# Accounting in the Cloud Computing

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**Abstract** The paper widely discusses not only threats and barriers, which are associated with the new model of cloud computing. It covers the benefits and prospects for the development of enterprises and all kinds of services inherent in using the cloud computing model. The results of a survey conducted among Polish entrepreneurs operating in the province of Silesia on the knowledge of the concept of cloud computing, the potential of the business model have been analyzed, discussed and compared with published results of previous studies. It has been noted that the use of cloud computing, also in the area of accounting reduces overall IT management costs, and allows large-scale consolidation and optimization of the use of hardware and software resources. It can level the competitive field, by making a large-scale computational resources available to small businesses and other organizations, which would not be able to afford adequate infrastructure otherwise. This trend represents also the ability to equal opportunities in the macro-scale, which means emerging economies, at least for those regions that have created a sufficiently reliable and fast broadband infrastructure.

**Key words:** Cloud computing, accounting, SME business.

## Introduction

Cloud computing is a new model of computation that can bring significant benefits to consumers, businesses and government, creating new threats and challenges. "In the cloud" data processing came to be called a model of the IT systems in which the server installation location does not matter. "Cloud computing" model can be simply defined as the storage, processing and use of data to be accessed over the Internet, on a different location computers. This means that users can request to have almost unlimited computing power that do not require significant capital investment in order to meet their needs and that they can access their data from any location where they are connected to the Internet

This is the Internet which was one of the major factors influencing the fact that globalization of economic processes leading to the integration but also interdependence of countries, societies, economies, characterized by, inter alia, the flow of goods, capital and labor on a global scale is an irreversible process. Also, the internationalization of economic processes and internationalization of enterprises are already a fact. Globalization covers all areas of economic life, but the most advanced is in the area of financial markets. Along with widening of globalization and internationalization the range of users of financial information and their information needs. Taking this into account, knowledge of accounting systems existing in different countries, in particular the differences and similarities between these systems and the directions of their development gains significance. Globalization of the economy and the development of civilization undoubtedly contributed to the processes of harmonization and standardization of accounting. The advantages and tangible benefits from the use of international standards, meant that they enjoy more and more recognition around the world, which is reflected in their direct implementation in national accounting, in such countries as China, Russia, Ukraine and African countries, or the use of selected standards under the modified national regulations, such as in Poland, the Czech Republic or so-called old EU countries. Convergence of national solutions and IFRS took place in South Africa, Japan, Israel, Malaysia, Latin America, especially in Mexico and Brazil. This progressive internationalization of business, integration within the European Union and the creation of international financial organizations forced somehow need to create a uniform system of accounting standards, which would be based on clear and explicit rules that ensured comparability of used solutions and comparability of financial statements prepared in accordance with them at the national and transnational level.

Accounting "in the cloud" is a relatively new phenomenon. Accounting is a field rather conservative and one of the last subjected to modern IT and technological. With the introduction of new solutions in recent years, it turned out that the concept of building own data center is not always effective. Moreover, in the era of globalization and performance of transnational availability of current financial information from anywhere in the world and at any time becomes a necessity. Processing of data on costs, revenues, sales, corporate finance in the cloud enables access to such data limited only by access privileges independently of place and time.

  

In the recent years, both in Europe and in the world a number of studies such as the effects and extent of implementation of the cloud computing model in enterprises, areas in which it is used, the protection of consumers in the EU and the use of digital services in the EU to ensure a single market have been prepared.

## Model of data processing in the cloud - risks and benefits

The World Wide Web provides access to information for all and everywhere, and thanks to cloud computing, computing power is available for everyone and everywhere. Cloud computing, as the Internet network, is the result of an ongoing for some time technological development, which will continue to proceed. In contrast to the Internet, cloud computing is still in a relatively early stage of development. Bearing in mind the rapid implementation of cloud computing in the European Union, it becomes extremely important to adopt new legal framework for data protection and develop uniform standards governing their processing, which is necessary to increase the safety of the provision of this service.

Cloud computing can be seen as a form of reproduction of power and the flexibility to use various forms of outsourcing by companies or organizations. Data processing service in the "cloud" can handle all types of business applications and services, including a full range of business needs. In addition, this service allows businesses to introduce quickly new products to the market, through more effective cooperation, including international partners, as well as the availability of advanced, low-cost computing resources. Business processes run in the cloud allow for close cooperation between many different providers and increase the possibility of cooperation and access to information between different companies within the same organization, which promotes the internationalization of economic activity.

