Service Delivery and Consumer Cloud (United Kingdom)

A Connected Life Market Watch Perspective

Cisco Internet Business Solutions Group

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May 2012

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Agenda

- Methodology
- Respondent Profiles and Demographics
- Key Findings (United Kingdom)
- Topics
  1. Technology Usage
  2. Buying Behavior
  3. Pricing
  4. Service Provider Wi-Fi
  5. Consumer Cloud and Connected Life
  6. How To Expand Customer Potential

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Methodology

Connected Life Market Watch

Service Delivery and Consumer Cloud

Approach

Connected Life Market Watch (CLMW) Program

- Cisco IBSG's recurring primary research program
- Monitors changing consumer behavior to identify key market transitions
- Topics include mobile (2009), video (2008, 2010)
- 2011 focus: Service Delivery & Cloud Experiences

Methodology

- Broadband consumers
- 20-minute online survey, representative sample (500-1,000 respondents/country)
- Multiple segmentations (demographic, tech affinity)
- United Kingdom field work: December 2011

Scope 2011

Canada

France

Germany

Italy

United Kingdom

United States

Source: Cisco IBSG Connected Life Market Watch, 2011

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Respondent Profiles and Demographics

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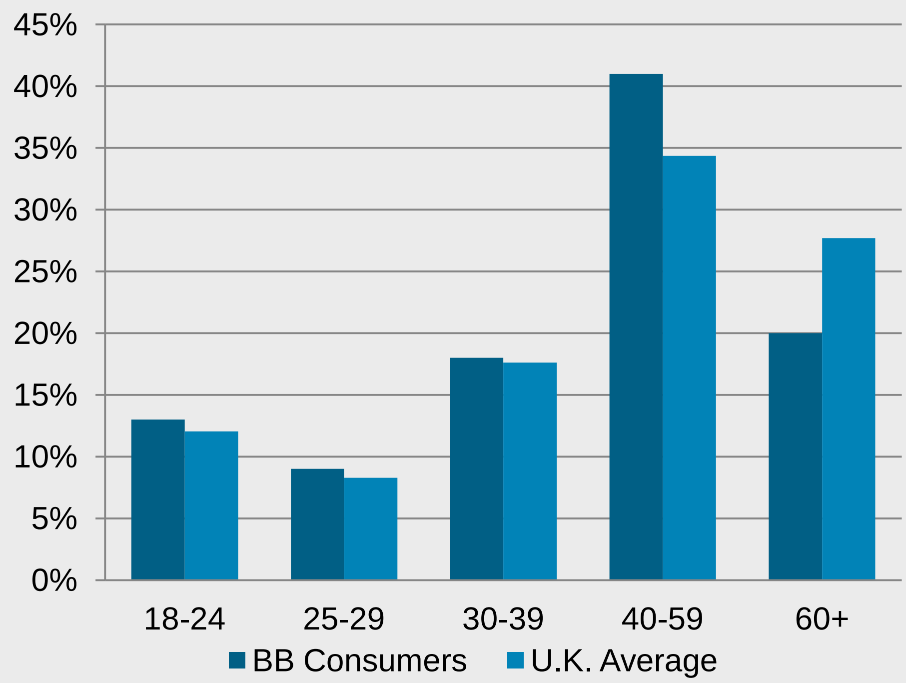
Demographics: Representative of U.K. Broadband Population

Younger, Richer, More Employed, Have More Children than U.K. Average

Broadband Respondents vs. U.K. Average

	Broadband Consumers	U.K. Average
Gender: male / female	54% / 46%	49% / 51%
Avg. household income	£32,000	£26,000
Have children in the home	34%	32%
Employed	60%	47%

Respondents' Age vs. U.K. Average



Source: Cisco IBSG Connected Life Market Watch, 2011;
U.K. Office of National Statistics, 2012

Base: U.K. broadband consumers

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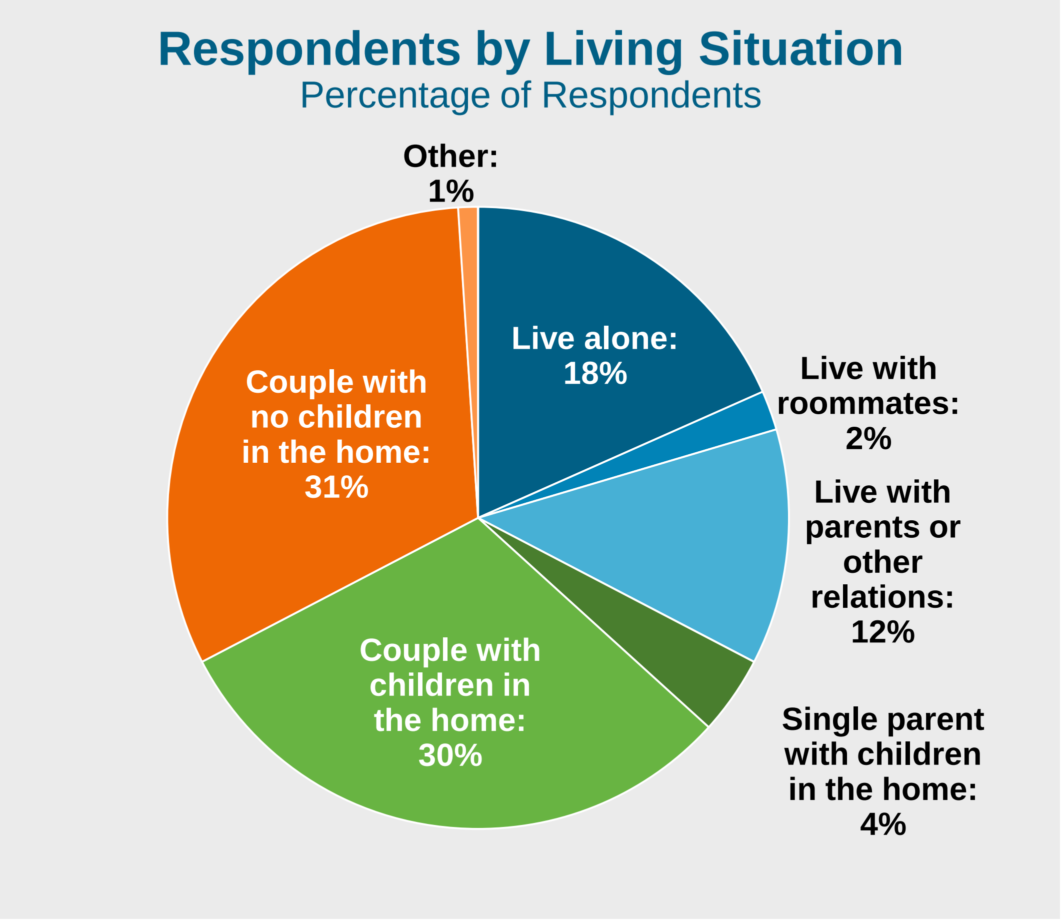
Respondents Represent a Variety of Living Situations

Include Single Parents, Roommates, Typical Families

- 34% of respondents have children in the home
- 61% are in a married /couple situation
- Single-person households make up 18% of respondents



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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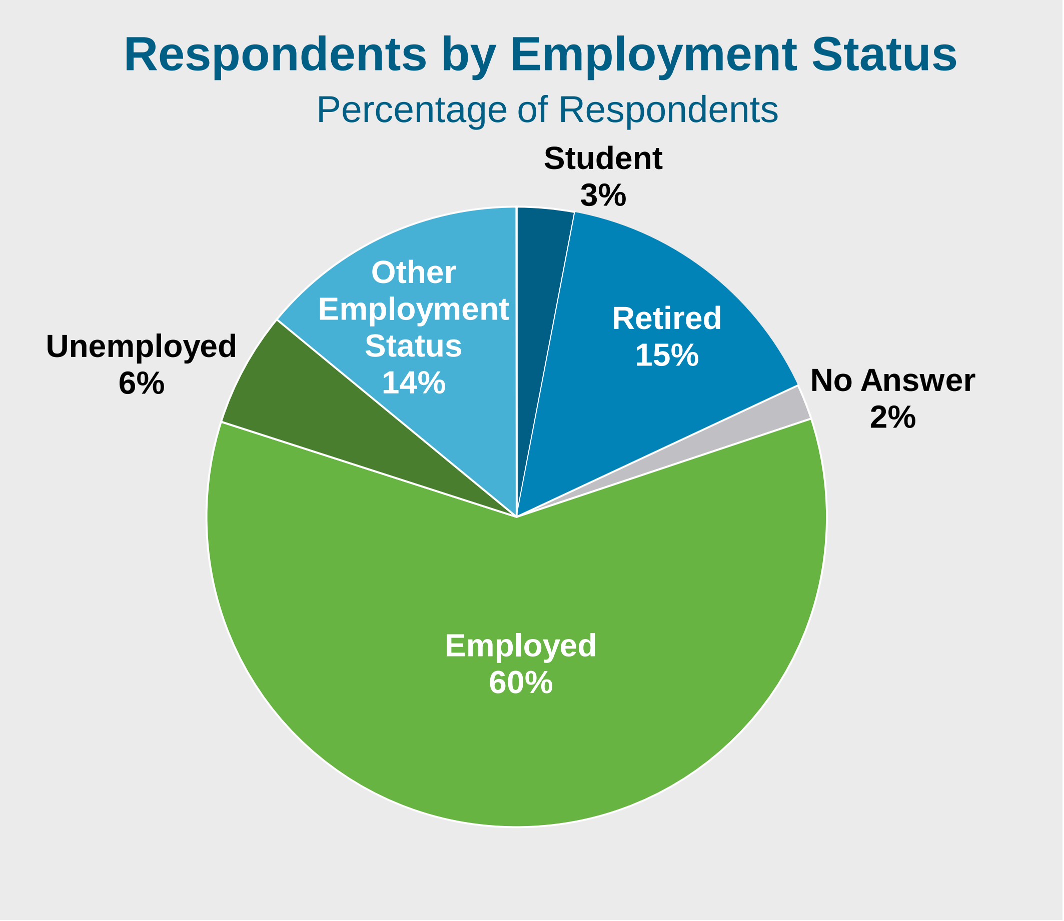
Respondents Include Working, Nonworking, and Student Populations

- 60% of respondents are workers currently employed
- 6% are currently unemployed



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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Key Findings
(United Kingdom)

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Key Findings: United Kingdom

Topics	Emerging Findings
Technology Use	• Consumers are embracing Connected Life services and technologies • Mobile video use is rising; mobile data use is mostly in fixed locations • Smartphones have hit the mass market
Buying Behavior	• SPs have clear lead in most important decision criteria, especially cost and reliability • Broadband is the “anchor service” for SPs
Pricing	• Most consumers do not want to move away from flat rates • SP strategies to drive tiered pricing are underwhelming
SP Wi-Fi	• High acceptance of Wi-Fi for wireless web browsing • Use of Wi-Fi over cellular network is more common among heavy data users • Users ready to accept compromises on quality and immediacy
Consumer Cloud & Connected Life	• Broadband consumers are interested in cloud enhancements, which make them more likely to buy Connected Life services • Experience *bundles* drive purchasing
Expanding Customer Potential	• SPs should target “In Play” consumers • Reliability, ease of setup, and troubleshooting are factors that strongly influence “In Play” segment

Source: Cisco IBSG Connected Life Market Watch, 2011

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1 Technology Use

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Technology Use: Key Takeaways

- Traditional landline is still the anchor service because it is bundled with broadband, the most critical service
- Broadband consumers widely use portable devices: mobile phones are now standard and smartphones have hit the mass market
- Most mobile Internet and mobile video activity takes place in fixed locations, but they have different trends
- Mobile video users are no longer just early adopters; however, mobile video is still a “snacking” experience
- VoIP solutions and TV-over-Internet are starting to challenge landlines and pay TV, while mobile data suffers from expensive tariff plans

