Connected Life Market Watch

Service Delivery and Consumer Cloud (U.S.)

Cisco Internet Business Solutions Group

August 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

- U.S. broadband consumers
- 20-minute online survey
- 1,000 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

- U.S. consumers are more likely to adopt Connected Life services when they include cloud enhancements
- The more engaged consumers already are with Connected Life experiences, the more impact cloud experiences have on their demand for Connected Life services

Consumer Buying Behavior

- SPs are the preferred provider for Internet-to-TV solutions and can expand market potential by targeting consumers that are "in play"
- **Ongoing cost, up-front cost,** and **reliability** are the strongest factors in consumer decision about *where to buy;* ongoing costs with an SP is a key area of concern

Usage-Based Billing

- Most U.S. broadband consumers consider usage-based broadband pricing unfair and would prefer subscribing to an unlimited plan
- For online video, consumers are likely to respond to usage-based billing by **reducing use**

Consumer Technology Trends

- Consumers are embracing Connected Life services and technologies: mobile video use is rising, mobile data use occurs predominantly in fixed locations, and consumers are increasingly reliant on their broadband service

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

Connected Life

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

Source: Cisco IBSG, 2011

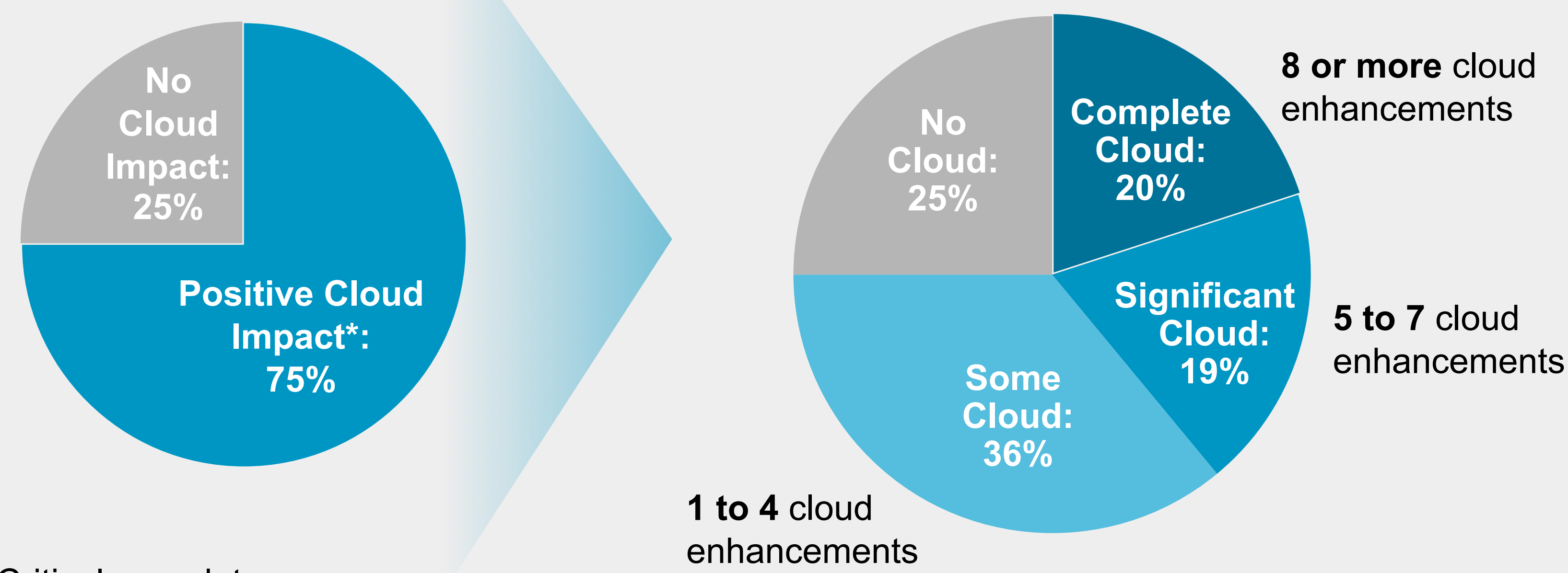
Cloud Is More Powerful as Complete Experience vs. Single Enhancement

Most consumers influenced by more than one cloud enhancement

Consumer Response Across All Consumer Cloud Enhancements

Consumer Segmentation Based on Extensiveness of Cloud Reaction

Percent of consumers positively impacted



* Critical, mandatory, or differentiating

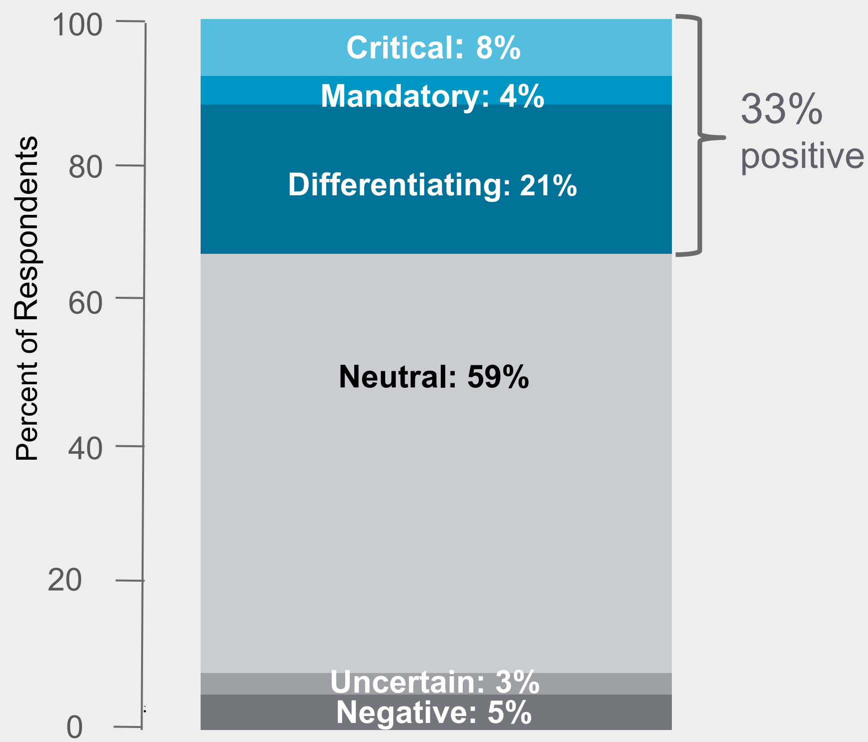
Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. 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; 36% of consumers report interest of 8+ on 10-point scale

Average Response to Individual Cloud Enhancements

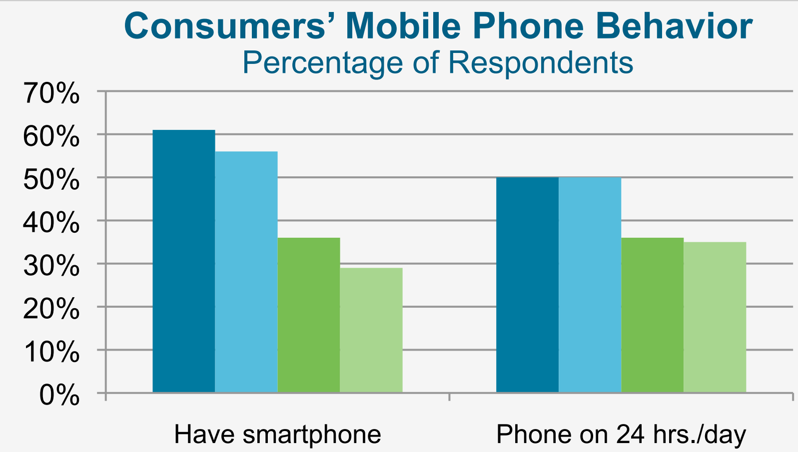


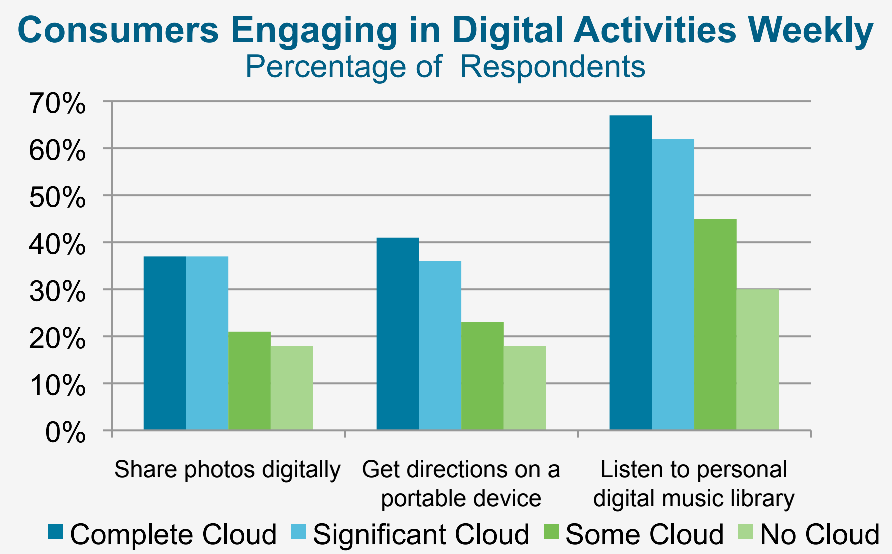
Source: Cisco IBSG, based on Kano methodology, 2011

