Beginners Guide To Hosted VOIP

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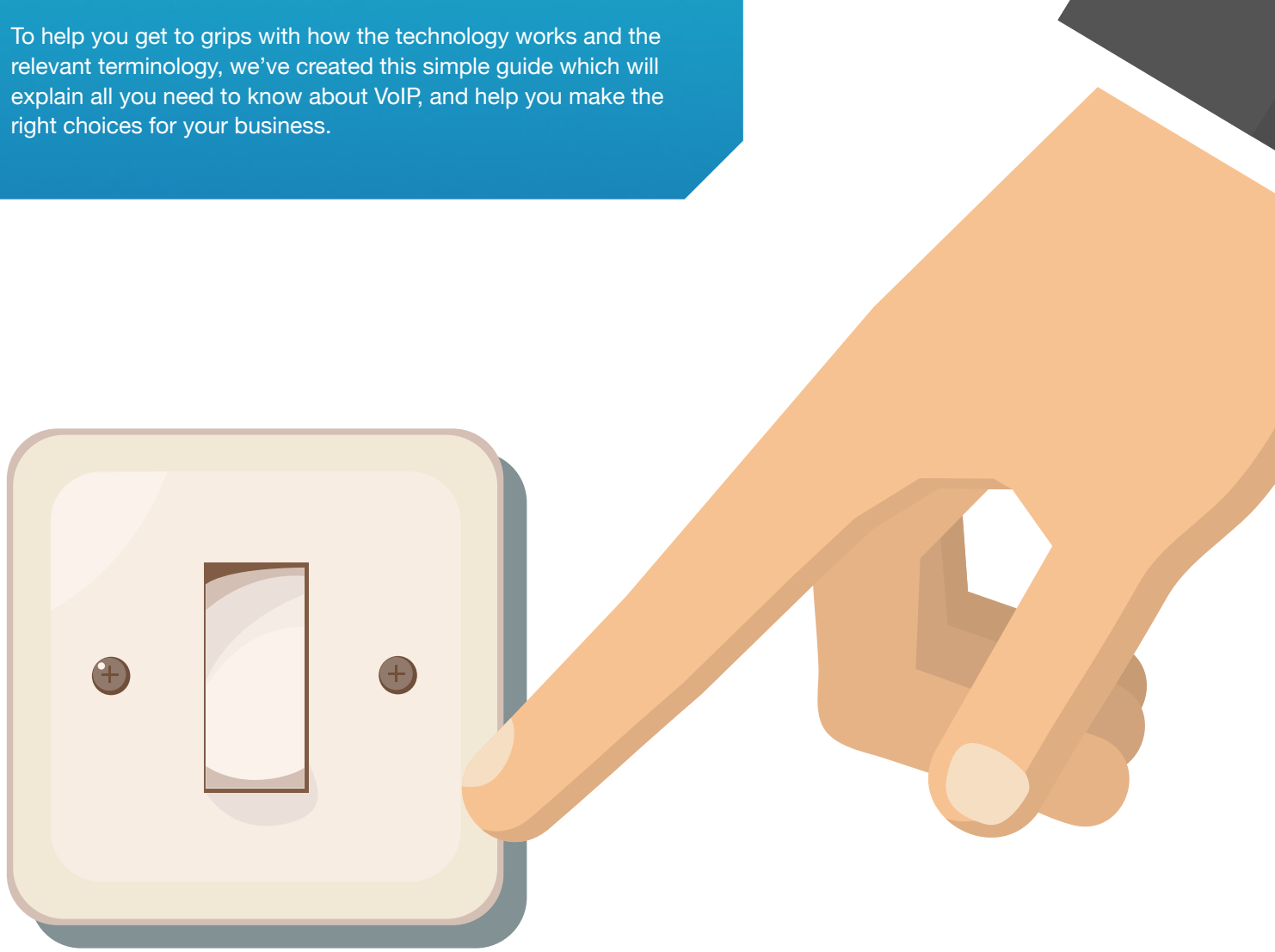
VOIP, HEARD ABOUT IT?

