



Q2 2012

Top-Line Observations & Findings

With more than 10 million daily users, Devicescape is a leader in WiFi offloading services. The company publishes the Devicescape WiFi Report in an effort to better understand business and consumer behavior around WiFi networks and WiFi-enabled devices. This data is then passed to device manufacturers and service providers, allowing them to ultimately build better products for the end user.

More than 1,800 Devicescape members of all ages, professions and locations participated in this quarter's survey, offering their opinions on topics ranging WiFi connectivity habits at the office and home to the types of activities respondents use their mobile devices for.

Key findings from the "Q2 2012 Devicescape WiFi Report" showed:

- The Devicescape Curated Virtual Network (CVN) reached 8.6 million hotspots during the second quarter.
- More than 90 percent of respondents expect large events like the Olympics to provide free WiFi. A vast majority of respondents (82 percent) applaud the London subway system for providing its riders free WiFi during the Olympics.
- Over 77 percent of respondents would use their smartphones to take advantage of coupons or other deals while visiting London during the Olympics.
- Data charges due to roaming are a top concern among international travelers, with 88 percent indicating so. Another 89 percent rely on WiFi to keep data charges low and stay within their data plans while traveling overseas.
- Forty percent regularly stream sporting events on their smartphones or tablets to keep abreast of the latest scores.
- Almost 41 percent say they would use social media to connect with fellow sports fans or place bets on live, in-play betting apps.
- At least one-half of respondents say the number of people at a sporting event or festival has affected their cellular network.

WiFi Key for Overseas Travel

With the 2012 Olympics in London looming, overseas travelers are reminded that their cellular usage might have to be reined in for a week or so — that is, unless they can connect to a WiFi network. Overseas roaming charges could put a significant dent in a smartphone customer's wallet, the threat of which will no doubt severely curb any communications with family and friends back home. While traveling, 88 percent of our respondents say they would worry about such charges, and a further 89 percent would rely on WiFi to keep charges low. Thankfully, Olympics revelers from far away can find some respite from data charges on the London Tube, which has plans to provide free WiFi for riders throughout the event. More than 82 percent of our respondents agree that this is a fantastic idea, and absolutely critical to maintain connectivity.

Roaming charges would not be the only concern at the Olympics, according to our respondents. With such a large volume of people using their smartphones at an event of Olympics magnitude, cellular service is likely to be compromised. Almost 56 percent of respondents cite this as a top concern.

It seems our respondents would find other uses for their smartphones if they were to attend the Olympics: More than 77 percent would use their smartphones to redeem coupons and deals at the event. This mirrors trends in previous surveys, which highlight leveraging smartphones and WiFi to take advantage of deals in retail shops, grocery stores and the like. Also echoing past reports is the requirement that hotels offer free WiFi. Indeed, 93 percent of our respondents underscore this expectation again this quarter.

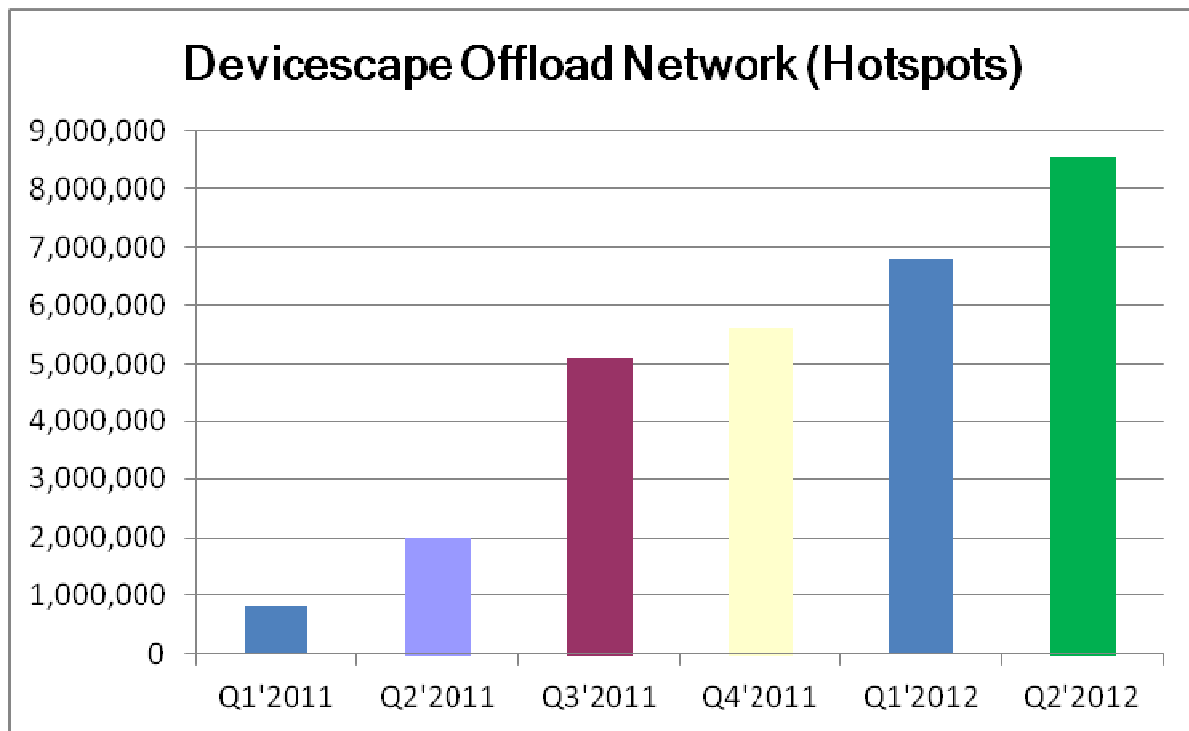
Sports Enthusiasts and WiFi: A Match Made in Heaven

