



03.02.2021

Modern cloud-
based business
management

CGI

Modern cloud-based business management



Tomasz Mazurek
CLOUD ARCHITECT

The necessity of remote work and efficient management in the face of the crisis caused by the pandemic leading to a shift of organizations to the cloud, streamlining processes and development of a kind of independence from what is physical has become not only mere optimization, but an indispensable element of the new reality of many companies from different business areas. What is a cloud, what benefits does it bring us, how to implement it and, more importantly, whom to entrust with such a relevant task? We are answering the five most important questions with the cloud in the lead role

What is a Cloud?

Every day we use many such solutions in a rather moderate form, although the possibilities are almost limitless. The cloud is nothing more than a vast network of servers scattered around the world, that act as one organism. These servers perform a variety of functions: they store and manage data, operate applications and

deliver content or services such as video streaming, email, office software or solutions such as web applications, BI and big data. Instead of using data and files physically stored in the memory of a local or personal computer, we can access them from any Internet-connected device, anytime and anywhere.

What are the benefits of a cloud?

The advantages of using a cloud are numerous, but I will focus on those most important, from a business point of view.

- **Security** – migration of data to a cloud means a significant change in the approach to securing sensitive information in an organization, such as a large company. We no longer need to focus on the technical aspect of the subject, but we can focus our attention on what really matters in these issues, i.e. what level of security we want to ensure our company. How to authenticate users? Is a password sufficient? How do we configure access to our services in the cloud? How often do we want to update them? Do we want the data to be encrypted, and if so, how? All these functionalities are already available in the cloud and all we need to be concerned about is their correct configuration.
- **Independence from hardware failure** – when we migrate to the cloud, maintenance of the hardware infrastructure is no longer our responsibility. Disk or software failure ceases to be a problem. We become independent from server failures, we have access to our data or applications from any location provided with Internet access.
- **Cost optimization** – moving an organization's infrastructure to the cloud enables maintenance related costs reduction. Owing to the scalability of cloud services, we can pay for the actual resource consumption such as hard drives, virtual machines or databases. In case of intensive periods of resource data use, for example, we can temporarily increase the number of servers that process our data and thus meet the expectations of users. This means that we only pay for the actual consumption of cloud resources, and we are not forced to maintain the



At CGI we have experience from many projects in the banking and financial sector, and therefore we are already aware of the sources of potential problems.

infrastructure throughout the year. On the other hand, owing to cloud use, we can afford to use solutions that were otherwise only available to the largest of companies. Advanced data processing solutions (big data), machine learning or data visualization and reporting are available at any time and can be used according to individual needs.

- **Cost transparency** – cloud use allows for accurate allocation of costs to specific applications and functionalities. We are able to accurately monitor the expenses relating to each of our applications, with a breakdown by space used on hard drives, computing power used or database consumption.

How to start working with the cloud?

We have full cloud transparency and its advantages. So how do you lead your organization into the cloud? The public cloud and the use of infrastructure in this way is a relatively young practice compared to the use of own infrastructure. Especially in such industries as banking and finance, where appropriate data protection is required by Polish and European law, great emphasis is placed on proper preparation and protection of the cloud during its implementation. Here, a partner company such as CGI becomes an invaluable support and can guide a company safely throughout a very complex process. From the preparation of a cloud migration strategy, through implementation, to the maintenance and further development of the platform.

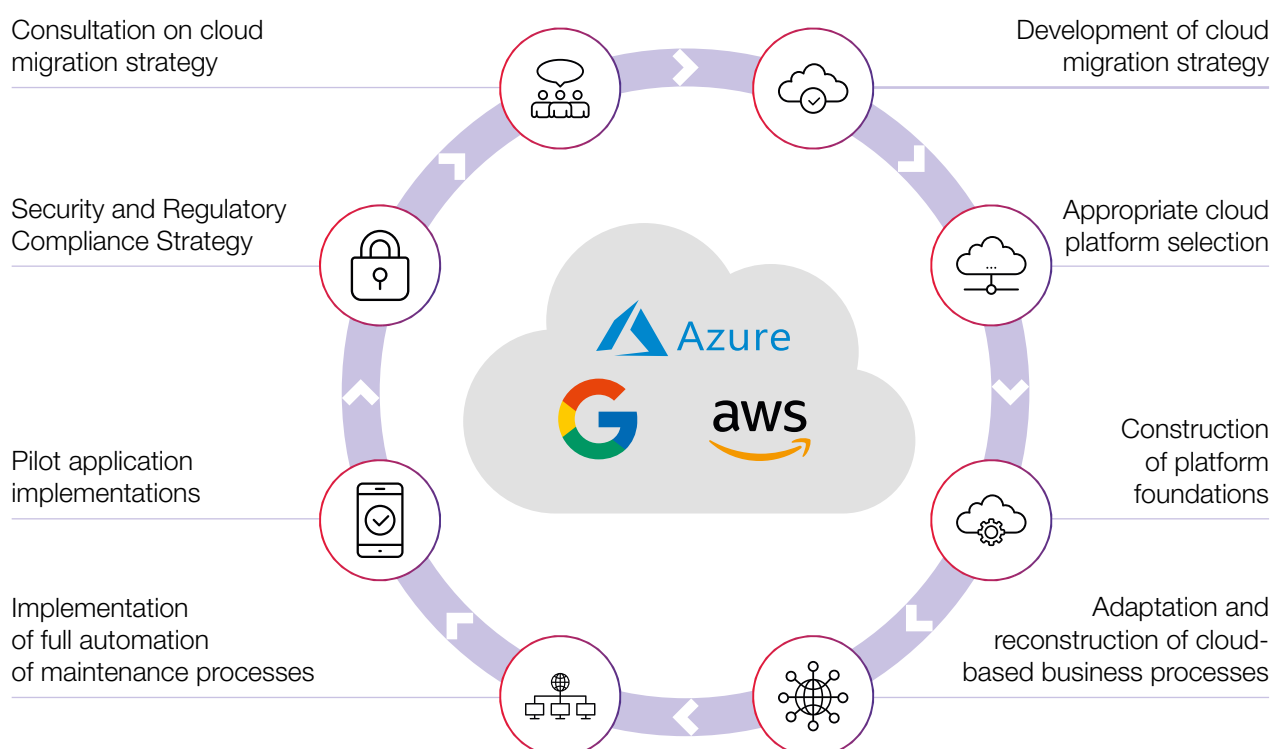
We have stable processes and frameworks in place enabling effective planning of cloud migration strategy, we pilot first implementations, maintain applications and are in charge of further development of the cloud platform. Our knowledge and the solutions we have developed allow us to significantly shorten the cloud implementation process, as opposed to the traditional approach.

