Connected Life Market Watch
Service Delivery and Consumer Cloud: Canada

Cisco Internet Business Solutions Group
September 2011
## Connected Life Market Watch Program
### Service Delivery and Consumer Cloud

### Scope
- United States
- **Canada**
- France
- Italy

### Approach

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

**Methodology**
- Canadian broadband consumers
- 20-minute online survey
- 744 total respondents
- April 2011

**Segmentation**
- Used proprietary scoring methodologies to identify consumer “technology” segments

Source: Cisco IBSG Connected Life Market Watch, 2011
Key Findings

Consumer Cloud & Connected Life

- Connected Life services are more attractive when they include cloud enhancements
- The more engaged consumers are with Connected Life experiences, the more impact cloud services have on their demand for Connected Life services

Consumer Buying Behavior

- SPs hold a strong lead as consumers’ preferred provider for Internet-to-TV solution and can expand market potential by targeting the 28% of consumers that are “in play”
- Ongoing cost, upfront cost, and reliability concerns are the strongest factors in a consumer’s decision of where to buy; ongoing cost is a key area of concern for SPs

Usage-Based Billing

- 72% of Canadian broadband consumers consider usage-based broadband pricing unfair, but most have not modified usage and have seen no affect on their bill
- For online video usage, most consumers would reduce use before subscribing to a higher tiered plan

Consumer Technology Trends

- Consumers are embracing Connected Life technologies; mobile data use occurs in predominantly fixed locations, and consumers rely increasingly on broadband

Source: Cisco IBSG Connected Life Market Watch, 2011
1 Consumer Cloud and Connected Life
## Cloud Offers Consumers an Enhanced Connected Life Experience

Cloud-Enabled Enhancements Can Be Applied Horizontally Across Connected Life Services

<table>
<thead>
<tr>
<th>Connected Life</th>
<th>Cloud Enhancements</th>
<th>Answer Consumer Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unified Data Management</td>
<td>Make my data management easy</td>
</tr>
<tr>
<td></td>
<td>Automatic Backup</td>
<td>Make it easy for me to get Connected Life services</td>
</tr>
<tr>
<td></td>
<td>Automatic Data Sync</td>
<td>Help me match my online social behavior to my real-life social behavior</td>
</tr>
<tr>
<td></td>
<td>Any Device/Location</td>
<td>Let me access and move my stuff easily across my devices, from anywhere</td>
</tr>
<tr>
<td></td>
<td>Immediate Access</td>
<td>Let me choose what I want across all services, but pay only once</td>
</tr>
<tr>
<td></td>
<td>Seamless Switching</td>
<td></td>
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<tr>
<td></td>
<td>One-Time Payment</td>
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<tr>
<td></td>
<td>Single-Menu Access</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Add New Capabilities Automatically</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remote Monitor/Automatic Fix</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Sharing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>See Peer Recommendations</td>
<td></td>
</tr>
</tbody>
</table>

Source: Cisco IBSG, 2011
Cloud Is More Powerful as Complete Experience vs. Single Enhancement

Most Consumers Influenced by More than One Cloud Enhancement

Consumer Response Across All Consumer Cloud Enhancements

- Positive Cloud Impact*: 78%
- No Cloud Impact: 22%

* Critical, mandatory, or differentiating

Consumer Segmentation Based on Extensiveness of Cloud Reaction

- Percent of consumers positively impacted
  - 1 to 4 cloud enhancements: 36%
  - 5 to 7 cloud enhancements: 22%
  - 8 or more cloud enhancements: 20%

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Canadian broadband consumers
Cloud Enhancements Impact Consumers’ Reaction to Connected Life

- Each cloud enhancement positively impacts one out of three respondents’ reaction to Connected Life services.
- Kano methodology validates and informs consumer interest interpretation.

  35% of consumers report interest of 8+ on 10-point scale; closely matching the 34% who find the enhancements critical, mandatory, or differentiating.

Source: Cisco IBSG, based on Kano methodology, 2011

Base: Canadian broadband consumers
Which Consumers Are Seeking Complete Cloud Experience?

