

INDUSTRY INSIGHT

The rapid growth of the mobile phone as a travel planning tool

Kizoom's Tim Johnson looks at how the humble mobile phone has evolved to become the definitive travel tool; a universal technology driven as much by smart innovation as by the public's insatiable need for personally relevant transport information

The rapid growth of the mobile phone as a travel planning tool

With 130% market penetration in the UK, the mobile phone presents a uniquely placed delivery channel for personalised travel information. But with the increasing proliferation of technologies and disparate standards and models, the question is how can the mobile phone be used compellingly and cost-effectively to better serve the needs of the British travelling public?

Text messaging

Mobile web

Smart Phone applications

The texting revolution

The technology timeline for travel information using mobile phones starts with text messaging, which emerged in the late 90s and went mass market around 2000. Over 200m texts are sent in the UK per day, and still growing fast, and there are an estimated 2.5 billion active text users worldwide. Today, one way or another, 80% of companies in the travel sector use text to communicate with customers.

200 million
texts are sent in the UK every day

Text messaging is here to stay. It's great for really simple services, trying to do one thing quickly and clearly. Good text services are easy in concept and quickly create familiarity that breeds re-use and word of mouth recommendation. It's also a compelling proactive technology for generating response; in the main, getting a text message is a welcome event.

There's something deeply human and culturally resonant about text messaging - a study at the University of Leuven has confirmed its addictive properties! What's more, it provides easy ways to monetize services, such as charging per message, and mobile operators love it because of its high profit margins.

Kizoom was quick to harness the value of text messaging in delivering personalised travel information. For example, text is key to our Live Travel Alerts services, where it is used to deliver simple key information to commuters at the point of decision, before leaving home in the morning and ahead of the commute home. It's an accurate, reliable and low cost use of mobile phones which goes a long way to instilling passenger confidence.

Away from the regular commute, our Live Departures to Mobile service addresses the need for real-time information on the move, delivering the next bus departure times with dependable simplicity, now serving some 100,000 queries a month.

The mobile web – internet on the move

The idea of making the internet mobile had more of a stumbling start than text technology, with the first wave of services launched in the early 2000s proving something of a false dawn. With devices, networks and data providers not ready in many ways, services were often hard to use and expensive, and 'WAP' soon got something of a bad reputation.

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However, technology has evolved in leaps and bounds over the past couple of years. The mobile web now really works and is in a phase of explosive growth, well on the way to becoming a second universal technology available to use for travel services. In the UK there are at least eight million active users, and with data volumes doubling every six months it is rapidly catching up with SMS in familiarity.

This change has been made possible by three key developments. Firstly, handset capability – virtually every phone being sold can now connect to the web, and as screens get larger and more phones have good location and

mapping capabilities, they can display well designed web pages very effectively. Secondly, faster networks - thanks to 3G technology the interminable wait for page delivery is a thing of the past. Thirdly, and just as importantly, the rapid spread of flat-rate data tariffs, at as little as £5 a month, is instilling confidence; taking away consumer fear of unpredictable costs.

Mobile websites are much richer than text messaging services. They are interactive, personalisable, and can feature images, maps and hyperlinks - altogether more flexible and easier to use. In fact, the mobile web will soon be seen not as inferior to the desktop internet, just different - and for transport services, often better.

The mobile web is seen as skewed towards the youth market, but this is changing fast with the most popular mobile site being cited as the BBC. It will soon be as universal as the desktop web, and is probably best thought of as another wave of the internet phenomenon, with a time lag of 10 years or so.

“For services to make the best use of the more advanced mobile phones it is beneficial to build applications rather than websites”

Are people ready?

So the phones are ready, the networks are ready and cheap access has arrived. 'WAP' is rapidly being reborn as the mobile web - an effective mass market delivery channel for a wide range of information services. This leaves us with three key questions: What services will actually be useful on the mobile web? How should they be designed? What commercial models will work?

The fundamental point to realise is that the mobile web is not just the web. Careful design and selection of appropriate content for the small screen and keyboard and the mobile context are critical. Specialist expertise is needed; simply putting regular web pages on mobile phones may be cheap but delivers a bad, off-putting experience - even on the more advanced devices.

Harnessing the mobile web for the delivery of effective travel information is our life blood. Kizoom has already created a raft of pioneering services for the mobile network operators, sites for Centro, TfL, and now the new Traveline NextBuses site.