Source: Cisco IBSG Connected Life Market Watch, 2011

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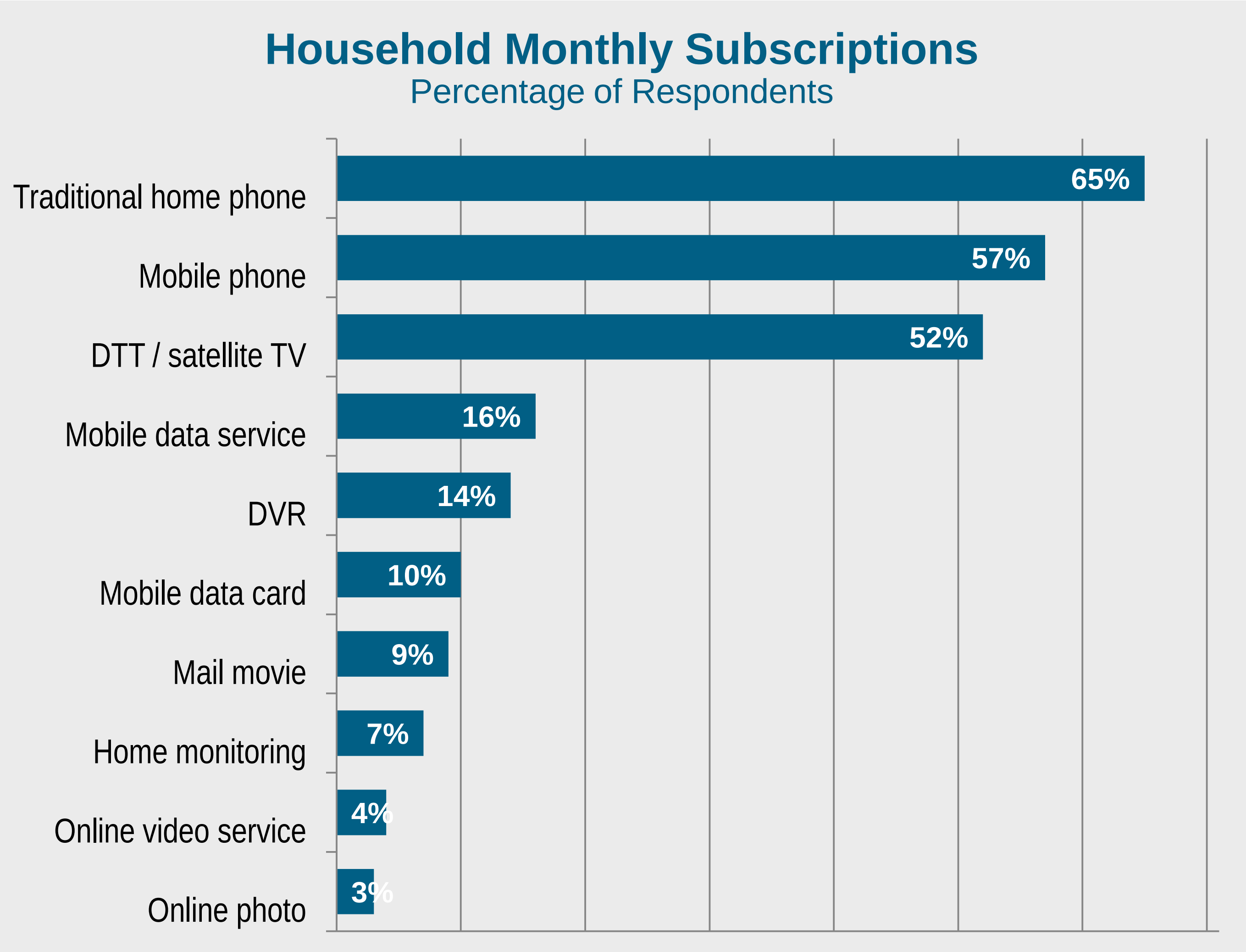
In Broadband Households, Traditional Landline Is Still the Anchor Service



- DVR & mobile data have significant presence
- Online entertainment (video, photo, storage) have limited household adoption to date

* "Mobile phone" does not include prepaid customers

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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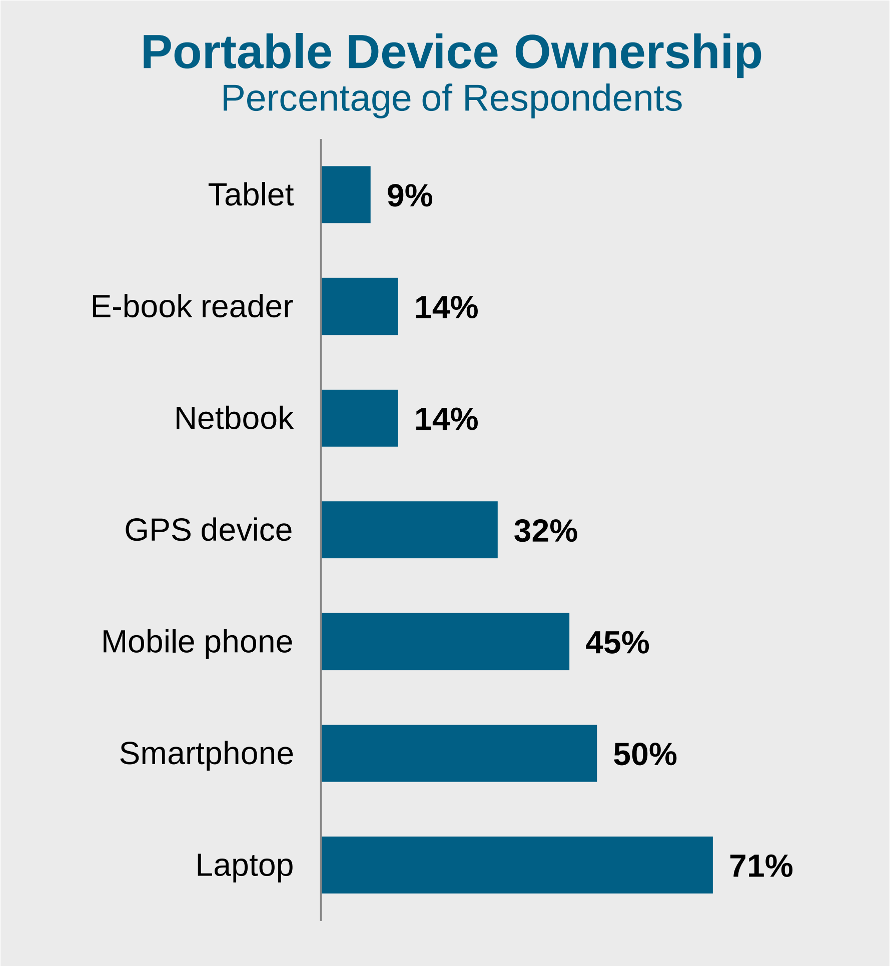
Mobility Is a Must: Broadband Consumers Widely Use Portable Devices

- Average broadband consumer owns 2.4 electronic portable devices
- Average early adopter owns 3.4 electronic portable devices



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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Sample of 543 BB Consumers Well Represents All Technology Segments

Early Adopters Are Younger, More Likely To Be Male, Currently Employed, and Have Higher Income than Other Respondents

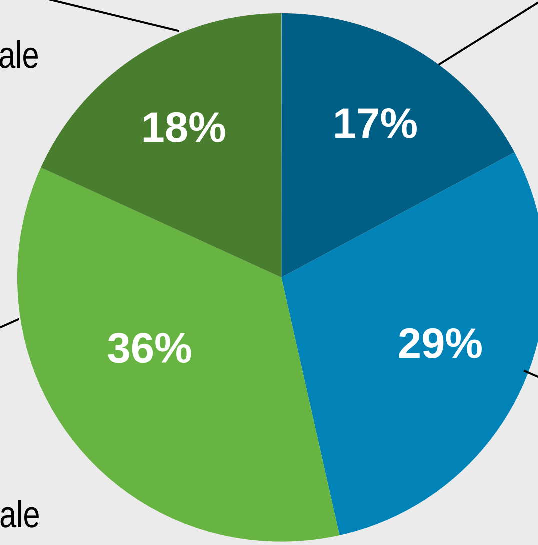
Average Across Base

Age:	44
Male/Female:	54% / 46%
Income:	£32K
Employed:	60%

Consumer Segmentation Based on Technology Profile

Laggard
49 years old (avg.)
59% male / 41% female
£21K HH income
49% employed

Early Adopter
38 years old (avg.)
60% male / 40% female
£42K HH income
81% employed



Late Majority
47 years old (avg.)
47% male / 53% female
£30K HH income
51% employed

Early Majority
42 years old (avg.)
56% male / 44% female
£33K HH income
66% employed

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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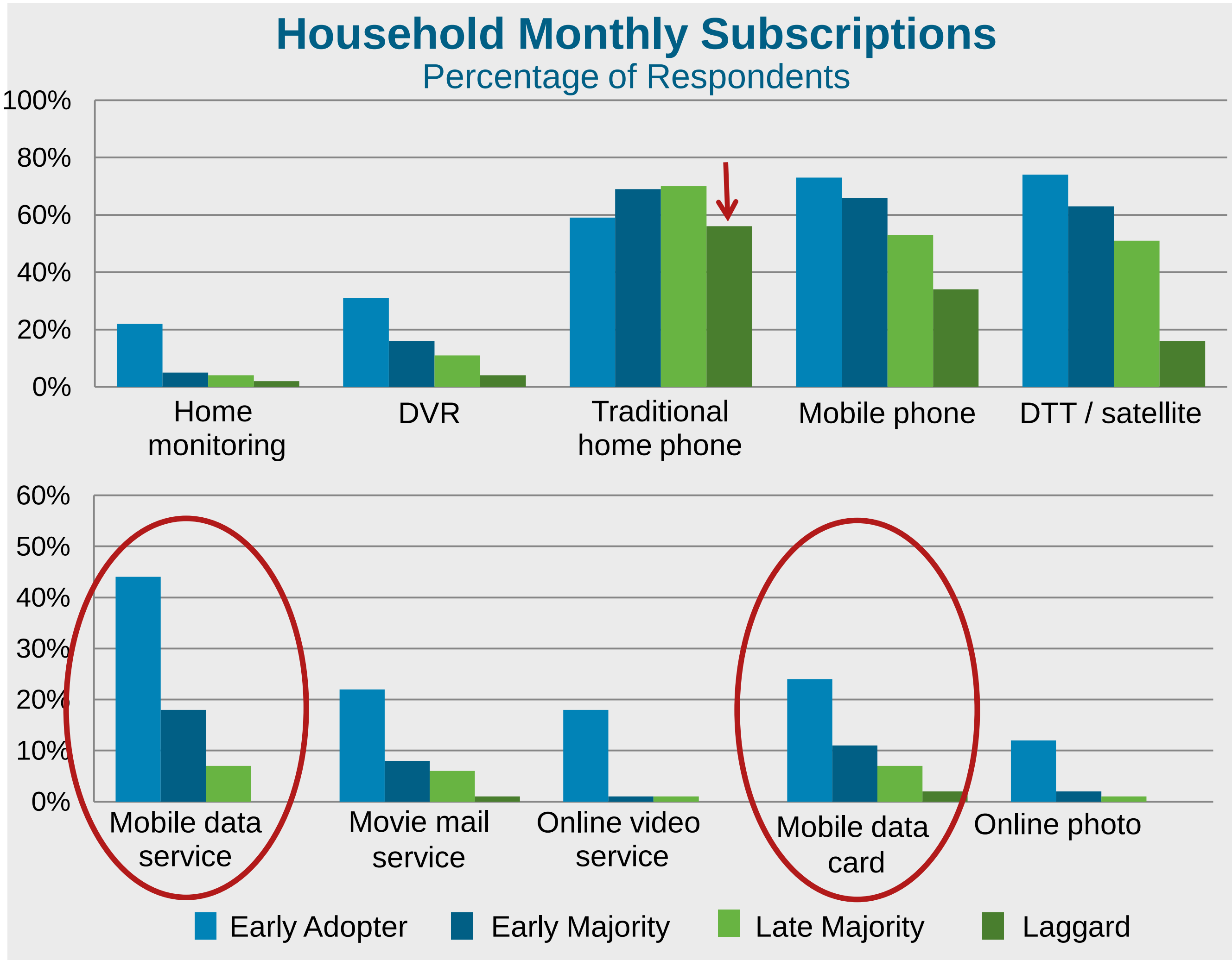
Service Adoption by Segment Provides Insight into Lifecycle Stage