- Complete cloud experience demanded by connected consumers who regularly engage in Connected Life activities
- Consumers with strong demand for complete cloud:
  - Younger (38% under 35)
  - More likely to be female (58%)
  - More likely to be early adopter
- Consumers with no demand for cloud are less engaged in Connected Life
  - No strong buying-channel preferences
  - Likely to be concerned about service contracts

Source: Cisco IBSG Connected Life Market Watch, 2011
Base: Canadian broadband consumers
Some Cloud Experiences Have Stronger Impact than Others

### Impact of Mandatory and Critical Enhancements on Connected Life Services

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Payment</td>
<td>10% 16% 26%</td>
</tr>
<tr>
<td>Remote Monitor</td>
<td>7% 13% 20%</td>
</tr>
<tr>
<td>Immediate Access</td>
<td>8% 12% 20%</td>
</tr>
<tr>
<td>Any-Device Access</td>
<td>3% 9%</td>
</tr>
<tr>
<td>Automatic Backup</td>
<td>4% 10%</td>
</tr>
<tr>
<td>Automatic Add</td>
<td>3% 7%</td>
</tr>
<tr>
<td>Single Menu</td>
<td>3% 8%</td>
</tr>
<tr>
<td>Data Sync</td>
<td>3% 8%</td>
</tr>
<tr>
<td>Seamless Switching</td>
<td>2% 8%</td>
</tr>
<tr>
<td>Unified Data Mgt</td>
<td>2% 5%</td>
</tr>
<tr>
<td>Advanced Sharing</td>
<td>5% 7%</td>
</tr>
<tr>
<td>Recommendations</td>
<td>1% 2%</td>
</tr>
</tbody>
</table>

- **Mandatory**
- **Critical**

- More than 20% of consumers already expect their Connected Life services to include certain cloud enhancements:
  - Single payment
  - Remote monitor / auto fix
  - Immediate access

- These consumers will react to a Connected Life service **negatively** if these cloud enhancements are not present.

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Canadian broadband consumers
Some Cloud Experiences Spark Stronger Consumer Interest than Others

For 10 of the 12 cloud enhancements, between 30% and 50% of broadband consumers expressed strong interest.

**Consumer Interest in Cloud Service Enhancement**
Percentage of Respondents Expressing Interest of 8+ on 10-Point Scale

- Remote Monitoring / Automatic Fix
- One-Time Payment
- Immediate Access
- Any Device / Location
- Automatic Data Backup
- Single Menu
- Unified Data Management
- Automatically Add New Capabilities
- Automatic Data Sync
- Seamless Switching
- Any Device / Location
- Advanced Sharing
- See Recommendation of Friends

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Canadian broadband consumers
Cloud Enhancements Impact Connected Life Buying Behavior

On average, 66% of respondents have increased likelihood of buying Connected Life service if it has single cloud enhancement.

29% are “more likely” or “much more likely” to buy.

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Canadian broadband consumers
Consumer Buying Behavior
Factors Driving Where To Buy
### Consumer Purchase Behavior: Factors that Drive Consumer Decision About Where to Buy

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage of Respondents Who Ranked Factor 1 or 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower ongoing cost</td>
<td>40%</td>
</tr>
<tr>
<td>Lower up-front cost</td>
<td>40%</td>
</tr>
<tr>
<td>Reliability</td>
<td>30%</td>
</tr>
<tr>
<td>Ease of use</td>
<td>20%</td>
</tr>
<tr>
<td>Troubleshooting</td>
<td>20%</td>
</tr>
<tr>
<td>Ease of setup</td>
<td>15%</td>
</tr>
<tr>
<td>Features &amp; capabilities I prefer</td>
<td>15%</td>
</tr>
<tr>
<td>Ease in selecting the right device/service</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Top considerations are cost and reliability**

**Time-saving factors are an important part of the evaluation**

**Ease of setup, features, and buying guidance do not play a major role in consumers’ decision about where to buy**

Source: Cisco IBSG Connected Life Market Watch, 2011
Base: Canadian broadband consumers
### Channel Preference Based on Individual Factors in Consumers’ End-to-End Experience

<table>
<thead>
<tr>
<th>Feature/Capability</th>
<th>Service Provider</th>
<th>Don't Know</th>
<th>Retail / Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troubleshooting</td>
<td>59%</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Ease of setup</td>
<td>54%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>Reliability</td>
<td>54%</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>Ease of use</td>
<td>50%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Ease in selection</td>
<td>45%</td>
<td>24%</td>
<td>31%</td>
</tr>
<tr>
<td>Features/capabilities I prefer</td>
<td>45%</td>
<td>25%</td>
<td>30%</td>
</tr>
<tr>
<td>Lower up-front cost</td>
<td>44%</td>
<td>25%</td>
<td>31%</td>
</tr>
<tr>
<td>Lower ongoing cost</td>
<td>43%</td>
<td>25%</td>
<td>32%</td>
</tr>
</tbody>
</table>

- **SPs have a commanding lead in troubleshooting, ease of setup, reliability**
  - Twice as many consumers believe SPs better fit their needs in these areas

- **SPs still lead in ongoing cost, up-front cost, features, and ease of selection**, but by a smaller margin

Source: Cisco IBSG Connected Life Market Watch, 2011
However, SPs Have Smallest Lead in Most Important Decision Criteria