Base: U.S. 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 (40% under 30)
  – More likely to be female (60%)
  – 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



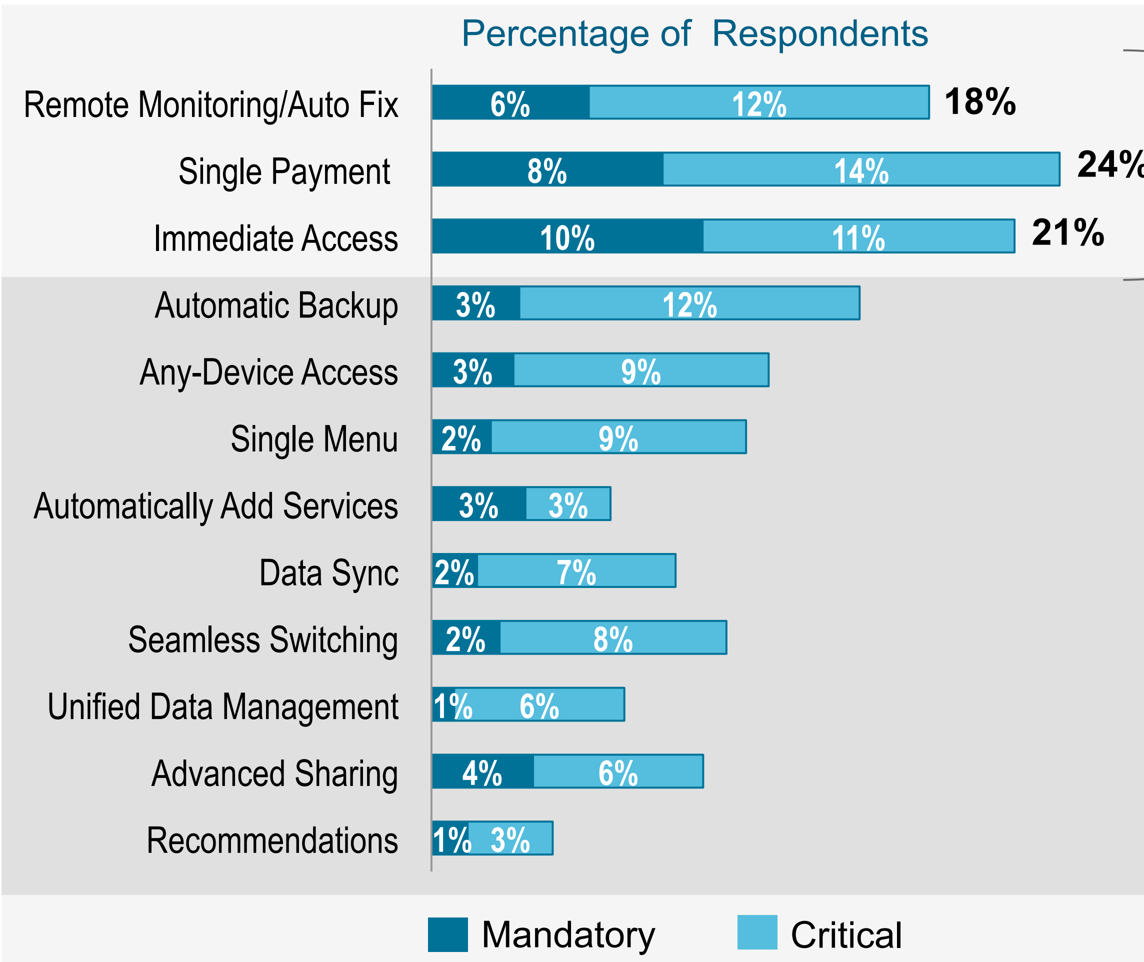


Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. broadband consumers

Some Cloud Experiences Have Stronger Impact than Others

Impact of Mandatory and Critical Enhancements on Connected Life Services

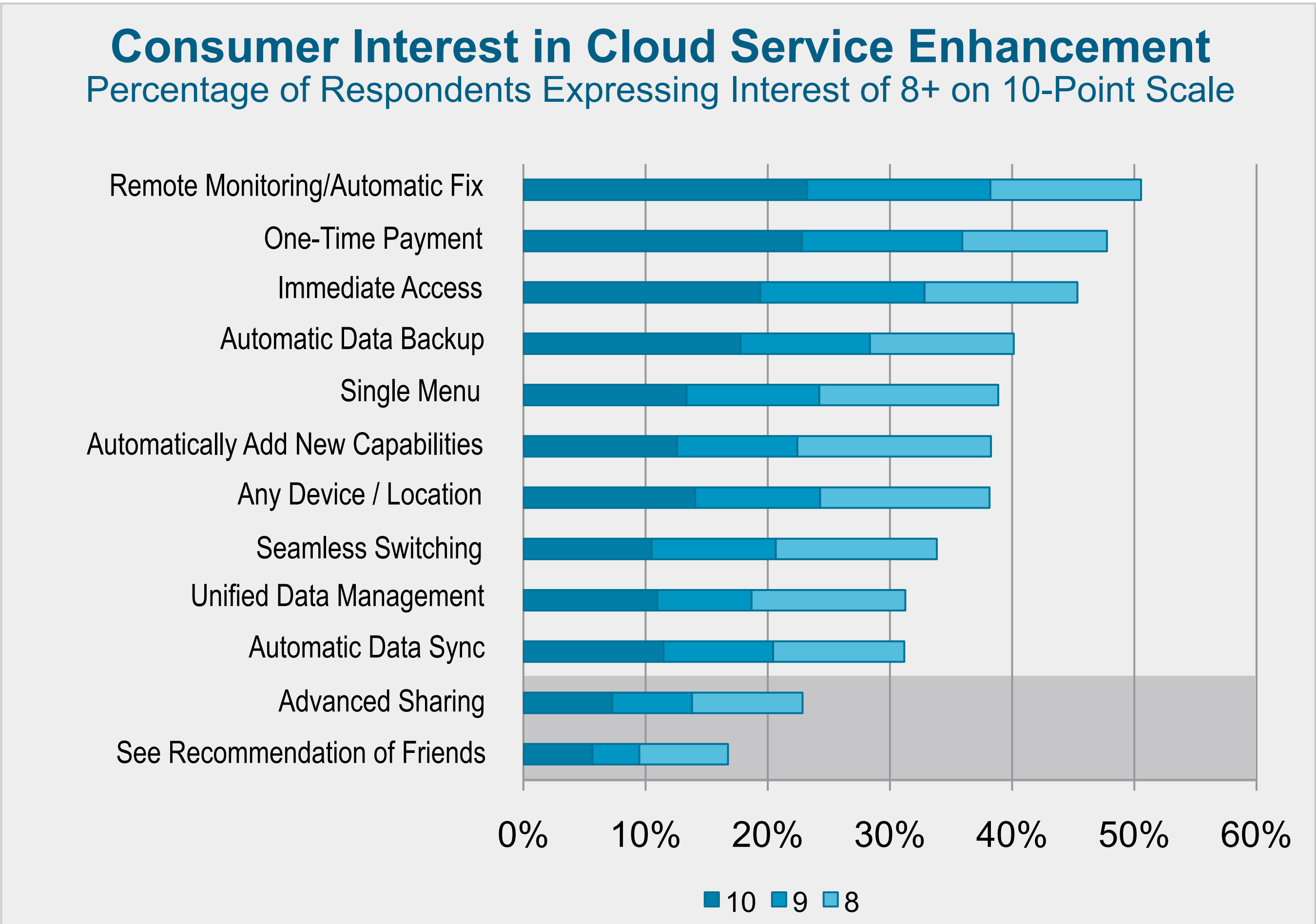


- 18% to 24% of consumers are already starting to expect their Connected Life services to include certain cloud enhancements:
  - Single payment
  - Immediate access
  - Remote monitor /auto fix
- These consumers will react to a Connected Life service negatively if these cloud enhancements are not present