- Traditional home phone shows interesting adoption—laggards have lower adoption than early adopters
- Mobile data card & mobile data services have similar adoption profiles, while online services are still mainly in early adopter phase
- Laggards are very tech-shy

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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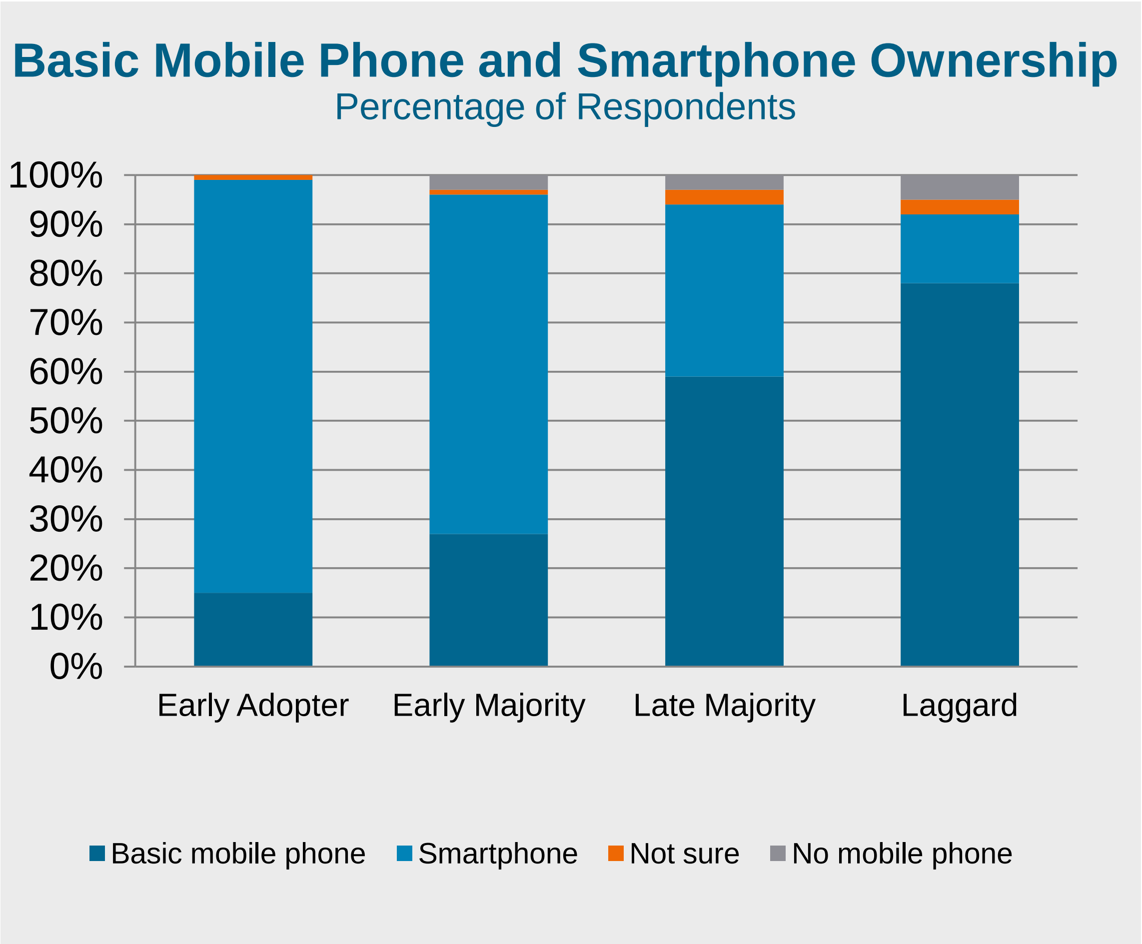
Mobile Phones Are Now Standard; Smartphones Have Hit the Mass Market



- 97% of broadband consumers own mobile phones
- Smartphones have moved beyond early adopters and early majority; they are starting to penetrate the late-majority and laggard segments
  - 50% of all broadband consumers own smartphones, including 14% of laggard consumers

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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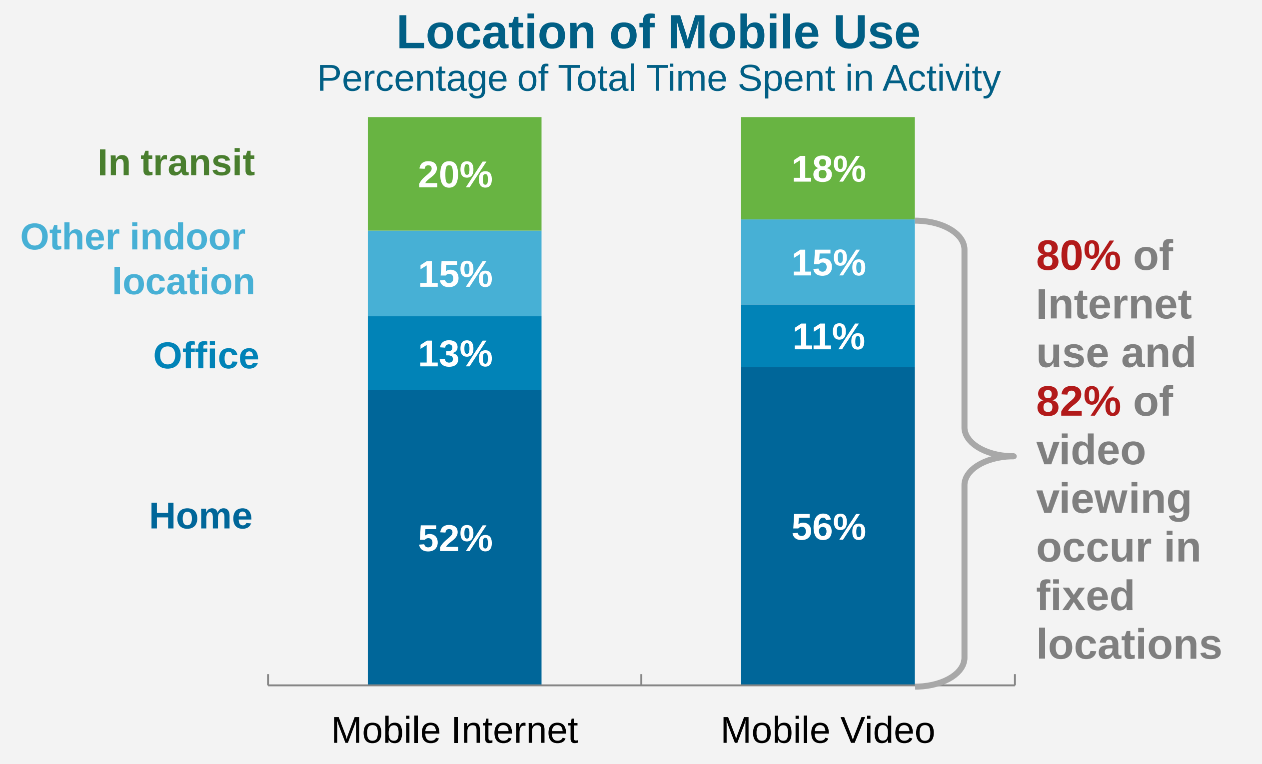
Most Mobile Internet & Mobile Video Activity Takes Place in Fixed Locations



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

- 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 small-cell solutions (Wi-Fi / femto / pico)

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Respondents engaged in activity

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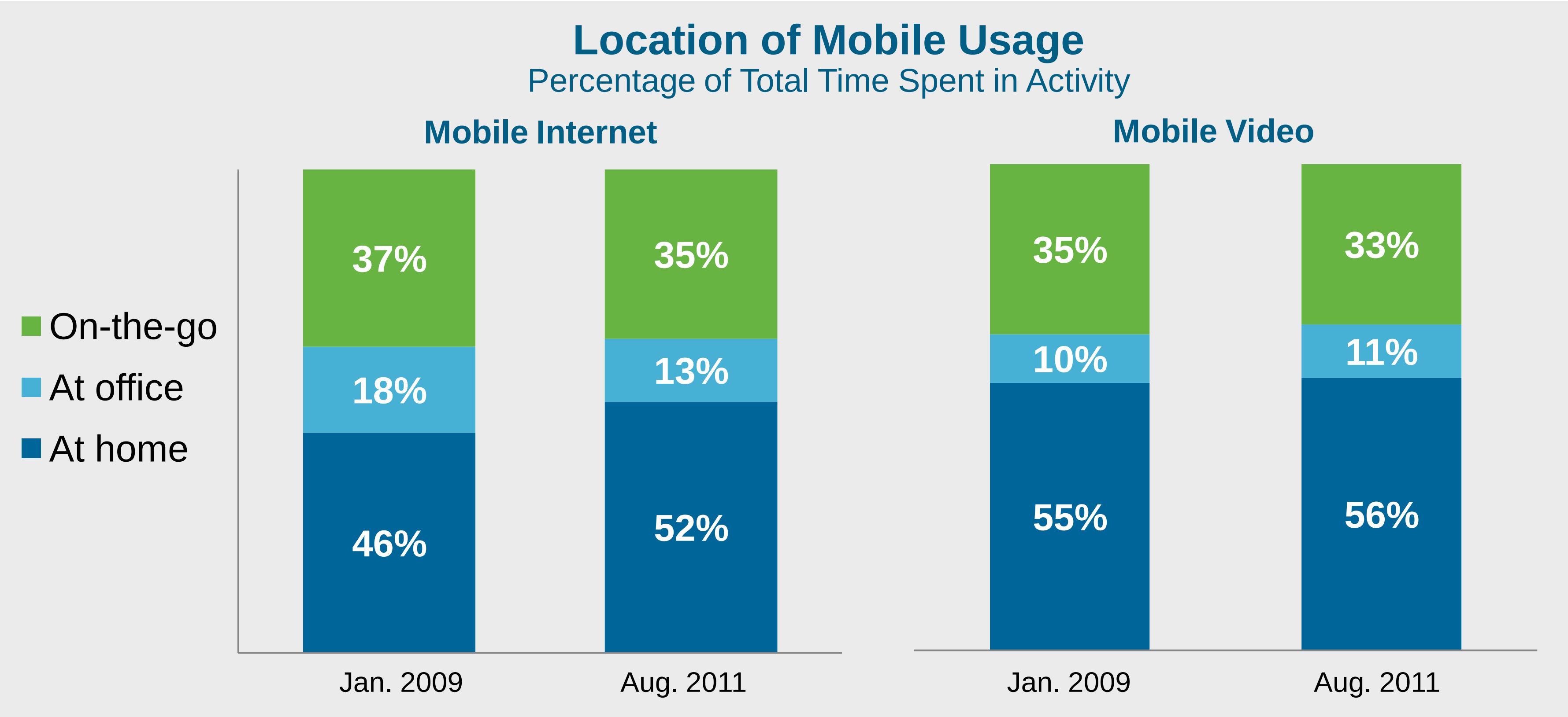
Mobile Internet & Mobile Video Have Similar Trends at Home



There has been a rise in at-home use as percentage of both total mobile Internet and also mobile video since 2009