Cloud computing can produce savings and facilitate innovative web services. However, it turns out that the implementation of a wide range of use of cloud computing faces a variety of barriers. The basic condition for exploiting benefits of cloud computing activities, not only for the single market of the European Union, is to fill the gaps in the legal provisions related to the cloud. Main points are to improve conditions for users, solving security-related problems of stakeholders, to encourage the public sector to benefit from the cloud and to support further research and development in cloud computing (Directorate-General for International Policies, 2012).

One of the barriers is the fear of users whether stored and transmitted data in the cloud will not be used or disclosed in unexpected ways. This aspect is one of the fundamental considerations by business owners who want to take advantage of new solutions. Data transmission within a LAN (Local Area Network) gave business owners confidence that their interception by unauthorized persons is minimal and depends only on the level of security on its own network. When moving data across virtual servers, we have to rely on adequate collateral public network and server units service provider. Enterprises and consumers need to be confident and reassured by service providers with complete security of their data. There must be an appropriate high level of confidence on the supplier - recipient line in the field of risk management skills, backed up by the use of cutting-edge solutions in the field of cybersecurity.

Considering the technical point of storing data in the computing cloud, it is worth saying that they are accessible from any computer connected to the network. In addition, in the case of public cloud, are stored together with the data of other clients. Although each user has individual access channels to prevent its data being spied by other recipients, but the fact itself of storing data in the same infrastructure can be worrying. Concern may also result from the fact that we entrust our resources to an unfamiliar company, which admittedly provides the maximum level of security, but against external users. The provider, if he wants, can easily browse our data.[1] National systems of protection of privacy should be predictable, transparent and avoid unnecessary burdensome registration requirements for data and cross-border data transfers for service providers, such as the cloud. Cloud Providers should be encouraged to establish a privacy policy, appropriate for this type of service and the business model they use. Another barrier to wide popularization of cloud computing is the fight against cybercrime, which usually manifests itself in the form of theft of money, goods, programs, data. Computers are also used in the so-called technological or economic espionage. There must be clear and precise legal provisions allowing the fight against criminals in the network, as in the real world. Effective enforcement mechanisms in this field should be ensured.

[1] The Business Software Alliance (BSA) Global Cloud Computing Scorecard ranks 24 countries based on seven policy categories that measure the countries' preparedness to support the growth of cloud computing. Together, these countries account for 80 percent of the global ICT market According to this study, rules introduced in Korea provide the best data protection and the worst – in South Africa. Also, in this regard, there is no relevant data protection legislation in China, India, Indonesia and Singapore.

The problem is the lack of appropriate legislation in individual countries, which are the seats of companies providing cloud computing services, or are transit countries for data transmission. This creates conditions for the development of cybercrime[2].

Area for better regulation in connection with the implementation of a wide range of CC is the protection of intellectual property. The pace of development of services, applications available in the cloud, will depend on providing legal protection to owners and authors of these solutions. Among the countries surveyed by the BSA, the worst results are noted in Brazil and the best in Australia.

A separate issue is the free transfer of data and adaptation of international regulations in this regard. It should be possible for users to move data between different cloud providers, which require both the suppliers and governments to cooperate between each other in the field of data transmission. There is a need to develop standards, such as those already existing in transmission of image and sound.

Implementation of cloud computing in companies requires access to broadband Internet. The exchange of data is so large that the usual links operating in asynchronous ADSL (Asymmetric Digital Subscriber Line) can cause delays in the transmission of packets, which in turn will adversely affect the functioning of the company, which depends on information stored hundreds or thousands of kilometers from the place of running a business. Therefore, successful implementation of cloud computing depends essentially on building the necessary infrastructure networks and eliminate unstable work of network connections (Kobis, 2013).

Software solutions used by companies often come from different suppliers. During the migration to the Cloud Computing model it may well be that particular application is not available in the cloud, or is available in the cloud of another service provider. There may be a need to provide mechanisms for ensuring cooperation between programs or between clouds. These solutions can be very costly, and in some cases impossible to achieve. Although companies offering clouds are doing everything to ensure maximum usability, but it is remembered that, this method of supplying solutions is still in the development phase.

By their nature, cloud computing works across the countries' borders, and the success of its services depends on access to regional and global markets. It should promote trade in computer network, allowing for the sale and purchase of products regardless of the physical location of production and distribution. The promotion of "free trade".

