Businesses are starting to adopt mobiles and tablets and making them part of a 'mobile working' strategy.

BUSINESS GUIDE

Mobiles and Tablets

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"Mobile devices with internet access can provide businesses with the opportunity to offer mobile and flexible working to employees who may have a long commute."

Introduction

Over the last few years the sales of mobiles and tablets have steadily overtaken the sales of desktop PCs and laptops. It is not uncommon to upgrade tablets every 12-18 months, where PCs and laptops are normally replaced every three to five years.

Business are starting to adopt mobiles and tablets and making them part of a 'mobile working' strategy. As the cost of mobiles and tablets come down and become affordable items for individuals, businesses have started to allow an employee to BYOD (Bring Your Own Device) and enable it to be connected to corporate networks. According to the International Telecommunications Union, the mobile broadband networks that power these devices have become "the fastest growing technology in human history".

What does the technology do?

Why have mobiles and tablets become more popular?

Mobiles and tablets have become more popular as the processing power of the devices and the quality and resolution of the screens have improved. In addition, the combination of mobile networks with improved coverage and higher download speeds has led to a whole ecosystem of 'mobile apps'.

Will mobiles and tablets ever replace PCs?

For complex applications, large spreadsheets and content generation such as writing documents, presentations or computer programming a desktop computer or laptop is likely to be the most suitable device to use for the foreseeable future. It is more likely now that people will have multiple devices and use different devices depending on where they are and what they are doing. It is common practice to send and receive emails from a single email account from a computer, a tablet or a mobile phone and simply select the device that is most convenient at that point in time.
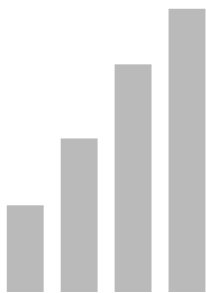
Can I create documents on the move or just view them?

Depending on the type of device you have, and the different input methods it supports, you may find some devices are more suited to viewing documents, rather than creating them. Some devices support additional clip-on, add-on or blue-tooth keyboards that make creating documents much more practical than using small device keyboards or on-screen keyboards. Mobile applications now exist for editing Microsoft Office documents on the move with mobile devices; however a reasonably high resolution screen is required to make the best use of them.

What does the technology do?

What it the difference between a tablet and a phablet?

A new breed of device has started to appear in the mobile sector, the phablet. Essentially the phablet is a large phone with a large screen that can be used as a tablet, hence the name 'phablet'. The best known phablet is the Samsung 'Galaxy Note' range of devices.

What is the difference between 3G and 4G devices?

A 3G device is designed to work on the 3rd Generation (3G) network, and a 4G device is designed to work on the new 4th Generation (4G) network, and fallback to the 3G network where 4G coverage is not available.

A typical 3G network in the UK can achieve mobile internet speeds of around 7Mbps, whilst a typical 4G network in the UK can achieve mobile internet speeds of around 14Mbps (though the quoted theoretical maximum speeds in advertisements are often much higher than most users experience outside of major cities).

TOP TEN BUSINESS APPLICATIONS

1 Travel applications such as the National Rail App

2 Mapping applications such as Google Maps

3 CRM applications such as Salesforce.com

4 Social media applications such as Twitter

5 Business networks such as LinkedIn

6 HR applications like Replicon

7 Note taking applications such as Evernote

8 Expenses applications like Expensify

9 Shared task lists such as Asana

10 File synchronisation tools such as Box and DropBox

Issues and concerns

Data security

Data security or information security needs to be considered where employees may have commercially sensitive information held on a mobile device.

1 The first and most basic level of security you need to consider is setting up the device to automatically 'lock' after a period of inactivity, and subsequently requiring a password, PIN code or other method to 'unlock' the device again.

2 The next level of security is encrypting the information on the device so that it cannot be turned on without a password or pin code, and any data stored on the device (or a memory card in the device) is safe from being able to be read by anybody who may steal or find the device.

3 The third and final level of security you may want to consider is called 'remote wipe'. This allows the owner of a device to completely remotely wipe or erase everything on the device from another computer or website. The Apple 'find my phone' feature is a good example of an application that doesn't just help you locate a lost phone, but also allows you to 'kill' the device or 'erase' the device remotely so it cannot be accessed by anyone who subsequently finds it.

Issues and concerns

Integrating with existing systems/processes

We are at the point now with mobile devices that almost all email systems and business applications have an 'email connector' or 'mobile app' for the leading business software solutions. If you are in any doubt about compatibility it is best to speak to the software manufacturer or mobile salesperson first, just to make sure.

Cost implications

In most cases the main cost of mobiles and tablets is not the cost of the device itself, but actually the 'calls and data' aspect of the contract the device is bought with. The UK is different from many other countries in that operators and manufacturers will often heavily discount the cost of the device (which may be as much a £500 in the case of a mobile or tablet) in return for a 12, 18 or 24 month commitment to a 'calls and data' tariff. Most mobile operators will now allow you to group, or 'bunch' several devices under one 'business tariff' and share collective minutes of calls, and megabytes of data.

Future-proofing

Again the UK is different from most other countries and 'upgrades' are part and parcel of most modern mobile contracts. Usually the 'carrot' to extend the contract for another 12, 18 or 24 months is the lure of an upgrade of the device itself.