Hosted VoIP (an acronym for “Voice over Internet Protocol”) is a type of internet phone system which is quickly taking over from standard business phone systems and landlines. The VoIP industry is now worth £40bn and growing at approximately 9% per year. Simply put, it is a piece of technology that converts voice calls into data and then transmits them over the internet. VoIP offers a number of cost-saving benefits and features that can help businesses improve their communications.

Should you consider switching?

Deciding whether to switch from a familiar technology that’s been tried and tested for decades to something new can be a nerve-wracking process. It’s vital that you understand what the technology is, how it works and compares to other systems, and what the considerations of switching are, before you can decide whether it is right for you.

To help you get to grips with how the technology works and the relevant terminology, we’ve created this simple guide which will explain all you need to know about VoIP, and help you make the right choices for your business.



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WHAT IS **VOIP?**

The simplest way to understand VoIP is to imagine it as a private members club. The club you choose, who the other members are, which facilities you use and how often, will affect how much value you get from your membership. If you do not have VoIP, you are a non-member.

1. Membership

You join the club via a VoIP service provider and to activate your membership you need a reliable, fast internet connection, and a special VoIP phone or a 'softphone' app. The cost of membership is quite affordable (around the same price as a conventional business phone system), but has the potential to save you lots of money depending on how much you interact with other club members.

2. Other Members

As part of your membership you can call other members of your club (people using the same VoIP platform as you) for free, or at a discounted rate.

If you call an affiliate member (people using a different VoIP platform to you) you can sometimes get cheaper calls – but this depends on what the affiliate club's set-up is.

If you call a non-member (people using standard phones and phone lines (called PBX) then you pay standard rates for your phone calls.

Sometimes you'll know that the people you're calling are club members, such as fellow colleagues in your own office or other offices, and sometimes you won't. If you pick a club where you already know lots of the members, you can make big savings. If you never ring other club or affiliate members, then you probably won't save much – though there can still be other benefits to being a member (e.g. lower running costs, enhanced features).

3. Facilities

As part of your VoIP club membership you get the use of lots of facilities that non-members don't get, such as access to a clever portal that links to your computer diary (e.g. through MS Outlook) and can redirect calls when you're in a meeting. The portal also enables you to redirect calls and your answerphone to your mobile or other landlines so you never miss calls because you're away from your desk.

You can get an upgraded membership to use even more features, like call recording, but obviously the pricing and benefits offered depend on which club you decide to join, and what features you want to use.

It is the club's job to make sure that you always have access to state-ofthe- art facilities so, over time, it will upgrade the facilities automatically and ask if you would like the latest premium features on your phone system.

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VOIP VERSUS **PBX**

VoIP is a piece of technology that converts voice calls into data and then transmits them over IP (internet protocol) or digital networks, such as broadband, Ethernet, WiFi or even 3G and 4G. To use it you need to switch from using a standard telephone system and phone line (a PBX telephone system), to hosted VoIP. This means that the 'brains' of your telephone system is moved off site and into a service provider's data centre. It also requires you to get a special VoIP phone - which looks like a standard phone, but is actually more like a computer - or a softphone app which can be accessed from your PC, smartphone or tablet.