As one can see, there are several problems that must be solved in order to use the model of cloud computing, which, however, has many advantages. By using this solution, users can request to have almost unlimited computing power, they do not require significant capital investment (computer equipment, servers) in order to achieve their needs and can access their data from any location where they are connected to the Internet. With cloud computing costs for users of information technology (IT) can be reduced and the development of many new services is possible. The use of cloud computing means that even the smallest businesses can reach out to larger markets and governments can increase the attractiveness and effectiveness of their services while reducing expenses.

Kobis (2013) among the opportunities and benefits for companies in the Cloud Computing implementation lists:

***No need to invest in their own IT infrastructure*** - this advantage relates primarily to companies that only build their infrastructure. For companies that already have their own IT infrastructure, moral aging of infrastructure is a motivation to transfer resources in the cloud. Cloud computing provides always the latest available solutions.

***Scalability and Performance solutions*** - is related to the daily operation of the company. Software manufacturers argue that traditional infrastructure companies is used to a small extent - between 15 and 20 percent. In contrast, cloud is a solution that maximizes the use of resources, increasing it up to 90 percent. In the case of clouds, the customer decides what computing power he needs in a given period, paying only for the actual utilization.

***Independence from the physical device and place of residence*** - in traditional solutions, where applications are installed on workstations, work is closely connected with certain physical computer. In the case of cloud computing there is a possibility of employing the so-called mobile workers.

***Resistance to hazards (safety and reliability)*** - Cloud Computing uses redundant servers and backup all your data to enable continuous availability and reliability. The system has the ability to automatically and immediately switch back up your data as primary and start the service on the other, efficient servers.

***Savings staff*** - having your own IT infrastructure combined with the employment of highly qualified specialists managing and monitoring the work of individual departments. When you move to a cloud computing infrastructure, the responsibility for ensuring access to services is on the supply side. This enables a significant reduction in IT staff.

[2] Research conducted by BSA shows that a model system to combat cyber crime can be found in such countries as Japan, Germany, France and South Africa not included in the chart, which achieved 9.8 points. Poland in the statement is in an overall sixth place. Also in this category, Brazil occupies the last place among the 24 countries surveyed-1.6 out of 10

The adoption of cloud computing in all sectors of the economy may help to reduce the costs associated with information and communication technologies and, in conjunction with the new digital practices within the business, can improve the productivity, growth and employment (Kretschmer, 2012). The European Union has taken actions to encourage all interested parties to participate in the implementation of these actions. This could mean additional, direct expenditure of € 45 billion for the model of cloud computing in the EU in 2020, as well as the overall total impact on GDP of EUR 957 billion and the creation of 3.8 million jobs by 2020 (International Data Corporation, 2012).

The solution of specific problems associated with cloud computing would mean faster and better harmonized adoption of this technology by enterprises, as well as organizations and public authorities in Europe. This will lead to contributing to the demand for accelerated productivity growth and increased competitiveness of the economy and, on the supply side, the broader market in which Europe becomes a key partner in the international dimension. Thus, the European ICT sector can benefit from the introduction of important new features. Under appropriate conditions, the traditional strengths of Europe in the field of telecommunications equipment, networks and services can be a very effective use of the cloud infrastructure. In addition, the large and small European application developers could benefit from the growing demand (European Economic and Social Committee and the Committee of the Regions. 2012).

Kovachev, Cao, and Klamm (2011) point out in their research on cloud computing in mobile applications. In order to better understand how to facilitate the building of mobile applications based on the cloud, they pursue work in the field of mobile computing through the prism of principles of cloud computing, which can help to build a more advanced mobile applications.

Cloud computing market is growing rapidly in Poland. According to the International Data Corporation (IDC) report "Poland's Cloud Services Market 2011-2015 Forecast and 2010 Competitive Analysis" in 2010, the value of the cloud computing market in Poland, covering both private cloud and public accounted for nearly 7% of the total IT outsourcing market is estimated at more than $ 520 million. At the same time processing in the cloud computing is the fastest growing part of the Information and Communications Technology (ICT) market. Projected average annual growth rate for 2015 is at 33 %. It turned out, however, that these predictions were too optimistic. Although the cloud is extensively promoted and the offer in this regards is growing fast, Polish companies are not as enthusiastic towards the clouds as expected. Therefore, a lower growth rate of the cloud computing market has to be accepted. In the current year among IT spending in Poland, the traditional model of purchasing will still dominate, while spending on cloud model will account for only a fraction of expenditures (International Data Corporation 2011).

