·IIIII CISCO

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 \bullet
- 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
- Fielded Dec. 2008 Jan. 2009

Segmentation

Used two proprietary scoring methodologies to determine the "Technology" segment and "Prosumer" segment

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

3





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



Mobile data already represents 25% of ARPU

Source: Company Reports; Cisco IBSG, 2009

"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

Few Consumers View Phone as Their "Anywhere" Link to the Internet

Mobile Data Access Does Not Equate to Use

Most consumers are addressable	57%	Have an Internet browser on their mobile phone	
Some consumers are exploring	33%	Use their mobile phone to access the Internet	
Few see mobile as essential data link	14%	Mobile phone is their on-the-go link to the Internet	

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



Beyond Email, Main Uses for Mobile Internet Are News, Maps, and Search

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



Mobile Internet Activities

When Consumers Must Cut SP Services, Mobile Data Is the Most Expendable

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

Consumer Spending Priorities

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



Source: Cisco IBSG, 2009

Cisco Confidential

Base: U.S. broadband (BB) consumers

Capture and Lock in Mobile Data Revenue

Cisco Confidential Copyright © 2009 Cisco Systems, Inc. All rights reserved.

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

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

Source: Cisco IBSG, 2009

Cisco Confidential

* 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



Source: Cisco IBSG, 2009

Base: Mobile Internet nonusers/U.S. broadband consumers

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-devicerelevant 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)



However, Adoption Is Only Half the Story

Only Daily Mobile Internet Users Protect Mobile Spend

Expected 2009 Spend (Percent of respondents)



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

Consumer Spending Priorities: Mobile Data

Percent of consumers cutting mobile data first or second



Source: Cisco IBSG, 2009

Base: Global broadband users

Everyday Users Perceive Value for Investment

Barriers to Increased Mobile Internet Usage

(Percent of Respondents)



Unlimited Plans Can Play a Role in Unlocking Usage

Mobile Internet Behavior & Perceptions

Limited Plan vs. Unlimited Plan Subscribers



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

Cisco Confidential Copyright © 2009 Cisco Systems, Inc. All rights reserved.

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

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



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 60% 50% Average BB 40% Consumer 30% Infrequent Mobile Internet User 20% 10% Everyday Mobile Internet User 0% **United States** Western Europe

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

Cisco Confidential

Note: Results based on panel of U.S. broadband & mobile phone users

Cisco Confidential Copyright © 2009 Cisco Systems, Inc. All rights reserved.

Daily Mobile Internet Users Are Young, Tech-Savvy, and Working

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