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. broadband consumers

Some Cloud Experiences Spark Stronger Consumer Interest than Others

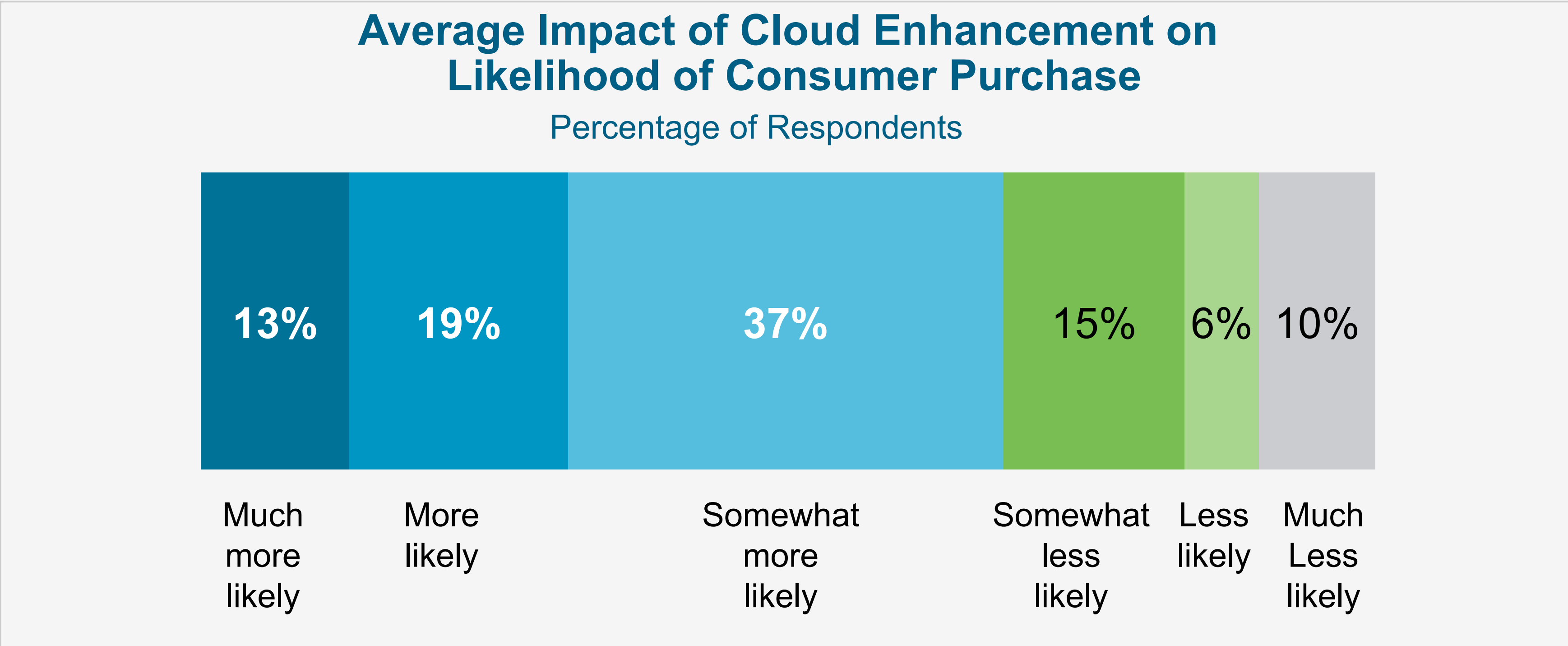


For 10 of the 12 cloud enhancements, **between 30% and 50%** of broadband consumers expressed strong interest

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. broadband consumers

Cloud Enhancements Impact Connected Life Buying Behavior



- On average, 68% of respondents have increased likelihood of buying Connected Life service if it has single cloud enhancement
- 32% are "more likely" or "much more likely," further validating Kano methodology

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. broadband consumers

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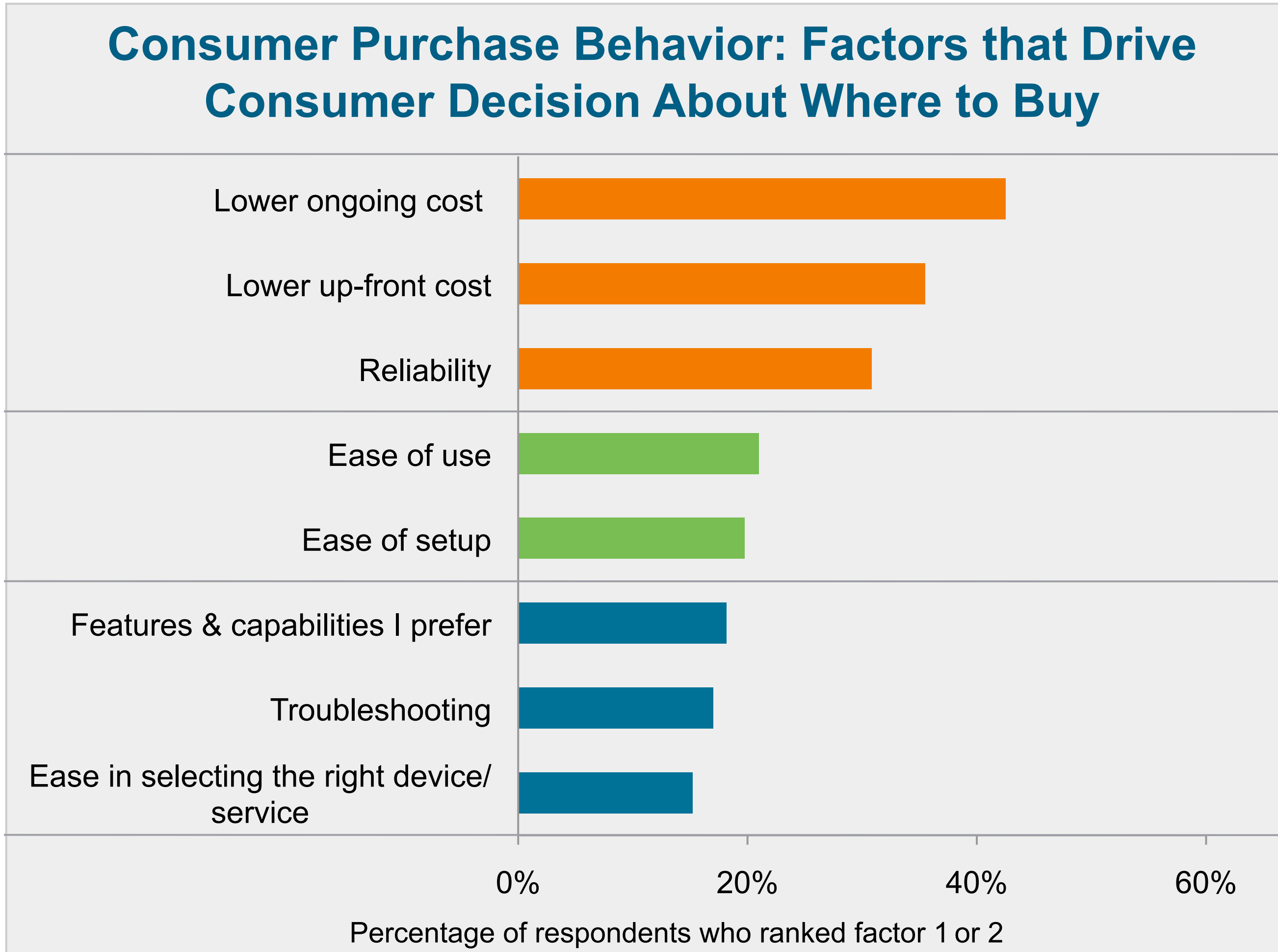
Consumer Buying Behavior

Factors Driving Where To Buy

Cost and Reliability Are the Most Important Factors in *Where To Buy*



Top considerations are cost and reliability

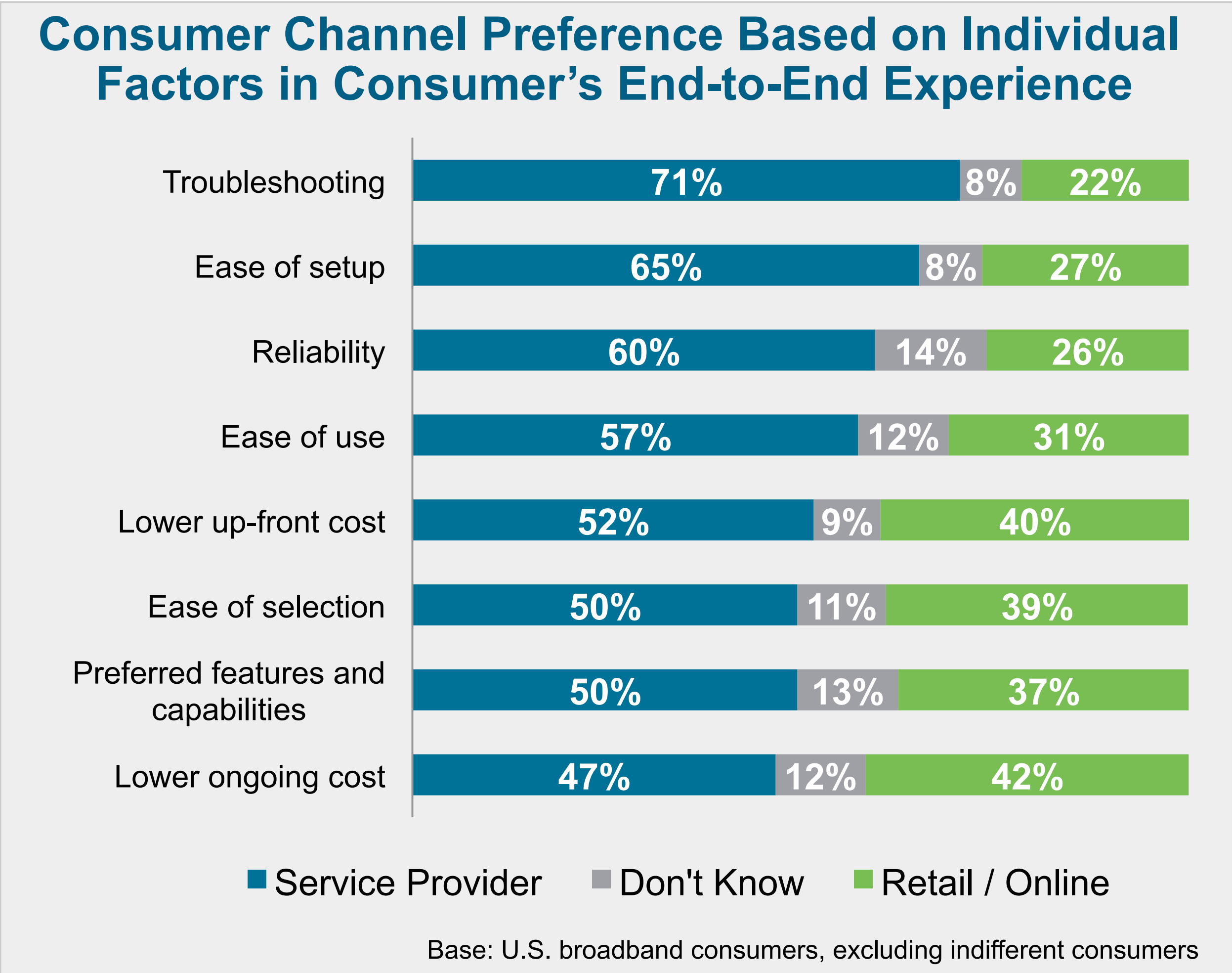
Time-saving factors are an important part of the evaluation