Somewhere in the world, a sporting event of some sort is being televised — or so it seems. With this in mind, sports enthusiasts access their smartphones or tablets to watch the latest live streams or video highlights. While our respondents indicate that 40 percent do this regularly, the rest indicate a slow or unstable connection keeps them from watching on their device. WiFi would likely rectify this issue with a consistent, high-quality connection unaffected by volumes of data users.

Linked to this is a certain reluctance to use social media to connect with fellow sports fans at a live sporting event. Almost 24 percent of our respondents say they would use their devices to connect with fellow fans or place bets on live, in-play betting applications only with a reliable wireless connection. Forty-one percent would not be sidelined by a lackluster wireless connection.

"The 2012 Olympics and similar events present an opportunity for WiFi to shine," said Dave Fraser, CEO of Devicescape. "In environments where wireless connections suffer due to heavy data usage, WiFi, with its unlimited spectrum, emerges as the better choice to keep the citizens of the world connected."

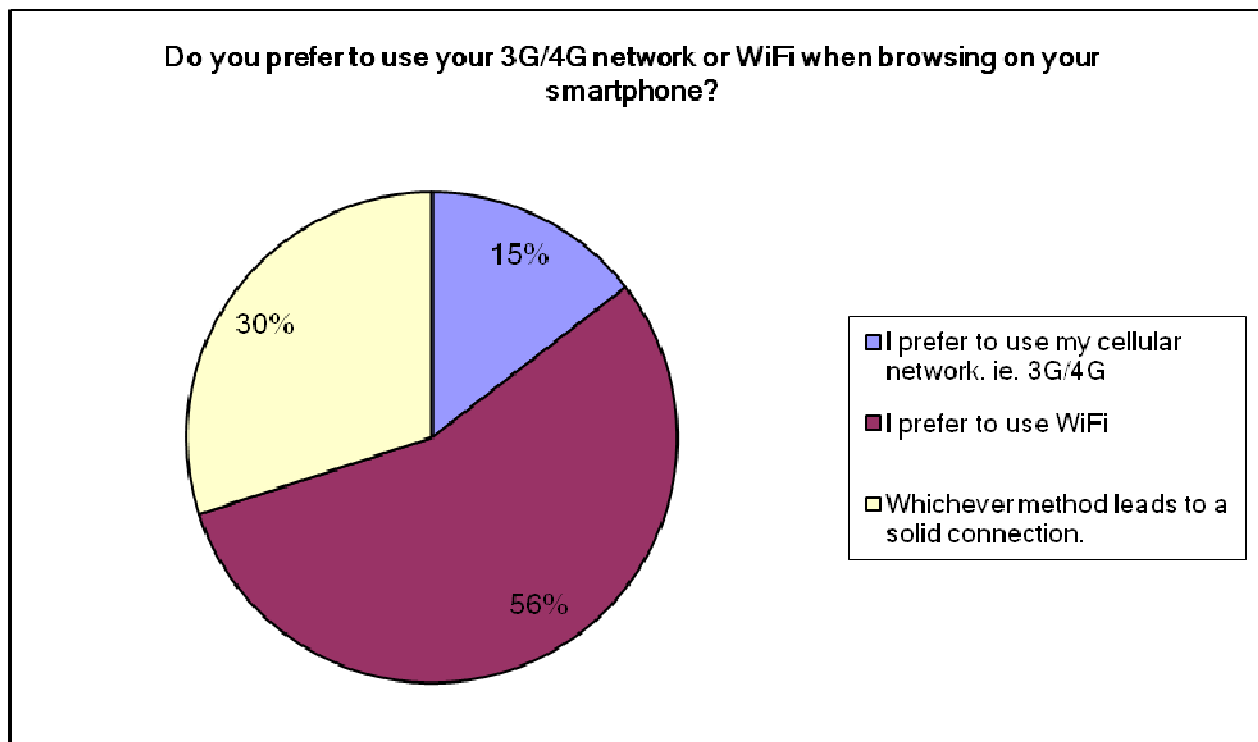
Devicescape Offload Network Statistics



The number of curated hotspots reached 8.6 million through the end of the Second quarter. The network should continue to experience significant growth through 2012 as more smartphones are released into the market, thus discovering more hotspots globally. Devicescape will continue to partner with various global mobile operators to speed the network growth.