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Respondents engaged in activity

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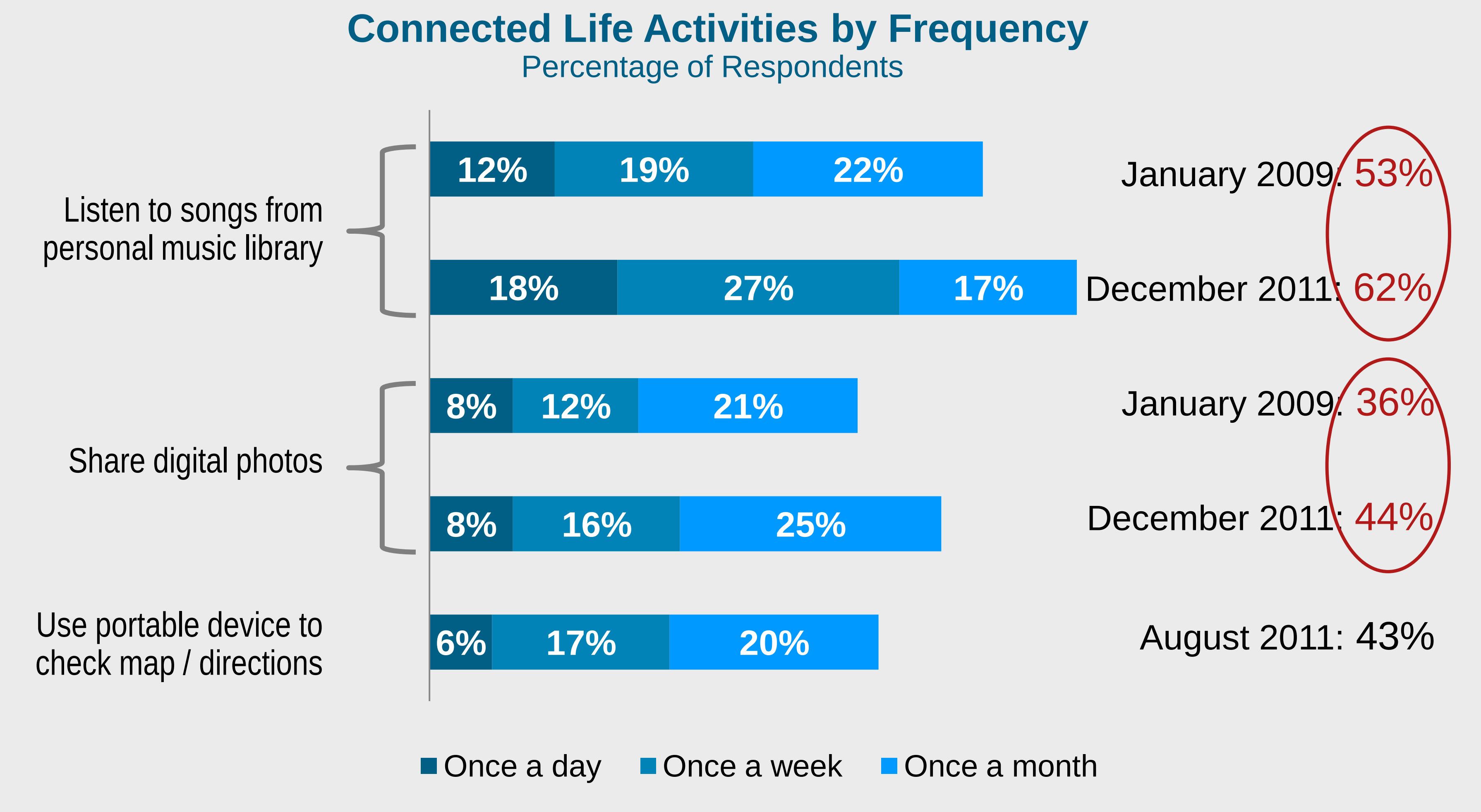
Consumers' Connected Life Activities Increased from 2009 to 2011



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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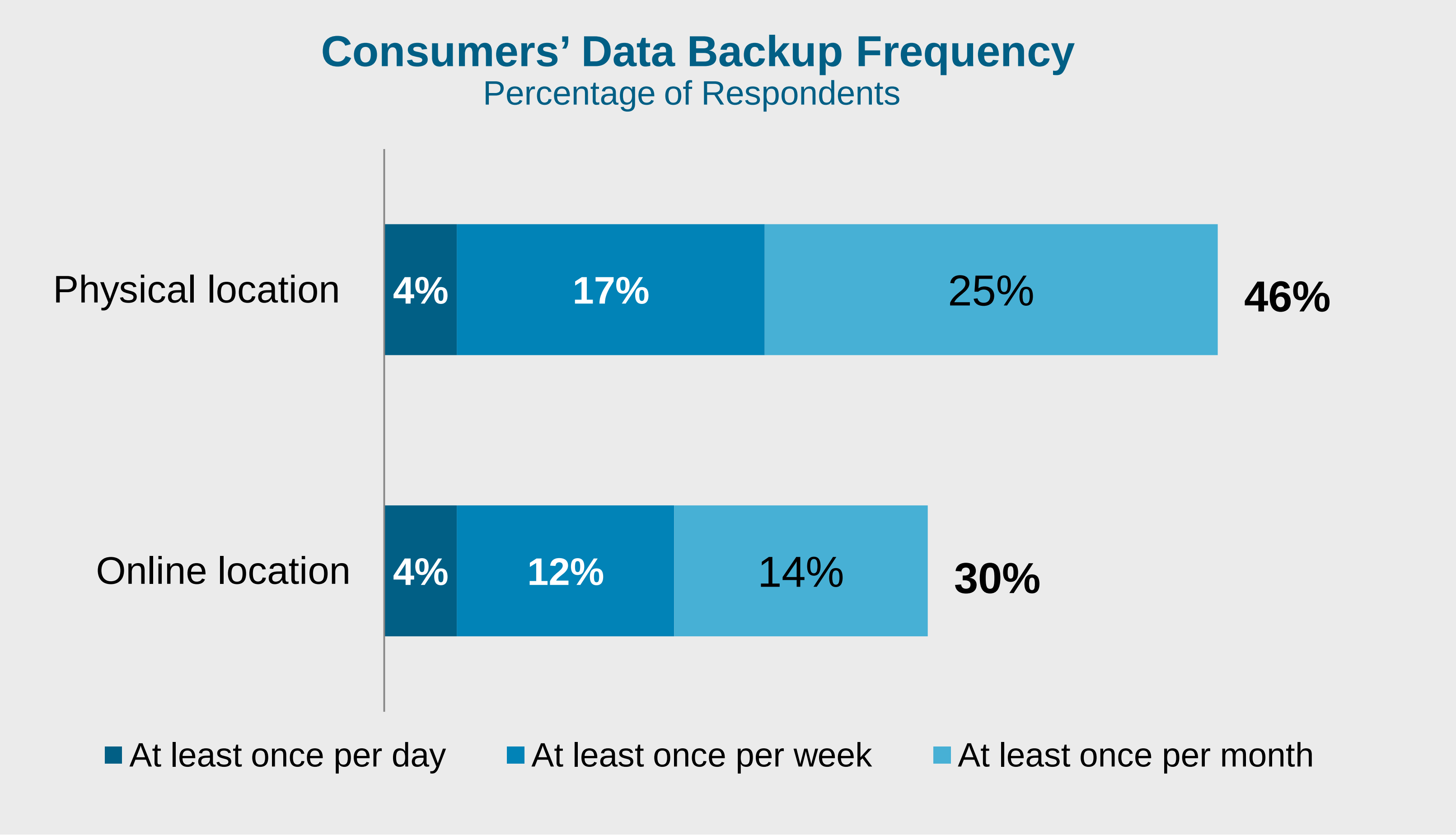
Not All Consumers Have a Diligent Practice for Data Protection



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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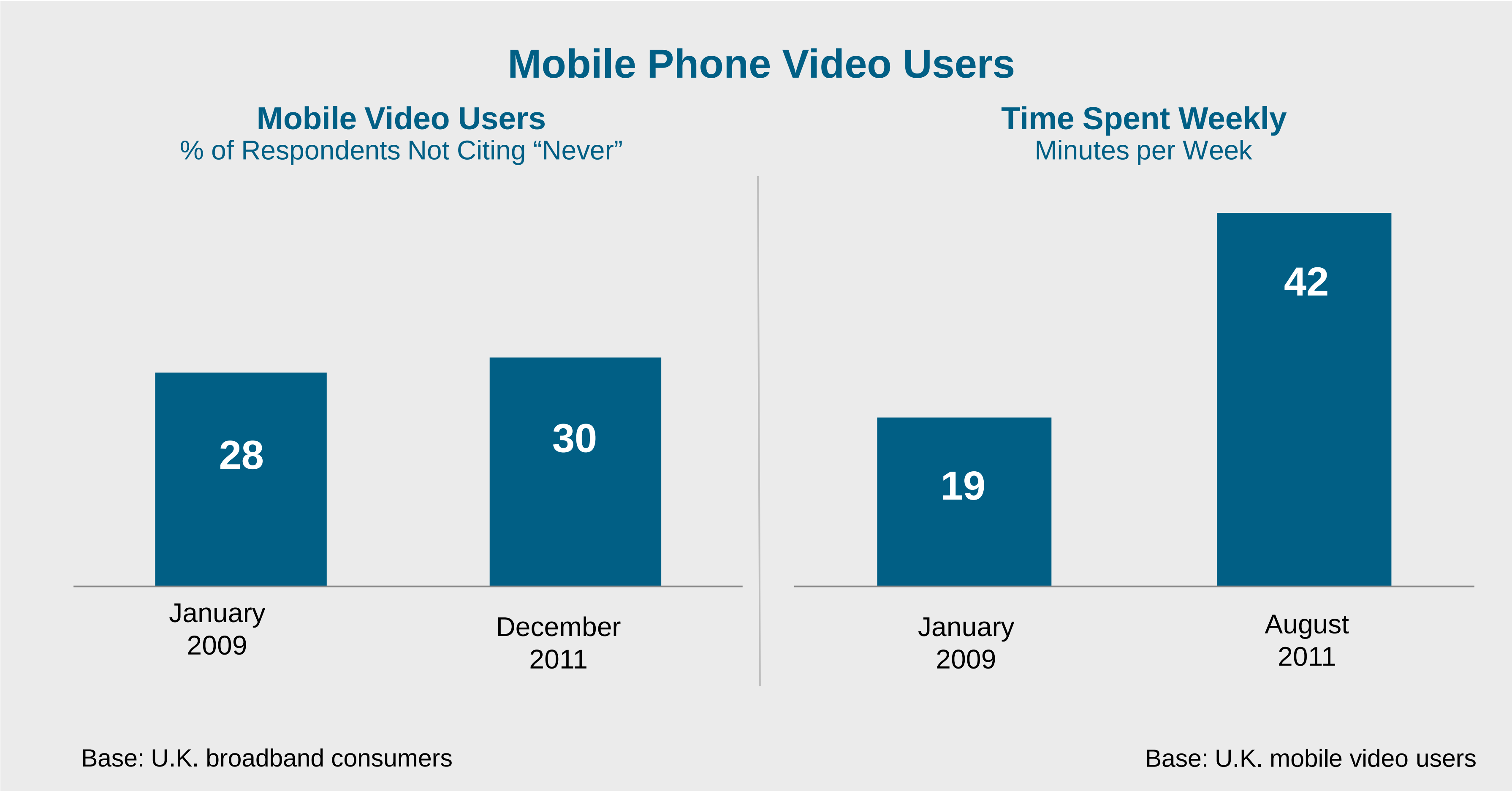
Mobile Video Users Are Not Just Early Adopters: Usage Is Growing



