



VoIP for Business

An objective review of options and practicalities

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In a nutshell: VoIP is becoming more pervasive in the business communications landscape, suggesting that the proposition is generally well understood. However, what is less clear for many businesses are all the things they need to consider when implementing a solution, and indeed which type of offering to go for. This paper looks at some of the decisions a business will face as they make the transition to VoIP.

Key points:

- A major barrier to VoIP implementation is limited knowledge of which solutions exist and which is right for their particular needs.
- Familiarising yourself with the different solutions – hosted, hybrid or premise-based - is a good place to start, followed by a review of the pros and cons of each.
- Don't expect a 'one-size fits all' situation. The choice of approach will be based on a number of factors, and these will be linked to your individual situation.
- Beyond this point, start engaging with providers. Be clear about your requirements, and don't be afraid to let them educate you, but make sure you are clear about who is responsible for what.

Lots of people are paying increasing attention to the growing number of VoIP offerings in the marketplace, with the benefits of reduced total cost of ownership, through to consolidated and streamlined voice and data communications via a single infrastructure being well documented and understood.

In spite of this general belief that a switch to VoIP is probably a good thing for many businesses, there is still a lot of reluctance to actually take the plunge, and this isn't just about upfront cost of change, and potential accompanying disruption.

A big part of the reluctance is linked to the absence of more granular information on how to actually go about an implementation, and knowing what is appropriate in different circumstances and scenarios. Before we look at this in more detail, it is probably worth spending a little time considering the different flavours of VoIP, which can be categorised in 4 different ways:

- Public internet VoIP, in the form of Skype-type offerings. While we mention them here, it is merely to acknowledge that they exist, and are primarily aimed at, and more suited to, the consumer market. True, some businesses will make use of some of the functionality of these services – IM for example - but as a rule, they are not suited to voice communications for businesses, as the quality is simply too variable. The rest of this paper will assume that these services are generally not a serious consideration for businesses.
- Hosted VoIP services. This is typically when a provider deals with all the PBX functionality, processing, handling and distributing calls for the business via a public or private network from their own secure platform, using the business existing communications pipes. Because the service is hosted by another party, there is no requirement to install and maintain a PBX. This category can be further subdivided into various types of service, including network-provider hosted services, which includes the VoIP service bundled with network services transmission, and vendor hosted services, which include customer premise equipment but not network transmission.
- Full (premise-based) IPT installation: The solution is physically installed and maintained on site, and incorporates use of the existing LAN and WAN. The business may have the choice of acquiring the equipment and investing in IT staff with the prerequisite skills to manage and run the system, or of using the solution as a fully managed service from a third party.
- Hybrid solutions: these are typically based around a managed service, but involve use of the existing PBX equipment within the business, with an overlay of VoIP functionality, and with services delivered via a secure service provider network.

Given the options available, how can a business work out which type of solution best suits its requirements? Let us explore each of the options in a little more depth, and some of the potential pros and cons associated with them. It is important to note these are not 'absolute' definitions or descriptions, although we do focus on the attributes typical of each.

Hosted VoIP services

Hosted VoIP services can offer some immediate advantages for many organisations. A key benefit is that there is lower capital outlay, as there is no physical infrastructure to install and maintain. This also means that implementation is a relatively quick and painless process. A hosted service is also flexible, with moves, additions and removal of extensions being configured remotely, causing minimal disturbance, and system maintenance is a non-issue. Additionally, the system is scalable, as it is not based on equipment that has been designed to accommodate a defined number of users, and is future proofed, with upgrades being addressed within the contract and occurring as a matter of course.

While the list of benefits of a hosted VoIP solution is impressive, there can be a number of downsides that need to be considered. One area is that of control over systems security and redundancy, which resides with the provider rather than the customer. Cost in terms of capital outlay is often (quite rightly) cited to tempt businesses into the hosted camp, however, hosted users will incur ongoing fees, typically on a per extension basis, which can be quite expensive, and of course will go on forever. And while flexibility exists when it comes to, say, adding a new extension, if more sophisticated changes are required, for example a custom feature, then the provider may either charge a premium for this – as a one off and through monthly fees - or worse, not be able to implement it at all. Last but not least, the connection to the service provider's network (public internet or private) should also be considered with respect to the potential impact on call quality and service reliability.