What is the role of a “cloud” partner?

At CGI, we handle the entire process of transitioning to the cloud and thus take full responsibility for it. What distinguishes us is our experience with large-scale implementations of this kind, in financial institutions in Europe. The right choice of technology and, most importantly, a public cloud provider are extremely important in such projects. For this reason, we do not focus on a particular cloud, but select the right provider according to the needs of the client and its organization. At CGI we have experience from many projects in the banking and financial sector, and therefore we are already aware of the sources of potential problems. We have stable processes and frameworks in place enabling effective planning of cloud migration strategy, we pilot first implementations,

maintain applications and are in charge of further development of the cloud platform. Our knowledge and the solutions we have developed allow us to significantly shorten the cloud implementation process, as opposed to the traditional approach.

Communication is the most important factor in such a project. That is why we place great emphasis on a spirit of partnership and conversation. Our consultants support the project with their knowledge and experience in terms of transitioning to the cloud, the technologies used or legal restrictions. In such a process we always try to involve the client to take up a discussion on expectations. Each implementation is different from the previous ones due to the specificity of a given application and the business knowledge behind it. It is precisely this type of information that comes from the client that is crucial for every implementation. Thanks to that conversation we are able to determine what is the purpose of the implementation, what

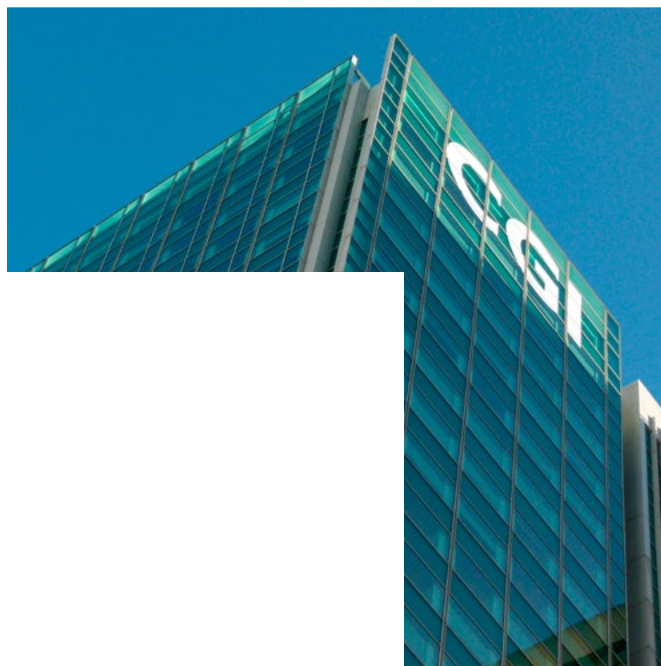


current problems we can fix and what are the limitations tied to the implementation of new solutions. This dialog is maintained throughout the entire cloud implementation process. From planning and strategy development, legal consultations, identification of the first possible applications to be migrated, through selection of the cloud platform, platform preparation in terms of infrastructure, data transfer, and on to their implementation in production as well as further maintenance and platform development.

At CGI, we also specialise in advanced data processing or analytics solutions. We have completed many implementation projects for data warehouses, systems using machine learning models or reporting systems. The choice of technology is a very important stage in any project of this type. For this reason, we often offer our clients to test a given solution in the form of a short PoC (Proof of Concept), which allows for the assessment of the implementation of a given issue using several competitive technologies. This makes it possible to assess and show which technology will be the most suitable in a given case. We also know how important data security is and how many legal regulations involve transferring such valuable information to the cloud. For this reason, we offer assistance in cloud migration not only from a technical but also from a legal point of view.

For more information on migration to the cloud, please contact **Cezary Małkosa** cezary.makosa@cgi.com





Who is CGI?

CGI is first and foremost more than 40 years of consulting experience. We are present in 40 countries, including most European countries, Canada, the USA, Australia, India and Brazil.

In our 400 offices, 78,000 consultants work with a focus on proactive problem solving for our clients. We have been present on the Polish market since 1996. During this time, we have grown to become a leading consulting company in the IT industry.

We work closely with our clients, making it possible for us to understand their needs and to adapt the most effective solutions in the field of consulting, system integration and outsourcing for companies from the telecommunications, financial and insurance sectors.

Our commitment: Insights you can act on.

[cgi.com](https://www.cgi.com)

