

Mobile Web Insights

April 2009

As more online traffic shifts to mobile networks, Openwave is assisting operators in developing new revenue opportunities while keeping total cost of ownership in check.

Using its Mobile Analytics solution, Openwave has processed an anonymous sample of actual customer logs from a leading, North American operator over a five-day period.

What follows are recommendations based on the key mobile internet trends.

Operator Portal Visits Dominate

No surprise that the operator's portal recorded the highest number of visits by almost 30%, compared to the more popular social networks and search engines (fig. 1).

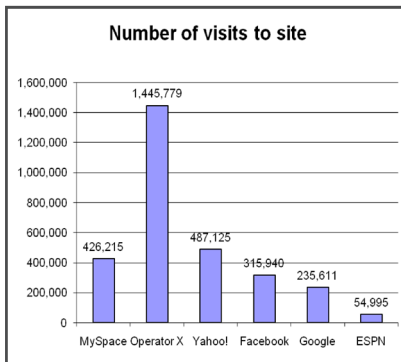


Figure 1: Operator portals record highest visits

Inside the data: Advanced users may bookmark their preferred homepage, but the majority of users do start their mobile internet sessions at the default operator portal. Not only is on-portal access free of charge, most consumers find it cumbersome to create bookmarks on their mobile phones.

Recommendation: Operator X should think ahead. Browser technology is advancing quickly. It won't be long before one-touch bookmarking makes users less reliant on the operator portal.

The Potential of Social Networks

Figure 1 also shows significant demand for social networking services MySpace and Facebook.

Inside the data: A detailed analysis of the traffic on these social networking sites shows that almost half of the users update their status or send messages to their friends every day. About a third viewed their friends' profiles.

Recommendation: By partnering with social networking sites and providing on-portal links (with the option of receiving

status updates and message notifications via SMS), Operator X keeps the portal as the main starting point for subscribers. Additionally, Operator X now has high-value real-estate to sell to mobile advertisers.

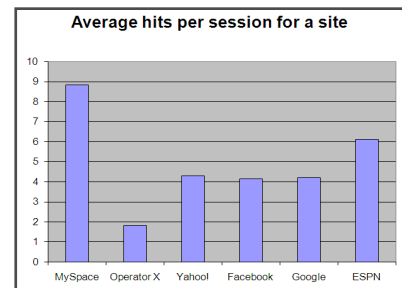


Figure 2: Social Networking sites rank highest

MySpace is a clear leader in terms of the average hits per session as shown in figure 2, and leads Facebook by almost 46%.

Inside the data: MySpace is beginning to displace Gmail and Yahoo! Mail as the preferred choice of communicating on the internet.

Recommendation: Operator X could team with leading social networking sites to generate incremental revenues through co-branded voice and text messaging services.

Operators and Mobile Search

Mobile Search presents an enormous opportunity for operators to monetize high value keywords. Figure 2 shows top 10 keywords that appeared on Google and Yahoo! OneSearch.

| Top Keywords | |
|---------------|------------------|
| Google Search | Yahoo! OneSearch |
| 1. myspace | 1. myspace |
| 2. facebook | 2. facebook |
| 3. youtube | 3. google |
| 4. movies | 4. youtube |
| 5. gmail | 5. yahoo |
| 6. weather | 6. funformobile |
| 7. craigslist | 7. myxer |
| 8. espn | 8. ebay |
| 9. ebay | 9. espn |
| 10. news | 10. gmail |

Figure 3: Subscribers access Social Networking or email sites through search engines

Inside the data: The top keywords show that subscribers use search engines to access their social networking or email sites. Craigslist is also shown as the seventh most popular keyword on Google. It is likely that this site and others like it will see more traffic in a slow economy.

Recommendation: Operator X could offer these top keywords to advertisers and media agencies at competitive rates or could partner with any frequently-searched internet brand to have their URLs dynamically bookmarked (over the air) for users. This would improve the user experience and drive traffic to those sites.

Operator X is also in a position to provide classified services similar to Craigslist to registered users, based on their unique subscriber profiles.