Source: Cisco IBSG Connected Life Market Watch, 2011

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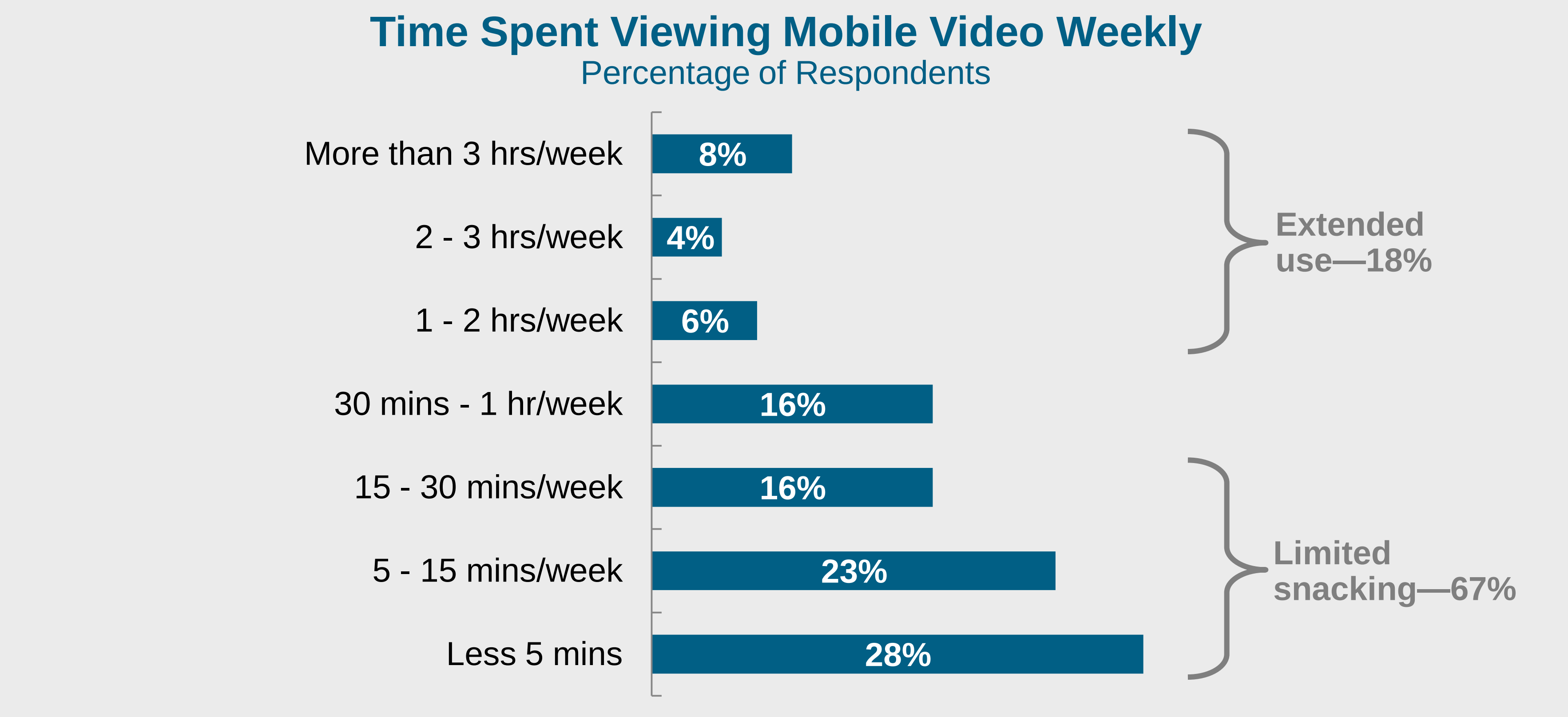
Mobile Video Is Still a "Snacking" Experience



- Rough average is about 42 mins / week among mobile video users
- Only 18% of mobile video users watch more than 1 hour / week on their mobile phones and 70% of broadband consumers never use mobile phone to watch videos

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. mobile video users

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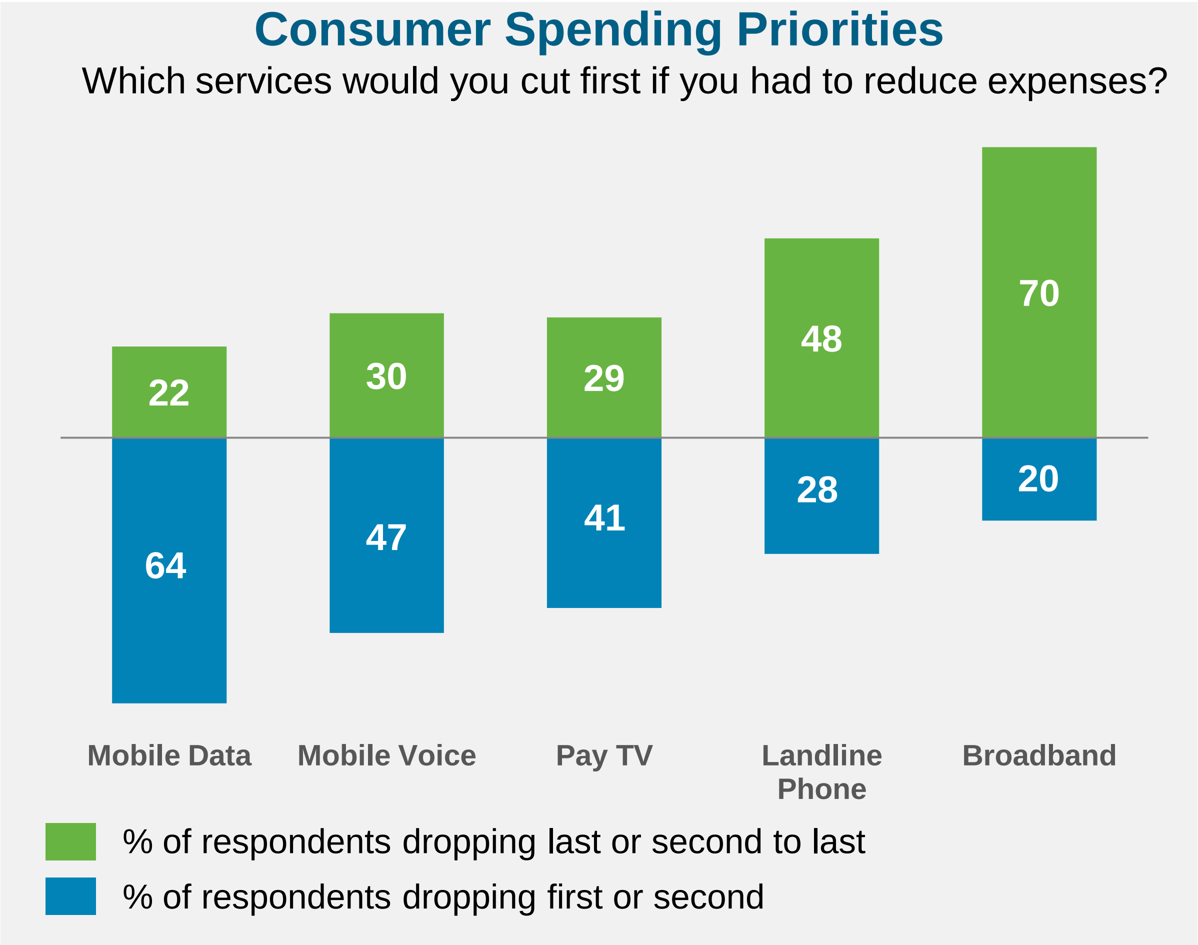
Consumer Spending Priorities: Broadband Is Most Critical

- Broadband and landline phone are top priorities for broadband consumers in the United Kingdom
- VoIP solutions and TV-over-Internet challenge mobile voice and pay TV
- Mobile data suffers from expensive tariff plans and is expendable



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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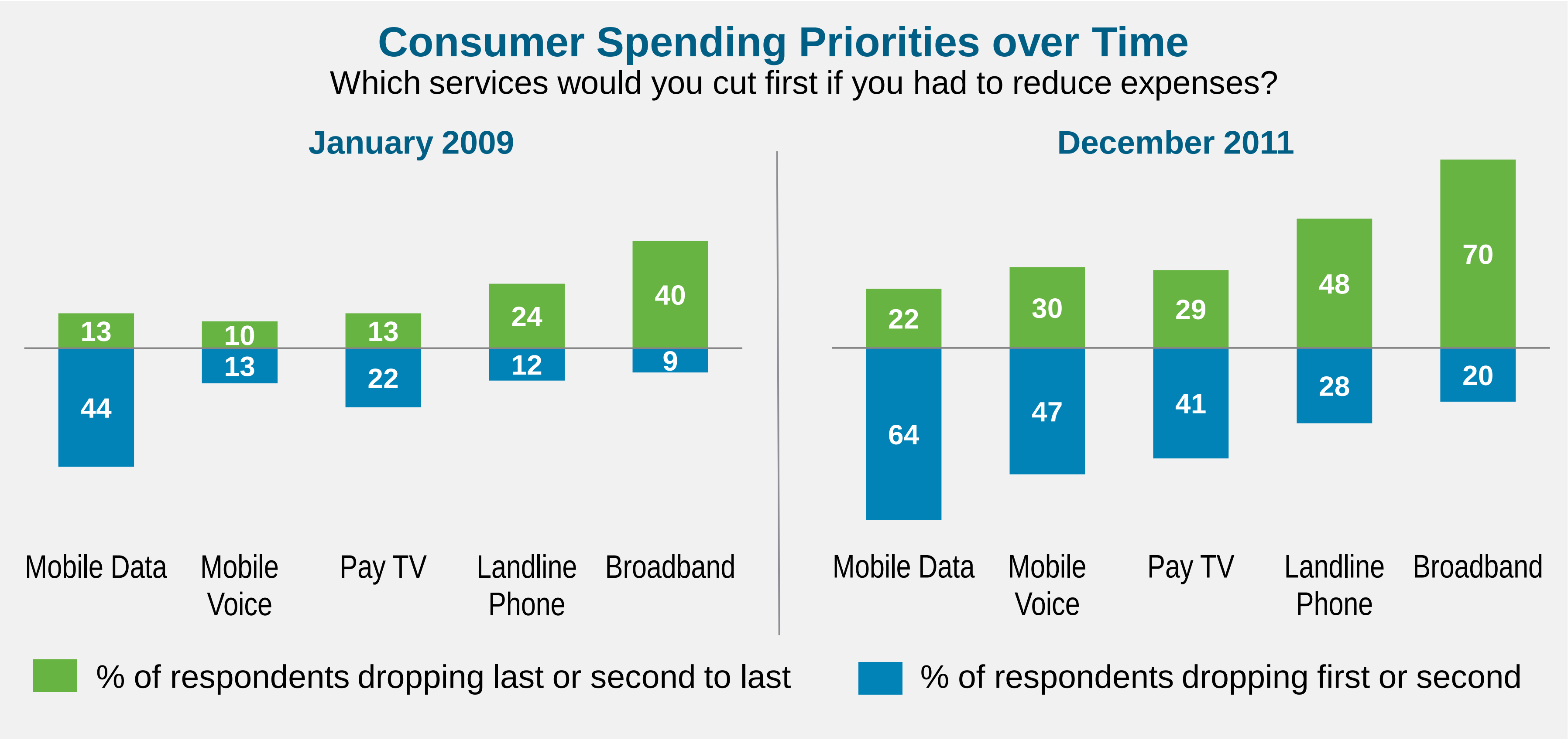
Consumers Are Becoming Clearer About the Value of Key Services



- Everything has increased in importance, most significantly broadband
- Mobile data remains least important, and more people would be willing to let it go

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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2

