Virtual Meets Point-of-Presence

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Genkiosk

Introduction

The virtual world meeting point-of-presence (PoP) seems like something of an oxymoron. And yet the rise of self-service kiosks as internet access points and Wi-Fi hotspots has proved that the two can be synonymous, working together to provide greater access for users to the digital world.

This paper looks to outline the burgeoning self-service kiosk opportunities for Internet services providers (ISPs) and telecoms companies. With the rise of smartphones, why are kiosks appealing to internet users? And how are kiosks being used to develop Wi-Fi hotspot networks?
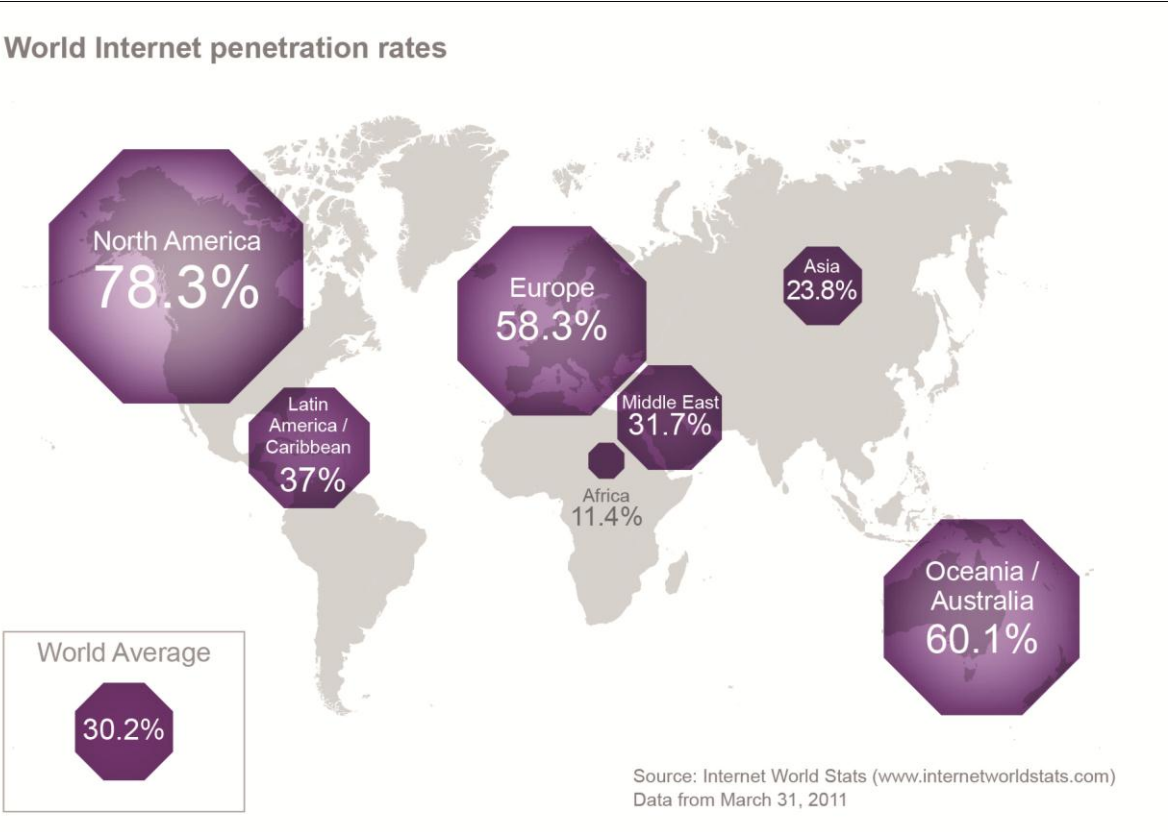
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Accessing the Internet

There is a widespread assumption that Internet access is prolific and widely available. Public and private Internet access has certainly come on apace over the last decade. Broadband has become the norm in much of the developed world, while internet penetration rates are significantly over the global average in North America, Australia and Europe.