Features, support, 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: U.S. broadband consumers

SP Lead Varies Across Consumers' End-to-End Experience

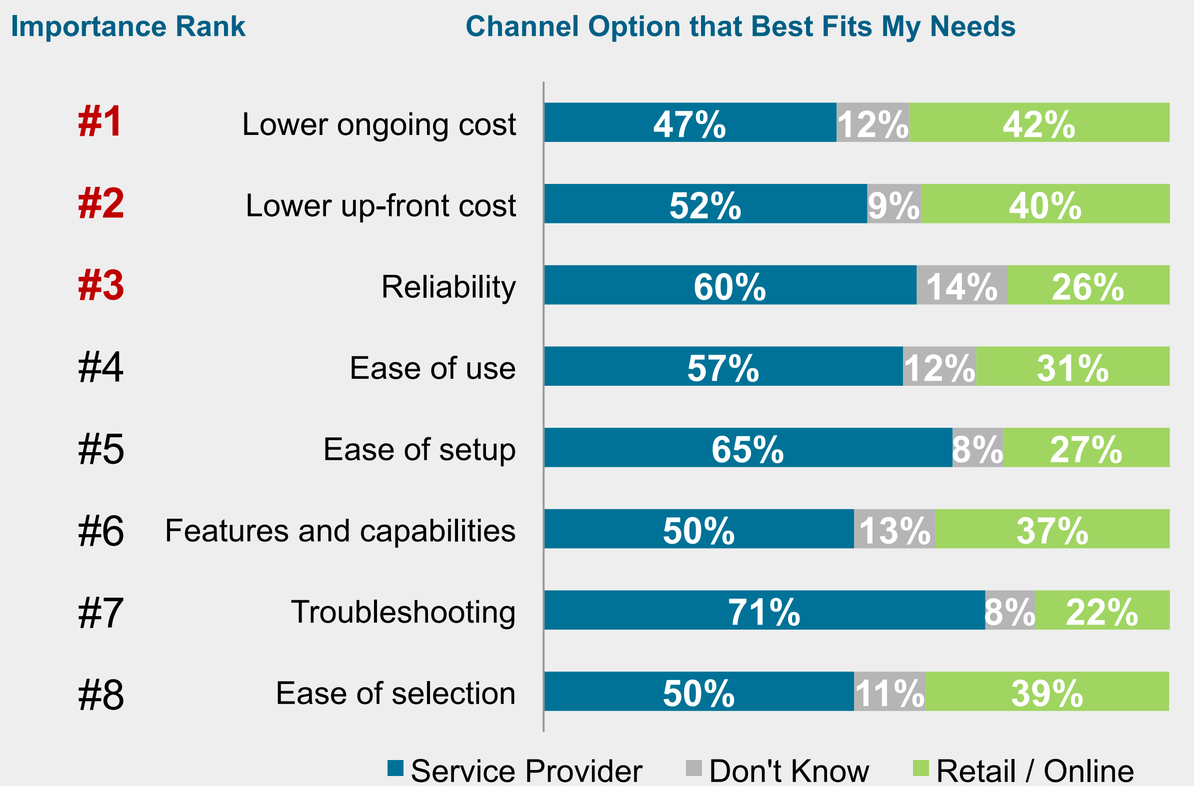


Source: Cisco IBSG Connected Life Market Watch, 2011

- 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

However, SPs Have Smallest Lead in Most Important Decision Criteria

Consumer Channel Preference: Individual Factors in Order of Importance



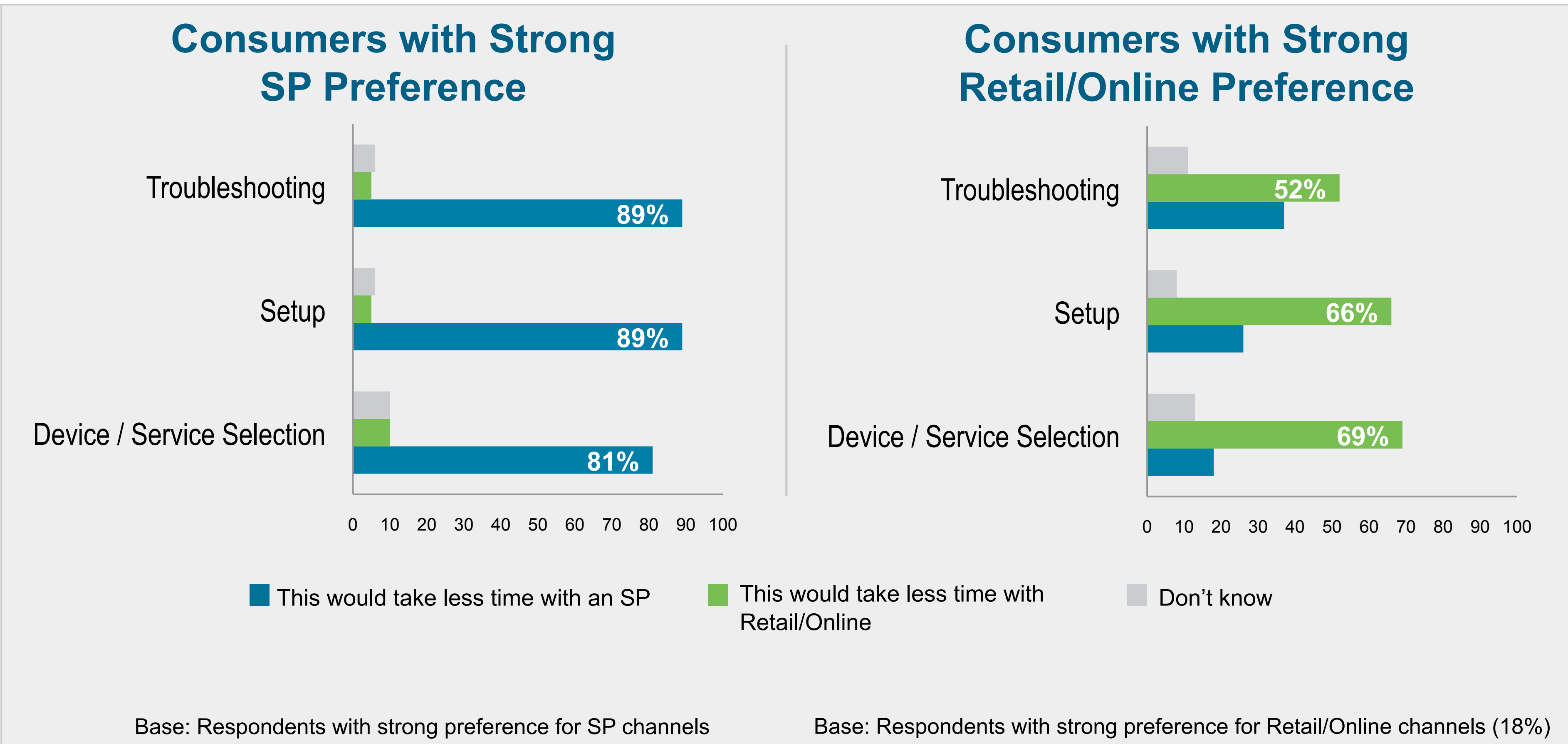
Base: U.S. broadband consumers, excluding indifferent consumers

- Ongoing cost is the most important decision criteria for most consumers
- And, it's the factor where SPs and retail/online preference are most evenly matched

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



Source: Cisco IBSG Connected Life Market Watch, 2011

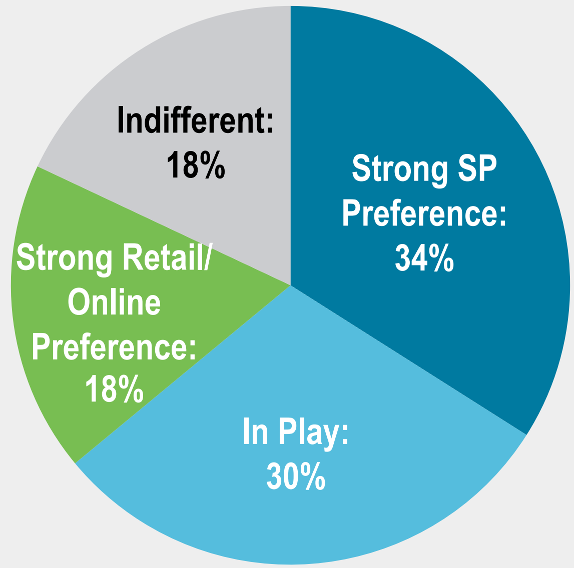
SPs Are Consumers' Preferred Provider for Internet-to-TV Solution

For 8 different factors in the purchase process—from up-front cost to ease of use—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

