

adodo's Guide To Buying a New Phone System



4 Points To Consider First

EASE

Would you like the deployment of the system to be as seamless as possible and be easily managed thereafter? In fact who will be responsible for managing the system?

Would you like all the elements of the system from a single manufacturer so there are no interoperability issues to take into consideration?

Even if you have multiple sites would you like the system to act as one single system with an ability to manage it from anywhere via your browser?

Would you like to be able to integrate with your business applications, mobile devices, and have presence visibility for everyone to reduce time wasted playing phone 'tennis'?

FLEXIBILITY

How would you like your system delivered?

There are four typical scenarios;

- **On Premise.** All system components (soft/hard/virtual PBX(s) and gateways for redundancy and connectivity of legacy devices and services) reside within your office(s), totally under your control. Also known as Customer Premise Equipment (CPE).
- **Cloud.** Typically the cloud PBX will be virtualised and running on large, fault tolerant, high availability servers, located off-site, but again totally under your control. All phones on your site(s) and mobile/homeworkers will connect directly to the system in the cloud.
- **Hosted.** Provided as a remote service rather than products. You'll have phones on your site but the off-site PBX will be owned by the service provider. You'll have some, but not total configuration control.
- **Hybrid.** Offer the benefits of both cloud and on-premise deployed. The central PBX is located in the cloud, but you have the option of deploying Network Service Gateways (or soft/hard/virtual PBXs) on your sites to provide full redundancy with local PSTN break-out in the even of the primary link to the cloud failing. For further details see the Hybrid section.



ROI

A new phone system is a long term investment and therefore all the costs of ownership need to be considered. Therefore questions need to be asked about;

- System suitability to serve the changing needs of the business without significant upgrades, system swap-outs, bolt on enhancements from third party manufacturers and their resultant business disruption
- System suitability to accommodate changes in service delivery options such as hosted, cloud, and the optimum, hybrid/hosted, without significant cost, operational compromises or support complications.
- Supplier's ability and commitment to providing "bespoke" capability in short order to facilitate each customers market positioning and USP developments as they change.
- Supplier's ability to enable customers to experiment with business changes, at minimal cost, before fully committing to them.

SUPPORT

Are you looking for a system that is designed with you in mind?

Is it backed by an established manufacturer that understands the market and your needs?

Will the system be maintained by an accredited reseller providing support and advice?

Will you have to pay for software updates?



Seven Tips to Choosing the Right Business Phone System



Medium and small businesses don't have to think small when it comes to business phone systems. Today's IP phone systems let you swap your old phone system for feature-rich business phone systems that were once only available to corporations with big budgets.

IP phone systems—also known as IP PBXs, voice over IP (VoIP) or IP telephony systems—deliver high-fidelity sound and reliable service, so you can count on calls coming through loud and clear. An abundant array of calling features, recording options, and numerous distribution configurations make it easier for customers to reach the right person quickly and easily. And with unified communication features it means your employees can become even more productive and stay in touch easier. There is even no restriction on where they work or when.

The industry has many three letter acronyms to make it sound complicated but don't let that confuse you. We've provided a list of the most common ones at the end of this guide.



Follow these 7 Tips to choosing a business phone system that's right for you.