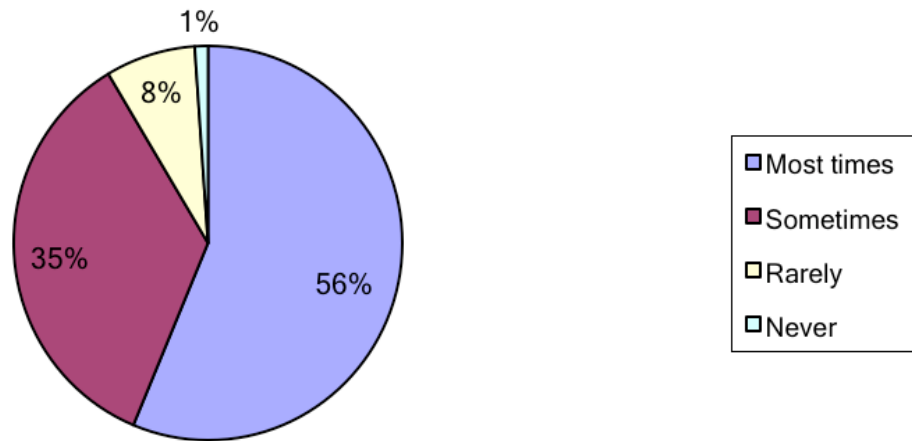
The WiFi offload rate achieved on the virtual network continues to exceed 30 percent depending on geography. This offload rate should continue to rise as more and more hotspots are added to the network.

WiFi Preference Versus 3G/4G by Smartphone Users



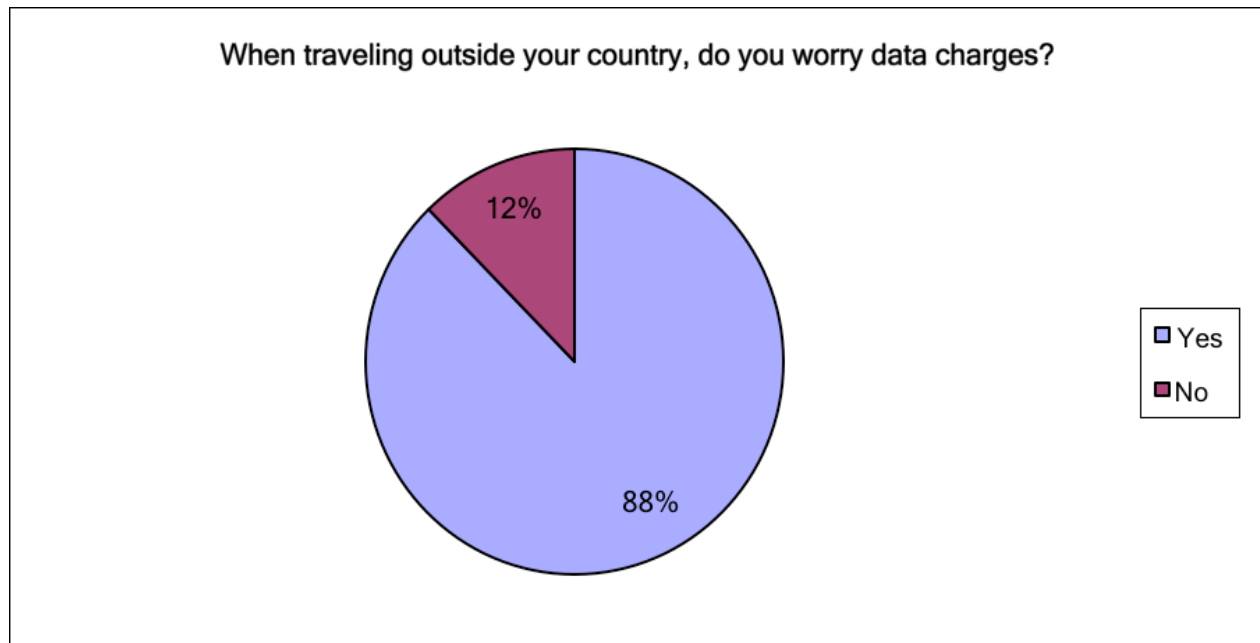
The reliance on WiFi over existing 3G/4G networks continues to remain high through the second quarter. Given that Devicescape previously had curated 6.8 million hotspots by the end of the first quarter, this shows a correlation between the demand by consumers and their increasing availability.

Do you check to see if there is a free WiFi hotspot connection while on your smartphone/tablet when you're out of the home or office?



Here we see illustrated the increased awareness of consumers to the availability of WiFi hotspots. Only 1 percent of those polled indicated they never looked for an open WiFi connection.

Mobile Device Use While Travelling



In the modern world it has become increasingly common and expected to maintain a virtual presence regardless of one's physical location. In the office or at home, users are expected to be able to receive emails, have access to social media and make use of cloud-based services. For the most part, this is not an issue. However, when faced with the prospect of travel, 88 percent of respondents indicated a concern over the fees associated with international roaming and data usage.