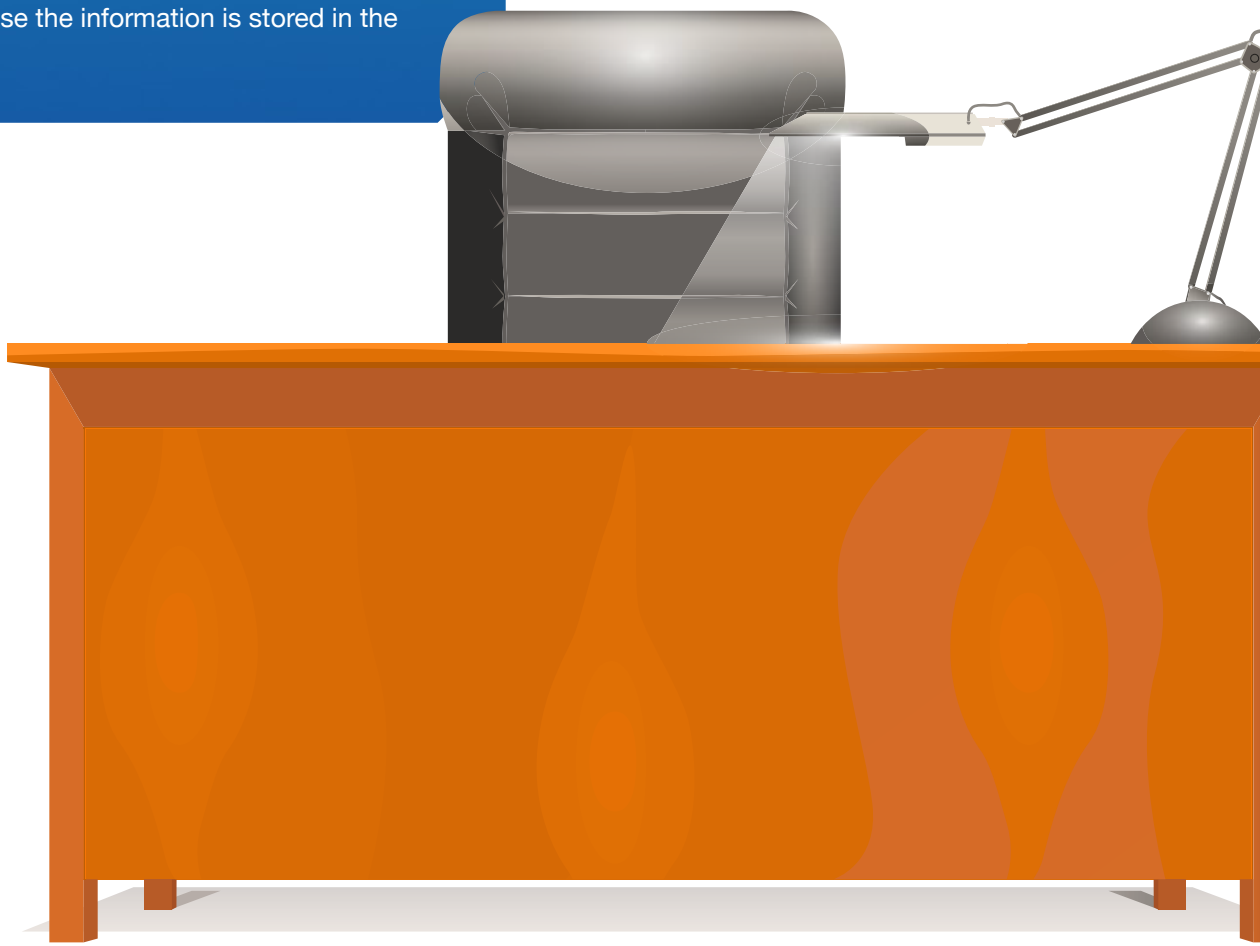
With a standard phone system, adding or removing users requires an engineer to move the lines. With VoIP, because it uses an internet connection, adding and removing users is much simpler and can be done via an internet portal.

Think of it as...

A desktop PC (PBX) compared to a laptop with a Gmail account (VoIP). With a desktop PC you have to be at your desk to use it. If you're not at your desk, you can't. With a laptop, you can move it quickly and easily to a different desk and as long as it has an internet connection you can communicate with people. Even if you don't have your laptop with you but you have a smartphone or another computer you can still get your Gmail messages (calls/voicemails) through an internet connection because the information is stored in the cloud.

Consider the VoIP option if you…

- Are a small business
- Have 5 to 200 people
- Have fibre broadband available



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ON-NET VERSUS **OFF-NET**

On-net calls are made using a hosted VoIP solution to recipients using the same service provider and the same platform. These are usually free or much cheaper than standard call rates.

Off-net calls use traditional phones and phone lines and are made to non-hosted VoIP users, or recipients using a different VoIP service provider and platform. These calls are chargeable at your service provider's standard rate.

Think of it as...