Consumer Buying Behavior

Factors Driving Where To Buy

Buying Behavior: Key Takeaways

- Cost and reliability are the most important factors in where to buy
- Ongoing cost concerns far outweigh concerns about up-front cost
- 31% of consumers prefer SPs for Internet-to-TV solutions, but 37% are indifferent
- Channel preference does not strongly influence buying decisions
- Purchase criteria vary somewhat by employment status and age group
- Early adopters have slightly different purchase criteria

Source: Cisco IBSG Connected Life Market Watch, 2011

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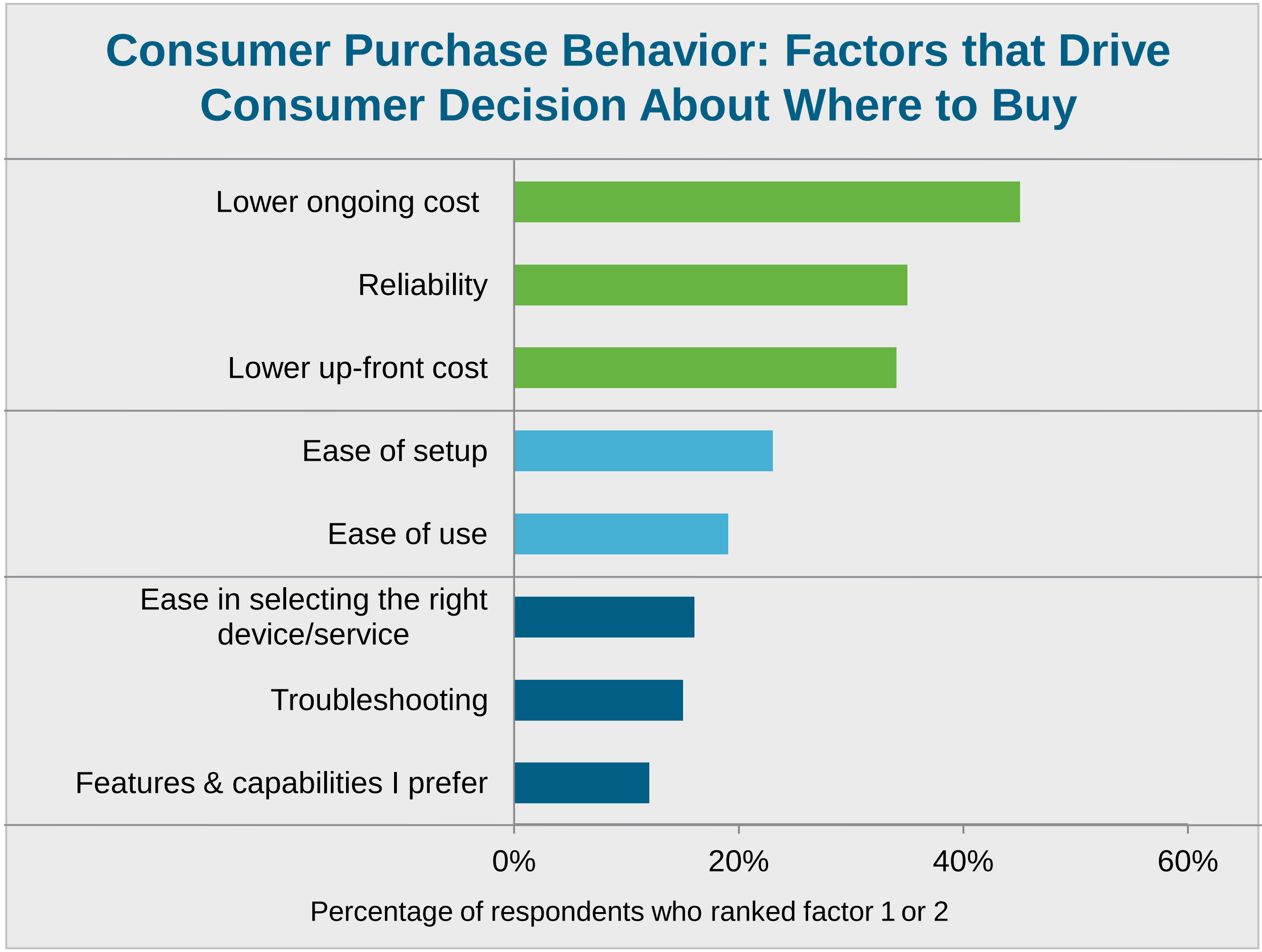
Cost and Reliability Are the Most Important Factors in *Where To Buy*



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.K. broadband consumers

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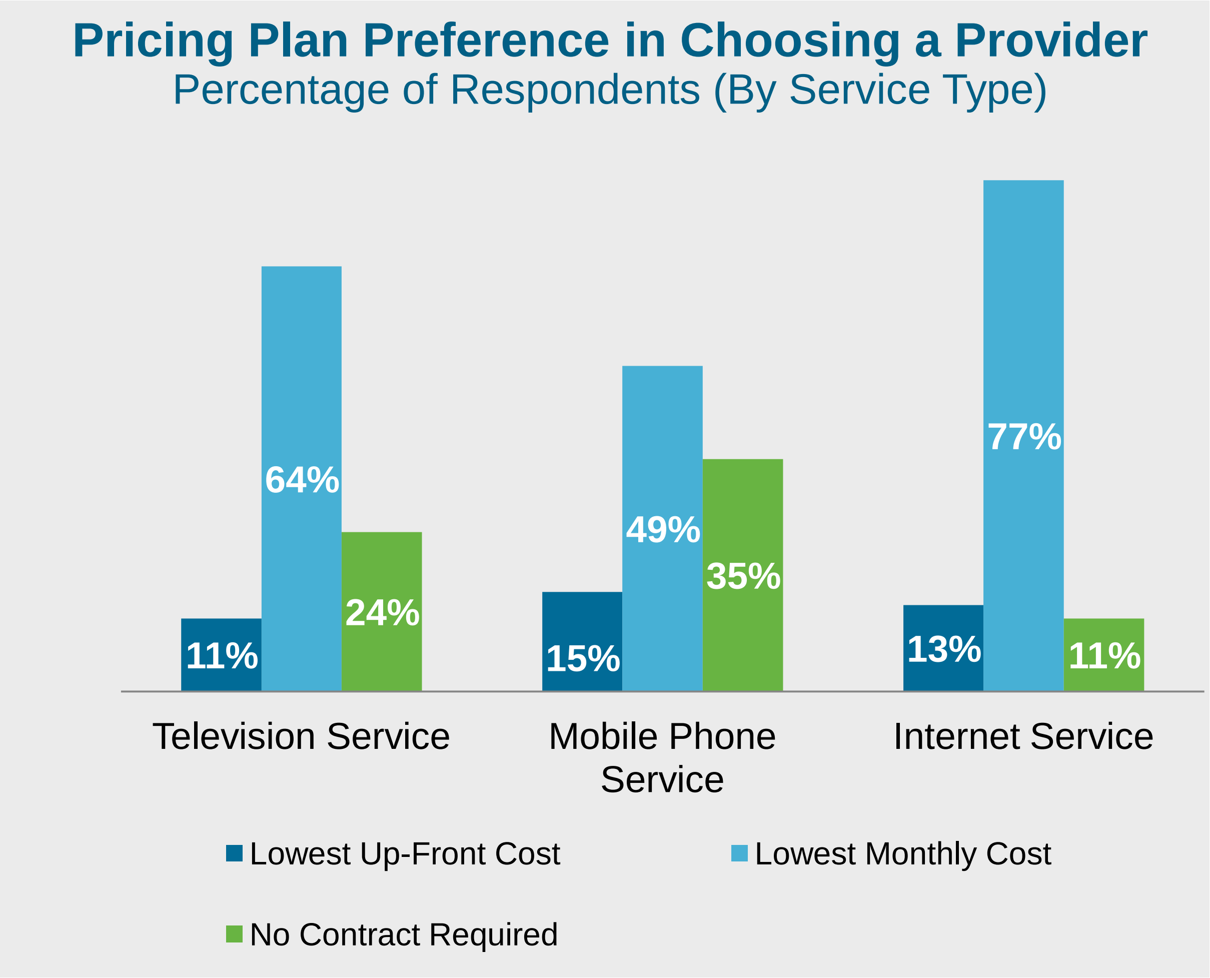
Ongoing Cost Concerns Far Outweigh Concerns About Up-Front Cost

- When pricing factors are isolated, concern about monthly cost **far exceeds** worries about up-front cost in all services
- For mobile services, **contract concerns** are very important



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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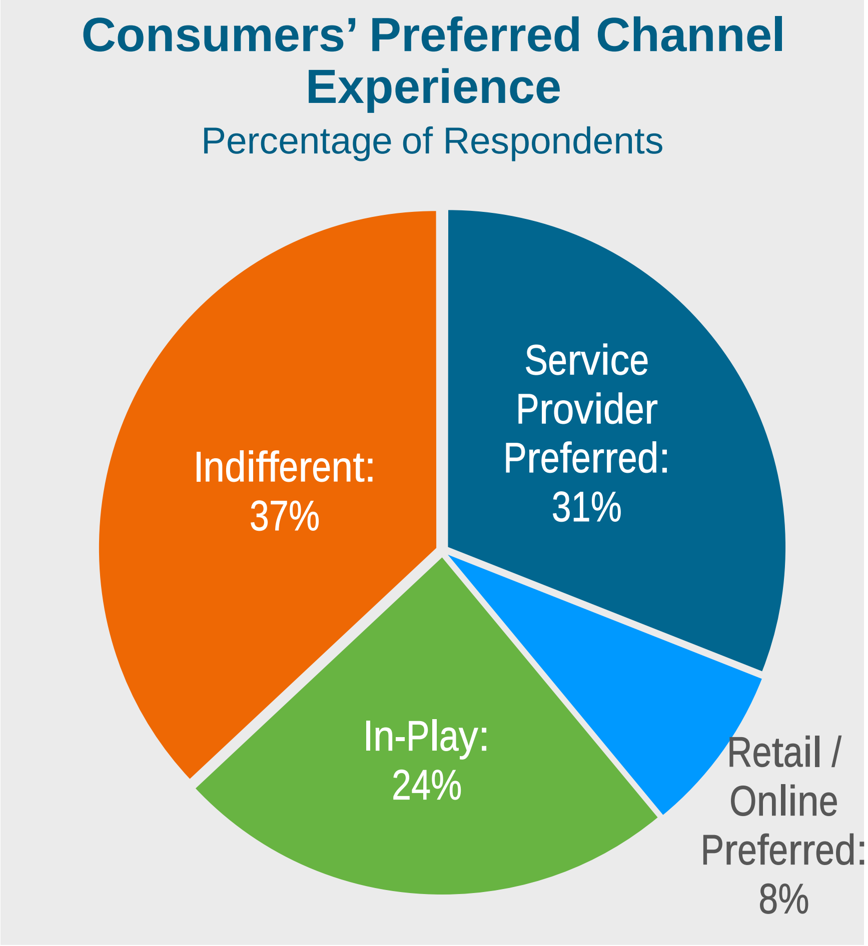
1/3 of Consumers Prefer SPs for Internet-to-TV Solutions, but More Are Indifferent

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 ALL factors
- **Strong Retail/Online:** These consumers believe retail/online provides a better experience in ALL factors
- **In-Play:** These consumers' channel preference shifts from factor to factor; SP prevails in 3 areas, Retail in 2, and the remaining areas are quite balanced
- **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