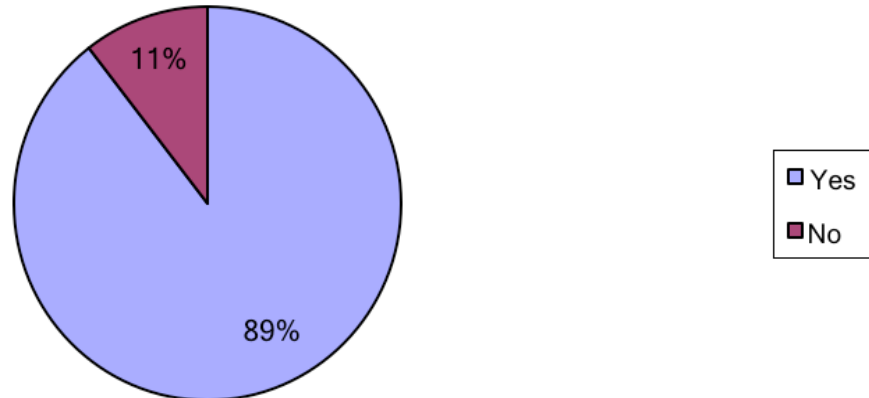
This is not without justification. Currently, a major U.S. provider charges US\$30 for 120MB of data and an additional US\$30 for every 120MB afterward¹. Those without a plan are charged a prepaid rate of US\$20 for every 1MB used. Given that mobile devices are increasingly designed to maintain an "always-on" connection, having the device on is often enough to incur exorbitant charges.

With the 2012 Olympics about to get under way in London, this topic is not without merit. As a major athletic and cultural event, it is expected to draw international attention. Journalists, officials, government representatives, professionals, tourists and of course athletes will gather in London. Such influx of international travelers, all of whom require reliable data access for various activities, also means high roaming costs.

¹'AT&T International Data Plans' – July 21, 2012

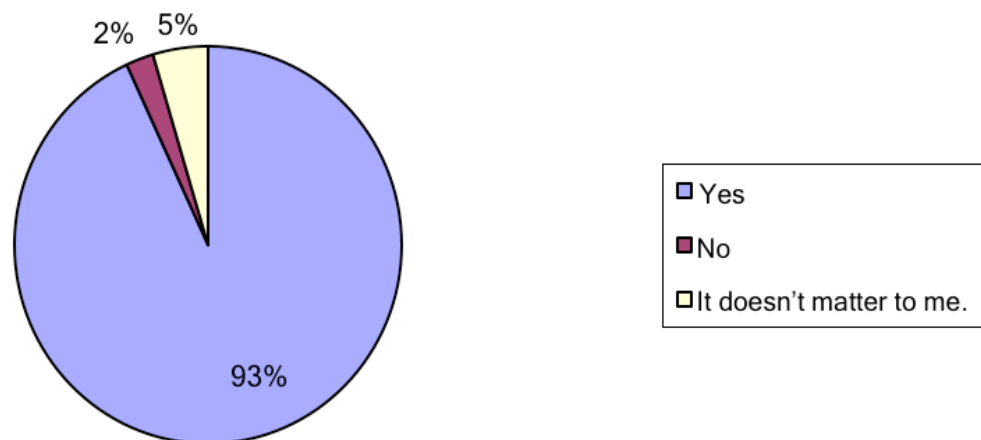
<http://www.wireless.att.com/learn/international/roaming/affordable-world-packages.jsp#data>

If so, do you rely on WiFi to keep your data charges down and stay within your data plan?



Out of the 88 percent of those who responded to concerns about the costs of using their 3G/4G connection abroad, 89 percent indicated that the use of WiFi was their primary means to reduce the charges. This is by far the simplest and most effective means by which to address the problem currently. In fact, after consumer backlash over large bills received while using data abroad, many companies have taken to encouraging the use of WiFi instead of the cellular connection to their subscribers who have left the country.

