



NFON
Cloud Telephone System

THE PROS AND CONS OF CLOUD VS. ON-PREM PHONE SYSTEMS



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Overview

There are something like 235 million companies in the world, and countless more public and third-sector organisations. Every one of them uses some form or other of a very basic technology: the telephone.

The ability to communicate – more specifically, to talk – is supported by many more different IT delivery architectures and consumption models than ever before. Among the most compelling, irrespective of business size, sector or location, is cloud telephony. Although only 4% of the addressable market has embraced it to date, the proportion is increasing rapidly, as organisations convert away from the popular status quo of traditional PBX systems situated on their premises.

But who cares what others do with their enterprise telephony, when the only opinion that really matters is yours? In all likelihood your current telephony system is a traditional on-premise setup, so what do you stand to lose or gain by switching up to the next-generation alternative?

This guide is designed to set out the arguments, for and against, of cloud telephony versus its arch nemesis: the on-premise

phone system. Use it to decide where next for your business communications.

Definitions

Before we start, get to grips with the following definitions of precisely what is meant by ‘cloud telephony’ and ‘on-premise phone systems’.

Cloud Telephony

The provision of telephony services to any device in any location via a cloud service. There is no infrastructure necessary, other than the handset or screen where calls, messages and other interactions are presented/entered.

Not to be confused with hosted telephony services, where dedicated or multitenanted phone system infrastructure is situated in a separate location to its users.

On-Premise Phone System

A private branch exchange (PBX, or IP-PBX) phone system located at the business premises. This system’s hardware and software capabilities support the delivery of all calling and conferencing features and services to user endpoints (handsets, devices etc.). This may include additional components such as an operator console and plugins for contact centre functionality.

Key criteria

The guide outlines the comparative strengths and weaknesses of the two competing approaches against the following key criteria:

- Costs
- Risks
- Scalability
- Feature Sets
- Management
- Quality
- Mobility

COSTS

How much does it cost to own, operate and service? What are the hidden costs associated with its operation?

Cloud Telephony

There is no capital expenditure necessary to acquire infrastructure, other than handsets (if compatible versions are not already owned). The ongoing service cost is charged on a predictable, per-user basis, and this includes all version updates for the life of the service.

Calling costs are very low, and can typically be included within the flat monthly rate. Users who require special calling plans or

highly specialised features may cost marginally more per month than standard users.

Organisations using cloud telephony need to have basic standards in place for their LAN and broadband/WAN connectivity.

On-Premise

There are significant capital costs associated with acquiring and installing physical phone systems for each major site, plus applicable handsets. Ongoing costs take the form of a service/maintenance contract with a qualified thirdparty, and call costs payable to a telecom service provider.

Version and feature upgrades can carry additional costs, both to acquire and to install. Other financial considerations include training costs associated with managing the system/s internally, and the energy and facility costs associated with housing the phone system at a safe, accessible location on your premises.

VERDICT: Cloud telephony is the clear choice for organisations that want predictability and no capital expenditure, offering a total cost of ownership of up to 70% lower than on-premise.

As well as being more expensive overall, on-premise phone systems attract a variety of hidden costs, though these can be mitigated somewhat if you're prepared to maintain it yourself and stick to the most basic capabilities.

SCALABILITY

How readily can it cope with growth and added demands? To what extent is adding extra users and capacity disruptive or expensive?

Cloud Telephony

A carrier-scale, rather than an enterprise-scale, physical infrastructure means that there are practically no limitations on size and growth with cloud telephony. There are no technical challenges – literally just plug and play.

The cost implication is entirely predictable, as service costs are all on a peruser basis. The ability to bring new users on stream is directly related to the responsiveness of the cloud telephony provider to act upon such a request.

On-Premise

Scalability challenges are lessened if the original PBX specification is accurately sized according to present and future requirements. In such an event, the ability to add users is simple so long as there are sufficient internal skills, and no changes are necessary to the limited capacity of the physical infrastructure. Problems increase with unexpected or rapid periods of growth, such as seasonal demand. The ability to open and provide telephony service to new sites using this model can be expensive and time-consuming.

VERDICT: Adding a single user can be done easily and cost next to nothing with the on-premise model, while the cloud telephony approach will always attract an incremental sum. However, in all other instances the inability of onpremise systems to scale quickly, cost-effectively and non-disruptively places cloud telephony at an advantage. This is especially the case in multi-site scenarios.

RISK

How much risk does it expose the organisation to? How badly affected could the organisation be in the event that something goes wrong?

Cloud Telephony

The infrastructure behind cloud telephony services adheres to carrier-grade standards for 24x7x365 availability. Cloud telephony providers employ teams of support professionals, distributed cloud architecture and highly resilient failover infrastructure to drastically reduce the potential for loss of service.

Any issues that could arise would be rapidly identified, isolated and rectified. Cloud telephony providers have clear policies governing their service levels and communicate with customers in real-time about service status.

Service contracts are typically 30 days, with the option to cancel without notice or penalty.

On-Premise

Only a problem at your own site/s will affect your telephony service.

Therefore, your own ability to respond to and remediate disruption governs how impacted business operations may be. However, few enterprises have anything like the environmental protections and distributed service architecture of a national/international carrier, making them more susceptible to power surge/outage, natural disasters and cyber-attack.

In any event, you will likely have to rely on external service partners to repair infrastructure that you don't have the internal skills to manage.

Most service arrangements are for a fixed period of several years, as are financing arrangements that spread the capital cost of the phone system into monthly repayments.

VERDICT: As far as risks to service go, organisations need to invest trust in their cloud telephony provider, whereas they are well and truly in the driving seat when it comes to their own onpremise infrastructure.

