

**L**ET ME paint you a picture: you wake at the perfect moment to feel rested and refreshed. A detailed itinerary is in front of you, but neither you nor a colleague wrote it. On leaving the house you are reminded, by your phone, to check you have your passport. You drive to the airport without car keys or a wallet.

At the airport you're already checked in and your phone is your boarding pass. You buy a coffee knowing it would be discounted before getting to the shop and you pay without cash or card. On the plane you surf the internet on your laptop.

You land in a country you've never visited and you don't speak the language, but you understand everyone. You tell the taxi driver the fastest route to your meeting. You give a presentation projected from your phone and understand counterstrategies shown on slides in a language you can't read.

You spill water on your laptop, but the data has automatically appeared on your phone and tablet. You buy a replacement, type in your username and password and the laptop is a mirror image of your old one with everything restored. Your day's expenses are automatically filed and the next itinerary written. You already know that tomorrow you'll rise rested and refreshed.

It may sound like science fiction, but everything here is either possible now or in the very near future. This is how.

**MOTION SENSORS**

You may think your job is to monitor technology, but increasingly technology monitors you. Apps such as Sleep Cycle (69p, iPhone) and ElectricSleep (free, Android) run with your handset placed in your bed. They use the gyroscopes inside modern smartphones to detect your movement and therefore your different sleep cycles so you are woken in light sleep.

**CONNECTED TRAVEL**

Online check-ins have taken the next step with apps like British Airways (free, Android and iPhone) which also act as your boarding pass. In-flight WiFi is now offered by 16 US airlines and global adoption is accelerating. Car travel is evolving too. The Zipcar app (free, Android and iPhone, inset below) allows you to lock/unlock and start your car from your phone and Mercedes and Ford will soon launch cars with built-in WiFi hotspots. Meanwhile travel apps like TripIt and ExpenseMagic (both in our Top Ten apps) scan booking references and receipts respectively to automatically create detailed itineraries and expense records.

**GLOBAL POSITIONING SYSTEM**

Mobile devices now not only detect how you move, but where you move using their inbuilt GPS. Premium driving apps such as TomTom for the iPhone (£49.99) provide turn-by-turn directions for journeys anywhere in the world and even ad-



NFC technology allows you to pay for goods with a swipe of your device

Phones are turning sci-fi into sci-fact, writes Gordon Kelly

# The future's calling



vised routes based on the day, time of day and live traffic alerts. Google Navigation (free, Android) is a more basic offering, but does a similar job for free.

**LOCATION AWARENESS**

Unlike GPS, Location Awareness ties where you are with what is happening around you. The likes of VoucherCloud and iVoucher (both free, Android and iPhone) show offers at stores and restaurants nearby while the iOS 5 software update will link location to tasks so relevant alerts can be triggered based on leaving the house or passing specific shops.

**NEAR FIELD COMMUNICATION**

The latest generation of smartphones is equipped with Near Field Communication (NFC) chips. NFC enables simple data exchanges at close proximity and Visa and MasterCard are championing it to pay for goods and services with a swipe of your phone. It works even if your phone runs out of battery and PIN entry is required for payments over £20.

**AUGMENTED REALITY**

Today's portable devices combine their camera, GPS and internet connection to "see". Currently the most famous example is Word Lens (free, iPhone) which detects written language when an iPhone's camera is pointed at it and displays the translation onscreen. Augmented reality has many more uses including travel and tourism. Notably the Nearest Tube app (£1.49, iPhone) shows you the closest tube station by simply holding your phone up to the

world around you, and Wikitude (free, Android and iPhone) provides information about buildings and landmarks when your device is pointed at them.

**ACOUSTIC FINGERPRINTS**

Acoustic Fingerprints help phones to hear. Using the microphone on your device, real-world sounds are recorded and matched to huge audio databases to identify everything from a song playing on the radio (Shazam: £3.99, iPhone; £2.99, Android) to performing spoken translation between two people (Vocre: 69p per translation, iPhone).

**CLOUD COMPUTING**

Cloud Computing is the act of taking information off your computer and instead accessing it via the internet (aka "the Cloud"). Consequently, lose or break your device and simply buy a replacement and all your data is back. Google has built an operating system, Chrome OS, which works entirely in the Cloud and the first laptop with it, the Samsung Chromebook (£349, inset above), is already on sale.

**GADGETS**

The Samsung Galaxy Beam phone features a built-in projector and Intel's new Ultrabook category of laptops measure less than 20mm thick, weigh little more than a kilo, can have battery life in excess of eight hours and cost less than £633. They are rivalled by tablets such as the Apple iPad 2 (from £399.99), RIM BlackBerry PlayBook (£359.99, inset left) and Samsung Galaxy Tab 10.1 (from £370.99) which while less powerful are even lighter, cost less and use touchscreen interfaces like phones.

The message to the business traveller is simple: the future is here now.



## Technology writer Gordon Kelly selects his ten must-have apps to make life easier for the switched-on business traveller



**iWork** This is the jewel in Apple's productivity crown and the tech giant has now released it for mobile devices.

Comprising three separate apps each costing £6.99, Pages is a slick word processor, Numbers a tidy spreadsheet app and Keynote is for presentations. All three allow received files to be viewed and new documents to be created. Each is capable of producing professional quality work. A nice touch is the 69p Keynote Remote app which allows Mac presentations to be controlled from an iPhone or iPad. **Developer: Apple / Platform: iOS / Price: £6.99 (each)**



**Documents to Go** iWork isn't the only productivity suite in town. Slowly building a name for itself is

Documents to Go, a single all-in-one app which can edit, create and view Word, Excel and PowerPoint files. While it may not look as polished as iWork, Documents to Go is more flexible, allowing files to be uploaded to, and accessed from, online services such as Google Docs, Dropbox, iDisk and SugarSync. Free Documents to Go desktop software also enables files to be synchronised wirelessly with your PC or Mac. **DataViz / Android and iOS / £9.47 Android, £11.99 iPhone**



**Skype** The gold-standard in VoIP (Voice over IP) internet calls and its mobile apps are as good as the desktop

software. Users can make Skype-to-Skype calls for free anywhere in the world while Skype calls to mobile phone and landline numbers are cheap, while its handy instant-messaging functionality can replace text messages. Just be careful to use the Skype on WiFi app when abroad or networks' expensive data roaming costs will make it a false economy. **Skype Software / Android and iOS / Free**



**LogMeIn Ignition** Sometimes no matter how powerful your smartphone, nothing can replace your

desktop. LogMeIn Ignition lets you view and control every computer you own directly through your handset. You can zoom in and out of your computers and take control as if you were sitting in front of them. Forget a file? Just e-mail it to yourself from your desktop. Need to start a download, or remotely switch your computer on or off? No problem. Even switch the monitor off remotely for privacy as you work. **LogMeIn Inc / Android and iOS / £18.94 Android, £20.99 iPhone**