An online dating agency. Once you've joined, you can contact other members of the same dating agency for free (or at a heavily discounted rate). If you want to contact someone who uses a different dating agency (i.e. a company that uses a different phone system) you have to pay to contact them.

Consider the VoIP option if you…

- Make lots of internal calls
- Have lots of different offices within the same company

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INTERNET VERSUS **PHONE LINE**

We've all experienced delay on a phone call, whether it's through a poor mobile signal, or a long distance call, and know that a split second delay can make conversation incredibly difficult, as people find themselves talking over each other.

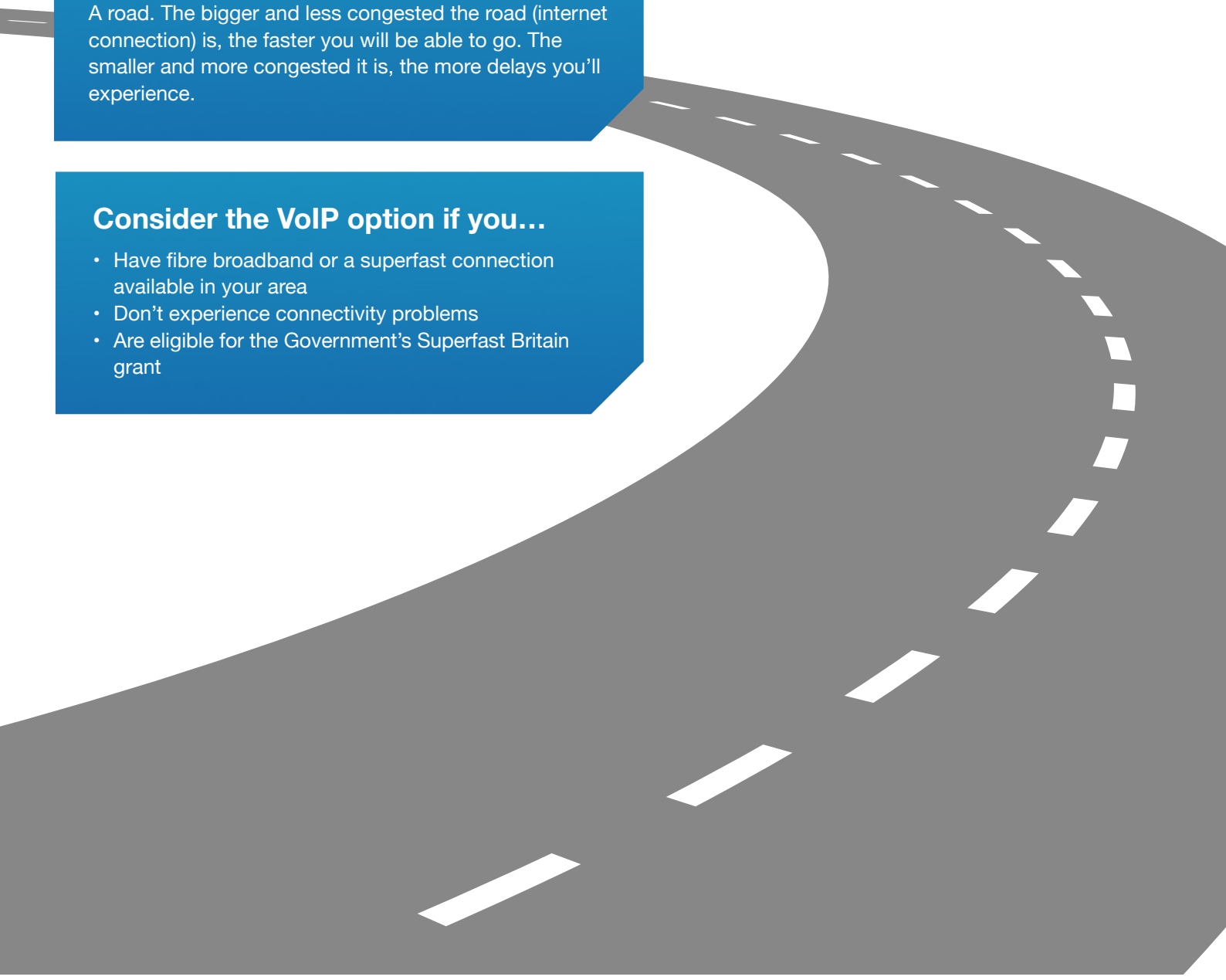
Unlike a landline or mobile phone call, the experience and quality of a VoIP call is all dependent on how strong or fast your internet data connection is. It is imperative to have plenty of bandwidth and a good internet data connection to ensure peak performance. Many VoIP providers advise that businesses should have an internet connection dedicated solely for VoIP usage.