Base: U.K. broadband consumers

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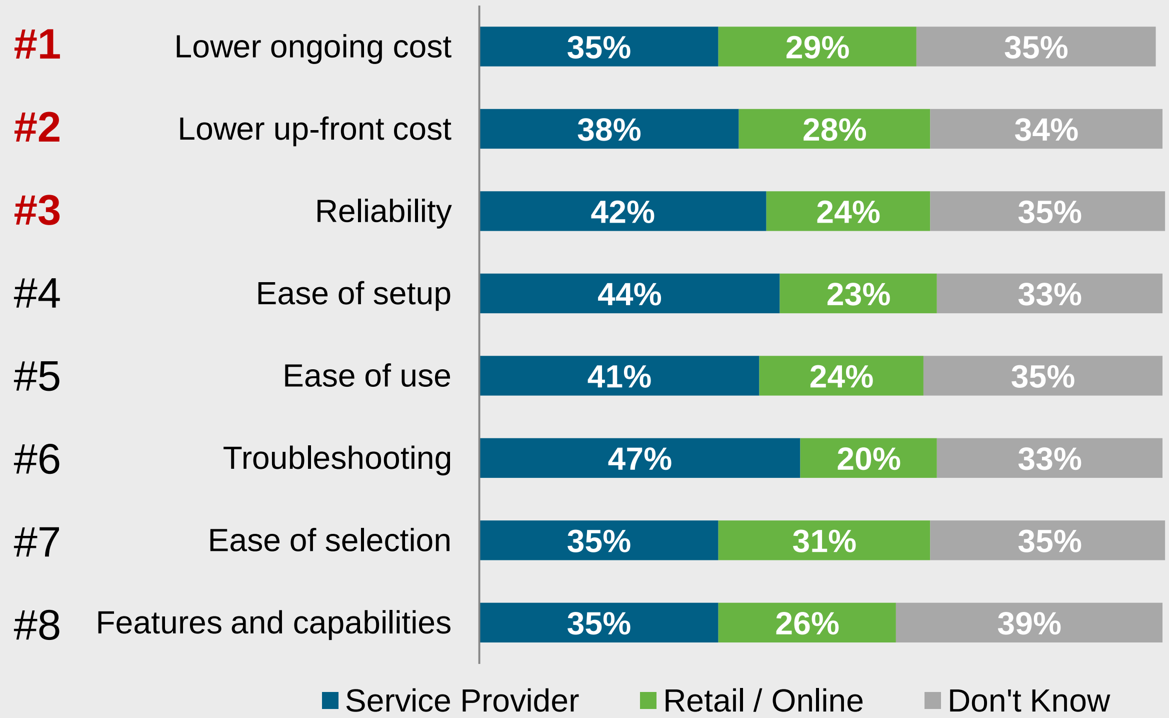
SPs Have Clear Lead in Most Important Decision Criteria

Consumer Channel Preference: Individual Factors in Order of Importance

Importance Rank | **Channel Option that Best Fits My Needs**



- Many U.K. users do not have a clear preference
- Ongoing cost is the most important decision criterion for most consumers
- SPs have commanding lead in *troubleshooting, ease of use, ease of setup, reliability*
- SPs still lead in *up-front cost* and *ongoing cost,* but by a smaller margin

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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Purchase Criteria Vary Somewhat by Employment Status

Factors that Drive Consumer Decision of *Where To Buy,* by Employment Status

Average		Employed		Student		Retired	
#1	Ongoing Cost (45%)	#1	Ongoing Cost (43%)	#1	Ongoing Cost (69%)	#1	Reliability (44%)
#2	Reliability (35%)	#2	Up-front Cost (35%)	#2	Reliability (44%)	#2	Ongoing Cost (38%)
#3	Up-front Cost (34%)	#3	Reliability (33%)	#3	Ease of Setup (37%)	#3	Ease of Selection (28%)
#4	Ease of Setup (23%)	#4	Ease of Setup (21%)	#4	Up-front Cost (26%)	#4	Up-front Cost (26%)
#5	Ease of Use (19%)	#4	Ease of Use (21%)	#5	Ease of Use (12%)	#5	Ease of Setup (24%)
#6	Ease of Selection (16%)	#6	Troubleshooting (17%)	#5	Features (12%)	#6	Troubleshooting (17%)
#7	Troubleshooting (15%)	#7	Ease of Selection (16%)	#7	Ease of Selection (0%)	#7	Ease of Use (16%)
#8	Features (12%)	#8	Features (15%)	#7	Troubleshooting (0%)	#8	Features (9%)

Percentage of people who ranked each attribute as most important or second-most-important.
Red: Ranking is significantly different from average.

- For **students,** ease of selection and troubleshooting are the last factor driving decisions.
- For **retired** persons, reliability is more important than ongoing cost.

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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Purchase Decision Factors Also Vary by Age Group

Factors that Drive Consumer Decision of *Where To Buy*, by Age Group

Average		Age 30-39		Age 40-59		Age 60+	
#1	Ongoing Cost (45%)	#1	Ongoing Cost (44%)	#1	Ongoing Cost (44%)	#1	Reliability (42%)
#2	Reliability (35%)	#2	Up-front Cost (38%)	#2	Up-front Cost (35%)	#2	Ongoing Cost (34%)
#3	Up-front Cost (34%)	#3	Reliability (35%)	#2	Reliability (35%)	#3	Ease of Setup (25%)
#4	Ease of Setup (23%)	#4	Ease of Selection (18%)	#4	Ease of Setup (22%)	#4	Up-front Cost (24%)
#5	Ease of Use (19%)	#5	Ease of Use (16%)	#5	Ease of Use (21%)	#5	Ease of Use (22%)
#6	Ease of Selection (16%)	#5	Ease of Setup (16%)	#6	Troubleshooting (16%)	#5	Ease of Selection (22%)
#7	Troubleshooting (15%)	#7	Troubleshooting (15%)	#7	Ease of Selection (14%)	#7	Troubleshooting (20%)
#8	Features (12%)	#7	Features (15%)	#8	Features (11%)	#8	Features (12%)

Percentage of people who ranked each attribute as most important or second-most-important.
Red: Ranking is significantly different from average.

- For those **60 and older,** reliability is a greater concern than up-front cost.
- **30- to 59-year-olds** are more concerned about reliability, and less about ease of selection.

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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Early Adopters Have Slightly Different Purchase Criteria

Factors that Drive Decision of *Where To Buy* for Early Adopters

Average		Early Adopter	
#1	Ongoing Cost (45%)	**#1**	Ongoing Cost (39%)
#2	Reliability (35%)	**#2**	Up-front Cost (37%)
#3	Up-front Cost (34%)	**#3**	Reliability (32%)
#4	Ease of Setup (23%)	**#4**	Features (27%)
#5	Ease of Use (19%)	**#5**	Ease of Use (20%)
#6	Ease of Selection (16%)	**#6**	Ease of Setup (17%)
#7	Troubleshooting (15%)	**#7**	Ease of Selection (15%)
#8	Features (12%)	**#8**	Troubleshooting (12%)

Percentage of people who ranked each attribute as most important or second-most-important. Red: Ranking is significantly different from average.

- **Early adopters** are more concerned with features, and they are less concerned with troubleshooting
- Purchase criteria for the other technology segments—early majority, late majority, and laggards—closely follow those of the average consumer

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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Channel Preference Does Not Strongly Influence Buying Decisions

Ranking of Factors that Drive Decision of *Where To Buy, by Channel Preference*

	Total	SP (Believe SP provides a better experience)	Retail (Believe retail provides a better experience)	In-Play (Channel preference shifts from factor to factor)	Indifferent (Lack of interest)
#1	Ongoing Cost (45%)	Ongoing Cost (43%)	Ongoing Cost (50%)	Ongoing Cost (54%)	Ongoing Cost (42%)
#2	Reliability (35%)	Reliability (40%)	Up-front Cost (33%)	Up-front Cost (39%)	Reliability (34%)
#3	Up-front Cost (34%)	Up-front Cost (32%)	Reliability (31%)	Reliability (31%)	Up-front Cost (32%)
#4	Ease of Setup (23%)	Ease of Setup (23%)	Ease of Setup (21%)	Ease of Setup (19%)	Ease of Setup (24%)
#5	Ease of Use (19%)	Ease of Use (22%)	Ease of Use (21%)	Troubleshooting (18%)	Ease of Selection (21%)
#6	Ease of Selection (16%)	Ease of Selection (15%)	Features (21%)	Ease of Use (15%)	Ease of Use (20%)
#7	Troubleshooting (15%)	Troubleshooting (13%)	Ease of Selection (14%)	Features (13%)	Troubleshooting (18%)
#8	Features (12%)	Features (12%)	Troubleshooting (7%)	Ease of Selection (11%)	Features (10%)

Attributes rated as most important or second-most-important.

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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3 Pricing

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Pricing: Key Takeaways

- U.K. broadband consumers are more tolerant of usage-based billing than their counterparts in Italy, Germany, and France; however, more than half feel this pricing model is unfair
- Early adopters, connected TV owners, and smartphone owners are more likely to view wireline and mobile usage-based billing as fair
- Consumers dislike the move away from flat rates: our research did not reveal compelling mitigation strategies

Source: Cisco IBSG Connected Life Market Watch, 2011

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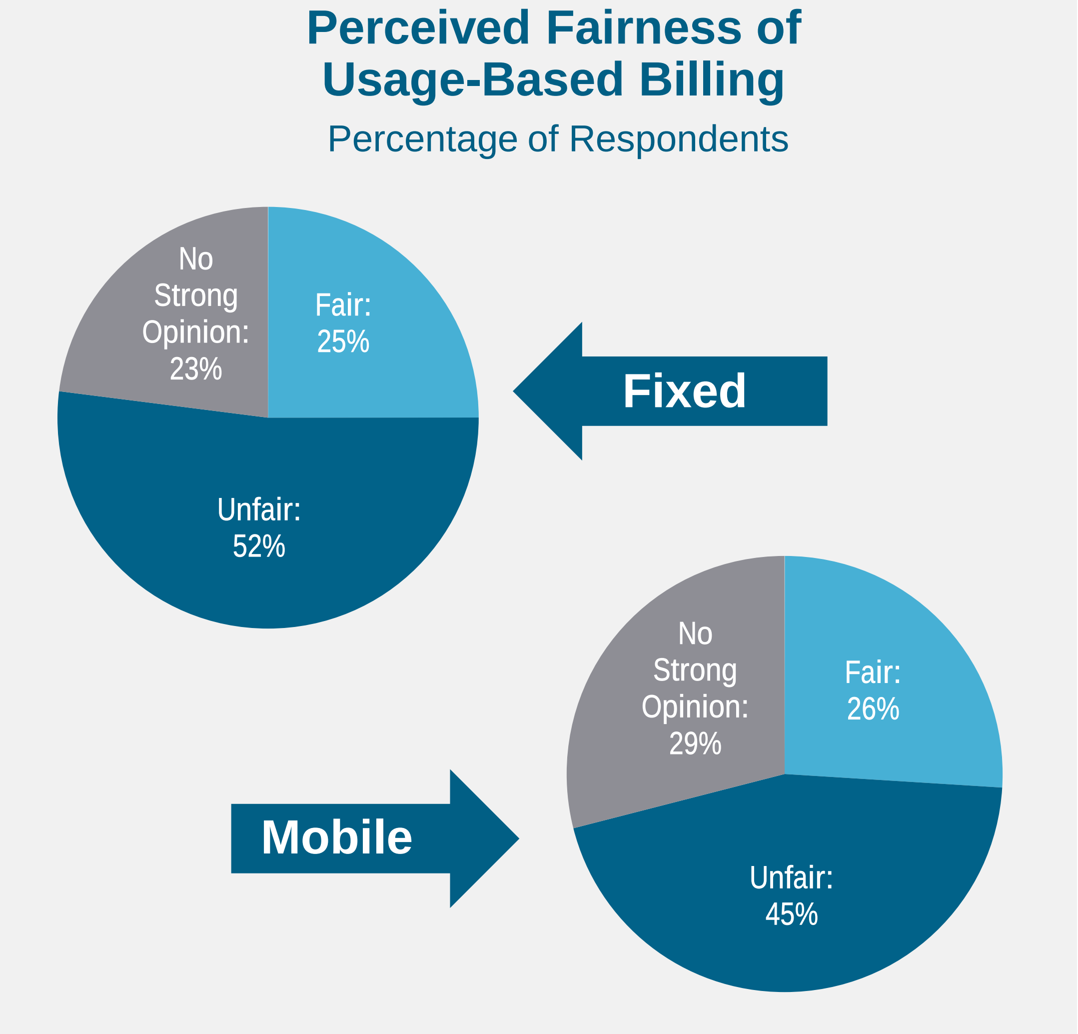
Consumers Feel It Is Unfair To Pay for Broadband Services Based on Use