Consumers' Preferred Channel Experience

Percentage of Respondents



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. broadband consumers

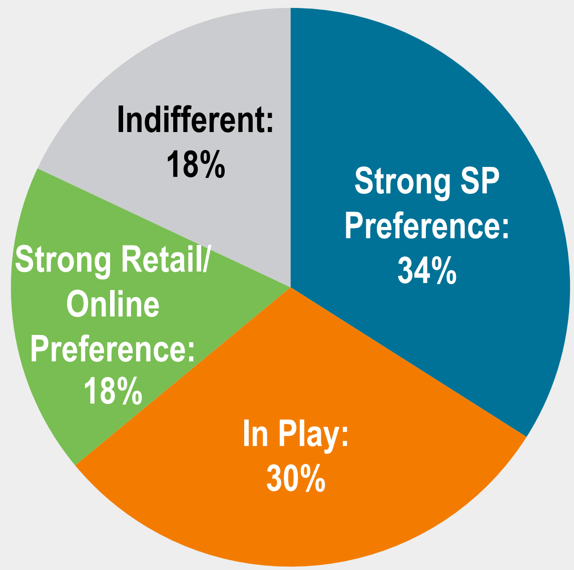
To Expand Customer Potential, SPs Should Target "In Play" Consumers

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

- 18% of consumers are highly indifferent and will be difficult to draw into any Internet/TV purchase
- Another 18% show a strong preference for the retail/online experience and may be difficult to attract
- However, a sizable 30% of the market shows openness to consider both SP and/or retail/ online solutions

Consumers' Preferred Channel Experience

Percentage of Respondents

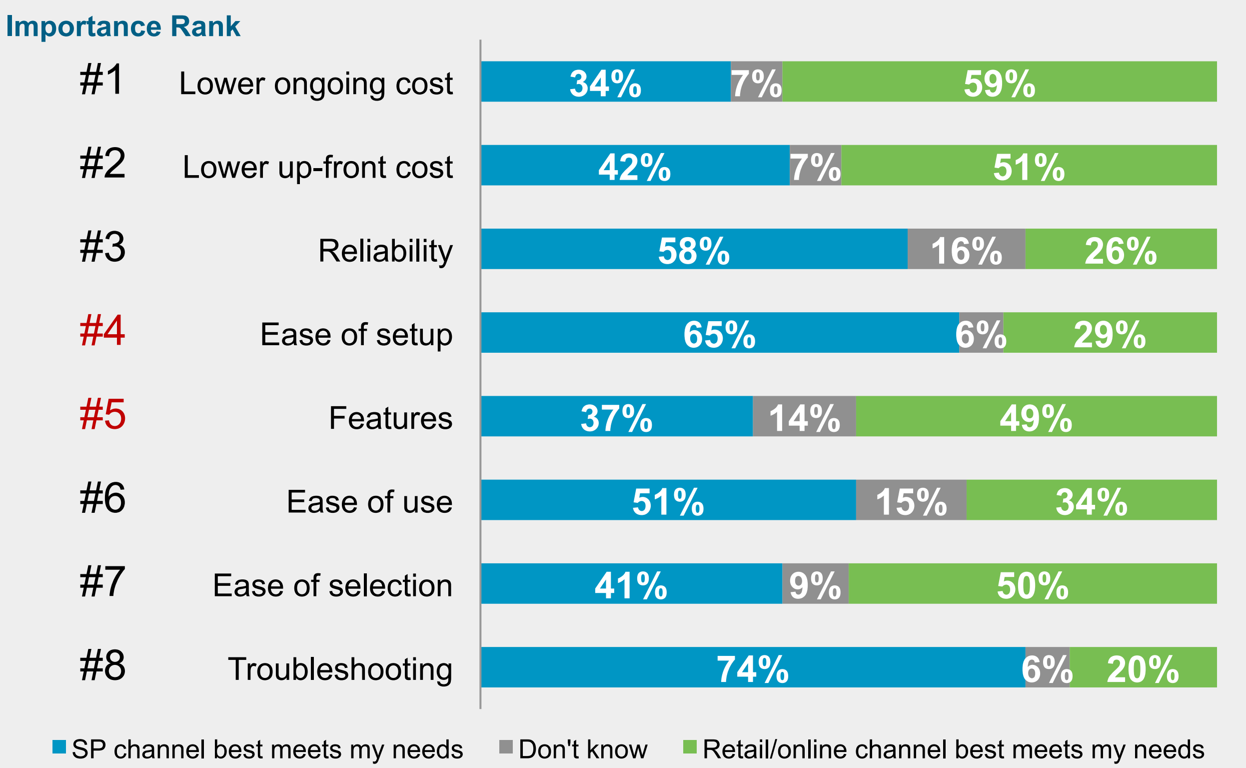


Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. broadband consumers

"In-Play" Segment's Priority Buying Factors Favor the Retail/Online Channel

Channel Preference of "In-Play" Consumers
Based on Individual Factors in Consumers' End-to-End Experience



Red: Criteria ranked higher than for average consumer

- 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—also a strong decision factor—to attract consumers

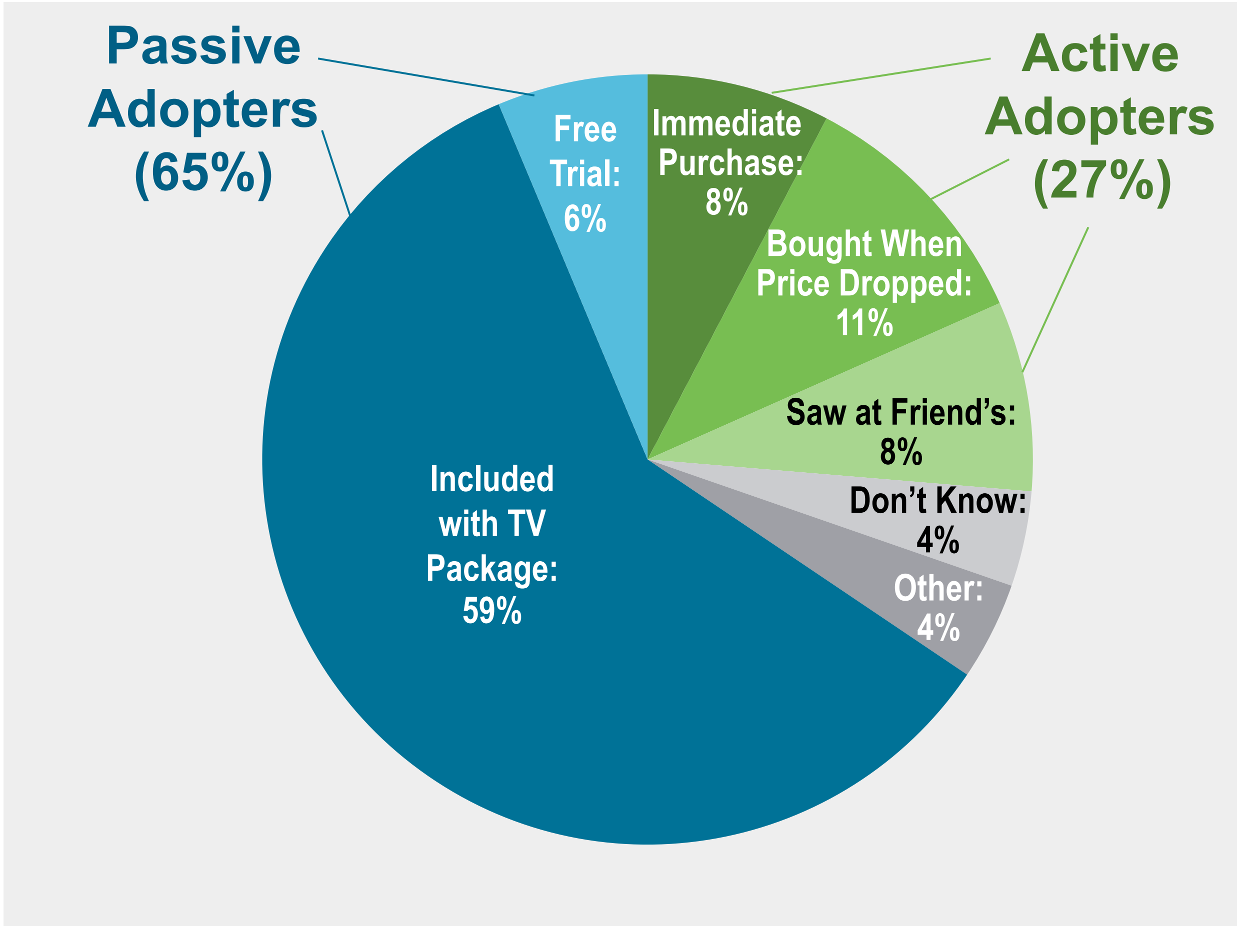
Source: Cisco IBSG Connected Life Market Watch, 2011

Base: "In-Play" U.S. broadband consumers

By Lowering Adoption Barriers, SPs Can Influence Buying Behavior

Example: Consumer Reasons for DVR Adoption

- 65% of DVR owners first adopted a DVR because an SP made it easy
- Similar principle could apply to today's new technology



