# Mobile Technologies: Past, Present & Future

# Introduction

The following presentation will be a brief overview into the history of mobile technologies, the effect upon the consumer, and what the future of mobile technology looks like. The various operating systems, past and present, as well as the corresponding hardware available to the application developers and what this means to the consumer.

# Past

The telephone has been through a frenzy of development over the past century since its invention. Until the 1980s, the telephone was a static entity only capable of sending and receiving voice calls, but upon the invention of wireless communication, suddenly the possible of what such a device was capable of were endless. It was all made possible with the PDA.

## PDAs (Personal Digital Assistant)

The OmniGo 700LX, released by HP in 1996, is credited with being a pioneer within the PDA world, being the first telephone with an LCD screen and having software installed on it – by definition a smart phone. It was DOS 5.0 compliant and was capable of running Windows. Coupled with an operating system, it was capable of sending text messages, and connecting to the Internet to send emails and faxes.

Although the technology was ready, it wasn’t until 1999 when the technology had improved sufficiently, with Internet speeds of up to 9.5kbit/s – fast by 1999 standards! This helped Japanese company, NTT DoCoMo, subscribe 40 million subscribers within 2-3 years; proving financial viability paved the way for EDGE and 2G Internet technological innovations.

## Early Android Days

In 2008, the first phone to use the open-source phone OS, Android, was the HTC Dream. Androids founder, Andy Rubin, sold the company to Google. Android uptake at first was slow, however by 2010 Android was the number one selling operating system for phones.

## Blackberry

Blackberry was an early pioneer in the smartphone industry, featuring ease of use for emailing and texting, it was a heavily marketed and successful product in markets aimed at a business personnel. It also featured extensive encryption of its devices, which was equally popular in the business districts.

## Windows Phone

First launched in 2010, it was Microsoft’s attempt at mimicking what Apple had successfully done in 2007. Create an all-encompassing GUI interface across mobile, tablet and desktop.

## iOS

Widespread mass adoption of the smartphone has to be credited to the iPhone. Apples development of the phone from 2007 onwards, showed the world what a phone could do and how it would embellish their lives.

Everything from GPS for maps, to in-built accelerometers for games (as well as many other uses - Maps being a proponent of the accelerometer).

# Present

For the past decade the smartphone has really been around for, the present day has a lot of exciting features that numerous iterations of new features.

## Voice assistances: Siri, Google Now, Cortana

One of the major advances in mobile technology is the drive towards using voice more over text. The major hurdle manufactures’ had to overcome was the algorithms to translate speech into text. The multitude of different accents and languages was a challenge, but an important obstacle to overcome. With wearable devices such as Google Glass and Apple Watch, we are to digest information through sight and respond

# Future

Augmented Reality (AR) is currently under rapid development and is expected to become an addition to our lives when online shopping for example, visualising the products in front of us and being able to manipulate them.

Google Glass might become a pioneer in this field, whereby emails will be displayed in your point-of-view.

Apple has started, but not taken it far yet, their Health Kit range. In the future these applications such as frequently taking your blood pressure and insulin levels and reporting the information onto your doctor to be stored in your doctors file.

The main advance, however, will be in GPU/CPU capabilities, with more powerful machines than ever before capable of astonishing graphical games, outputted via an Oculus Rift, for example.