Connected Life Market Watch: Mobile Consumer

Mobile Internet

Cisco Internet Business Solutions Group
July 2009
## Connected Life Market Watch: The Mobile Consumer

### Scope
- United States
- Mexico
- Brazil
- Saudi Arabia
- South Africa
- United Kingdom
- France
- Germany
- Spain
- Italy
- South Korea
- China
- India

### Approach

**Market Watch Program**
- Cisco IBSG’s recurring primary research program
- Monitors changing consumer behavior to identify key market transitions

**Methodology**
- Broadband consumers
- 20-minute online survey
- 6,600 total respondents

**Segmentation**
- Used two proprietary scoring methodologies to determine the “Technology” segment and “Prosumer” segment

Source: Cisco IBSG, 2009
SPs Should Foster Daily Mobile Internet Use To Reach Revenue Targets

Key Findings:

1. Continued mobile data revenue growth is **critical** to service providers’ financial stability

2. Many consumers are starting to explore mobile data, but view their mobile data service as **expendable**

3. The customer’s spend is optimized and locked in when mobile Internet is integrated into **everyday** life

4. SPs can encourage everyday behavior by addressing consumer barriers

5. SPs must take steps to profitably manage the **exponential increase in mobile data traffic** that is expected in the next 3 years

Source: Cisco IBSG, 2009
Mobile Data: The Revenue Growth Engine Is Starting To Take Off
Service Providers Rely on Mobile Data To Fuel Future Wireless Revenue Growth

Average Revenue Per Mobile Subscriber
United States: 2005 - 2008

- **Voice:** -4% per year
- **Data:** +40% per year

Mobile data already represents 25% of ARPU

“Wireless is about to enter a new era.”
Ivan Seidenberg, CEO, Verizon, March 2009

“We lead in wireless data, which is the industry’s best growth area.”
Randall Stephenson, CEO, AT&T, January 2009

“Historically, wireless growth has been driven by ... wired voice users. Going forward... it will be broadband data.”
Dick Lynch, CTO, Verizon, March 2009

Source: Company Reports; Cisco IBSG, 2009
Few Consumers View Phone as Their “Anywhere” Link to the Internet

Mobile Data Access Does Not Equate to Use

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most consumers</td>
<td>57%</td>
</tr>
<tr>
<td>Are addressable</td>
<td></td>
</tr>
<tr>
<td>Have an Internet browser on their mobile phone</td>
<td></td>
</tr>
<tr>
<td>Some consumers</td>
<td>33%</td>
</tr>
<tr>
<td>Are exploring</td>
<td></td>
</tr>
<tr>
<td>Use their mobile phone to access the Internet</td>
<td></td>
</tr>
<tr>
<td>Few consumers</td>
<td>14%</td>
</tr>
<tr>
<td>See mobile as essential data link</td>
<td></td>
</tr>
<tr>
<td>Mobile phone is their on-the-go link to the Internet</td>
<td></td>
</tr>
</tbody>
</table>

Source: Cisco IBSG, 2009
Note: Results based on panel of U.S. broadband & mobile phone users
Today’s Market Includes Different Types of Mobile Internet Users

Everyday Users
- Use cell phone for Internet access every day
- 11% of broadband consumers
- Weekly mobile Internet time spend: 2 hours+

Sometime Users
- Use cell phone for Internet access 1 to 6 days a week
- 10% of broadband consumers
- Weekly mobile Internet time spend: 57 minutes

Infrequent Users
- Use cell phone for Internet access 1 to 3 days a month
- 12% of broadband consumers
- Weekly mobile Internet time spend: 12 minutes

Source: Cisco IBSG, 2009

Base: U.S. broadband & mobile Internet users
Beyond Email, Main Uses for Mobile Internet Are News, Maps, and Search

- 86% access email
- Mobile, location-based services have not yet realized full potential

**Mobile Internet Activities**
(Percent of Mobile Internet Users)

- News and information: 54%
- Get directions/map: 52%
- Search: Specific question: 36%
- IM: 29%
- Location (e.g., find a gas station): 26%
- Browse without a destination: 25%
- Search: Product purchase: 23%
- Social networking: 23%
- Games: 23%
- Online banking: 20%
- Search: Humor: 17%
- Look for video entertainment: 15%
- Make travel plans: 12%

Source: Cisco IBSG, 2009

More consumers use mobile Internet for IM than for location-based services.
When Consumers Must Cut SP Services, Mobile Data Is the Most Expendable

- Mobile data still considered discretionary
- Slow economy will accelerate cord-cutting
- SP growth strategy depends on today’s landline revenue to fuel investment in mobile data for tomorrow’s revenue growth

Source: Cisco IBSG, 2009

Consumer Spending Priorities

*If you had to reduce your monthly household expenditure, which of the following services would you cut first?*

- Mobile data: 24% would drop last or second to last, 64% would drop first or second
- Landline phone: 36% would drop last or second to last, 47% would drop first or second
- Mobile voice: 46% would drop last or second to last, 36% would drop first or second
- Pay TV: 43% would drop last or second to last, 28% would drop first or second
- Broadband: 51% would drop last or second to last, 25% would drop first or second