Mobile Ad Networks

Operator X used Openwave Mobile Analytics to track mobile ad networks serving ads off portal to their subscribers. Figure 4 shows the top mobile ad networks by number of ads served over one day.

| Ad Network | # of Ads Served | Ads Received by Users | Clicks Recorded | CTR |
|------------|-----------------|-----------------------|-----------------|------|
| AdMob | 147,969 | 15,009 | 862 | 0.58 |
| Buzzcity | 22,086 | 527 | 251 | 1.14 |
| Microsoft | 10,268 | 2,894 | 69 | 0.67 |

Figure 4: Using Openwave Mobile Analytics to track mobile ad networks

Inside the data: Although AdMob served the most ads, its click-through rate (CTR) was lower than BuzzCity and Microsoft. The low CTR on AdMob could be the result of generic (low value) ads which are not targeted to users.

Recommendation: Operator X could play a vital role in the mobile advertising value chain by providing aggregated subscriber data (behavioral, psychographic, demographic and location) to these ad networks which enables more precise targeting of subscribers with relevant content. The result would be higher CPM rates — win-win-win for publishers, advertisers and subscribers.

Smartphones or Feature Phones

Smartphones are a hot topic of discussion, specifically the iPhone, credited with driving adoption of the mobile web through its large touch screen, user-friendly menus and wide variety of applications.

As figure 5 shows, for Operator X, the Samsung-SGH-I617 accounts for 15% of hits on the mobile web. Its closest competitors are the BlackBerry 8310 (also a smartphone) and SonyEricsson’s W580i feature phone

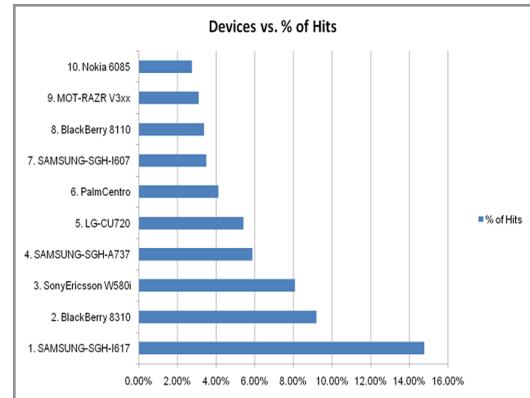


Figure 5: Samsung-SGH-1617accounts for 15% of hits on mobile web

Inside the data: Although smartphones do drive significant volumes of mobile internet traffic, a vast majority of the feature phones do also contribute to mobile internet traffic volumes.

Recommendation: With this data at its disposal, Operator X can play a key role in helping advertisers and media agencies conduct targeted campaigns for specific mobile phones.

In Summary

Subscriber data has always been part of an operator’s asset base. Extracting this information and transforming it to gain subscriber insight is the hard part.

These examples are just a tiny fraction of what Openwave Mobile Analytics can provide to operators in helping them understand and confidently predict user behavior patterns, as well as best position themselves as an important player in the mobile value chain.

The data used in Mobile Web Insights comes, by permission, from Openwave customers who have deployed the Mobile Analytics Solution.

Stay tuned over the coming months for more of these reports from different regions across the world.



2100 Seaport Boulevard
 Redwood City, California 94063 U.S.A.
 Corporate +1 650 480 8000
 Europe +44 2890 416 200
 Asia +81 3 5909 6100
<http://www.openwave.com>

About Openwave

Openwave Systems Inc. (Nasdaq: OPWV) is one of the world’s leading innovators of software applications and infrastructure designed to enable revenue-generating, personalized services, including mobile analytics, content adaptation, mobile and broadband advertising, and a suite of unified messaging solutions.

As the communications industry intersects with the Internet, Openwave software enables service providers to converge services, in an effort to increase the value of their networks by accelerating time to market and reducing the cost and complexity associated with new service deployment. Openwave’s unique product portfolio provides a complete range of mobile internet service management, messaging, and location based solutions. Openwave is a global company with a blue chip customer base spanning North America, Latin America, Australia and New Zealand, Asia, Africa, Europe, and the Middle East. Openwave is headquartered in Redwood City, California. For more information please visit www.openwave.com.

Openwave and the Openwave logo are registered trademarks of Openwave Systems Inc. in various jurisdictions. All other trademarks are the properties of their respective owners.

Copyright © 2009 Openwave Systems Inc. All rights reserved. April 2009.