According to Internet World Stats however, the average global Internet penetration rate in 2011 was only 30.2%. That means that on average, just under a third of the world's population have access to the Internet. It is clear that Africa (11.4%), Asia (23.8%), the Middle East (31.7%), Latin America and the Caribbean (37%) have a significant way to go in order to bridge the global digital divide.

The Internet penetration rates for Europe are somewhat surprising. The statistics show that only just over half of the continent's population (58.3%) have access to the World Wide Web. The developed world may have further work in terms of providing Internet services on a national level. Taking the UK as an example, recent data from the ONS (August 2011) highlights that although 77 per cent of households have Internet access, 5.7 million households still remain without.

World Internet penetration rates

North America 78.3%

Europe 58.3%

Asia 23.8%

Latin America / Caribbean 37%

Middle East 31.7%

Africa 11.4%

Oceania / Australia 60.1%

World Average 30.2%

Source: Internet World Stats (www.internetworldstats.com)
Data from March 31, 2011

There are significant opportunities here for ISPs and telecoms organisations to provide a much needed internet service point-of-presence. Where physical access is a barrier, service providers can develop a self-service kiosk estate in optimal locations. These kiosks can then be monitored for performance.

ISPs should look to partner with service organisations that provide kiosk management software. This technology is readily available to analyse peak usage, reporting on whether there are idle kiosks and at what times. Real time usage data provides the ISP with comprehensive information that allows decision makers to determine service prioritisation. If a fault occurs at a busy location at a peak time, intelligent software management systems should then report that fault immediately, so that it jumps to the top of the queue. SMS, email and telephone alerts can be automatically set up to report faults to ensure downtime is kept to a minimum.

Kiosks also help end-users overcome the financial hurdle of initial investment in the hardware, installation fees and on-going line rental. Self-service kiosks are based on a prepay model which means customers can ensure their internet usage is to an affordable standard.

In terms of internet access therefore, self-service kiosks can work to bridge the global digital divide. They enable end-users to overcome physical and financial barriers to Internet access, as well as being a cost-effective and intelligent way of delivering services by the service provider.

Tourism, Leisure and the Internet Café Culture

Added value services are crucial to the tourism and leisure industry, providing an all-round positive experience for customers. Ensuring guests and visitors have access to the Internet is seen as one of these key value-adds. Hotels, tourist attractions, airports and resorts all need to provide Web access points for customers and are looking to self-service kiosks as a viable, secure and cost-effective option for Internet access.

The key benefits for travellers and tourists are that kiosks are reliable points to access the Internet rather then rely on unfamiliar and potentially variable network coverage from a smartphone overseas. In addition, customers avoid being hit by expensive roaming charges on their return home. They are also secure points to access the Internet while abroad and the kiosks can be placed in a pleasant environment to create an agreeable value-added experience. The Icelandic volcano eruption in 2010 and the travel chaos that ensued proved to be a stark reminder of the importance reliable overseas Web access is to travellers needing to re-arrange new routes and communicate with business partners, colleagues, friends and family.

For tourists and travellers therefore, the importance of having a physical point-of-presence for Internet access is still essential in the age of the smartphone. An obvious example is pre-flight check-in. Virtually all airlines now encourage all passengers to check-in online, providing a financial incentive and no need to queue when you arrive at the airport. To do this on a smartphone is somewhat cumbersome and does not provide the ability to print a boarding pass at the end of the check-in process. A self-service kiosk situated in a hotel lobby provides an easy solution for the traveller.

The continued existence of Internet café culture into the second decade of the 21st century is something of a phenomenon. The Philippines is a prime example, where 66% of the population accessed the Web from Internet cafés in 2011 (Net Index Study, Yahoo! Philippines and Nielsen Media, 2011). A particularly popular use of Internet cafés in this region is for gaming. Over half (56%) of Filipino 'netizens' use the Web for online gaming. A BBC article analysing the continued presence of cyber cafés in towns and cities across the UK also highlighted the importance of providing Internet access as a communal facility (*Who still uses internet cafes?,* 31 August 2009). Although the majority of UK citizens have home broadband, café owners have said their clientele wanted a 'change of scene', enjoyed the environment of being in a café, needed to access social networking and private email accounts away from the office during lunch, or migrant workers wanted to talk to their families overseas.