With more control comes more responsibility, and this doesn't make organisations any more secure or insulated from the risk of going offline unexpectedly, for an unknown period of time. The other major difference concerns contract term, with on-premise more likely to tie you in for longer to a technology that could end up failing to keep up with your evolving requirements.



FEATURE SETS

Which has the most features, are how easy are they to integrate and deploy?

Cloud Telephony

All of the PBX features that users are accustomed to are available as part of a standard cloud telephony service. NFON, for example, numbers over 150 features as part of its basic package, including fixed-mobile convergence (FMC) and other unified communications capabilities.

None require any internal skills or time-consuming changes to infrastructure. NFON cloud telephony also integrates with key software implementations such as CTI (Computer Telephony Integration) and Lync/Skype for Business, plus a range of vertical industry solutions. This enables immediate rollout of advanced features with minimal training and additional licensing costs.

On-Premise

On-premise systems are typically rich in calling, conferencing and other PBX features, though there are differences between what certain manufacturers include as standard and which are considered premium add-ons.

Non-standard features necessitate the installation of additional line-cards and/or software which may require specialist skills, training and testing, and invariably introduce delay.

VERDICT: The range of standard functionality should be considered broadly common across both approaches, though any necessary add-ons are technically faster and simpler to deploy with cloud telephony. Bear in mind that any changes to internal business processes brought about by introducing new telephony integrations/capabilities will require effective project management, regardless of the model employed.

MANAGEMENT

How simple is it to manage ‘out-of-the-box’? To what extent are additional skills and resources necessary to manage it effectively?

Cloud Telephony

With no on-site infrastructure, and technology being provided ‘asa-Service’, there is no ongoing management overhead associated with cloud telephony. Periodic service upgrades and the development of new features are introduced without the need for intervention. However, it is still advisable to appoint an internal ‘administrator’ to act as the central point of contact at the organisation so that any service changes can be orchestrated coherently. Online portals provide the facility to view real-time service status and make account changes as necessary.

On-Premise

Management of the phone system is the exclusive responsibility of the organisation, who typically adopt this internally (i.e. within the IT department) or via a suitably skilled third party. This can add cost and delay to the process of operating the infrastructure, particularly for any complex queries that may necessitate the involvement of the manufacturer. Failure to implement firmware upgrades recommended by the manufacturer in a timely fashion can diminish the capability of the infrastructure, undermine its resilience, and prevent the organisation from taking advantage of the latest technology.

VERDICT: You can't completely forget about managing your phone service when you opt for cloud telephony, but you certainly no longer have to be an expert – or employ one to be – in system infrastructure. By contrast, management of onpremise systems requires investments in time and resources. Moreover, failing to manage them effectively can introduce unwanted risk.

QUALITY

How do they compare in terms of voice quality, ease-of-use and other aspects of the user experience?

Cloud Telephony

Cloud telephony leverages VoIP technology to deliver highquality voice throughout the call path. VoIP is the same mature technology employed by IPPBX systems. Some independent standards bodies have taken steps to certify the voice quality of cloud telephony providers, such as TUV and its recognition of NFON.

The cloud telephony user experience is further optimised by the use of softphone clients that extend service to PCs, laptops, tablets and smartphones. User interaction with features is highly intuitive and requires minimal or no training.

On-Premise

The voice quality of on-premise systems is typically robust and standardsbased. All communications systems are reliant upon the quality of underlying access networks, and on-premise systems are no different.

The user experience is typically good – including on softphones, where available - assuming that the latest version has been installed and the PBX manufacturer’s approach to the user interface is consistent with best-practice.

VERDICT: There is very little, if anything, to separate the two approaches here. The optimum user experience may be a matter of personal taste between what different providers and

manufacturers offer. Consideration needs to be given to how the latest upgrades are implemented within an on-premise environment.

MOBILITY

How well are dynamic working practices and collaboration supported? Does it restrict or enable the use of mobile technologies?

Cloud Telephony

Cloud telephony services stay relevant to changing technology preferences so – as you would expect – seamless roaming and mobility from anywhere are typically supported as standard as part of a consistent multi-platform experience.

This is further facilitated by the integration of FMC and Unified Communications capabilities so that each user has one phone number for people to reach him/her on, irrespective of device or communications method. By the same token, a range of numbers can be used for each user, with rules applied for each governing how that call is handled.

On-Premise

Even the oldest PBXs can be reconfigured to support some level of mobile integration, although this can be problematic and feature-limited. The latest generation of IP-PBX technology has mobility functions comparable with cloud telephony, though these

can be highly expensive to implement for all users in a large deployment.

Many PBX manufacturers also deliver proprietary Unified Communications features as part of their offering though these tend to integrate poorly with industry-standard solutions such as MS Lync/Skype for Business.

VERDICT: Mobility is just another feature, so the crucial question is: does it come as standard? On-premise solutions will vary widely in this regard – and come with their associated management/implementation costs – whereas cloud telephony solutions is future-proofed keep pace with up-to-date enterprise mobility requirements.

A platform for business transformation?

Cloud services for a range of business applications and IT functions – from email and data storage to CRM and ERP – are becoming the new normal. The direct consequence of this change is that legacy approaches to IT delivery steadily become obsolete.

Organisations are increasingly using cloud to transform their businesses at pace, with more than 80% of UK firms deploying at least one cloud service already, and many more in the pipeline. Cloud telephony is certainly one of those.

Cloud telephony offers a compelling alternative to the tried-and-tested approach of buying a phone system and running it onsite. Even if you compare it to so-called 'hosted' PBX solutions, cloud telephony provides substantially greater scalability, flexibility and ease of management.

Businesses that have already adopted cloud telephony are realising the benefits over conventional solutions, including lower costs, easier roll-out, increased control, automatic updates, built-in business continuity, and a scalable pay- as-you-grow model that provides the ultimate flexibility for businesses of all sizes.