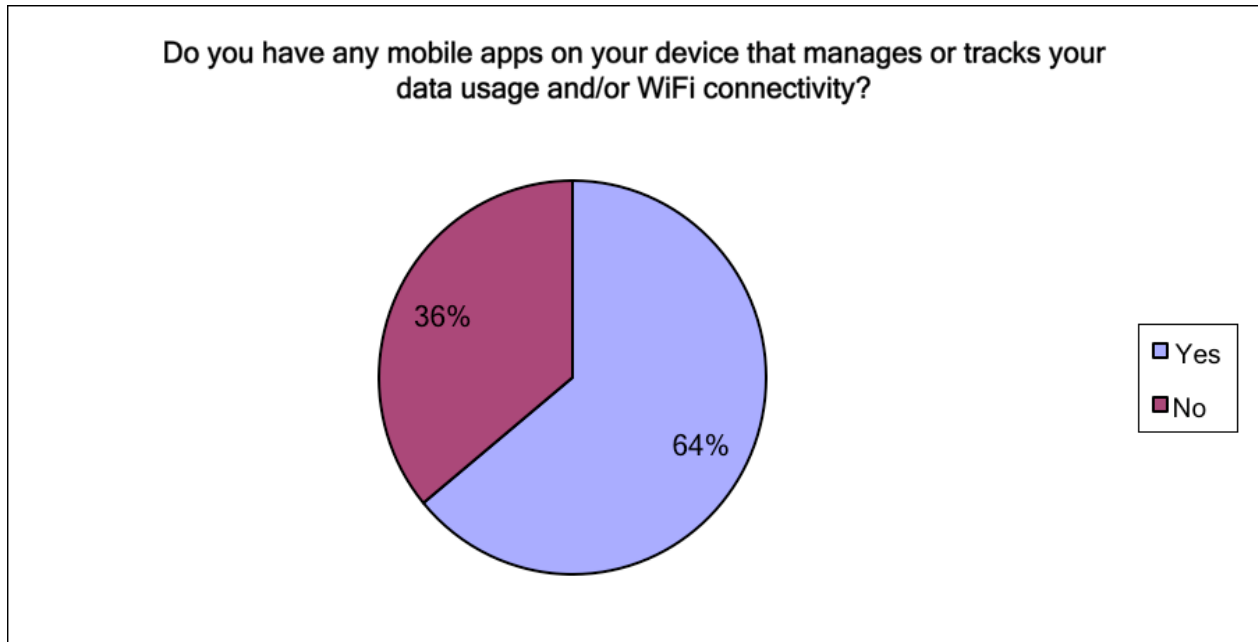
When staying at a hotel while traveling, is it important to you that the hotel offer free WiFi?



Given that while travelling most consumers will stay in a hotel, access to guest WiFi is increasingly a must-have for most people. This is both a convenience and cost-saving measure for the consumer, as well as a marketing strength for the hotel property.

Third-Party Data Management

While the use of WiFi is cost-effective and efficient, there is one unfortunate truth to the matter: WiFi is not always available to be used. Whether it is because of being on the move or no hotspots in the area, the mobile device's 3G/4G network connection may be the consumer's only option. Given the already-established concern over the fees associated with international roaming, there must be another means to control the amount of data a device consumes.

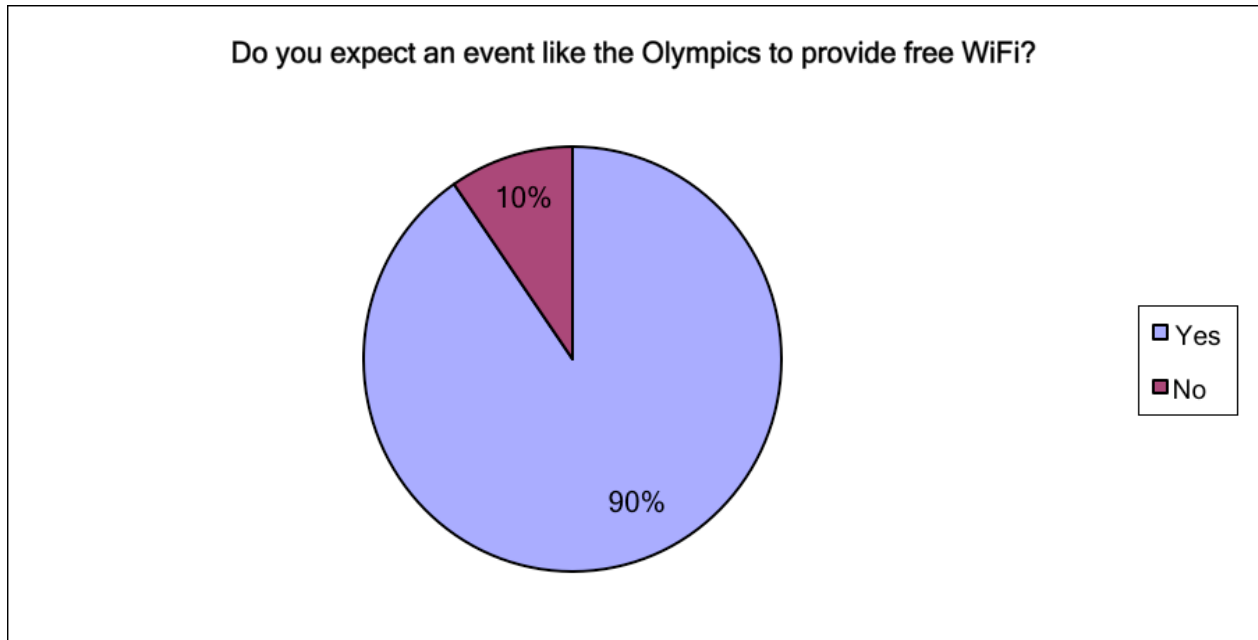


This is where the growing category of mobile software applications comes in: data management. These applications work by monitoring the usage of a mobile device's various connections and offer the user various options. Alerts, disabling connections at certain thresholds, or even the capacity to disable specific applications are all features found within such software.