### Consumer Channel Preference: Individual Factors in Order of Importance

<table>
<thead>
<tr>
<th>Importance Rank</th>
<th>Channel Option that Best Fits My Needs</th>
<th>Service Provider</th>
<th>Don't Know</th>
<th>Retail / Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Lower ongoing cost</td>
<td>43%</td>
<td>25%</td>
<td>32%</td>
</tr>
<tr>
<td>#2</td>
<td>Lower up-front cost</td>
<td>44%</td>
<td>25%</td>
<td>31%</td>
</tr>
<tr>
<td>#3</td>
<td>Reliability</td>
<td>54%</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>#4</td>
<td>Ease of use</td>
<td>50%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>#5</td>
<td>Ease of setup</td>
<td>54%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>#6</td>
<td>Features and capabilities</td>
<td>45%</td>
<td>25%</td>
<td>30%</td>
</tr>
<tr>
<td>#7</td>
<td>Troubleshooting</td>
<td>59%</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>#8</td>
<td>Ease of selection</td>
<td>45%</td>
<td>24%</td>
<td>31%</td>
</tr>
</tbody>
</table>

- **Ongoing cost** is most important decision criteria for Canadian consumers
- And, it’s the factor where SPs have the smallest lead over retail/online channels

Source: Cisco IBSG Connected Life Market Watch, 2011
Consumers With Strong Preference Believe Their Channel Saves Them Time

Saving Time in the Purchase Process: Comparing Retail / Online & SP Options by Customers with Strong Channel Preferences

Consumers with Strong SP Preference
- Troubleshooting: 85%
- Setup: 88%
- Device / Service Selection: 79%

Consumers with Strong Retail / Online Preference
- Troubleshooting: 58%
- Setup: 66%
- Device / Service Selection: 74%

Source: Cisco IBSG Connected Life Market Watch, 2011
Base: Canadian consumers with strong channel preference
For 8 different factors in the purchase process, consumers were asked which channel option best met their needs:

- **Strong SP**: These consumers believe SP provides a better experience in 6 or more factors
- **Strong Retail/Online**: These consumers believe retail/online provides a better experience in 6 or more factors
- **In Play**: These consumers’ channel preference shifted significantly from factor to factor
- **Indifferent**: These consumers selected “don’t know” for all 8 factors, likely due to lack of interest in Internet-to-TV solutions

Source: Cisco IBSG Connected Life Market Watch, 2011
To Expand Customer Potential, SPs Should Target “In Play” Consumers

To increase SPs’ customer potential, in-play consumers represent the best segment to target:

- 17% of consumers are highly indifferent and will be difficult to draw into any Internet / TV purchase
- Another 17% show a strong preference for the retail/online experience and may be difficult to attract
- However, a sizable 28% of the market shows openness to consider both SP and/or retail/online solutions

![Pie chart showing Consumers’ Preferred Channel Experience]

Source: Cisco IBSG Connected Life Market Watch, 2011
Base: Canadian broadband consumers
## Channel Preference of “In-Play” Consumers
Based on Individual Factors in Consumers’ End-to-End Experience

<table>
<thead>
<tr>
<th>Importance Rank</th>
<th>Criteria</th>
<th>SP channel best meets my needs</th>
<th>Don’t know</th>
<th>Retail/online channel best meets my needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Lower Ongoing Cost</td>
<td>38%</td>
<td>7%</td>
<td>56%</td>
</tr>
<tr>
<td>#2</td>
<td>Lower Up-Front Cost</td>
<td>35%</td>
<td>7%</td>
<td>58%</td>
</tr>
<tr>
<td>#3</td>
<td>Reliability</td>
<td>61%</td>
<td>8%</td>
<td>31%</td>
</tr>
<tr>
<td>#4</td>
<td>Ease of Use</td>
<td>53%</td>
<td>10%</td>
<td>37%</td>
</tr>
<tr>
<td>#5</td>
<td>Ease of Setup</td>
<td>60%</td>
<td>7%</td>
<td>33%</td>
</tr>
<tr>
<td>#6</td>
<td>Features</td>
<td>39%</td>
<td>10%</td>
<td>50%</td>
</tr>
<tr>
<td>#7</td>
<td>Troubleshooting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#8</td>
<td>Ease of Selection</td>
<td>39%</td>
<td>10%</td>
<td>52%</td>
</tr>
</tbody>
</table>

- Retail/online channel demonstrates strong lead in the two factors that most strongly influence “In-Play” consumers’ decision about where to buy: ongoing cost and up-front cost.
- SPs can take advantage of their lead in reliability and troubleshooting to attract consumers.
- SPs should consider price as a lever to attract the in-play segment.