Think of it as...

A road. The bigger and less congested the road (internet connection) is, the faster you will be able to go. The smaller and more congested it is, the more delays you'll experience.

Consider the VoIP option if you…

- Have fibre broadband or a superfast connection available in your area
- Don't experience connectivity problems
- Are eligible for the Government's Superfast Britain grant



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WIDEBAND VERSUS **NARROWBAND**

During the design of conventional telephony systems, it was established that it was not necessary for listeners to hear all the frequencies that make up the human voice in order to determine the words being spoken. So a standard phone system was designed to pick up and transmit a specific sound range, based on frequency (300hz to 3400kHz), to allow people to converse, but avoid unnecessary complexity. This range is called narrowband.

Changes to high definition technology have prompted users to demand a superior quality audio experience. Wideband is able to pick up and transmit a broader sound range (150hz to 7kHz or higher) and therefore gives more sound clarity and a better quality. The clearer the sound is, the less likely listener fatigue will be, during the call.

Think of it as...

Standard TV and HD TV. You won't miss out on any of the action by watching your favourite soap opera on a standard TV (phone), but if you want to watch a wildlife documentary (i.e. need good call quality), the picture clarity on HD will be better, enabling you to see more detail.

Consider the VoIP option if you...

- Make calls in a noisy environment
- Make lots of conference calls

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SIP TRUNKING

SIP (Session Initiation Protocol) trunks are used to add VoIP lines to a business' existing, standard (PBX) phone system. This is particularly useful for businesses with periods of high seasonal demand or that are experiencing a period of sharp growth.

