The NobelBiz Guide for

On-Premise vs. Cloud Contact Center Solution:

Benefits and Challenges

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Contact Center Technology

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Introduction

Cloud Computing is increasingly being described as the new paradigm of modern IT. In this guide, our objective is to understand the mechanisms that drive the decision to implement a Cloud Computing solution in organizations. This e-Book adopts a qualitative methodology, based on a simple comparison between on-premise infrastructure and cloud technology. The cloud-based services industry is growing strongly and consistently, but the on-premise delivery model still reigns supreme, even after the unplanned work-from-home experiment from the last year and a half. But the line between the two models started to fade, as many on-premise contact centers also incorporated a cloud component. Although cloud-based technologies and options are available, many established companies are frequently not able to immediately transfer their whole IT infrastructure to the cloud.

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After all, it's not that simple to weigh the entire spectrum of options and to take an educated choice about which service and deployment model is ideal for your organization, with the ever-increasing variety of business software solutions.
In addition, our method of working and communicating is clearly changing as our mental approach to business technology is becoming increasingly common due to new digital technologies. Many organizations recognize that it makes excellent financial sense to equip staff with the newest technology since efficiency and productivity are also increased. However, in the decision-making process, many variables must also be taken into consideration.

In this e-Book, we sought to address the differences between the on-premise and cloud models by evaluating and describing the advantages, variances, and options for each infrastructure. We wanted to clarify any misunderstandings and help you make the right decision for your organization.

Why do businesses still use On-Premise contact center software?

On-Premise software is installed and executed on computers that are located on the user's or organization's premises. Until not so long ago, the On-Premise was the standard for almost all call centers around the globe. The servers are located on-site; you buy and own all the necessary hardware and software licenses.

Just like Cloud, the On-Premise model has its own advantages:

- **Buying an ongoing license**

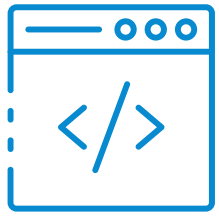
  If a company plans to use On-Premise software for a long time, it may be cheaper than using a cloud solution. This is because most cloud systems often require a monthly subscription. However, compared to a cloud option, companies that opt-in for On-Premise have to bear a cost-effective annual maintenance.

- **An internet connection is not necessary**

  On-Premise solutions do not require a fully functioning Internet connection. Even when their online connection is disrupted, employees may readily access their data and tools and can still make or receive calls. However, all the other communication channels (email, social media, VoIP, webchat, etc.) will of course be down for as long as the internet connection is down.

- **The data is not stored offshore**

  Another benefit of On-Premise solutions is that data is not saved on a remote server. Therefore, companies choosing local servers are fully responsible for data protection. Companies that wish to guarantee that their data is secret often choose not to host the information on an external server, even if cloud solutions are normally quite safe.



The Drawbacks of On-Premise call center technology

- **Additional IT support**

  Additional skilled IT personnel is required to deploy, manage and maintain on-site servers. The cost of this extra assistance must definitely be taken into account when looking for a contact center solution.

- **Limited scalability**

  Infrastructure cannot be expanded quickly to maintain an increased activity or scale down when business slows down. One of the main issues when adopting On-Premise solutions is this lack of flexibility.

- **Increased setup and maintenance expenses**

  Generally, on-site solutions require a considerable initial setup expenditure. In addition, you also need to consider the costs for maintaining all the software upgrades, software patches, and licensing conditions.

- **Data loss risk**

  For contact centers, data security is not something to be taken lightly. This is why management needs to take all the necessary measures to ensure prevent any type of permanent data loss. Following a redundancy logic, cloud systems usually store data in multiple locations, whereas On-Premise solutions keep on-site backups, being vulnerable to various hazards.

- **Compliance**

  If a company works in regulated sectors, compliance requirements must be met. While most cloud solutions have extensive out-of-the-box compliance features, it takes a lot of work and qualified personnel to accomplish the same with on-site infrastructures.

