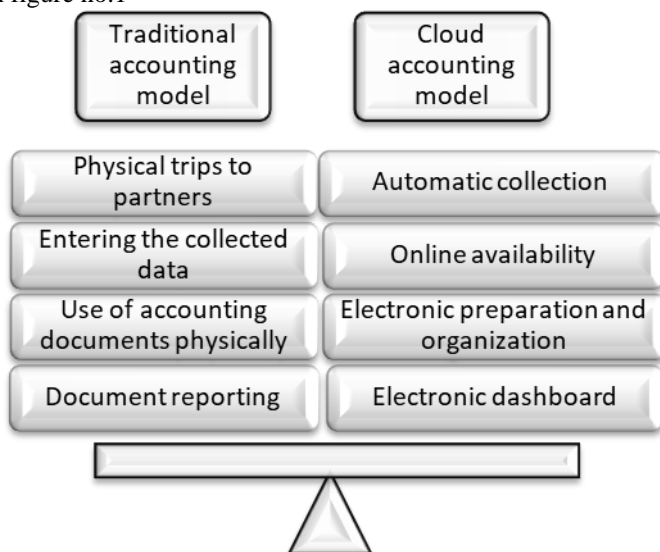


Figure no. 1: Comparison between traditional and cloud flow

Source: Authors' own contribution

The advantages of digitizing accounting offer the possibility of much simpler tracking, within the officially accepted accounting model, namely the accrual accounting model, elements derived from the second model. Such an element can be considered the clear

picture of how much money the economic entity actually has at its disposal, especially from the exploitation activity. One can track the cash flow that is useful in the decision making process. Professional accountants can offer in a shorter time new services such as: economic and financial analysis and based on receipts and payments and provide a clear picture of how much money the business actually has at home, cash flow forecasts, providing more in-depth financial expertise that can be extremely useful especially for small entities that cannot perform it regularly and that can maintain or increase the level of performance. The cash accounting model would be much less accurate than short-term accrual accounting. There is no option to be adopted as the only model but it can transfer the methodology as mandatory additions to the basic model. This is facilitated by the speed of data processing through the digitized system and especially by Cloud accounting which allows centralization and analysis of data much faster through the way of accessing data. Although there is still a general distrust of data transfer in the Cloud, especially if the data is processed outside the business, Cloud technology can be considered one of the major changes in the accounting profession. Automation of data processing in the first phase referred only to the ability to capture information from documents, to process them, to assign them to related accounts and to store them. Currently, the solution to develop the cloud implementation in the specific procedures of the accounting system is to interconnect as many external elements as possible in order to control those transactions through the Cloud (loans, credits, salary payments). It is obvious especially after the specific period imposed by the Covid crisis that online accounting will change the accounting profession. The operation of the accounting model can be highly automated, providing transparent information, which determines that professional accountants perceive their analysis and consulting as the basis of their activity.

The awards for accounting excellence software in the UK have a continuity that has proven in the latest edition to increase cloud accounting and model the technological habits of accountants. Net Promoter Score is used as a performance indicator that measures the difference between promoters and detractors of a product, service, or company. Regarding the products in question regarding the awards for accounting excellence, some of the well-known suppliers such as Wolters Kluwer, IRIS, Sage, Thomson Reuters and CaseWare were overtaken due to the implementations of the cloud elements. The situation of the first 8 producers of accounting software is represented in the figure no. 2.

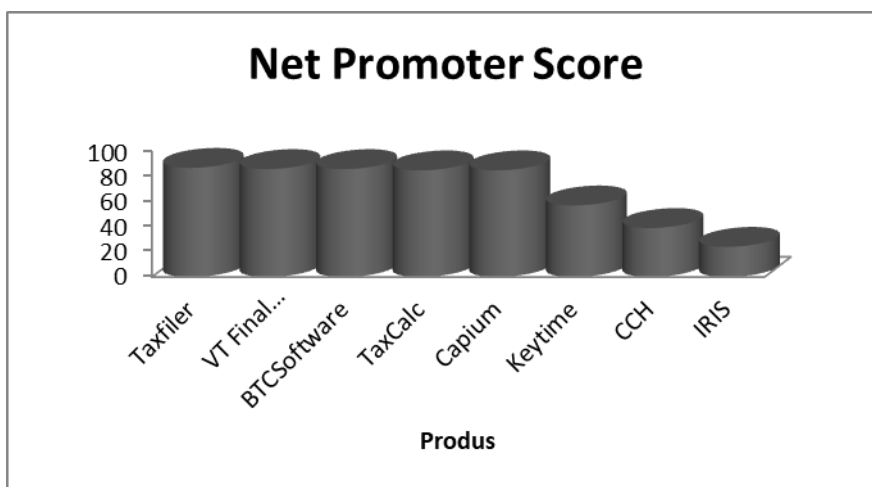


Figure no. 2: Net Promoter Score

Source: Authors' own calculation

Conclusions

Cloud integration in the accounting model involves the transfer to the Cloud of operations specific to the flow of accounting activities. The results consist of the provision of real-time reporting and consulting services on the profitability of economic activity, cost analysis and information for decision-making. The speed of data collection and processing, make the accounting model to provide information in a very fast and secure way from the perspective of IT security, thus reducing the time of data collection for accounting analyzes.

The results prove that Cloud Computing technology, which is already strongly integrated in the business environment, satisfies entities through the advantages in terms of cost and efficiency of new technologies.

A Cloud application in the field of accounting is necessary to give innovative users the confidence, visibility and skills they need to use the cloud in the business entity with the help of tools and principles to support innovation. These entities are obliged to carefully address the needs of users of accounting information, this being facilitated by the adoption of the digital sphere and by the categories of users organized as legal entities. The changes from the IT point of view, in the accounting field, by simply digitizing the traditional processes, must be completed by the development and adaptation of the business to the dynamics and trends from the commercial and marketing perspective. Cloud accounting can be seen as a strategy specific to an economic entity and as any other change that involves policies, tools, procedures, consulting implemented effectively, that facilitates the exploitation of the opportunities that accompany it. Cloud accounting is based on the concept of Cloud Computing, which in simplified terms can be seen as the storage, processing and use of information from remote computers, which can be accessed via the Internet. Cloud Computing users have the advantage of reducing IT costs and enabling the development of many new services.

The integrated accounting model in the cloud will allow stakeholders to access established sections of information to understand and analyze the financial position of an entity at a given time. The cash accounting model assumes that income is recorded when it is collected and expenses are recorded when the actual payment is made.

After conducting this study, it became clear that the market is increasing, even in Romania and the demand and supply of software products will continuously adopt cloud computing services. The supply of Cloud software products is constantly evolving as any market segment in which growing demand determines an equivalence supply.

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