The reasons for continued Internet café usage are many and varied therefore. Café owners need to ensure that they are making the most of the latest technology to maximise on the returns from each unit. Intelligent kiosk management software allows for regular reporting on which kiosks are performing well, as well as providing vital data for those that don't. Decision-makers can dig deeper and form strategic marketing plans to encourage uptake. The technical support provided by a third party kiosk technology provider frees up café staff to interact and service clientele, namely focussing on the revenue generating elements of the café.

This is certainly the case in the South Pacific island of Fiji which has a buzzing cyber café culture. Connect Fiji (part of Telecom Fiji) has recently invested in self-service kiosk management software to take advantage of the burgeoning opportunities provided by kiosks.

By partnering with a kiosk provider, hotels, cafés and leisure organisations are providing a real added value service with minimum effort on their part. Best in class kiosk technology allows for regular reporting on usage and uptake, as well as technical support and maintenance. Outsourcing this to an experienced kiosk service provider means less hassle for the hotelier, Internet café or travel company and better service for the customer.

Cloud service

This diagram is a representation of the servers to be provisioned by GWD Media in a cloud-based service. The resources are automatically adjusted as the load system changes (e.g. more users or more data coming in from kiosks).
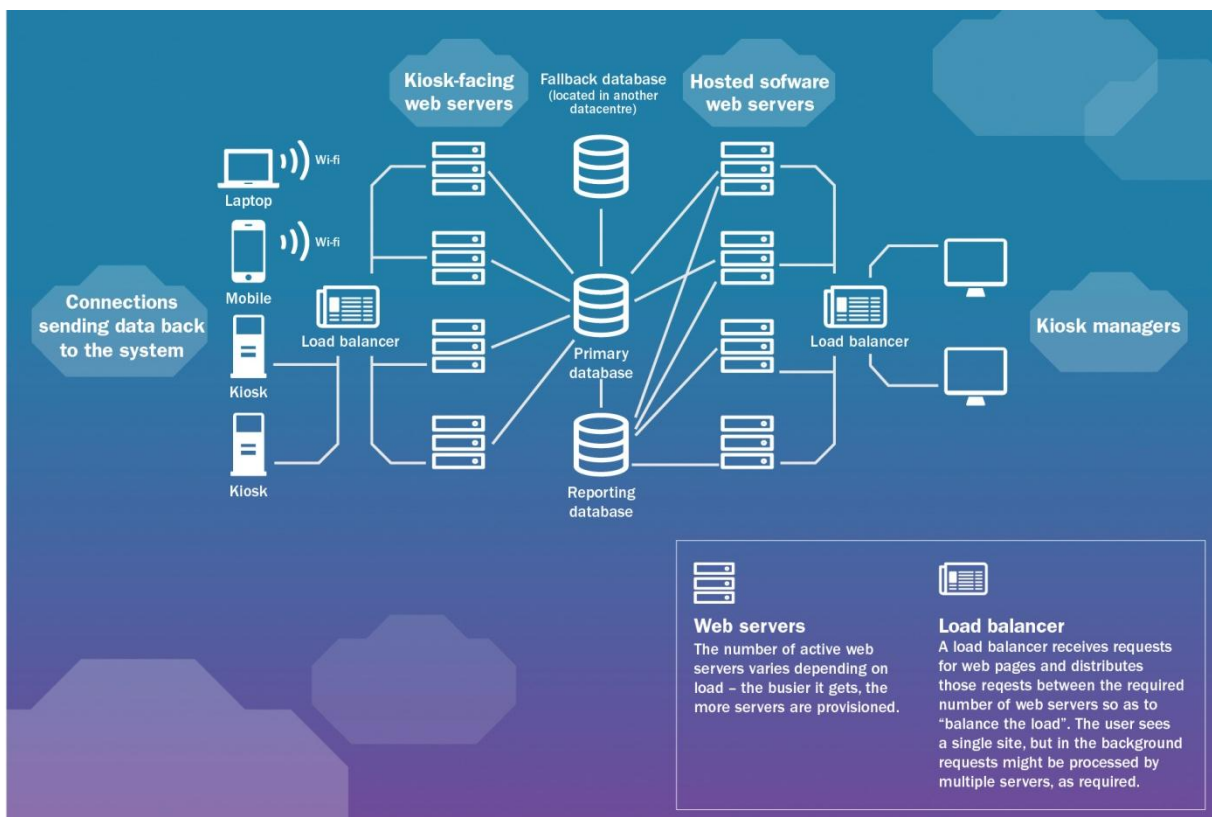
Wi-Fi Hotspots