Getting started

The most popular Operating Systems used on mobiles and tablets are:

Google — Android

Apple — iOS

Microsoft — Windows 8

RIM — Blackberry

The most popular devices used today are:

Samsung Galaxy — Android Phone

Google Nexus 7 — Android Tablet

Apple iPhone — iOS Phone

Apple iPad — iOS Tablet

Nokia Lumia 925 — Windows 8 Phone

Microsoft Surface Pro — Windows 8 Tablet

Blackberry — Phone

Blackberry — PlayBook Tablet

The first thing you should do is evaluate the business needs and decide if this is just a device for making calls and reading emails, or if you will need to make presentations from the device or run applications on it.

The next thing you should do is plan the use and introduction of the devices. Who will get them first? Who will pay for the device? Who will pay for the tariff? Will the device belong to the business, the employee or COPE?

If your users 'consume' information they probably don't need an external keyboard that can be clipped to the device or connected with a cable or via Bluetooth. If some of your users 'create' information they probably do need the use of an external keyboard for occasional use.

If you need to use the devices in offices, homes and coffee shops then the WiFi versions are probably all you need. However if you need to be truly mobile you should probably go for a model with 3G or 4G as well as WiFi.

What business benefits can I expect?

Flexibility

Mobile devices with internet access can provide businesses with the opportunity to offer mobile working and flexible working to employees who may have a long commute, or smaller children to drop-off or collect from school, and the employees who are happy to mix work life and social life on the latest gadgets and devices. Having the ability to access emails and documents stored on the cloud is a major benefit for such users.

MON   **TUE**   **WED**   **THU**   **FRI**

Extending the working week >>>>

For many people the ability to use a single device for both work and pleasure means that businesses can sometimes leverage the **'always connected'** lifestyles of employees and, for example, receive quick updates and replies to questions over the week-end without having to wait until Monday morning.

Once upon a time, having a formal email signature with a long legal disclaimer drafted by an army of lawyers made a company look professional and efficient, but nowadays getting a reply back from an email later in the evening or at the week-end with 'Sent from my iPad' is more likely to **impress a customer** who feels that the organisation is always available, responsive and cares about their custom.
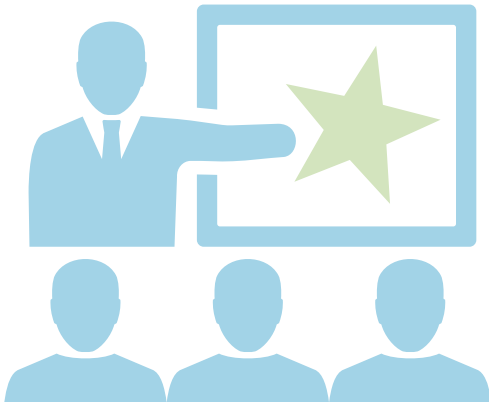
Some organisations frown upon employees installing games and social media applications on work devices. In theory it sounds like a good idea to keep business and pleasure separate, especially if the business has paid for the device itself. However businesses are increasingly adopting a new method known as COPE.

Corporately Owned, Personally Enabled (COPE) describes the situation where an organisation buys the device, but the employee treats it as his or her own device and is allowed to change the wallpaper, install games and applications or music. The logic is that because the device can also be used for games, music and social media the employee will take it with them everywhere and is able to respond to work colleagues and customers around the clock.

Several businesses have reported that when a work device becomes a COPE device, **employees will find a few minutes every day to check-in** with work colleagues even whilst on holiday (without ruining their holiday for the rest of their family).

What business benefits can I expect?

Enhanced presentations

Business presentations have also taken a new lease of life since some of the newer tablets, phones and phablets started to offer small adaptors or HDMI cables that could be used to connect them up to a monitor, projector or large TV to deliver presentations without having to carry around a heavy, bulky laptop bag.

Longer battery life

Whereas most traditional laptops would struggle to last more than a few hours on battery, the new generation of mobile tablets, phones and 'phablets' can be used continuously all day, and be left on standby for more than a week.

Due to the lack of any standard way to measure or compare battery life between devices many technology reviewers and technology magazines now quote how long the battery can last when playing a HD movie (High Definition) or making a telephone call.

The information provided below is by no means intended to replace manufacturers' official specifications, but as a 'rough guide' most mobile devices have been paired with batteries designed to last:

7-10 days	On standby
6-10 hours	Making telephone calls
5-9 hours	Playing a HD movie in 'full-screen'

Most of the new modern mobile devices use different types of processor than their PC or laptop equivalents. The most popular type of processor used in mobile devices was developed by the UK electronics company ARM (the same company that designed the Acorn, Archimedes and BBC Micro computers used in 80% of UK schools in the 1980s and early 1990s).

FOLLOW THESE

TOP TIPS

1 Try before you buy

If possible, try the device in a shop before you buy.

2 Battery life is key

Check the battery life of the device before you buy.

3 Ensure your 'must have apps' are available

Check that the apps you want to use are available in the 'app store' for your device.

4 Check compatibility with existing software

Speak to your IT support staff or software suppliers about device compatibility with the software you already use.

5 Trial the practicalities of 'going mobile'

Leave the computer or laptop behind and try working from a smartphone and tablet for a whole day to see how practical it is for you.

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NEXT STEPS

1. Register to attend a fully-funded Business Development Workshop:
   www.business.wales.gov.uk/superfastbusinesswales/events

2. Make an appointment to see a Business Adviser who will help you
   create a personal action plan to grow your business:
   www.business.wales.gov.uk/contact-us

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