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. broadband consumers

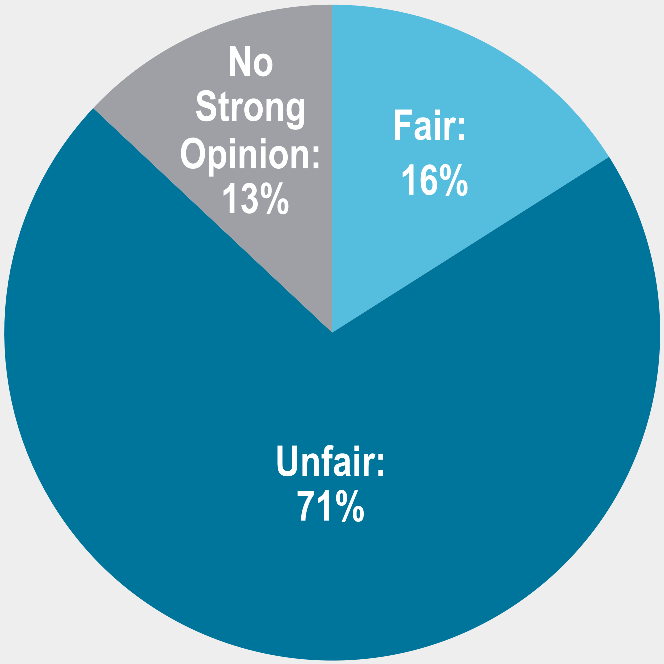
3 Usage-Based Broadband

Consumers Feel It Is Unfair To Pay for Broadband Service Based on Use

- Tiered pricing for fixed broadband based on data usage is not being practiced in U.S. today
- U.S. SPs face increases in data usage (driven by video) that are not balanced by increased revenue
- In reaction to this situation, their Canadian counterparts began launching tiered broadband pricing plans in 2010

Perceived Fairness of Usage-Based Billing

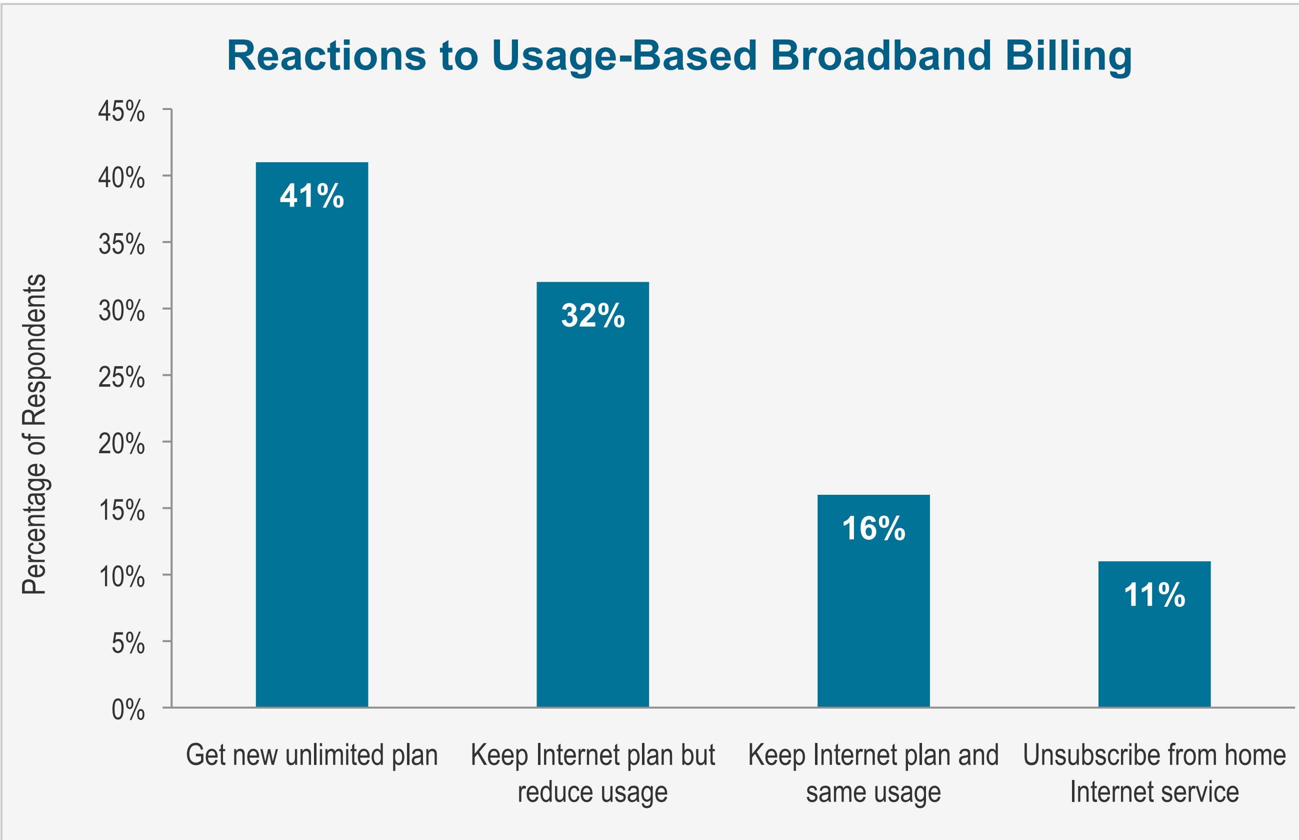
Percentage of Respondents



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. broadband consumers

Unlimited Plans Could Be Popular When Usage-Based Billing Comes to U.S.

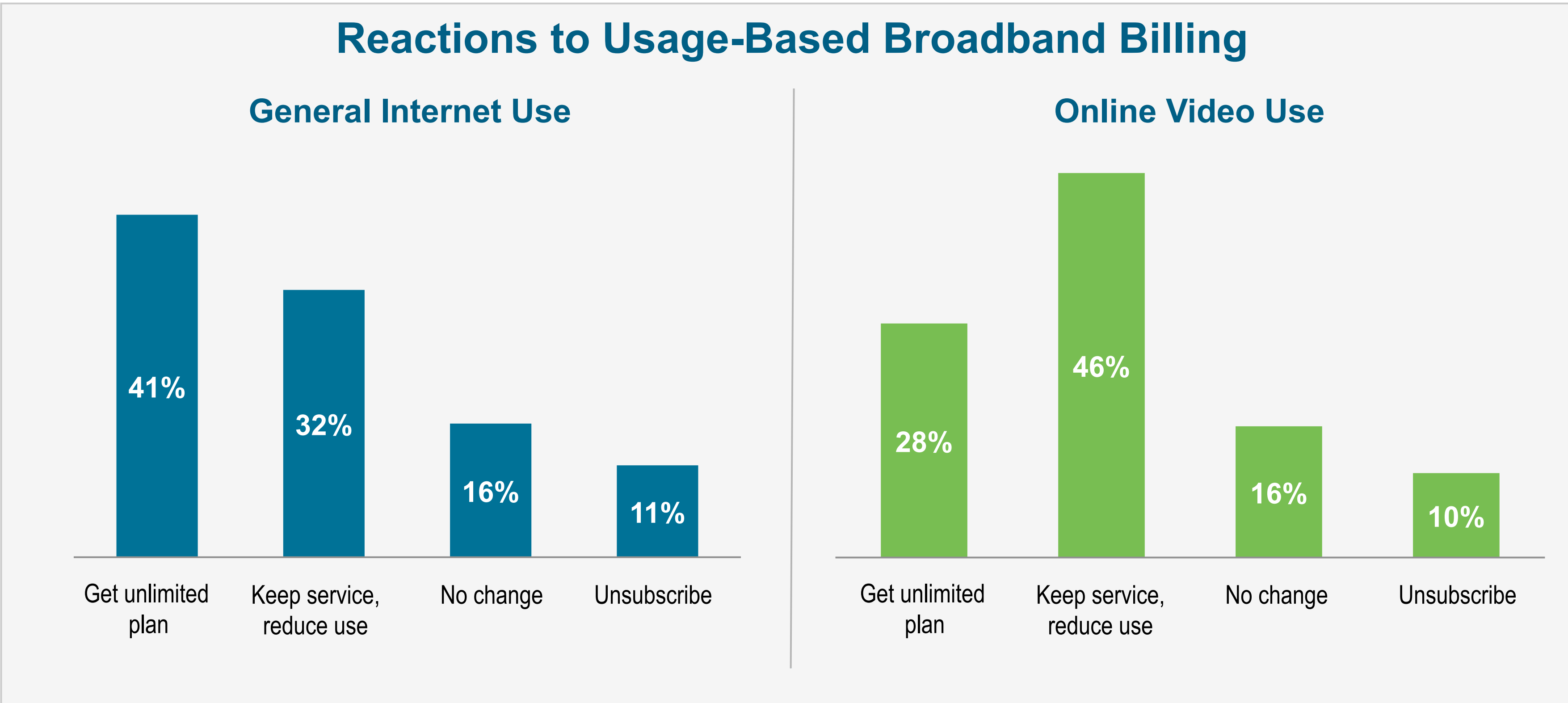


- In response to usage-based billing, consumers plan to **subscribe to unlimited plans** or **reduce Internet use**
- Younger consumers are more likely to seek an unlimited plan; **52% of those under 30** plan to subscribe to an unlimited plan