- 1. Why do you need a new phone system?** Identify the problems you are having with your old phone system and what you'd like to solve with a new system. Is the phone system old and expensive to maintain? Do you have different phone systems in different offices, making it hard to communicate? Are customers having difficulty reaching the right person and spending too much time on hold or in voicemail? Are your employees increasingly using mobile phones in the office to get modern communications features? Is the cost of third-party conference call services getting out of hand? Do you have lots of people on the move? Are you considering flexible working? Do you simply need to look and sound right?
- 2. What will be the results of a new phone system?** What business benefits do you wish to have and are they quantifiable? Productivity measures could be qualitative, such as increased customer satisfaction, or they could be quantitative, such as the reduction in the number of calls lost, the effectiveness of call centre agents, or the time employees save on chasing others around the system. With the right IP phone system, you should be able to achieve a return on your investment in one year.
- 3. Do you want an IP phone system that is on your premises or in the cloud?** Most companies buy their own IP phone system hardware and software and manage their own systems. In this model, you will make an upfront capital investment as well as incur the operational expenses of running the phone system. Companies often work with a network consultant or reseller to install the system, and the consultant often provides ongoing maintenance. Companies are also using [hosted or cloud services](#). A hosted or cloud service is housed and managed offsite by another company, which might be a traditional phone company, a dedicated VoIP hosting provider, or even your local reseller. A hosted approach may eliminate a lot of the upfront capital expense of buying and installing the phone system, although you may pay for each handset. You usually pay a one-time installation fee and then a monthly cost per user. It's easy to add (or reduce) the number of users for a hosted or cloud service. In addition you are also freed from the task of ongoing software upgrades and maintenance.
- 4. In what way would you benefit from unified communications?** Most companies now require a way of linking their data to the phone system thus getting the systems to work as one. That way they are able to combine [presence, instant messaging, mobility, video conferencing and collaboration capabilities into a seamless business environment](#). It's a way of further reducing cost. Many unified systems also integrate with business applications and are able therefore to improve productivity and provide more convenience for workers. For example, users can make phone calls directly from Microsoft Outlook, Salesforce or other customer management tools.
- 5. Is the phone system easy to use and manage?** A new phone system is no longer just a set of new shiny phones on your desk. With unified communications workers can stay in touch and be more productive, no matter where they are. Workers should be able to use their laptops, smartphones and tablets as if they were at their desks. Look at the ease of ongoing operations and maintenance. Can your IT administrator use a Web browser to easily manage the phone system in all of your office locations? Can the office manager or receptionist easily add or remove users? A system that requires minimal training frees up your resources for more mission-critical tasks.
- 6. What will it cost to run?** Look for an IP phone system that will deliver a low total cost of ownership (TCO). TCO is a measure of what the technology costs to own. For unified communications, these costs include capital expenses, implementation and training, systems management and maintenance, and network call charges. [Choose an IP phone system that will reduce these tangible costs](#).
- 7. Take it for a test drive and look for customer testimonials.** The best way to evaluate a new phone system is to actually use the product. Make sure you have a demonstration or even test drive it in-house, and see if the products really do live up to their marketing claims from both a user and an IT manager perspective. In these days of social media it's a lot easier to find out how happy others are with the same product.



GLOSSARY OF TERMS

ADSL – Asymmetric Digital Subscriber Line

A broadband technology that delivers very high data transfer speeds over existing telephone lines within the traditional copper wire telephone network. It downloads faster than you can upload them due to there being more bandwidth available on the downstream. It is up to nine times faster than a 56k modem connection. Ideal for residential connections or for businesses not running a server.

Analogue Lines

The original telephone lines. They are still a common option for smaller businesses. However, technology is shifting rapidly towards SIP trunking which prove to be more flexible and cost effective.

Auto Attendant

An automated answering system that directs the caller to their destination using prompts. For example, “For the Accounts Department, please press 1”.

Bandwidth

A measurement that gives us the capacity to know how much data can be sent through a connection. It is measured either in frequency range eg) 3 kHz, or transmission rate (in bits per second) eg) 63 Kps.

Bluetooth

A technology designed to be embedded in electronic devices in order to provide wireless and seamless connections over short distances of up to 10 metres. Named after a Danish king.

Broadband

Any permanent connection to another network (usually the internet) that has the ability to send and receive large amounts of information in a short period of time.

Call Forwarding

This feature allows incoming calls to be redirected to another destination, such as a mobile phone or a home number.



Centrex

A PBX-like service providing switching at the central office instead of at the customer's premises. Typically, the telephone company owns and manages all the communications equipment and software necessary to implement the Centrex service.

Channel

Is another word used to describe a telephone line, usually used in the context of digital lines or SIP Trunks.

CLI – Calling Line Identification

Technology that provides the identity information of the incoming call on the receiver's phone display.

CoS - Class of Service

A means of managing traffic over a network by identifying types of traffic and prioritising certain groups.

DDI – Direct Dialling Inward or Direct Dial In

Gives the ability to route a call to the desired destination within an organisation directly through the switchboard bypassing the receptionist. The telephone company can allocate a range of numbers associated with the PBX and assign each seven digit number to individuals, faxes or computers.

DECT – Digital Enhanced Cordless Telephony

Are cordless handsets that provide wireless communications within an office, building or site, and they can be fully integrated into the company telephone system.

DSL – Digital Subscriber Line

Once called digital subscriber loop, this is a family of technologies that provide digital data transmission over telephone lines. It can carry both data and voice signals.