Poland has one of the most comprehensive systems of intellectual property protection. However, there are minor deficiencies in the process of enforcement. The legal system in Poland has provisions governing the protection of privacy, electronic signature, electronic commerce and cybercrime. Poland promotes innovation and interoperability. The Achilles heel of the exchange of digital services in Poland is still poor access to broadband network. A functioning, comprehensive strategy would ensure the improvement of the availability of high-speed Internet. The best situation in this area can be observed in urban areas, where thanks to a large extent to the acquisition of EU funds, the rate is at a good level. The situation in most rural areas is far below the European average. Cloud computing has significant economic potential. Enterprises benefiting from this form of services can reduce overall costs of operating systems, and also derive substantial profits from innovation adoption of new organizational processes that increase productivity. A survey conducted in 2011 on behalf of the European Commission by IDC among companies that use cloud computing shows that the savings associated with this amounted to an average of 10-20 % of the cost of IT. Among 36 % of the surveyed companies use of cloud computing has generated savings of 20% or higher in IT spending (European Economic and Social Committee and the Committee of the Regions, 2012)
http://pl.wikipedia.org/wiki/Chmura_obliczeniowa - cite_note-5.

Adoption of developed in the European Union strategy "Unleashing the Potential of Cloud Computing in Europe" is designed to create in effect of 2.5 million new jobs in European countries and impact of € 160 billion to EU GDP annual (about 1%) in 2020 (European Economic and Social Committee and the Committee of the Regions, 2012).

## Internet and globalization

It is known that the Internet is a challenge for traditional theories of regulatory and governmental practices. This is mainly due to blurring of concepts such as territory or sectors. Nevertheless, when we consider the future of the Internet, we see even greater challenges ahead, with many questions about privacy, security and Internet governance. It is also the moment to initiate a global discussion on the better, more efficient and more commonly used in business Internet. All these issues concerning the future of the Internet are crucial for Europe

and the rest of the world. The European Union has every right to be a key player involved in deciding the future of the Internet.

The Internet is the basis for the whole economy in a growing part of the world. ICT contributed to 40% of overall productivity growth in the economy in 1994-2004. The network effect enables acceleration and global diffusion of innovation. Subsequent changes in the economy, as well as in the lives of the citizens were remarkable. The variety and multitude of applications and business models supported by the Internet also largely affects its nature and structure (Internet traffic increases by 60% per year). You could say that the Internet infrastructure has become mature and exhausted its innovation and growth potential. We are at the beginning of a new phase of the Internet, which will drive innovation and growth. However, you have to think about what to do to unleash this potential, which is even more necessary in times of economic downturn. To get out of the economic crisis, we need to encourage stable and sustainable growth of business in the goods and services that respond to the real needs of the market with high value. Europe needs to make full use of the economic potential of a single market, which is still locked in fragmented national markets. Internet-based services should be used primarily, because their nature has a cross-border dimension (Reding, 2009).

The global nature of today's marketplace requires active participants in the internationalized business. Historically, companies compete with each other on the plane up to two performance goals, such as price and quality. However, competition in existing markets is not limited only to control of demand through price and quality but also the flexibility and speed of response. Therefore, today's organizations must compete against all the competing goals.

Economic globalization and internationalization are key factors for integrating suppliers, partners and customers within and outside the country, and the goal is to achieve integrated supply chains. This can help in the implementation of technology and information systems such as enterprise resource planning (ERP). Yusuf, Gunasekaran and Abthorpe (2004) studied the cases of successful and unsuccessful implementations of technology and information systems in order to achieve a coordinated and integrated supply chain. They found that the causes of failures are often associated with poor management of the implementation process. The emergence of various information technologies such as the Internet, electronic data interchange (EDI) and Web facilitate achievement of an integrated supply chain, which allows for flexibility and rapid response to changing market requirements.

Business processes in the cloud allow to combine a number of different suppliers and increasing cooperation between different departments of the same organization. Lack of adequate infrastructure in place is irrelevant (including emerging economies in macro scale, at least for those regions that are sufficiently reliable and have fast broadband infrastructure).