This has not quite caught on yet as the graph shows. Only 64 percent of respondents indicated the use of an application that manages their data. It is important to note that such software will grow more common and prevalent in the immediate future as more mobile operating systems include these features natively. One that has already done so is Android, which included it in their 2011 version 4.0.1 release "Ice Cream Sandwich".

2012 Olympics and WiFi

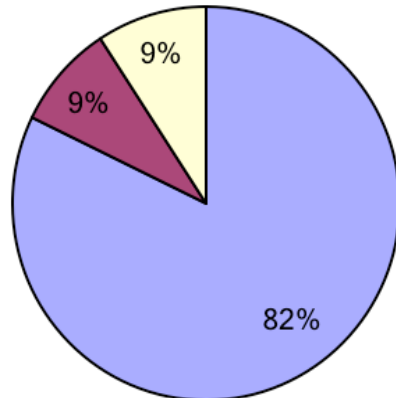
One cannot understate the impact a large event has on the local carrier networks and consumer demand for access to a reliable WiFi connection. This increases when the event is of such magnitude as the Olympic games. When it comes to highly publicized events such as the Olympics, there are increased demands by consumers for various concessions to be made.



Perhaps the most obvious is the expectation of free WiFi access for the duration of the Olympics. Ninety percent of those polled indicate that this is a message not to be taken lightly. In fact, London has taken steps to allow increased WiFi access throughout the city. Many projects were initiated by the city and broadband carriers to facilitate a robust and widespread network of WiFi access. For example, the London Tube has collaborated with Virgin Broadband to bring WiFi to the region's subway stations. Meanwhile a local cab company, "Green Tomato Cars," has equipped its fleet of 300 environmentally conscious cars with WiFi hotspots as well².

² 'Green Taxi Firm Adds Free WiFi to London Cabs' TechWeek Europe, July 5, 2012
<http://www.techweekeurope.co.uk/news/green-taxi-london-free-wi-fi-85203>

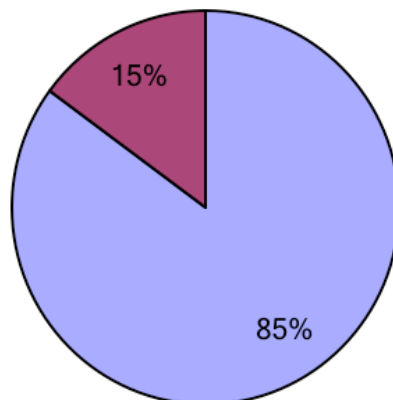
The London Tube (subway system) is planning on providing free WiFi during the 2012 Olympics for people traveling on the subway. Do you think:



- ☒ This is a great idea. People need connectivity underground
- ☒ This is not a good idea. There will be backlash if the WiFi is slow or doesn't work.
- ☐ It will make little difference.

When we asked our clients how they felt about the addition of WiFi to the London Tube the response was positive. Eighty-two percent of respondents considered it a positive investment by both the London Tube and Virgin Broadband.

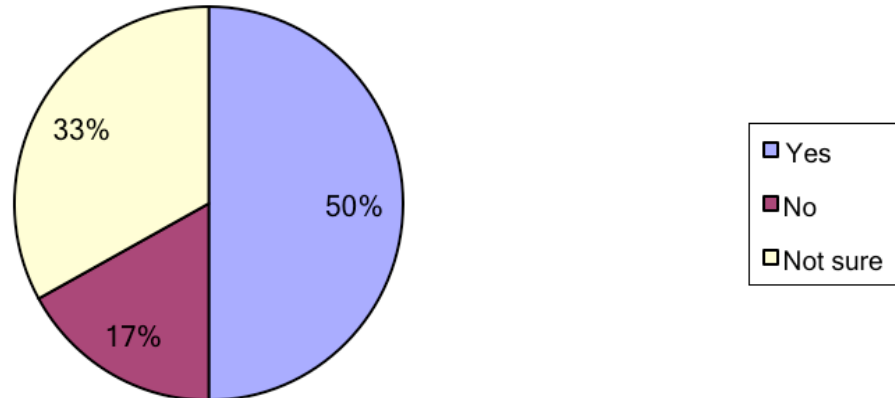
Would you connect to WiFi at a tube / underground / subway transport station to check timetables or ticket prices?



- ☒ Yes
- ☒ No

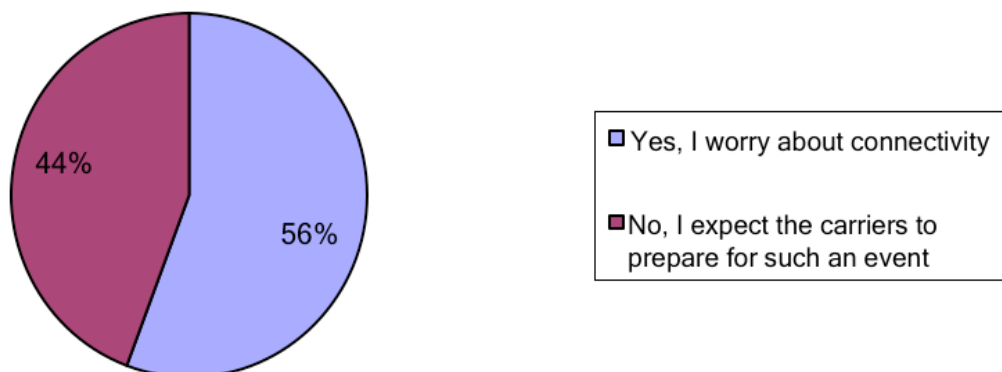
Here we see that most users would welcome using this new connectivity to access the timetables and prices of the station. By offering the ability to check on relevant information, users would be able to make smoother connections between trains and buses while being prepared for the associated costs.