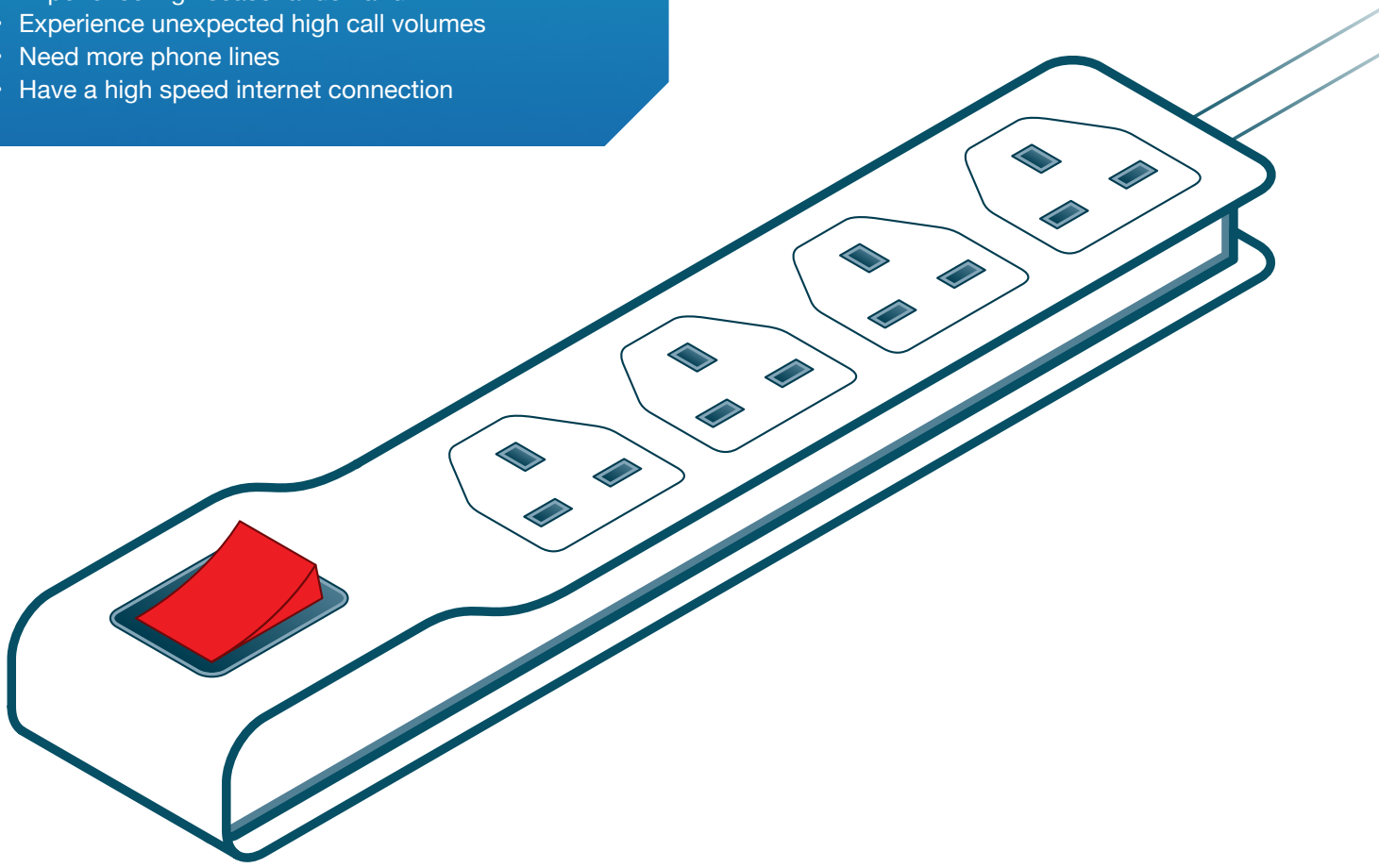
The trunks allow you to use a standard phone system and simply convert the call into data so that it can be carried over the internet rather than a phone line, and you can keep adding more trunks to your phone system if and when you need them. However, a SIP trunking system will only trunk (convert them to data and transmit them over the internet) if all of the other standard (PBX) phone lines are already in use.

Think of it as...

An extension lead which can be plugged in to an existing power socket (conventional phone system), if and when extra lines are needed.

Consider the VoIP option if you…

- Have a standard PBX system
- Experience high seasonal demand
- Experience unexpected high call volumes
- Need more phone lines
- Have a high speed internet connection



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JARGON BUSTER

PXB

A PBX is a standard business telephone system (with desk phones and landlines) that manages a business' internal and external calls. Its main purpose is to allow employees to share phone lines and save organisations from purchasing an individual line for each employee at the office.

BANDWIDTH

Is used to describe internet speeds. Think of a data connection as a tube and each bit of data as a grain of sand. If you pour a large amount of sand into a narrow tube, it will take a long time for the sand to flow through it. If you pour the same amount of sand through a wider tube, it will flow through much faster. The wider the tube, the more bandwidth a data connection has.

CLOUD COMPUTING

In its simplest form, cloud computing means storing and accessing data and programs in a data centre 'over the internet' instead of your computer's hard drive or server. What this means is your data – photos, documents, programs or whatever you choose - is basically stored in a server run by a third party, and accessed over the internet, rather than on one of your devices.

DATA CENTRE

A data centre is a highly-secure storage facility that houses, manages and powers a business' IT infrastructure, including servers, systems and hardware. Imagine it as a large library which is full of data. You can rent space in this library to store all your information, while also benefitting from your service provider's power, expertise and support.

DATA CONNECTION

A data connection is also known as an internet connection or a connectivity solution. There are several different types - ADSL broadband, fibre-optic broadband and Ethernet – and they are used to transmit data (e.g. emails, pictures, videos, files, or phone calls).

INTERCONNECTING

This is the physical linking of a service provider's network with equipment or facilities of another provider in order to exchange traffic and data.

Questions? Call our expert team on **0800 011 6559**