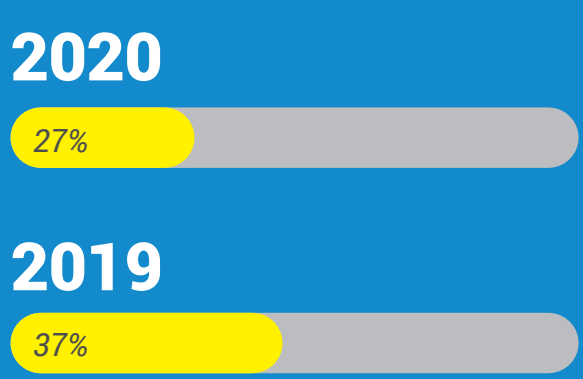
To summarize the On-Premise technology:

Advantages	Downsides
Purchase: no ongoing costs	**Hardware:** the devices used must be compatible with the software.
Data protection: sensitive data does not leave the system	**Maintenance:** the software is difficult to maintain and very time-consuming
Control: users decide what to do with the software	**Not scalable:** licenses are expensive and must be designed for the long term
Access: access to the software at any time without restriction	**Limited support:** software developments usually end up being abandoned

Further data cited by Forbes, suggests only 27% of workloads will be On-Premise by 2020.

This would spell a 10% drop in absolute terms in just one year, as the same number for 2019 is at 37%.

On-Premise Workloads
(in percentages)



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Cloud technology is the future

Instead of opting for a more expensive initial one-time purchase, many contact centers are now opting for the more flexible subscription-based cloud model. The software is hosted by a provider in a data center, and users have access to it via an internet connection. The machine merely makes a connection through the browser, and the real processing power is used in a perfectly adequate data center. So basically, all you need to run a fully functional contact center is an Internet connection.

Simply put, your cloud solution provider is responsible for maintaining your servers and backups, offering compliant technology, and ensuring that everything works smoothly in the background. Compared with the On-Premise solution, the installation process of a cloud solution is a walk in the park. The installation process is managed by your provider following a straightforward procedure and is takes considerably less time.

The growing need for remote agents to have access to a high-performance, content-rich, and scalable infrastructure, is driving the market demand for cloud technologies. Many of these solutions take the shape of modernized and cloud-native apps.

Although cloud solutions that fall under the software as a service (SaaS) umbrella will continue to be the largest market share, with revenues expected to reach $117.7 billion in 2021, application infrastructure services (PaaS) is predicted to expand at an even faster rate of 26.6 percent.

PaaS growth 26%

According to Gartner, here's a summary of the forecast revenue of Cloud computing from 2018 to 2022.

	2019	2020	2021	2022
Cloud Business Process Services (BPaaS)	45,212	44,741	47,521	50,336
Cloud Application Infrastructure Services (PaaS)	37,512	43,823	55,486	68,964
Cloud Application Services (SaaS)	102,064	101,480	117,773	138,261
Cloud Management and Security Services	12,836	14,880	17,001	19,934
Cloud System Infrastructure Services (IaaS)	44,457	51,421	65,264	82,225
Desktop as a Service (DaaS)	616	1,204	1,945	2,542
Total Market	**242,696**	**257,549**	**304,990**	**362,263**

Advantages of using a cloud-based infrastructure

You purchase calmness and operations with a Cloud solution. Besides the fact that you can instantly use your software after your license has been paid, cloud computing offers many additional advantages, such as:

- **Reduced IT personnel liability:**
  Third-party management of cloud servers reduces IT staff deployment duties, software patches, updates, etc.
- **Reduced upfront costs:**
  Cloud storage and computing only require monthly operating fees and no upfront cost. Cloud services can be paid on a monthly basis or per usage only. Some services and functions may, based on the money allotted, be added, deleted, or deactivated.
- **Improved access:**
  Cloud servers enable the access of data to maximize productivity and efficiency from anywhere at any time.
- **Cloud storage and computing power are expandable** to company demands and can instantly be accessed with just a simple plan update.
- **Cloud Servers provide greater data backup capabilities** than On-Premise alternatives – With efficient data recovery, businesses can rest assured that, if local files are erased, they can always depend upon a backup.

To summarize the Cloud technology:

Advantages	Downsides
Hardware requirements: the PC or other device used does not require high performance because the service runs in an external data center	**Data protection:** It is important to ensure that the provider handles the data of its users conscientiously
Maintenance: the installation of the updates is carried out by the supplier and thus does not require any additional effort from the contact center	**Internet access:** if there is no Internet connection or only a poor one, you cannot work with your software
Scalability: features and accounts can be added or removed very easily	
Costs: since Cloud is a subscription model, the initial costs are relatively low	

Why switch to a cloud-based solution immediately?