## Accounting in the cloud

Accounting for many centuries has been considered a discipline that did not give up fashions, and changes were introduced very carefully and in an evolutionary way. Prudent approach to changes contributed to ensure the stability of the accounting system and the ability to perform the basic function of which is to provide information to help the settlement of the ongoing management of their activities. In recent years, the pace of development accelerated accounting. Harmonization processes tend to be replaced by processes of standardization on a global scale. The current changes in accounting represent a rapidly advancing standardization processes rather than harmonization. Critics of the current processes of standardization propose a different solution, involving the harmonious co-existence of many (few) sets of standards and allowing the market to decide when and what standards should be used to prepare the financial statements. In the process of harmonization in the sense one can not talk about the process of approaching a single, universally accepted set of standards (Dobija, 2009).

The milestones of technological progress were virtual solutions such as the development of the Internet. An important element is to increase awareness among entrepreneurs' advantages of outsourcing, or outsourcing of certain services to external partners also in the field of accounting. Accounting will also be aimed in the direction of the "in the cloud" data. Systems available on the network will enable it - the world is excited about a system xero.com service that provides on-line accounting, and in Poland virtual mKsiegowa.pl. The factors reinforcing this trend will be publicly available service on the Internet and the integration of accounting systems with those services. One of the more advanced services system of this type is eDeklaracje. Submission of tax returns via the Internet will not only be more and more popular, but also will become easier. Instead of manually filling out a PDF form, accounting software will be equipped with the module sending it online.

An important issue is the integration in the area of payments. It is about not only downloading bank statements, but also direct integration with online payment systems. There are no obstacles to record electronic

payments automatically. Associating payments taken from the on-line system with the sales document is usually much easier than recording a bank statement taken from traditional banking.

The attention also should be paid to the aspect of telecommuting. On-line accounting no longer requires regular coming to the office in order to perform their duties. One can easily reconcile the private sphere of work. Organization of the accounting department, where for example every employee has the right to a one day work from home, is not difficult, with a program running "in the cloud". In large cities, it could mean saving 1-2 hours a week that you have to spend on commuting. Ease of integration of "in the cloud" systems lead to a cheaper solutions and are now available to small businesses.

## Results and discussion – analysis of cloud computing in polish SME businesses

To examine the extent of the interest of small and medium-sized enterprises in the region of Silesia a survey among entrepreneurs mainly from the area of Czestochowa has been conducted. The questionnaire was sent electronically to over 1,000 entrepreneurs, but responses were provided by less than 10%. 134 responses were received, which were given mainly by women (62%) aged 26-40 years (65%). 26% of respondents were in the age range 41-60 years. Most of the responders had a degree in economics - 62%, and the remainder (32%) technical education. Respondents most often pointed to the use of the Internet in business in the form of e-mail and having its own website. Communication with the public administration via the Internet becomes increasingly common.

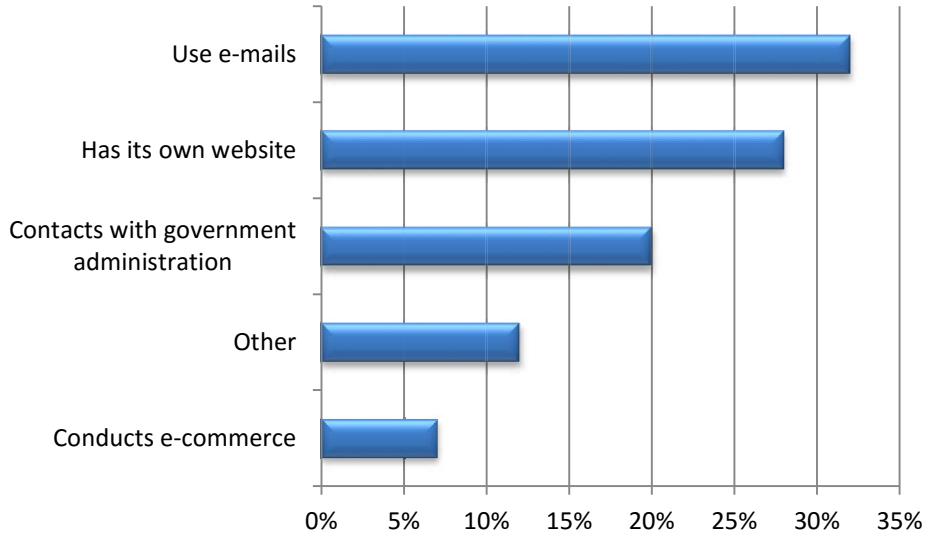


**Figure 1:** The use of the Internet in business

Most of respondents indicated accounting books (62%) and the income and expenses tax book (30%) as a kind of accounting records kept at the company. Among the surveyed companies, accounting is carried out by the internal financial and accounting services for 42%, by a specialist certified accountant at 28%, and by an owner at 20%. Only 8% of respondents outsourced the maintenance of accounting records to an external accounting office. Almost all respondents (96%) use computer programs for financial-accounting and payroll (80%) of their companies.