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. broadband consumers

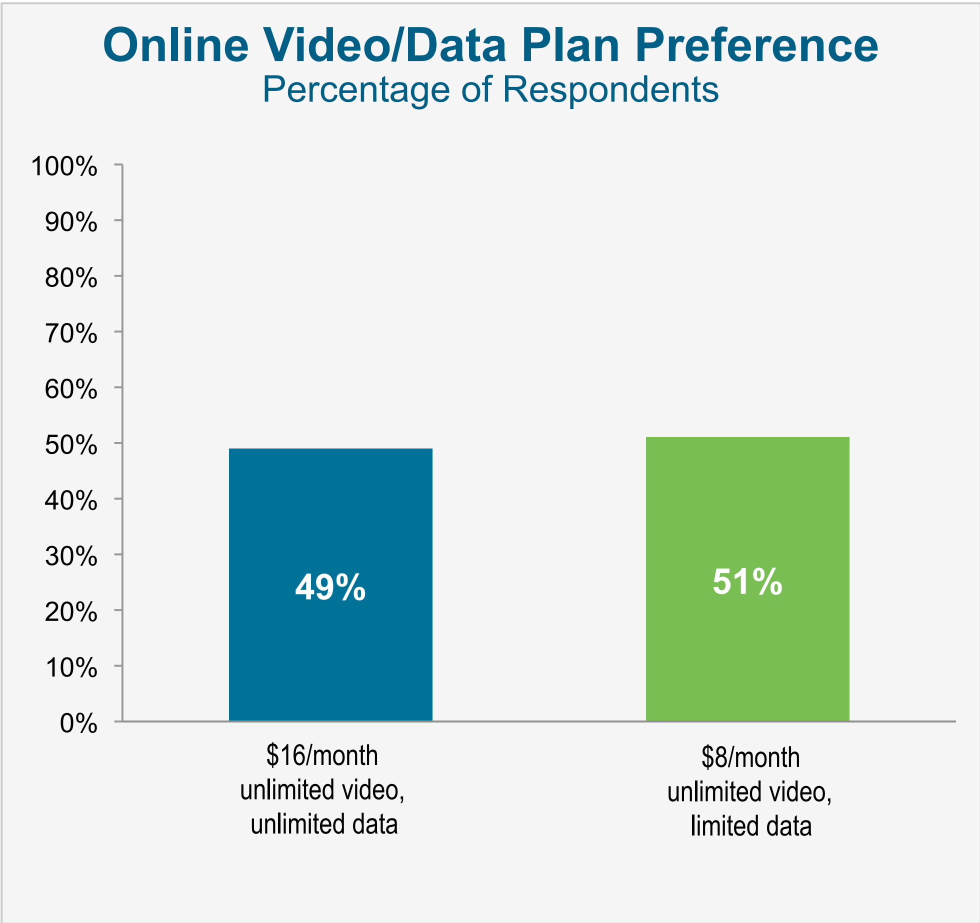
For Video Specifically, Consumers Are More Likely To Reduce Usage



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. broadband consumers

For Internet Video/Data Packages, No Clear Winner for Data Pricing



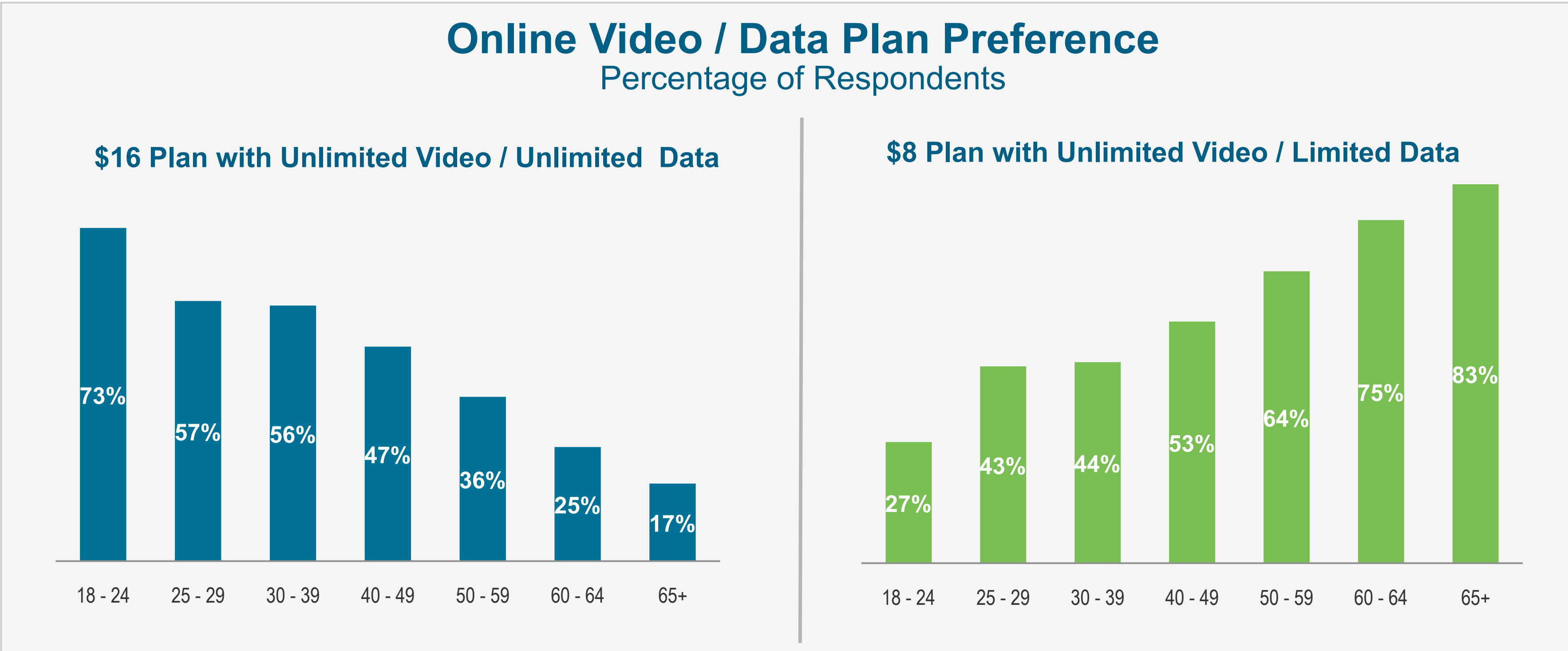
Online Video Service Pricing Options:

- **$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: U.S. broadband consumers

However, Very Strong Preferences Exist for Older / Younger Age Groups



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: U.S. broadband consumers

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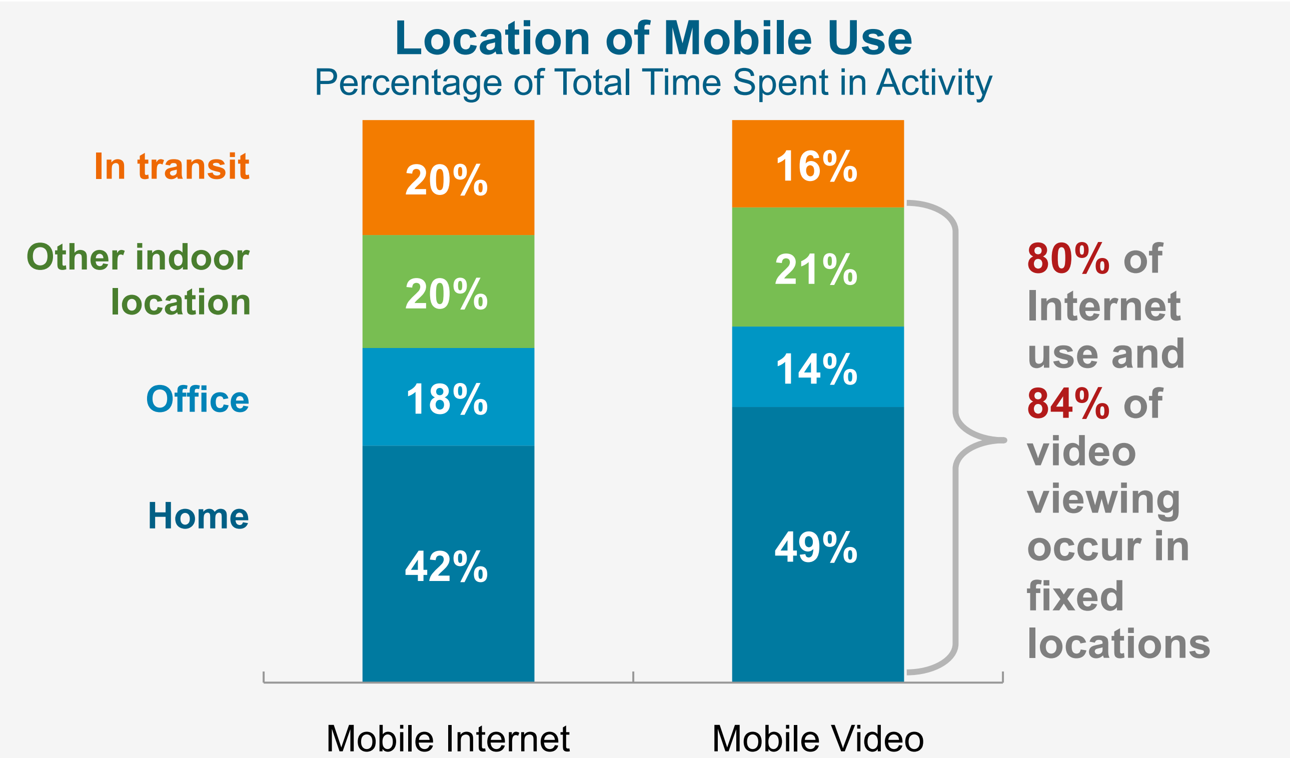
Consumer Technology Trends