The advent of applications

For services to make the best use of the more advanced mobile phones it is beneficial to build applications rather

than websites. An application is a piece of software actually downloaded to the phone, rather than being accessed remotely on a server. The application is able to use the advanced features supplied on particular phone models, delivering richer features than websites, and often faster and more attractively designed.

Applications also have the advantage of being usable offline if desired, which can be very valuable in some travel contexts such as reading timetables while in a tunnel.

However, building applications can be very device specific, creating a major challenge to service providers. This generates a proliferation of technologies, with many slightly varying versions being needed for different brands, models, operating systems, screen sizes etc. To achieve consistency and quality across a wide range of different phones without costs spiralling out of control can be a headache.

In creating an application there is a balance to be drawn between cost, richness of features, and the range of devices on which it will work. Kizoom has developed cost-effective ways to re-purpose applications across multiple platforms, for example with our Timetable to Mobile service. However, applications are never universal in the way that text or mobile web services can be, and an assessment needs to be made on a case by case basis looking at business priorities to judge the relative pros and cons of application and mobile website approaches.

The smartphone generation

Early smartphones stumbled to market, somewhat prematurely. They were often fiddly to use with poor screens and held back by issues such as data speeds. There was significant limitation in their range of data services, making them perceived as useful for business but of limited mass market appeal.

30 million

iPhones have been sold to date

The iPhone, by contrast, is transforming the nature of the mobile phone into a device designed for a broad range of communication, information and entertainment. By bundling together attractive technologies (GPS, touch-screen, Wi-Fi, etc.) with an extremely well-designed user interface, the iPhone is to the basic one-function phone what the PC was to the word processor back in the 80s.

The iPhone has been quick to achieve massive popularity with over 30 million handsets sold to date, and has spearheaded a whole new generation of devices. In

scrambling to catch up with Apple other manufacturers are escalating the drive for innovation. Some are succeeding, such as the highly capable phones using Google Android technology which are gaining traction in the market and look likely to be a serious player in 2010.

“As the environmental agenda forces people from their cars, the travelling public is hungry for accurate and dependable transport information”

iPhone - fad or future?

The sales figures are certainly driven by fashion, but also by real functionality and usability. Nobody buys an iPhone just to make calls; it's the definitive lifestyle accessory for personalised information and entertainment services.

Tellingly, iPhone devices represent a much higher proportion of travel service users than might be expected. A valid gauge of this can be seen from the staggering million journey look ups and 250,000 downloads of thetrainline.com app in its first two weeks in the Apple App Store (part of the iTunes Store) last month. Kizoom built this innovative app based on the design of our hugely popular and pioneering MyRail Lite service. Of course thetrainline is a big brand, but stories from all over Europe, and not only in rail, suggest that good quality travel applications for contemporary smartphones can be very successful, and are now moving beyond the obvious early adopters into the mainstream.

1,000,000

**journey look ups were made on
thetrainline.com app in the first two weeks**

Building device-optimised applications is essential to make effective use of these phones. App stores - from which users download applications either for free or for a small one-off fee - are providing a popular new route to market and commercial model for services. Buying an application is an experience similar to downloading a piece of music, and feels much more comfortable to the consumer than

old-style subscription models. Apple's iTunes leads the way, with two billion downloads to date, but Android Market, O2 Litmus, Orange Application Shop and others are all rapidly copying this concept.

Rising to the technical challenges of the smartphone generation, Kizoom has invested in a suite of technology to act as a flexible platform for multi-modal transport services. A collection of plug-and-play content for bus, tram, train, road and disruption news for varying mobile phone types is under development, which can be rapidly extended and adapted as new devices come to market and trends evolve.

Conclusion

While text messaging remains ideal for the simplest services, it is rapidly being joined by the mobile web as a second core channel for services that need near-universal accessibility. There is no doubt that the mobile web is increasingly cost-effective and better suited for richer, more complex information requirements than text messaging.

Application technologies, in particular for the advanced devices of the iPhone generation, are proving a very powerful way of communicating with a wide audience through attractive high usage services, and associating values of modernity and innovation with transport. Modern smart phones come into their own in respect of advanced travel services using location awareness, multi-modal data, and the provision of intelligent decision support.

Which technology is optimal for a particular service largely depends on the complexity of requirements and desired audience, balancing the need for universality with the desire to create a splash with a richly functional advanced service for the latest phones.

What is clearly evident is that transport providers today have unprecedented access to willing consumers. As the environmental agenda forces people from their cars, the travelling public is hungry for accurate, dependable and affordable transport information. There is no more convenient delivery channel today – or tomorrow - than the ever-smarter mobile phone.