  

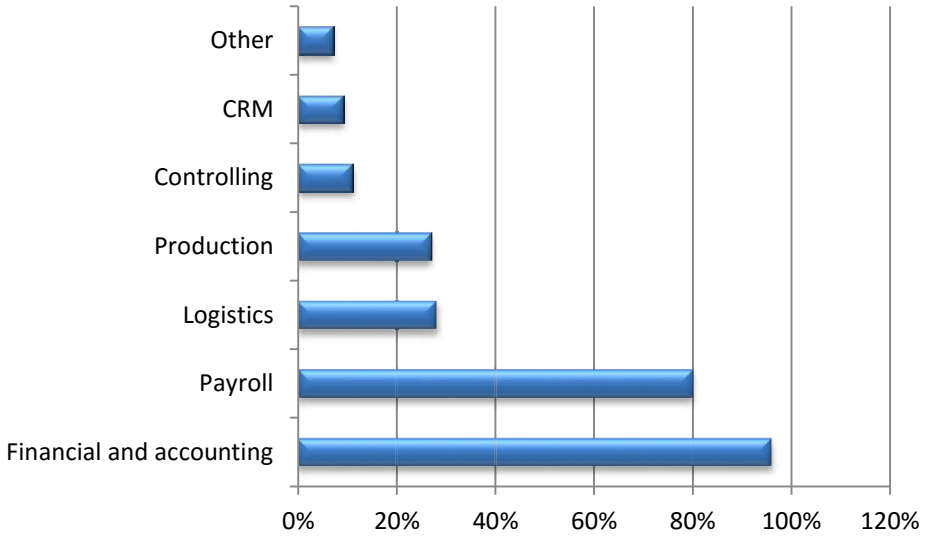


**Figure 2:** Area of business supported by computer programs

Perhaps because of the difficult economic situation at the macro level and because of the uncertainty, companies do not plan to change or purchase a new computer system in the next two years (62%). Only 16% of respondents expressed an interest in the subject. The remaining 22% of respondents were not decisive. In addition, when it comes to planning implementation in the Cloud Computing model 43% of the respondents answered that they do not plan any such actions, and only 3% of companies participating in the survey currently uses this form. The majority (53%) had no opinion on the subject, which may be due to the small knowledge of the essence of the model, its benefits and risks associated with it. Most companies interested in Cloud Computing model expects that it could be used in the area of finance and accounting. It is significant that the question of what might constitute a barrier to the implementation of Cloud Computing more than half of the entrepreneurs indicated a lack of knowledge of issues related to this model. In the second place, they pointed concern for the safety of the stored data