Base: U.S. broadband (BB) consumers
Capture and Lock in Mobile Data Revenue
## Mobile Internet Users Are Attractive Customers

**Daily Mobile Internet Users Spend $24 More than the Average Consumer and $15 More than the Infrequent Mobile Internet User**

<table>
<thead>
<tr>
<th>Customer Characteristics</th>
<th>Average BB Consumer</th>
<th>Infrequent User</th>
<th>Everyday User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly mobile phone bill</td>
<td>$72.50</td>
<td>$81.56</td>
<td>$96.92</td>
</tr>
<tr>
<td>Have an unlimited data plan for mobile phone</td>
<td>21%</td>
<td>37%</td>
<td>71%</td>
</tr>
<tr>
<td>Mobile video subscription</td>
<td>5%</td>
<td>6%</td>
<td>24%</td>
</tr>
<tr>
<td>Monthly cable/satellite bill*</td>
<td>$68.36</td>
<td>$75.34</td>
<td>$78.75</td>
</tr>
<tr>
<td>DVR adoption</td>
<td>38%</td>
<td>43%</td>
<td>61%</td>
</tr>
<tr>
<td>Premium movie channel adoption</td>
<td>26%</td>
<td>38%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Source: Cisco IBSG, 2009

* Spend among subscribers
To Capture New Segments, SPs Must Tap Mass Market and Make It Easy

Mobile Internet Is Still for the Tech-Savvy

- Most consumers (nearly two-thirds) are mass market+
- Only 15% of mass market+ segment has used mobile Internet
- 75% of everyday mobile Internet users are tech-savvy

### Barriers to First-Time Use

*Why don’t you use the mobile Internet? (Percent of respondents)*

- No need: 60%
- Too expensive: 54%
- No time sensitivity: 34%
- Awkard to type: 13%
- Poor phone data capability: 13%
- Data speed, website latency: 11%
- Lack of knowledge: 11%
- Poor website format: 6%
- Don't trust mobile security: 5%
- Difficult to search: 5%

**Top 3 Barriers**

1. Lack of need
2. Cost
3. Lack of urgency

Source: Cisco IBSG, 2009

To attract new users, SPs can use trials, smartphones, and limited bundles to expose nonusers to the mobile Internet
Smartphones Will Help Mobile Internet Penetrate Mass Market

Smartphones Change Consumers’ Perceptions of Mobile Internet

- Mass market users are more critical than early adopters
- With a smartphone, mass-market users report better mobile Internet experience—even in non-device-relevant areas
- With a smartphone, mass-market users’ satisfaction exceeds that of early adopters

Comparative Satisfaction with Mobile Internet Experience
Early Adopters vs. Mass-Market Consumers
(Percent of respondents very or slightly satisfied)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Early Adopter (any phone)</th>
<th>Mass market without a smartphone</th>
<th>Mass market with a smartphone</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPEED</td>
<td>45%</td>
<td>63%</td>
<td>61%</td>
</tr>
<tr>
<td>KEYPAD</td>
<td>53%</td>
<td>75%</td>
<td>67%</td>
</tr>
<tr>
<td>WEB FORMAT</td>
<td>51%</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>BATTERY LIFE</td>
<td>48%</td>
<td>64%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Source: Cisco IBSG, 2009

Base: Global mass market mobile Internet users
However, Adoption Is Only Half the Story

Only Daily Mobile Internet Users Protect Mobile Spend

Expected 2009 Spend
(Percent of respondents)

Mobile Voice

- Will spend less in next 12 months
- Will spend more in next 12 months

Average Respondent

- 10% 10%
- -10% -13%

Monthly Data User

- 10% 10%
- -13% -22%

Weekly Data User

- 14% 15%
- -22% -6%

Daily Data User

- 15% 16%
- -6% -5%

Mobile Data

- Spend is most vulnerable
- Spend is locked in

- 13% 13%
- -13% -15%

- 13% 13%
- -13% -19%

- 13% 16%
- -15% -5%

Source: Cisco IBSG, 2009

Base: U.S. broadband consumers with service
Globally, Consumers View Mobile Data as Most Expendable Service

- **Infrequent** mobile data users are just as likely to cut mobile data as the average consumer.
- Consumers who **use mobile data every day, however**, are 28% less likely to cut mobile data first.

