WHITEPAPER

CLOUD VS ON-PREMISE

WHICH PLATFORM FITS
YOUR ORGANISATION BEST



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ARE YOU READY FOR THE CLOUD?

You probably hear more and more about working in the cloud. Especially now that working from home has really taken off due to COVID-19. But what does it mean to work in the cloud? What benefits does it provide? Is it safe? The cloud has many advantages, but there are still some uncertainties about cloud computing. There are several cloud options. How do you know which one is right for you and your business? Is the cloud something for your business at all?

In this whitepaper we talk about the differences between cloud and on-premise and answer the most frequently asked questions about working in the cloud. We also zoom into the various cloud options so that you have all the details you need to make an informed decision.

I often get questions when I discuss the possibilities of the cloud. "Do I know where my data is?" "Is my data safe and secure?" These are all very good questions that we will aim to answer in this whitepaper.



- Paul Broderick, 4PS Business Consultant

CLOUD VS ON-PREMISE

What's the difference?

Are you unsure whether on-premise or cloud is a better fit for your company? In this section, we will have a look at the differences.

ON-PREMISE

At one end of the spectrum, on-premise is the IT term for locally installed software. When you opt for an on-premise solution, hardware and software will run in your business premises and you are therefore responsible for the availability and maintenance of the software and systems. This means that you are responsible for purchasing and maintaining all hardware. You are also responsible for the updating and upgrading of your software.

Advantages:

- Not dependent on the Internet.
- ✓ Own equipment.
- ✓ Security in your own hands

Disadvantages

- × Investments in equipment and licences
- × Operational costs for your own IT department
- old X Disruptive maintenance of hardware and software
- **x** Scaling up requires investments
- × Risk of security vulnerabilities

WORKING IN THE CLOUD

At the other end of the spectrum, when you work in the cloud, you purchase software from a supplier via the Internet, as a service. The supplier is responsible for the availability and maintenance of the software and systems. If you choose the cloud, there are several options. Of course, there are other solutions in between on-premise and pure cloud. These options are explained later in the whitepaper.

Advantages:

- ✓ Data is professionally secured
- ✓ Always real-time insight into data
- ✓ No major investments in hardware and licences required
- Updates are carried out automatically
- ✓ All-inclusive price per month
- Only pay for the number of employees who use the system and the required storage space of the system

Disadvantages

- × Always need an Internet connection to work.
- × Depends on a third party



CLOUD VERSUS ON-PREMISE

The 5 biggest differences explained

1. DIFFERENCE IN COSTS

When you work on-premise, you pay costs for customisation, implementation, hardware, IT personnel, training, but also the costs of a server room and its management and security. You may also be faced with unexpected costs. For example, when you have a malfunction that is not covered by the standard maintenance contract. When working in the cloud, you pay a fixed amount per month, where you only pay for the capacity that you actually use. As a result, you do not have to make a large investment in one go, but shift these investment costs to operational costs.

2. MAINTENANCE AND UPDATES

There are also a number of differences between the cloud and on-premise when it comes to maintenance and updates. In general, on-premise infrastructure is more labour-intensive. In an on-premise environment, the infrastructure must be renewed or replaced every few years. When necessary, you will have to make another investment in the hardware.



In addition to management and maintenance of the hardware, on-premise also deals with software updates that are installed manually. Your supplier or IT administrator must do this. If you opt for a cloud solution, you no longer have to manage the hardware yourself. This is taken over by the cloud supplier. In addition, you can receive automatic updates from the cloud supplier, so you no longer have to perform updates yourself.

3. SCALABILITY

A big difference between working on-premise and in the cloud is the amount of flexibility in terms of upscaling and downscaling. With on-premise software, you make an investment in advance in the capacity that is needed at that moment. As your organisation grows, you need to make additional investments. When your organisation shrinks, you may be paying for non-users. This works differently in the cloud. You can easily expand the available capacity. If you have more resources you can expand capacity, if you need fewer licences you can adjust the number of licences per month. This means that you only pay for the functionality or capacity that you actually use.

"If you opt for the cloud, your data will be with a server supplier or in a data centre. When using the Microsoft cloud, the data centre is Microsoft Azure. The advantage of working with Microsoft Azure is that the servers are 99.9% available. It also offers continuity in the field of cooling, power supply, Internet connectivity and maintenance." - Paul Broderick, 4PS Business Consultant

4. FLEXIBILITY AND ACCESS

There is also a difference in the flexibility and access between working on-premise and in the cloud. With on-premise, you often have limited or no access to business applications and documents outside of your own office. You can give access to users outside the office via a VPN connection, but the security of this is the responsibility of the customer. The flexibility of the cloud is that you can work with the software anywhere, anytime, as long as you have an Internet connection.

5. SECURITY

Because cloud services can only be accessed via the Internet, this entails security risks. However, the data centers where the cloud servers run have maximum security. Cloud providers and data centres specialise in managing cloud solutions. They have security procedures in place that other companies themselves could not achieve. The security of servers on-premise is often a lot weaker.