Most Mobile Internet & Mobile Video Activity Takes Place in Fixed Locations



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

- More than 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

Source: Cisco IBSG Connected Life Market Watch, 2011

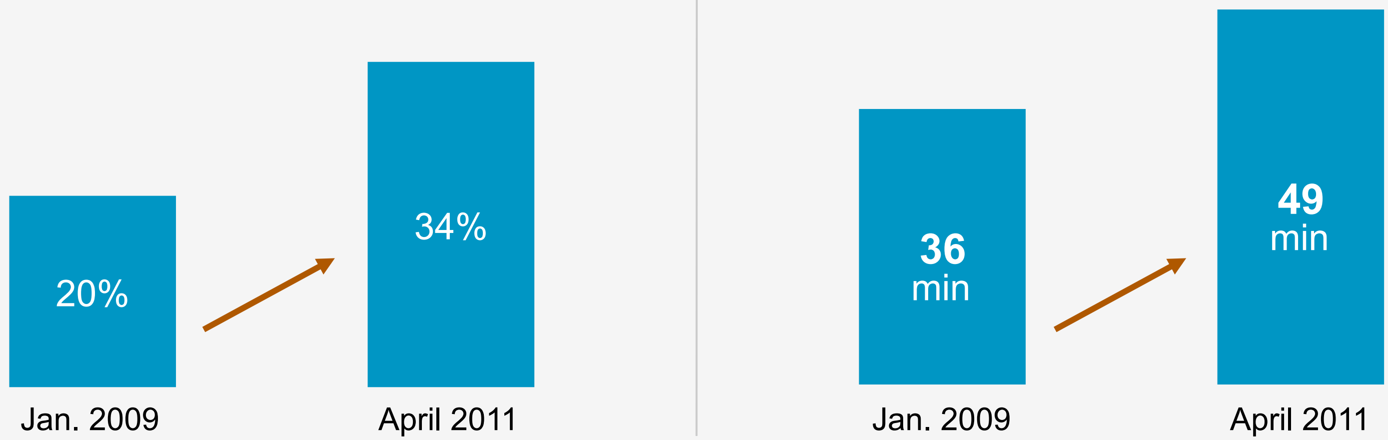
Base: Respondents engaged in activity

Mobile Video Use Is Trending Upward

Mobile Phone Video Users

Mobile Video Users
% respondents not citing “Never”

Time Spent Weekly
Minutes per week

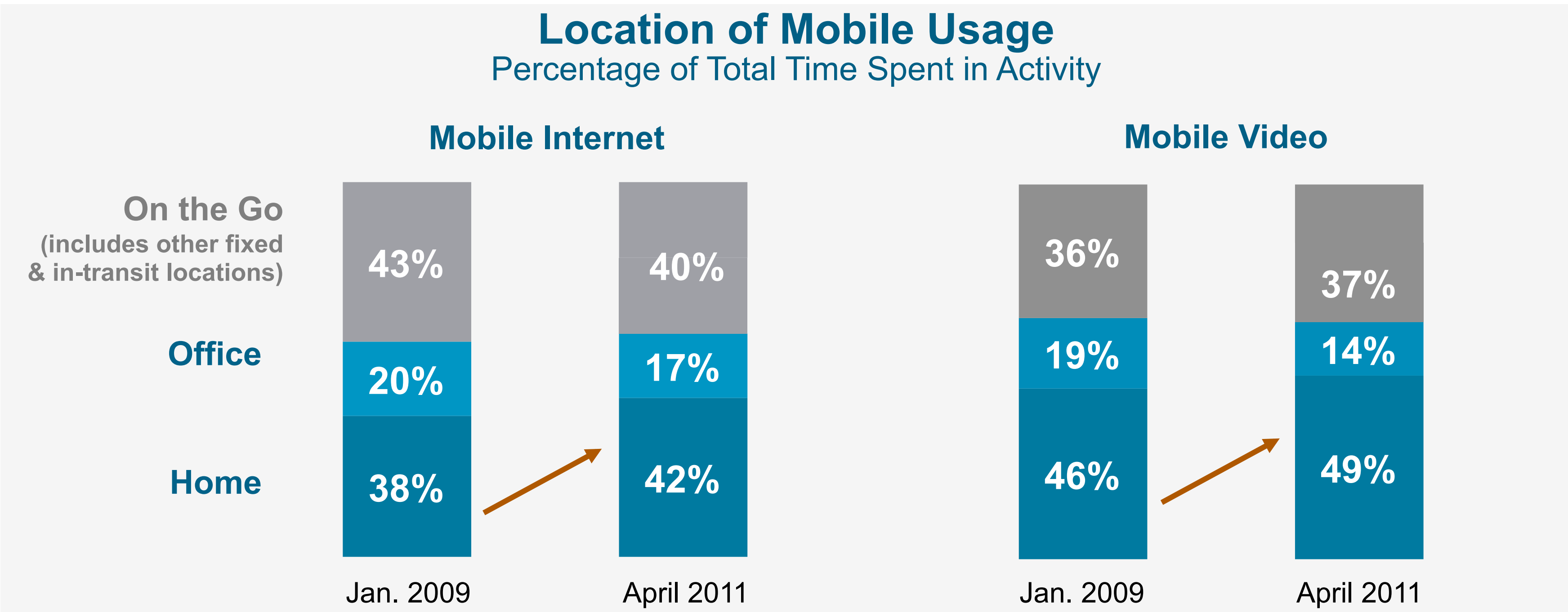


Base: U.S. broadband consumers

Base: mobile video users

Source: Cisco IBSG Connected Life Market Watch, 2011

At-Home Mobile Internet & Mobile Video Usage Are Trending Upward

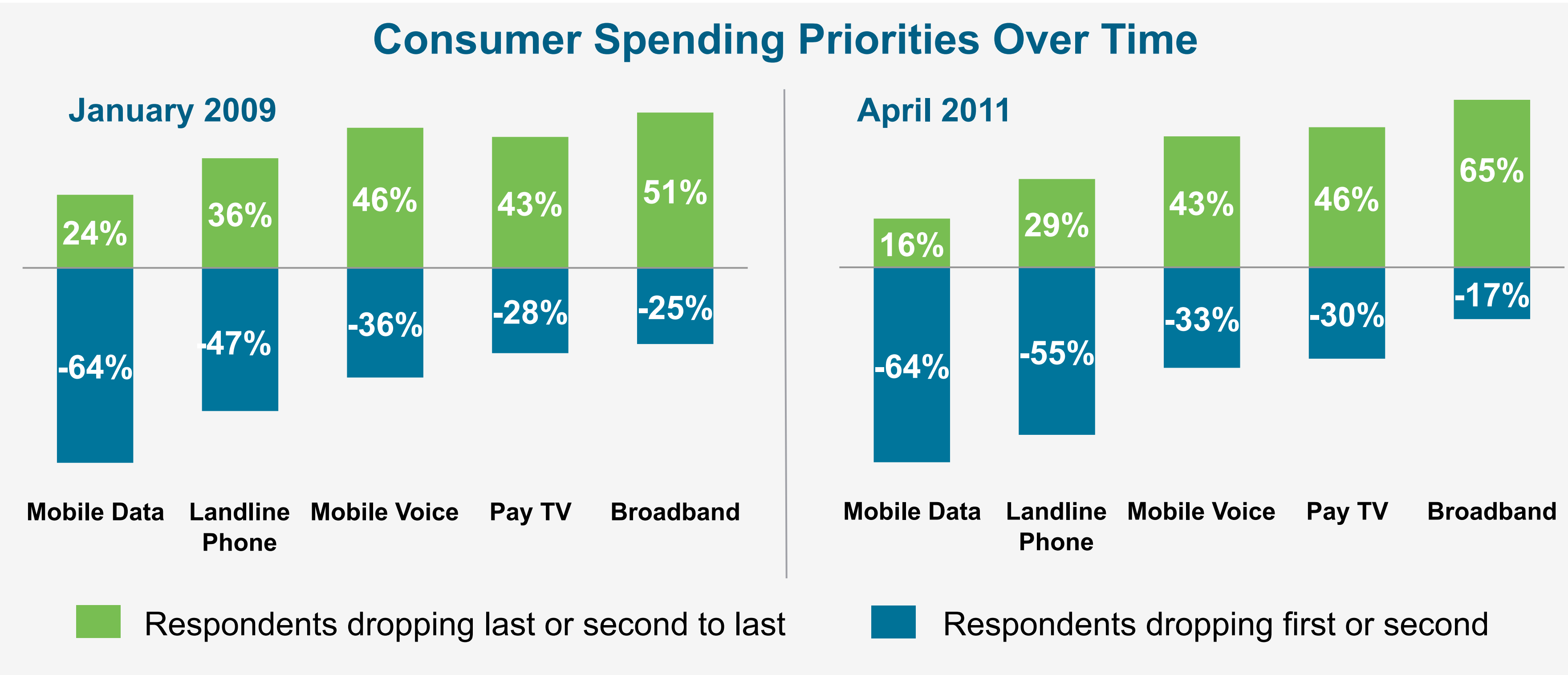


Slight rise in at-home use as percentage of total mobile Internet and mobile video activity since 2009

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Respondents engaged in activity

Changes in Consumer Spending Priorities Since 2009



- Broadband has increased in importance; landline phone has decreased
- Mobile data remains least important, and fewer people are protecting it

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.S. 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 must offer both usage-based and unlimited pricing plans to meet the needs of different customer segments and maximize profitability

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 targeting the 30 percent of consumers that are "in play"

Source: Cisco IBSG Connected Life Market Watch, 2011

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