Source: Cisco IBSG, 2009

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**Consumer Spending Priorities: Mobile Data**
*Percent of consumers cutting mobile data first or second*

- **Infrequent User**
- **Everyday User**

Base: Global broadband users
Everyday Users Perceive Value for Investment

Barriers to Increased Mobile Internet Usage (Percent of Respondents)

<table>
<thead>
<tr>
<th></th>
<th>INFREQUENT USERS</th>
<th>EVERYDAY USERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>37%</td>
<td>8%</td>
</tr>
<tr>
<td>Not Time-Sensitive</td>
<td>36%</td>
<td>20%</td>
</tr>
<tr>
<td>Website Latency</td>
<td>34%</td>
<td>25%</td>
</tr>
<tr>
<td>Website Format</td>
<td>27%</td>
<td>28%</td>
</tr>
<tr>
<td>No Need</td>
<td>23%</td>
<td>5%</td>
</tr>
<tr>
<td>Awkward/Type &amp; Scroll</td>
<td>23%</td>
<td>14%</td>
</tr>
<tr>
<td>Difficult to Search</td>
<td>19%</td>
<td>11%</td>
</tr>
<tr>
<td>Security Concerns</td>
<td>6%</td>
<td></td>
</tr>
</tbody>
</table>

Top 3 Barriers
1. Cost
2. Lack of urgency
3. Website latency

Top 3 Barriers to Increased Usage
1. Website format
2. Website latency
3. Lack of urgency

Source: Cisco IBSG, 2009
Base: Mobile Internet users
Unlimited Plans Can Play a Role in Unlocking Usage

Mobile Internet Behavior & Perceptions
Limited Plan vs. Unlimited Plan Subscribers

<table>
<thead>
<tr>
<th></th>
<th>Limited Plan</th>
<th>Unlimited Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyday Mobile</td>
<td>11%</td>
<td>36%</td>
</tr>
<tr>
<td>Internet Users</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Limited Plan</th>
<th>Unlimited Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Time Spend</td>
<td>19</td>
<td>79</td>
</tr>
<tr>
<td>(minutes)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Limited Plan</th>
<th>Unlimited Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Is a Barrier to</td>
<td>49%</td>
<td>13%</td>
</tr>
<tr>
<td>Increased Usage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unlimited subscribers are **3 times** more likely to be everyday users

Unlimited plans defuse cost as barrier to increased usage

Source: Cisco IBSG, 2009

**NOTE:** Percentages refer to active mobile Internet users only.
Prepare for Mobile Data Traffic To Protect Margin
Everyday Mobile Internet Users Drive More Traffic Than Infrequent Users

Average Mobile Internet Use Per Week

Globally, U.S. has highest percentage (32%) of daily users among current mobile Internet users

Source: Cisco IBSG, 2009
Global IP Traffic Growth

Two-thirds of a Zettabyte Will Cross Global Network Monthly

Global IP Traffic

Mobile IP Traffic

IP traffic will increase fivefold from 2008 to 2013

- Mobile data will represent less than 4% of all IP traffic
- This traffic, however, will increase at 130% CAGR from 2008 to 2012

Source: Cisco Visual Networking Index—Forecast, 2008-2013
Most Mobile Internet Usage Takes Place in Fixed Locations

Percent of U.S. Mobile Internet Usage Taking Place in Each Location

- **On the Go**: 56% (46 minutes)
- **In an Office**: 10% (33 minutes)
- **At Home**: 34% (43 minutes)

46 minutes

- Email
- Search
- Maps
- IM
- Web Browsing
- Entertainment

76 minutes of data activity per week per user can be offloaded through FMC solutions

Source: Cisco IBSG, 2009

Base: U.S. mobile Internet users
Everyday Mobile Internet Users Are Very Interested in FMC Solutions at Home

Interest in “Mobile at Home” Solution
Respondents citing interest at 6-7 on 7-point scale

Source: Cisco IBSG, 2009
Base: U.S. mobile Internet users
Optimizing & Protecting the Mobile Data Opportunity

Make mobile data easy to try
- Bundle into voice, offer free trials

Expand utility and ease of use
- Encourage smartphone adoption; highlight video, location-based services, and other easy, high-value apps

Set pricing to stimulate use, yet protect SPs
- Promote tiered bundles, use alerts to increase customer comfort with spend, clarify usage ceilings in easy-to-understand terms

Use offload solutions to divert fixed-location traffic
- Consider FMC solutions that offload in-office and in-home traffic to Wi-Fi networks, with pricing structures that encourage their use for data

Source: Cisco IBSG, 2009
Note: Results based on panel of U.S. broadband & mobile phone users
## Daily Mobile Internet Users Are Young, Tech-Savvy, and Working

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<th>Infrequent Users</th>
<th>Everyday Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 34 years old</td>
<td>39%</td>
<td>44%</td>
<td>67%</td>
</tr>
<tr>
<td>Income</td>
<td>$66.7K</td>
<td>$66.7K</td>
<td>$79.7K</td>
</tr>
<tr>
<td>Gender</td>
<td>M=49%</td>
<td>M=56%</td>
<td>M=65%</td>
</tr>
<tr>
<td>Tech-Savvy (Early Adopter or Early Majority)</td>
<td>32%</td>
<td>49%</td>
<td>82%</td>
</tr>
<tr>
<td>Time-Constrained: Value Time over Money</td>
<td>9%</td>
<td>8%</td>
<td>23%</td>
</tr>
<tr>
<td>Employed (full- or part-time)</td>
<td>65%</td>
<td>68%</td>
<td>79%</td>
</tr>
<tr>
<td>At least half of mobile phone calls are work-related</td>
<td>23%</td>
<td>28%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Source: Cisco IBSG, 2009