In your experience, has the large volume of people at a sporting event / festival ever affected the cellular network?



Historically speaking, the trend has not been in the favor of the cellular providers to offer sufficient coverage during large events. Only a small percentage of respondents indicated that the existing cellular infrastructure was sufficient to handle the needs of the event.

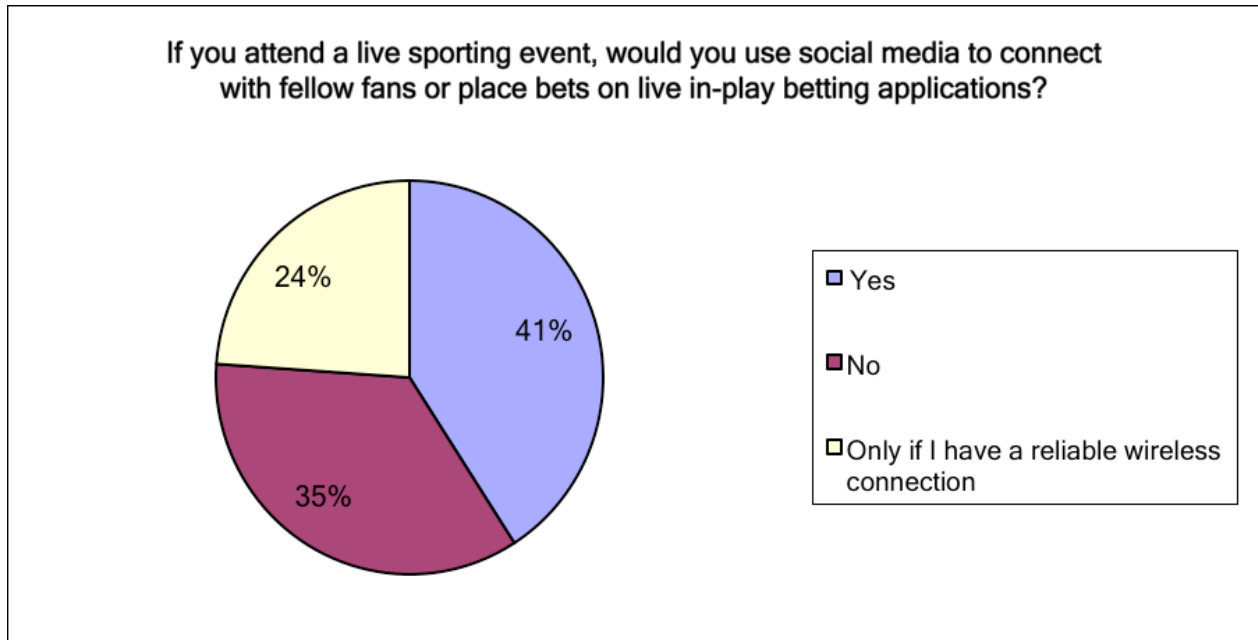
When traveling to an event like the Olympics, do you worry about cellular data congestion? i.e Too many people using their phone thus making it tough to make phone calls or browse the internet?



This is again reinforced by 56 percent of respondents indicating that cellular networks are often insufficient to handle the increased demand by large groups within a confined space. When consumers feel that their existing 3G/4G connection is unresponsive or too slow they turn to WiFi as a means to facilitate their needs. The investment in the networks throughout London are a means to maintaining customer satisfaction by offloading a large amount of data onto a separate WiFi network, thereby freeing up cellular bandwidth for other uses.