According to 43% of all business IT leaders, the biggest advantage of adopting cloud solutions is increased platform and service flexibility. The second most significant is improved disaster recovery, increased business continuity, and having access to best-of-breed platform and service alternatives. The Cloud offers several benefits that we mention below:

1. Operating savings

The cloud service provider assures the physical infrastructure operation according to the model selected. The profit lies in the maintenance of the hardware within a IaaS (Infrastructure as a Service) context. The Cloud service provider ensures hard drive redundancy, network switch substitution, etc. However, the client retains responsibility for maintaining the operating system.

This model allows the company to concentrate on what truly matters and to offer value to its own clients. It also helps employees to be more qualified in value-added activities, such as the deployment of infrastructure-as-code environments, and retain or recruit fresh talents.

2. Scaling

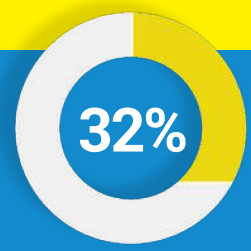
A cloud application will make sure that the contact center will never have any infrastructure issues. The pay-as-you-go model ensures a high degree of cloud elasticity and scalability.

This allows gradual charging increases to be managed both over extended periods and short-term “spikes” in activity. For example, during holidays an eCommerce website can see a spike in user traffic. In this situation, the cloud would automatically and temporarily increase the dedicated resources to accommodate the “spikes”. The resources will then be retracted to their regular levels on request or automatically.

The cloud provides information on expenses that are difficult to determine when the infrastructure is internally controlled. In addition, the wide range of services offered by the cloud model facilitates the testing and internalization of technologies. This flexibility also enables new services or new resources to be obtained in real-time. This opens the door to cloud computing scalability.

As part of their digital transformation plan, more and more organizations consider moving their existing apps to the cloud. There are several goals: to enhance flexibility, to manage expenses, to improve performance, and to safeguard their data.

According to Forbes 32% Of IT Budgets Will Be Dedicated To The Cloud By 2021



3. Redundancy simplified

A cloud application significantly simplifies the administration of redundancy: a vital component that assures data continuity in the event of a problem.

4. Data Security

The cloud providers are offering the highest level of hardware data security without exception. Hard drives are duplicated or even quadrupled, and in case of severe issues such as an earthquake or a tidal wave data replication can be requested in data centers hundreds of kilometers distant.
Secondly, cloud providers are serious about data security and are ready to handle different threats. There is typically more security in data and software than in standard data centers.

5. Management automation

A cloud management platform offers a special incentive for IT staff to automate time-consuming operations with rules for automating certain procedures.

6. Modernizing business solutions

The legacy business apps belong to every company. Moving these apps onto the cloud is a big opportunity, even by eliminating the functional areas that are not appropriate to the present environment, to enhance performance or to add key functions and decrease technological debt.

Cloud vs. On-Premise Infrastructure: 5 things to consider

Examine your IT requirements over time

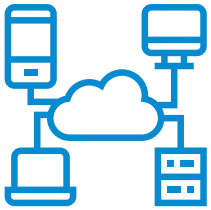
In general, when it comes to On-Premise infrastructure, the ROI peaks between 70% and 80% of load (performance) throughout the amortization period (between 3 and 5 years in general). If this infrastructure is underutilized, it will be enlarged in order to anticipate the demand in 3 or 5 years, lowering its ROI.
If you reach its technological boundaries, on the other hand, you risk having to relaunch an extra investment, which will result in higher expenses, especially in engineering.
Some businesses rely on server infrastructures to develop and gain new consumers; yet, predicting IT requirements is difficult, and requirements are frequently short-term.

In this context, Cloud technology will allow for easier scaling up and down, as well as improved control over IT costs.

Calculate engineering fees

Besides hardware, it's important to estimate the engineering expenses of building and maintaining On-Premises infrastructure vs. cloud infrastructure when comparing the two.
Whether the consumer installs it themselves or hires an outside company to do it, the initial expenses are often substantial.
Similarly, managing on-site infrastructure requires a team of specialists (Network, Storage, Virtualization, etc.). The size of the team will be determined by the quality of service the contact center wants to offer notably in terms of ITM and MTR, as well as time coverage, whether traditional or 24/7.

Because they are administered directly by the Cloud Provider, which has its own teams of specialists, these expertise requirements are not present in the Cloud options.