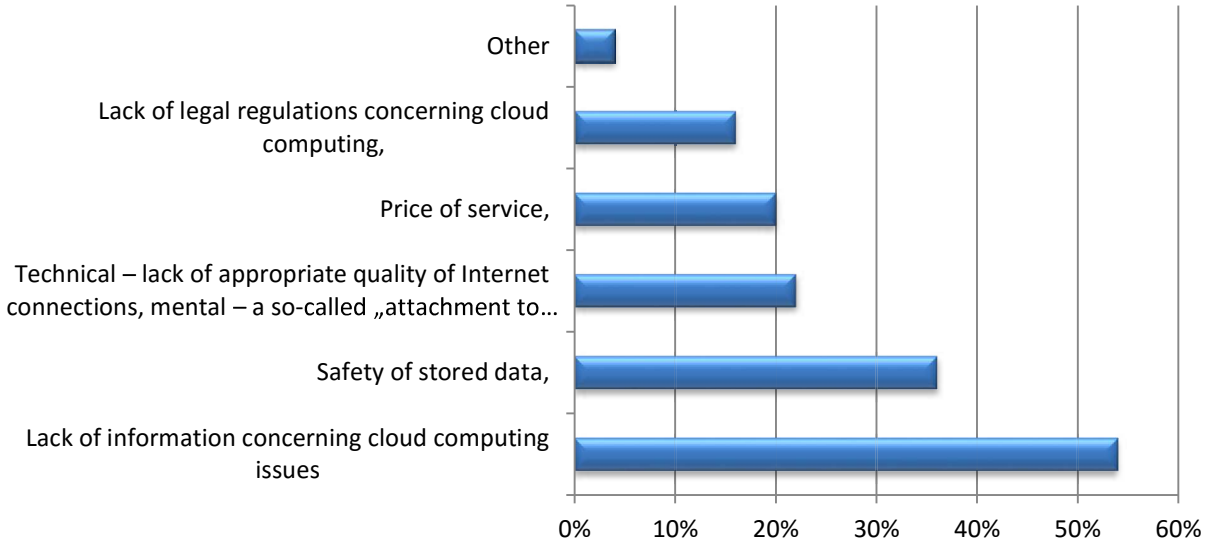


**Figure 3:** Barriers to the implementation of Cloud Computing

Among the benefits of using Cloud Computing primarily saving time, space and money associated with the construction, organization and maintaining their own server, storage devices, power and air conditioning, as well as the purchase of software licenses were indicated. 31% of respondents pointed at benefits of cloud computing in their availability and tie with the comfort of mobility. Resources that are leased by client are available almost anywhere, there is a possibility to perform the tasks by employees who are outside the company at the time.

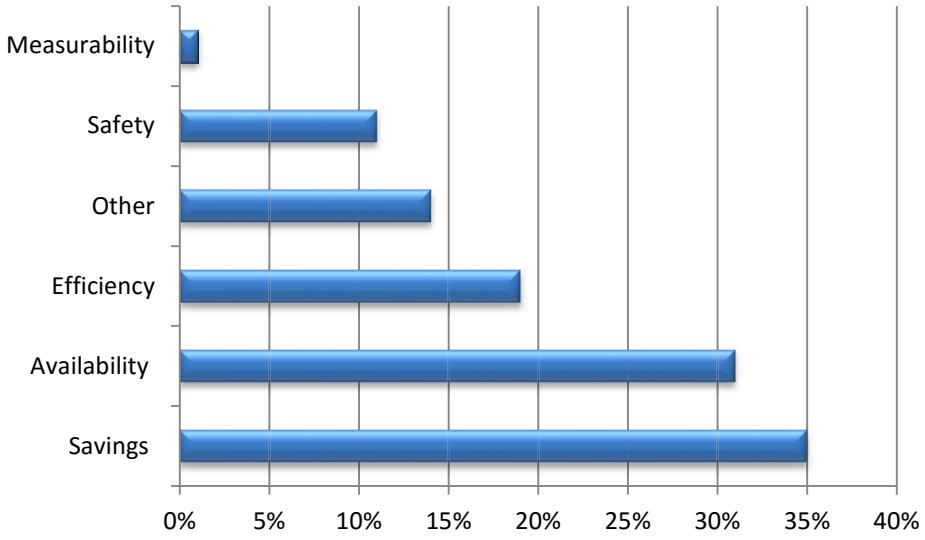


**Figure 4:** The benefits of using Cloud Computing

Interpretation of obtained results of the survey will be undoubtedly easier if one takes into account the information about the size of investigated companies measured by the number of employees. Among the respondents 58% of these were small businesses employing up to 50 employees.

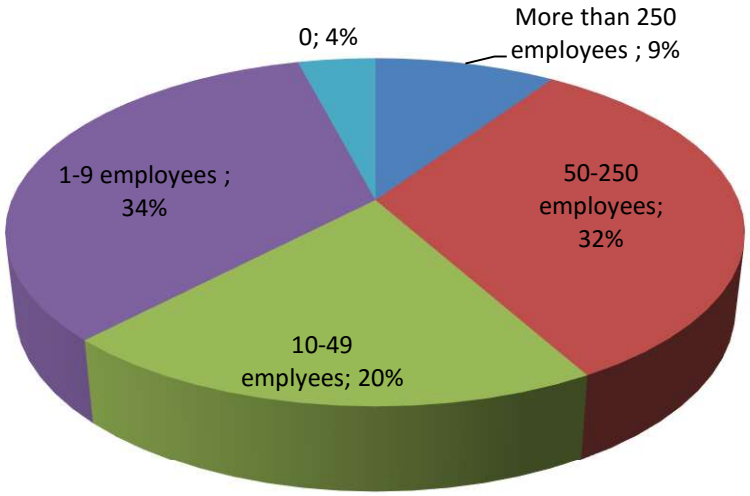


**Figure 4:** The size of investigated companies measured by the number of employees

Results of the survey conducted by the Cloud Industry Forum (CIF ) in the UK in 2012 look completely different. They show that even then, organizations in the UK were more satisfied with the services based on cloud computing. Of the 250 organizations surveyed in the UK 61% claimed that they currently use the cloud (compared with 34% in January 2011). The private and public sectors use the cloud in the same way. However, only 52% of small firms employing less than 20 employees have adopted cloud services, compared with 68% in