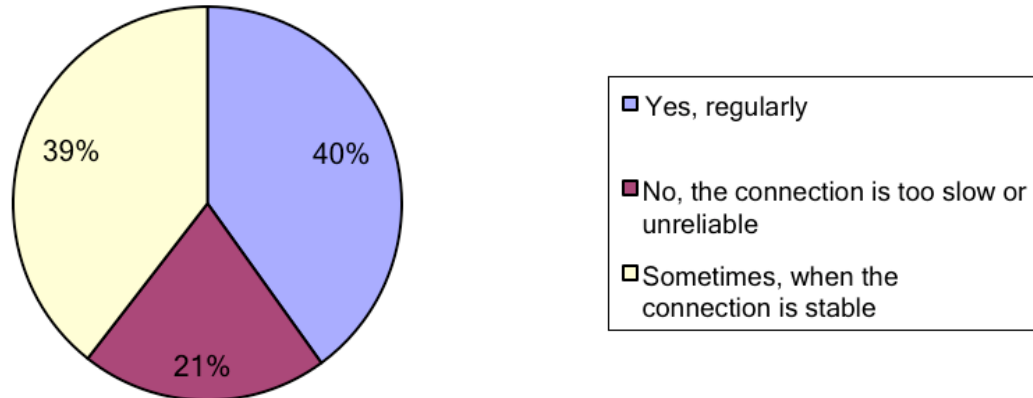
Olympic Virtual Participation

An event like the Olympics will have a tremendous impact in terms of data usage. In addition to the traditional television broadcasts and newspaper accounts, there are real-time updates via Twitter, team and athlete Facebook accounts to be maintained, blogs and articles to be posted online, and of course live streams of events.



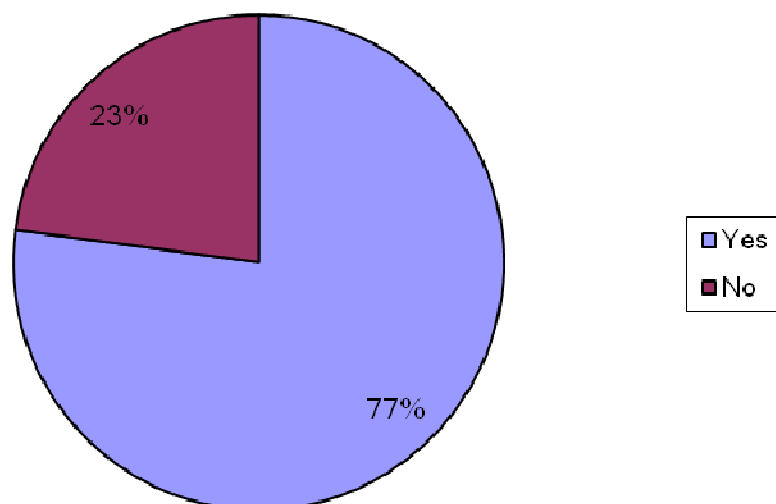
When asked if those attending would make use of online services, 41 percent clearly stated yes, while 24 percent remained cautious due to connection concerns. Clearly, having sufficient WiFi coverage at sporting events must widespread and robust enough to meet the demands of spectators.

Do you watch live streams / video highlights of sports events on your smartphone / tablet?



In addition, we see that even those who are not present are even more worried about their ability to remotely participate in events they are not able to attend. While the rollout of additional WiFi hotspots in the London area will assist those in the region, those viewing from further away will not benefit from that investment. However, that does not underscore the notion that reliability and speed of a WiFi connection is still superior and cheaper than a mobile user's existing cellular connection, and will still be readily available in most urban areas.

If you were to attend the 2012 Olympics, would you use your smartphone to redeem coupons and deals at the event?



A surprising number of people (77 percent) would also use their smartphone to redeem coupons and deals at the event. Leveraging WiFi proves to be a great marketing opportunity for many businesses.

Devicescape WiFi Report Summary

On a quarterly basis, Devicescape implements a survey to uncover WiFi usage and trends. The report taps into a random sample of WiFi users drawn from Devicescape's 10 million-plus user base. The survey respondents — a group that includes a variety of professionals and students from around the world — share their opinions and thoughts about WiFi, its use and its general adoption.

Devicescape Report Methodology

Devicescape queried thousands of users, representing a cross-section of Devicescape's overall membership. The survey questions were developed by Devicescape and industry leaders. Devicescape users include a wide array of working professionals from a variety of industries, as well as students in the United States and around the world.

With more than 10 million users, Devicescape is the leader in WiFi offload services. The company has worked with original equipment manufacturers and service providers since its inception. Devicescape's Offload Software enables anytime, anywhere, any network access.

License Terms and Conditions

This report is the intellectual property of Devicescape Software, Inc., and is subject to copyright restrictions.

The Devicescape WiFi Report ("Report") is provided to authorized companies and individuals ("Licensees") only. Licensees are allowed to use the Report for internal research, and are also allowed to reproduce the data in whole or in part in the Licensees' own publications, which can include but are not limited to reports, blogs, articles, data sheets and white papers ("Derivative Works"), with the following restrictions:

- Data in the Report may not be sold either in whole or in part.
- The Report may not be distributed to third parties without Devicescape's written consent.
- When data from the Report is used in Derivative Works, the data must be attributed to the "Devicescape WiFi Report."
- The licensee agrees to indemnify and hold harmless Devicescape with regard to the accuracy and suitability of the Report for any purposes whatsoever.

About Devicescape

Devicescape, The WiFi Offload Company™, connects more devices to more WiFi hotspots than any other offload service because Devicescape manages the largest virtual network of hotspots worldwide. Devicescape, which serves mobile operators with advanced WiFi solutions, is headquartered in California, privately held by leading venture capital companies including Kleiner Perkins Caufield & Byers, August Capital, JAFco Ventures, and Enterprise Partners. Online at www.devicescape.com.