Make sure your network is stable

Make sure your network is stable
Whether for On-Premise or Cloud, the dependence of companies on the network and especially on the Internet is a reality. Cloud infrastructures rely on an essential component: the network is essential to make access to the Cloud provider as reliable as possible so as not to make production environments dependent on the network. Many solutions exist, but they can represent a significant budget.

The use of apps in Cloud mode necessitates the network's redesign: Re-evaluation of the flow, projected degree of availability, and so on.

Make sure the infrastructure is readily available

It is important to think about the availability of your architecture, depending on the level of service you want to achieve. In the case of On-Premise, the question will be about the choice of architecture, but also about the hosting of this architecture. It is also possible to host an On-Premise solution in a data center to guarantee theavailability of energy resources.

In the case of Cloud solutions, the Cloud Provider's service level guarantee must also be considered. However, this isn't always enough, and it's worth looking at the architectures it employs, as well as the data center classification.

Make sure your data and apps are safe

On-Premise architecture provides for total control over security elements, as long as the contact center has one or more dedicated security specialists.
Companies should not be afraid to ask questions regarding the security of their data and IT resources hosted in the Cloud: certification, hosting location, Datacenter visit, audit, meeting with the teams, and so on. The sovereign cloud is for sensitive data or data that is subject to legislative restrictions. The decision will be made based on a trusting connection and the provider's methods.

Cloud providers employ a staff of security specialists that the firm may not be able to afford it.

Cloud vs On-Premise summary:

	ON-PREMISE	CLOUD
Cost	Single price, relatively high per license	The subscription model generates regular, but relatively low costs
Availability	Single price, relatively high per license	Access via Internet, as SaaS
Maintenance	Users must install the updates themselves and if the provider publishes them	Single price, relatively high per license
Scalability	In most cases you have to buy a completely new solution	The functions and accesses can in most cases be adjusted easily
Data protection	All data remains on site and is only kept on request	The provider must ensure that unauthorized third parties cannot access or intercept the data
Hardware	The user must ensure that the software works on their device	Each user only needs a functional Internet access; the software is hosted on specific servers

What solution to pick from the cloud?

If you are interested in migrating to the cloud, you need to know that there are multiple ways of doing so. Each method has different benefits and drawbacks. The various cloud solutions allow you to pick the appropriate integration level and therefore the granularity, portability or application architecture.

The initial level of cloud architecture (such as the installation of servers, network or even storage), allows the infrastructure to be externalized and involves moving from virtual machines to cloud machines. The most frequent solutions are:

Software as a service

Your staff has remote access to all of the software and apps they need to complete their jobs via a simple Internet connection.
(As a great example, CCaaS or Cloud Contact Center as a service).
This service renting method is useful, especially for businesses that do not have the financial resources to purchase professional software operating licenses.

The fundamental features available in the SaaS model are collaborative tools and communications. However, there are a variety of scalable tools that can be added, such as CRM or ERP software.

Infrastructure as a Service

The whole IT system is outsourced and hosted by a service provider. This covers not only the software (applications and software), but also the hardware (servers and networks). Companies that do not have the financial resources to purchase their own gear might benefit from this technology. The supplier is solely responsible for the upkeep and functioning of the updates.

Platform as a Service

Businesses that want a more complex technological environment, (that would allow them to create, for example, their own apps), can use PaaS cloud computing. This environment can handle sophisticated programming languages and has enough storage space to accommodate a big number of databases.

The study of the current software, the objectives of the organization, and its limitations will identify the best approach and best solution for the migration of an existing application to the cloud.

Cloud migration approaches

Methods, resources and time are required for migration from On-Premise to Cloud. For each migration, motives, possible refactoring, complexity and priority level must be taken into account and aligned to the objectives.

There are mainly two approaches to Cloud migration. They stand out because of their working methods, but also because of the extent to which they balance the needs of the company with the various cloud technologies.

Replatforming

This procedure involves improving the system layer application before moving to the cloud. There is no change in the application architecture. These 'little' adjustments enable you to profit from the cloud benefits (automation, scaling, cost reduction, etc.) This technique is required if you want to move without too much effort. However, without these modifications, the application will not operate. This may happen if you don't have the existing system environment in the cloud.

Refactoring

Probably the most time consuming and complicated approach to moving apps but surely the one that allows all you to access all the benefits of the cloud environment. The contact center platform needs to be transformed to adapt its architecture to the Cloud

For a smooth and smart migration, you should factor in a few parameters.