Premise-based IPT

An advantage of premise based IPT is that it typically allows greater control over the user experience. This is particularly valuable when a company wants to develop custom applications to serve specific business needs. Control over security and redundancy also resides within the business, which may be an important policy consideration. Furthermore, integration across other internal systems is likely to be easier, for example, with Microsoft Exchange. Ongoing fees, too, may be lower.

We have already touched on some of the disadvantages associated with premise based IPT earlier, but to recap, the initial capital outlay can often be a barrier to adoption, along with the ongoing maintenance costs associated with the equipment. Also, time to implement is also likely to be significantly longer than alternative solutions. In terms of resourcing, the business naturally needs to ensure it has the requisite skills to configure maintain and provide back-up capabilities for the system. In particular, managing changes such as configuring remote users can be complex. Additionally, as services evolve, responsibility for moving the systems forwards will reside with the business, and upgrades may be costly, both in terms of capital outlay and resourcing the upgrade.

Hybrid VoIP services

Hybrid VoIP services are interesting in that they offer some of the benefits from both hosted and premise based VoIP solutions, while removing many of the disadvantages. While there is no 'definitive' hybrid solution, options that exist could include the business using its own equipment, while monitoring and management is covered by a third party. Security concerns can also become less of an issue, with messages and call data remaining within the company.

Another way to think about hybrid VoIP solutions is in exploring the options available for extending existing infrastructure, particularly if your business has multiple sites and PBX-type equipment at each location. By considering the different options for voice and data transfer between sites and to/from public networks, it can be possible to gain some of the benefits of VoIP such as lower costs and greater flexibility, while extending the life span of existing investments.

While there are a lot of apparent benefits with the hybrid model, ultimately, there is a trade-off between the overall benefits offered by the two alternative models. And although the drawbacks of hosted and premise-based solutions are largely eliminated, they aren't eliminated fully. In terms of cost, although a hybrid solution will not require as big an outlay as a premise based one, upfront costs are higher than a hosted solution. Following on from this, as the hardware and software belong to the business, there will be associated maintenance costs along with a required level of expertise over and above using a hosted solution. And last but not least, as the business owns the hardware, upgrades and add-ons should be expected and provisioned for at some point in the future. Although tempting, it is important not to assume that the hybrid model automatically offers the best of both worlds until an accurate picture of requirements and options available to extend the capabilities of any existing communications equipment is attained.

Summary and recommendations

In summary, businesses that adopt a hosted approach will benefit from lower initial outlay, as well as being relieved of ongoing maintenance issues. On the flip side, however, they could face issues around call quality and reliability, along with security considerations depending on the choice of public or private connectivity taken. Businesses that adopt a premise based solution are likely to experience the reverse: higher initial outlays and ongoing maintenance to deal with, in return for a greater degree of freedom and flexibility. Hybrid solutions reap many of the benefits of the two extremes, but also bring with them some of the disadvantages. In approaching VoIP, businesses need to ensure they understand the different types of solution available, and what implementing each will mean to their organisation.

The choice of approach will be based on a number of factors, and these will be linked to your individual situation as a company. With this in mind, here are some questions to consider as you move along your VoIP journey.

- How well is the business able to resource a VoIP implementation? What is the existing level of expertise, and how much does the business want to be involved going forward? These factors may relate to the size of your business, or the level of technical know-how.
- Leading on from this, what degree of flexibility in terms of moves, adds and changes is likely to be required, in particular around configuring remote users?
- How important is call quality and service reliability to the business, along with control of functionality?
- What is company policy around issues such as security of call data, and redundancy? Regulatory compliance may figure highly here.
- What is in place in terms of your existing LAN and WAN, and to what extent will it be able to handle the additional burden placed on it in terms of security, quality of service etc if a premise-based approach is adopted?
- What potential issues exist around capex outlays and ongoing expenditure?

It is essential to understand your requirements before you begin to engage with suppliers. Once these are broadly established, start a dialogue with selected suppliers. Invite them in and get them to explain their offerings, and don't be afraid to let them educate you. Use the opportunity to make sure you are clear not just about what is included in terms of equipment and connectivity, but also who is responsible for what – e.g. installation configuration, ongoing maintenance, implementation of changes and customisations, and, often overlooked, end user support. On this last point, will end users be permitted to call the provider directly if they have issues, or do all support calls need to be routed through the local IT or facilities guys?

At the end of the day, there is nothing to be gained from choosing the wrong VoIP solution and everything to be gained from making a fully informed investment decision.