"When I discuss the possibilities of the cloud with customers, I regularly get questions about security. "Do I know where my data is? "Is all of my data properly secured?" Very understandable questions. Good to know: the requirements that Microsoft sets for the security of its data centres are much, much higher than an average company can achieve. Microsoft complies with 92 compliance standards in total, from global, to regional, to industry-specific. The cloud is typically therefore much safer than when a customer uses the software on-premise."- Paul Broderick, 4PS Business Consultant



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CLOUD PLATFORMS

The different cloud types

In addition to on-premise, you can choose from different types of cloud solutions.

The most common are: laaS and SaaS. At laaS (Infrastructure as a Service) you outsource part of the hosting. An external party takes care of things such as networking, storage and servers. Your organisation is responsible for configuring and maintaining the environment that runs on this infrastructure. With SaaS (Software as a Service), the entire application is managed and maintained by the supplier of the application.

Every business is different and some may not feel very comfortable knowing that cloud providers will decide when a new version of the software will be installed on their behalf. If you work with an on-premise solution, you are already used to the convenience and control you get by setting your own update schedule. With cloud that's not always the case but there are certain cloud options that make this possible. Would you like to know more? Read on as we list the main differences between on-premise and common cloud options.

ON-PREMISE

If you work on-premise, you are responsible for the hardware and availability thereof. You can buy or rent this hardware. The update schedule at on-premise is flexible: you are responsible for application management yourself. You also have the choice of your own hardware or the hardware of a data centre.

IAAS

If you choose laaS, you choose a cloud solution in which the management of the hardware (such as servers and network equipment) is outsourced to a hosting party of your choice. You keep the management of the operating system, database, applications and data yourself. A big advantage is that hardware no longer has to be purchased by your organisation itself, but that a subscription is taken out based on usage.

SAAS

When you choose SaaS, the chosen supplier manages and maintains the entire application. So everything is taken care of: infrastructure, operating system, management and development - everything is in the hands of the supplier. Updates are organised by the supplier and you don't have to worry about resource allocation. All you need to do is set a date for the update to be carried out automatically.

ON-PREMISE

Perpetual or subscription licence.

Own hardware:

- Self-control
- Planning in your own hands
- Arrange IT resources yourself

Data centre:

- Scalable
- Update schedule is flexible: you are responsible for application management.

IAAS

IT infrastructure is stored in the data centre of the cloud administrator.

You maintain control over the operating system, the database, applications and data.

Update schedule is your responsibility.

SAAS

IT infrastructure is stored in the data centre of the cloud administrator.

Supplier manages and maintains the entire application.

Updates are regular and quick and easy to implement. They are fully coordinated by the supplier and you will always benefit from the latest software functionality.

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DIGITISE YOUR BUSINESS PROCESSES

How do you go about it?

There are a few steps to go through when digitising your business processes and moving to the cloud. Where do you start? In this chapter we list the most important steps.

Step 1. Determine the goal of digitisation

Determine what you want to achieve with digitisation and see where the biggest pain points are within your organisation. These are the first two things to consider in the digitisation process. You don't need to go into far too much detail and create long documents listing pain points. Keep it short and to the point. This is essential for a successful implementation.

Step 2. Make sure you prepare well

When it is clear what goal you want to achieve with digitisation and what pain points there are within your organisation, you can proceed with the preparation. This also applies to the implementation of new ERP software. For example, you can think of arranging focus groups within your organisation, ensuring communication and collaboration are going well between them.

Step 3. Select a suitable software partner

Finding the right software partner is a prerequisite for success. Do your research, speak to other businesses who have already gone down the digital route and create your shortlist of preferred software partners. If you want to move to the cloud, choose a software partner who can offer you this option and can inform you in detail about the possibilities of working in the cloud.

Step 4. Implement the software and train your staff

The time has come, you did all the preparations and found the right software partner. The implementation process begins! If you have selected a software partner with experience in your industry, the process is likely to be straight-forward and objective-driven. It is important to keep everyone involved focused and ensure key milestones are achieved during the process.

Step 5. Continue to optimise and develop after implementation

The implementation process is over and the software is fully implemented. But even after the software implementation process is completed, it is important to continue to optimise and develop. So think about how you keep the knowledge within the organisation, carry out updates and developments and ensure that new employees are properly trained.

This whitepaper is written by 4PS. 4PS Construct is the end-to-end business management solution tailored for the construction industry and is unique in many ways. With over 20 years of experience in the industry and over 600 ERP implementations we are passionate about empowering construction business leaders to have better visibility and control on project costs and margins. Would you like to know more about this software and the possibilities in the cloud? Please contact one of our sales managers.





About the author

Paul Broderick | Paul has developed a keen eye for seeing specific customer requirements and recommending solutions to deliver business benefits and returns-on-investment. In the last three years Paul has focused this experience and knowledge specifically on the Construction industry, where digitisation is now the hot topic in IT, which has evolved and matured to become most relevant in today's construction industry.

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