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: “In-Play” Canadian broadband consumers
By Lowering Adoption Barriers, SPs Can Influence Buying Behavior

Example: Consumer Reasons for DVR Adoption

- In Canada, nearly a third of DVR owners first adopted a DVR because SP made it easy (compared with 65% in U.S.)

- It is likely that more aggressive bundling in the U.S. accounts for higher percentage of passive adopters

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Canadian broadband consumers
3 Usage-Based Broadband
Tiered pricing for fixed broadband based on data usage is now in practice in Canada.

Canadian SPs face higher data usage (driven by video) and usage-based billing attempts to monetize the increased use.

Like their U.S. counterparts who have not yet seen usage-based billing, most Canadian consumers believe it to be unfair.

Source: Cisco IBSG Connected Life Market Watch, 2011
Most Canadian Consumers Have Not Changed Use or Seen Impact on Bill

Reactions to Usage-Based Broadband Billing

- In response to usage-based billing, most consumers continue to use Internet as they have been and see no impact on bill.
- 51% of early adopters and 54% of those with Internet device watch data limits to avoid additional charges.

Source: Cisco IBSG Connected Life Market Watch, 2011
Base: Canadian broadband consumers
For Video Specifically, Consumers Are More Likely To Reduce Usage

Reactions to Usage-Based Broadband Billing
Specifically Considering Online Video Use

- 56% Keep service, reduce use
- 22% Get unlimited plan
- 14% No change
- 7% Unsubscribe

Source: Cisco IBSG Connected Life Market Watch, 2011
Base: Canadian broadband consumers
For Internet Video / Data Packages, No Clear Winner for Data Pricing

Online Video Service Pricing Options:

- **$16** per month, with **unlimited access** to video library, unlimited video streaming or downloading; **would not count against data limits** set by Internet service provider, OR...

- **$8** per month for **unlimited access** to video library, unlimited video streaming or downloading; **would count against data limits** set by Internet service provider, and could be subject to **additional data fees**

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Canadian broadband consumers
However, Very Strong Preferences Exist for Older / Younger Age Groups

Online Video / Data Plan Preference
Percentage of Respondents

$16 Plan with Unlimited Video / Unlimited Data

- 18 - 24: 65%
- 25 - 29: 62%
- 30 - 39: 54%
- 40 - 49: 51%
- 50 - 59: 49%
- 60 - 64: 36%
- 65+: 23%

$8 Plan with Unlimited Video / Limited Data

- 18 - 24: 35%
- 25 - 29: 38%
- 30 - 39: 47%
- 40 - 49: 49%
- 50 - 59: 50%
- 60 - 64: 64%
- 65+: 77%

Younger consumers skew heavily toward unlimited video / data plan, while older consumers skew heavily toward unlimited video with limited data.

Source: Cisco IBSG Connected Life Market Watch, 2011
Base: Canadian broadband consumers
4 Consumer Technology Trends
Most Mobile Internet & Mobile Video Activity Takes Place in Fixed Locations

- About 80% of mobile video and mobile Internet use (via mobile device) is not mobile. This usage takes place when the user is indoors and stationary, and could be supported by Wi-Fi / femto solutions.

The few late-majority / laggard consumers using mobile Internet and video are more likely to be at home than early adopters, so fixed-location usage could rise as market matures.

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Respondents engaged in activity
While 55% of mobile video users are mostly “snacking” on video, 14% watch more than 1 hour / week on their mobile phones.

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Canadian mobile video users
Consumer Spending Priorities

- Broadband is considered most critical for majority of consumers
- Mobile data is discretionary
- Landline phones remain important to Canadian consumers, in contrast to U.S. consumers, who protect mobile voice over landline service

Source: Cisco IBSG Connected Life Market Watch, 2011
Base: Canadian broadband consumers
5 Service Provider Implications
Next Steps: Implications for Service Providers

Technology Trends
- As consumers embrace Connected Life services and technologies, SPs will need to carefully manage pricing policies to foster new revenue streams and manage traffic costs without discouraging use.

Consumer Cloud Demand
- To increase adoption potential for Connected Life services, SPs should strategically include cloud enhancements with their offerings.

Usage-Based Broadband
- SPs should educate consumers so they can tie usage to the value of their broadband service; SPs can use usage-based billing as a tool in managing the OTT threat.

Buying Behavior
- Capitalize on preference for SP experiences to increase market share of Connected Life services.
- Though SPs hold a strong lead as consumers’ preferred Internet-to-TV solution provider, they can expand their market potential by addressing the ongoing cost concerns of the 28 percent of consumers that are “in play.”

Source: Cisco IBSG Connected Life Market Watch, 2011