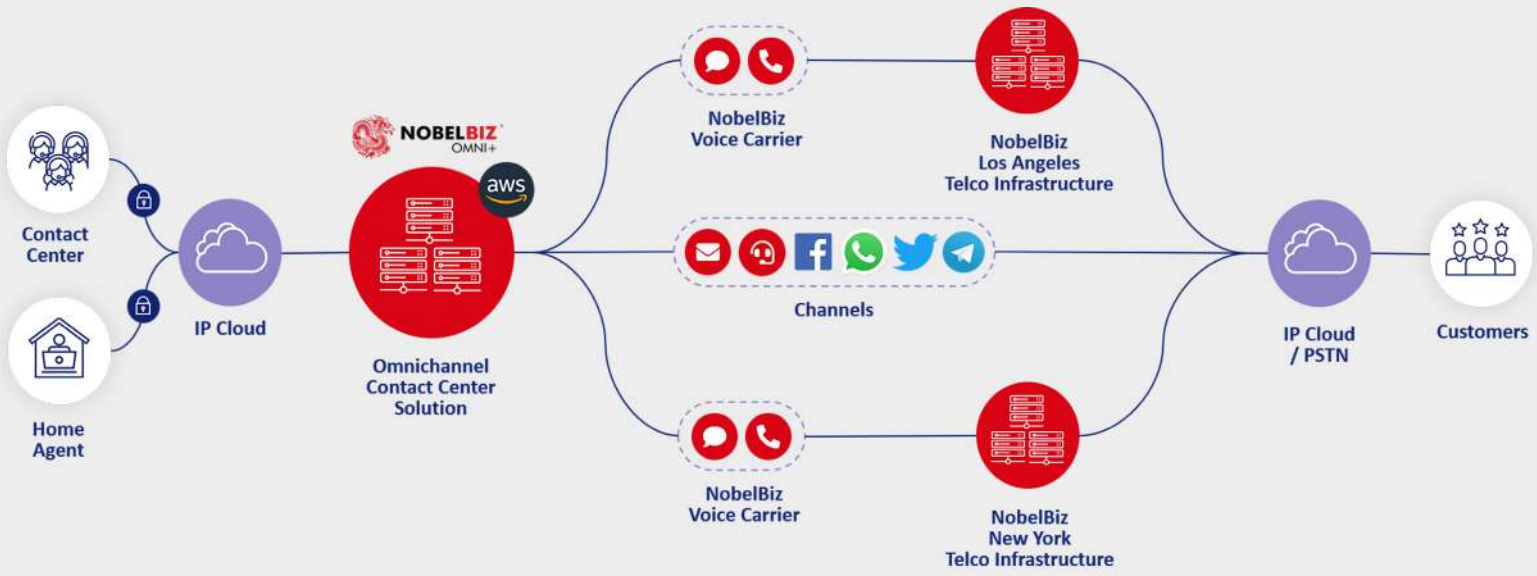
Learn more about the benefits of migrating from On-Premise to Cloud technologies from our podcast, **First Contact: Stories of the call center.**

Take your contact center to the next level with NobelBiz

NobelBiz has over 20 years of expertise providing full and customized solutions for contact centers all around the world. Regardless of size, industry, or activity, our services and technical solutions can meet the demands of every type of contact center (inbound, outbound or blend).

NobelBiz's mission is to ensure that our clients are constantly one step ahead of the competition. Our solutions are designed to maximize performance by offering the best cloud elasticity and scalability capabilities with highly competitive pricing.

At NobelBiz, we like to be called "The Promise Keepers of the Industry". Our team of experts are continuously coming up with new and inventive methods to turn underperforming call centers into high-performing Intelligent Contact Centers. Customer service, collections, sales, and marketing, as well as more complicated product creations, are all covered by NobelBiz.



NobelBiz Omni+ is a Cloud Contact Center Software and the first Omnichannel platform designed particularly for remote work. Omni+ is also your solution for a cost-effective and future-proof contact center, with a quick and easy installation process, enabling a seamless transition across the myriad of channels it supports.

NobelBiz Omni+ keeps you up to date on industry developments and connects you with your consumers on their preferred channels.

To learn more about how to improve customer experience in contact centers, download our ebook: CALL CENTERS ARE OUT EXPERIENCE CENTERS ARE IN.

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