Ethernet

One of the oldest Local Area Networks technologies which has been highly successful and is still popular.

Fixed Line

Is a telephone line which travels through a solid medium, either metal wire or optical fibre.



GPRS - General Packet Radio Services

A technology that allows customers to remain connected to the network between calls for the receipt and transmission of data.

IP – Internet Protocol

A standard set of rules that dictate how data is structured and controlled to ensure an accurate transfer of information.

IP PBX – Internet Protocol, Private Branch Exchange

Is a business telephone system designed to deliver voice over a data network.

IP Telephony

Also known as Internet Telephony or Voice over IP (VoIP). Use of Internet Protocol to carry and route two-way voice communications. IP Telephony can support telephone to telephone links through suitable adapters but also voice communications from telephone to IP terminal (such as a PC with sound card) or from IP terminal to IP terminal.

IP/VoIP Gateway

A gateway for existing telephone systems that converts traditional traffic into IP so that it can be transmitted over a data network. Using an IP gateway can be considered 'migration path' towards IP Telephony. This means that you can gradually transfer to IP Technology thus adding longevity to your existing system.

ISDN – Integrated Services Digital Network

A Digital public network for voice and data communications. The key feature of the ISDN is that it integrates speech and data on the same lines, adding features that were not available in the classic telephone system. It is available as ISDN2e, where the lines come in pairs, or as ISDN30e which comes in groups of up to 30 lines, the minimum order being 30.

ISP - Internet Service Provider

Point of access to the Internet for small business and individual users.

LAN – Local Area Network

A computer network covering a small physical area such as a school, a group of offices or a home.

Leased Line

Also known as a 'private circuit'. It is ideal for larger business that have mission critical applications to run across the circuit. They may require large bandwidth and high reliability, this option also includes a service level agreement. The leased line provides a direct connection between your premises and another site of choice.



LLU - Local Loop Unbundling

Is where a carrier provides their own broadband service from a local telephone exchange. They are buying the right to run their services over the copper cables and install their equipment in the exchange.

Network

A network is a collection of two or more computers all linked together to share data and resources.

OFCOM - Office of Communications

The UK regulator for the Communications industry.

PBX – Private Branch Exchange

Is a telephone exchange that serves a particular business or office, as opposed to one that a common carrier or telephone company operates for many businesses or for the general public. Sometimes referred to as PABX private automatic branch exchange or EPABX electronic private automatic branch exchange.

PSTN - Public Switched Telephone Network

The public switched telephone network which was traditionally analogue, but now is almost entirely digital. On a PSTN line two way conversations travel down a telephone line in a straight line, rather like traffic flowing up and down a motorway in opposite directions.

Portal

A gateway or entry point to the Internet incorporating significant function.

QoS – Quality of Service

This is used to provide acceptable voice quality across IP networks.

SDSL – Symmetric Digital Subscriber Line

Broadband technology that delivers very high data transfer speeds over existing telephone lines. The main difference between ADSL and SDSL is that SDSL has the same upstream data rate as downstream (symmetrical), whereas ADSL always has smaller upstream bandwidth (asymmetrical). However, unlike ADSL, it can't co-exist with a conventional voice service on the same pair as it takes over the entire bandwidth.

SIP Trunking

These lines allow a pure IP connection to be formed between enterprises and telephone carriers and make it possible for businesses to make and receive calls over broadband circuits or other data connections.



Smartphone

A mobile phone offering advanced capabilities beyond a typical mobile phone, often with PC-like functionality.

Soft PBX – Soft Phone

A software application providing server-based telephony, for example, a soft phone on your laptop allows you to make calls from it.

Trunk

Another way of saying 'line' or 'channel'.

Unified Messaging

Provides a centralised mailbox for all email, fax and voice messages. Through this system, messages can be viewed, replied to, saved and deleted in this one inbox.

Voicemail

Callers are enabled to leave messages on personalised mailboxes. Messages can also be retrieved remotely.

VoIP – Voice over Internet Protocol

A protocol that is optimised for the transmission of voice through the Internet or other packet switched networks, and is now considered part of the backbone of every day telecommunications.

VPN – Virtual Private Network

A Virtual Private Network is a private network built on Internet Protocol (IP) that helps extend the reach of your company's network either nationally or globally to connect remote sites or users together.

WAN – Wide Area Network

A computer network that covers a larger area rather than being limited to one building or site.