A recent study entitled "Digital Omnivores: How Tablets, Smartphones and Connected Devices are Changing U.S. Digital Media Consumption Habits" (comScore, November 2011) has revealed how the public consumes internet across a multitude of devices throughout the day.

This trend is being fuelled by the increase in smartphone and tablet usage. Singapore leads the world in terms of non-PC device usage to browse the web with 7.2% of overall browsing activity from non-PCs. In the UK and US about 4% of overall web browsing originates from smartphones and 1.6% from tablets. These figures point to rapid growth in a market which barely existed four years ago.

> "tablet owners use their devices to browse news websites at the start of the day, and then move on to a PC during the working day, and then back to a tablet at the end of the day. Similarly, mobile phones may be used for web browsing through the day when people are away from a PC."

Charles Arthur, Technology reporter, The Guardian 18 November 2011

This 'digital omnivore' trend will only increase as tablet device technology is developed and becomes more accessible across a variety of price points. ISPs would be wise to develop their Wi-Fi hotspot networks to make the most of this trend.

Wi-Fi hotspots need to have a point of presence. The advantages of an interactive and self-service location are obvious. For the network operator, providing a prepay model means that users only pay for what they need and cash or card payment can be taken at the Wi-Fi kiosk. This also avoids the need to man Wi-Fi hotspots, reducing labour costs and improving uptake as both payment types can be accepted. Business intelligence systems built into kiosk software allow for regular usage reports, helping to identify 'hot' Wi-Fi locations, track metrics like customer service issues and report faults. This is crucial to enable efficient operations and service prioritisation.

7.2%
of overall browsing activity from non-PCs

Wi-Fi hotspots have also become popular in retail locations such as coffee shops and food outlets – places where consumers go to pass time and meet friends or colleagues. Once again, the benefits of kiosks to act as a Wi-Fi hotspot in these locations echoes that of the Internet or cyber café. Whilst Wi-Fi access draws in the punter and keeps them browsing, staff can focus on selling drinks and foodstuffs.
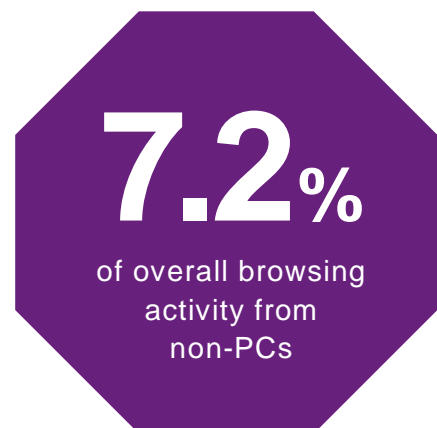
Summary

Public Internet access can and is being transformed by self-service kiosks. For the end-user, the ease of use and physical presence is an important value-add.

As we become digital omnivores, hooked to our Web browsing devices, there will inevitably be a transformation from value-add to necessity to access the Internet, whenever and wherever it is convenient for the consumer.

This is where Wi-Fi kiosks will come into there own. For the operators, business intelligence software will be a must-have to maximise on the opportunities afforded by self-service kiosks.

Self-service kiosks – the real opportunities