larger organizations. It turned out that one in four companies, which do not benefit yet from the cloud is not going to use it within the next 12 months. 34% of organizations in the public sector and 30% of small and medium-sized companies said they intend to take action in the cloud in the coming year. Studies have shown much greater enthusiasm among large enterprises, though one would think that small businesses would benefit from the chance to save money by using Internet solutions. Another study conducted by VMware showed that 59% of IT workers said they are hesitant to purchase in the cloud. As reasons for their hesitation, respondents mentioned the issue of security in the cloud, restrictions in previously signed agreements, as well as a lack of understanding of cloud technology.

The average company in Latin America uses cloud computing in 39% of all applications. The companies of the Asia- Pacific 28% of applications process in the cloud, but in Europe and the U.S., the percentage of companies using the cloud is even lower (12% and 19%) ("Asia Pacific and Latin America firms", 2012).

Within a few years, online accounting – accounting in the cloud - will cover 50% of the total accounting software market. Research of IDC firm confirms such conclusion. In the 2011, online accounting covered 11%, but IDC believes that this percentage will increase to 50% in 2016 among enterprises employing up to 100 employees. According to IDC, the rapid development of online accounting market forces accountants to include these changes in their businesses. There are new apps for integration of accounting systems with Microsoft Outlook. They allow for example the integration of the accounting system based on the cloud with Microsoft Outlook e-mail, so that products and services can be invoiced directly in Outlook ("New app to integrate E-conomic with Microsoft Outlook", 2011). What began as cloud-based applications, such as CRM and HR software now includes office automation, marketing automation software and financial accounting. In addition, supply chain management and solutions industry-specific/vertical soon will have their applications.

## Conclusions

Today's buyers expect software solutions that work with the modern workforce and mobile workers. Cloud solutions meet this requirement. CFOs often decide to adopt financial and accounting applications in the cloud. Financial and accounting software in the cloud may in future completely replace the use of software at the headquarters.

The benefits of cloud computing are too large to ignore. First, facilitation of geographical expansion, the applicability of mobile solutions and ease of integration are the basic benefits referred to. The possibility to constantly update products, which are available in the cloud (which do not require a large commitment of IT), and security of data recovery and low capital costs (such as servers) are beneficial as well ("How I Learned To Stop Worrying & Love Cloud Financial Software", 2013).

In terms of policy instruments, the main problems and risks of cloud computing can be divided into three basic categories. First of all, the legal framework that must cover the solution is the issue. The main problem is the large number of rules, often contradictory and in different ways, dependent on the country, which protect the interests of customers in terms of compliance and accountability; enforcement and pursuing claims. It is also important that other model contracts (terms and conditions) associated with Cloud computing service (Service Level Agreements; End User Agreements; privacy terms and conditions; clarity and transparency) and contracts with end-users ensure transfer of interoperability (vendor lock-in).

Small business does not need expensive software to lead the general ledger and perform basic accounting tasks. Simple accounting applications in the cloud are created to help small business owners to organize and manage their IT operations. Since this is an online accounting service, one can access business data anywhere on a mobile phone or a desktop PC and his data is safe because there are backups. Anxiety and concerns rises in terms of possible access of third parties to data of entrepreneurs (owners of servers and personnel operating them).

One of the uses of Cloud Computing in accounting for small and medium-sized enterprises are emerging recently "in the clouds" accounting offices, which are modern accounting solutions available anywhere. These are accounting offices, which do not need to be personally visited. It does not matter where physically clients and offices operate, and on what basis companies run accounting.

Although the appropriate action to promote and encourage the further development of cloud computing are already included in the program for Europe, in Poland use of services of accounting firms is still negligible. It is necessary to remove loopholes in the legislation, to ensure, inter alia, full harmonization of data protection rules across the EU, full transparency of contracts for the provision of cloud computing services, unified system of border protection of intellectual property rights, etc. It is appropriate to conduct comparative empirical research across the EU 27 on the user experience of cloud computing, their behaviors and perceptions risk as also noted earlier.

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