- Tiered pricing for fixed broadband based on data usage is not widely practiced in the EU today
- SPs face increases in data usage (driven by video) that are not balanced by increased revenue
- SP mobile providers have adopted tiered mobile broadband pricing for years



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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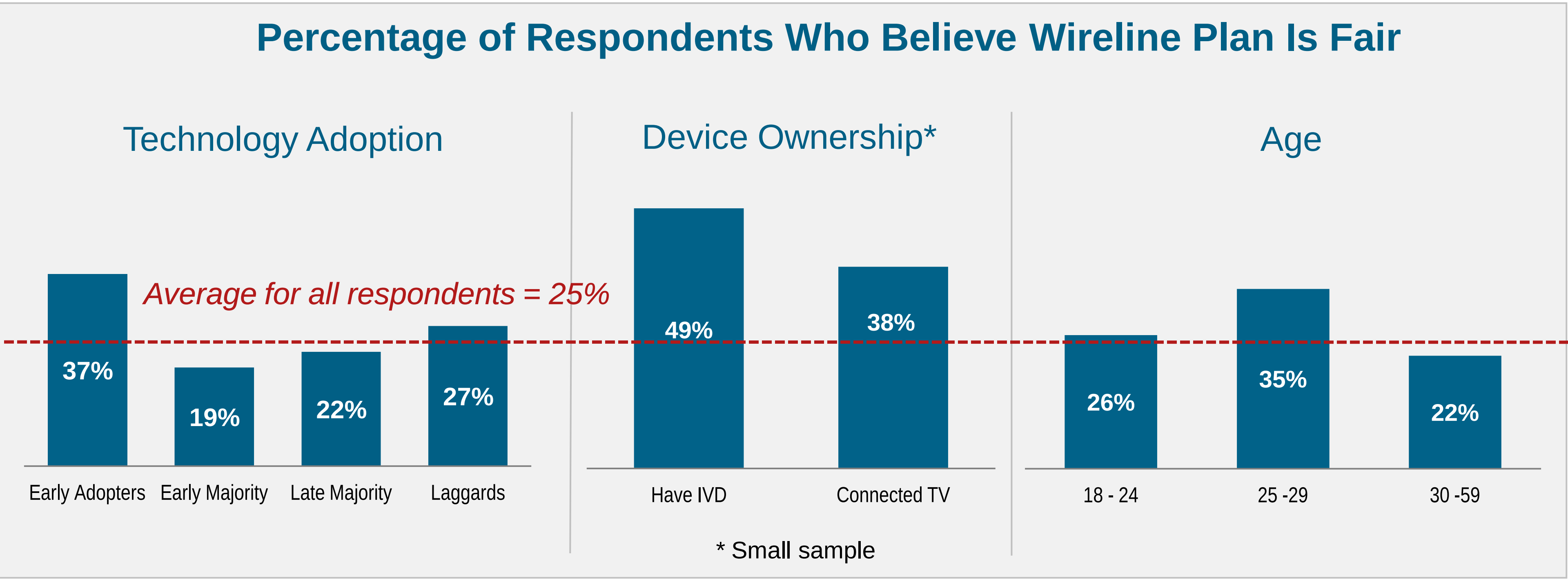
Early Adopters Are More Likely To View Wireline Usage-Based Billing as Fair

Perceived Fairness of Wireline Usage-Based Billing by Customer Segment



- Early adopters, Internet video device (IVD), and connected TV owners are **more likely** to consider usage-based billing fair
- Consumers aged 25-29 are **more likely** to consider usage-based billing fair

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Respondents believing usage-based billing is fair

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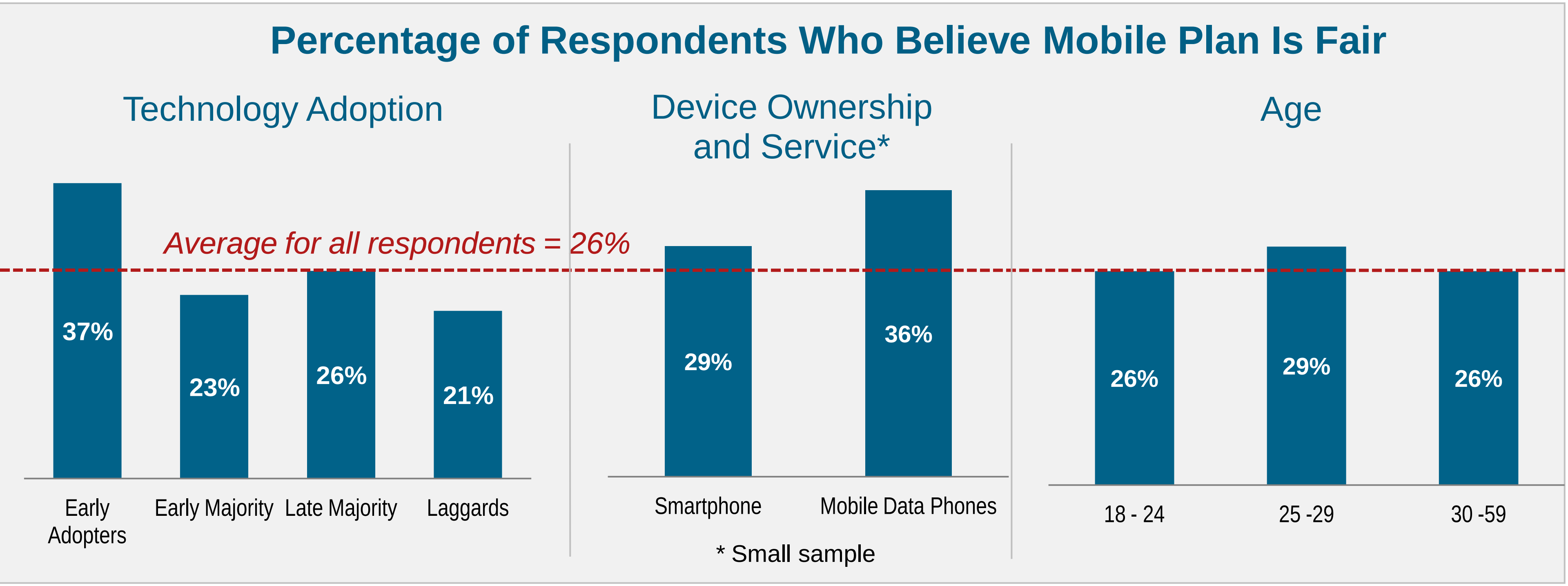
Early Adopters Are More Likely To View Mobile Usage-Based Billing as Fair

Perceived Fairness of Mobile Usage-Based Billing by Customer Segment



- Early adopters and Smartphone users are **more likely** to consider mobile usage-based billing fair
- Consumers aged 25-29 are **more likely** to consider mobile usage-based billing fair

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: Respondents believing usage-based billing is fair

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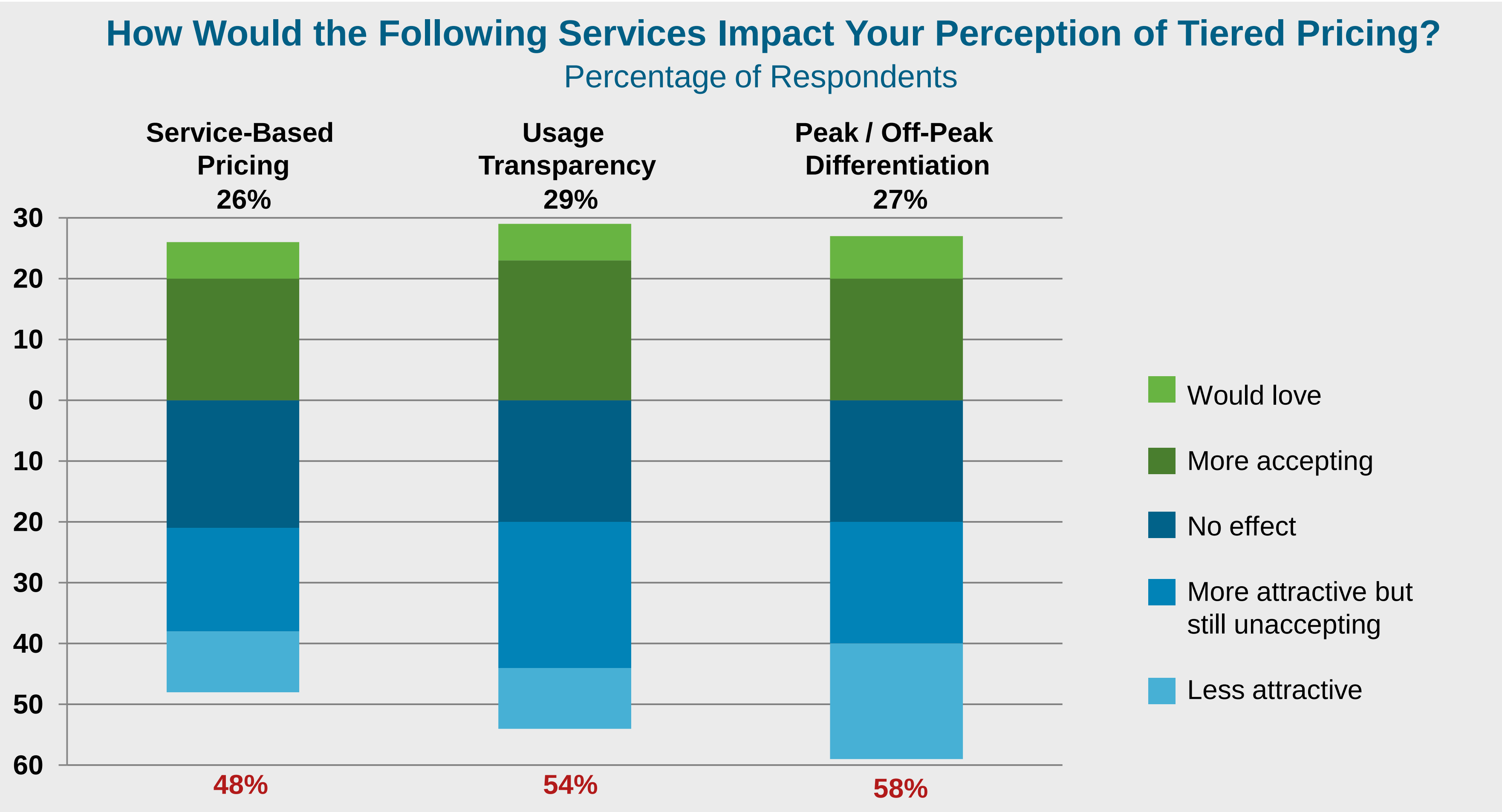
SP Strategies To Drive Tiered Pricing Are Underwhelming

Consumers Dislike the Move Away from Flat Rates



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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4 Service Provider Wi-Fi

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Service Provider Wi-Fi: Key Takeaways

- Mobile users are more *nomadic* than truly mobile in the ways they access mobile data and Internet video
- Most mobile Internet and mobile video activity takes place in fixed locations
- Mobile video is still a “snacking” experience
- Wi-Fi has become pervasive among smartphone users; they would like to take better advantage of Wi-Fi for coverage and cheaper service
- Users are willing to compromise on mobile network benefits in favor of Wi-Fi convenience
- Plans for use of Wi-Fi instead of cellular network are more common among heavy data users

Source: Cisco IBSG Connected Life Market Watch, 2011

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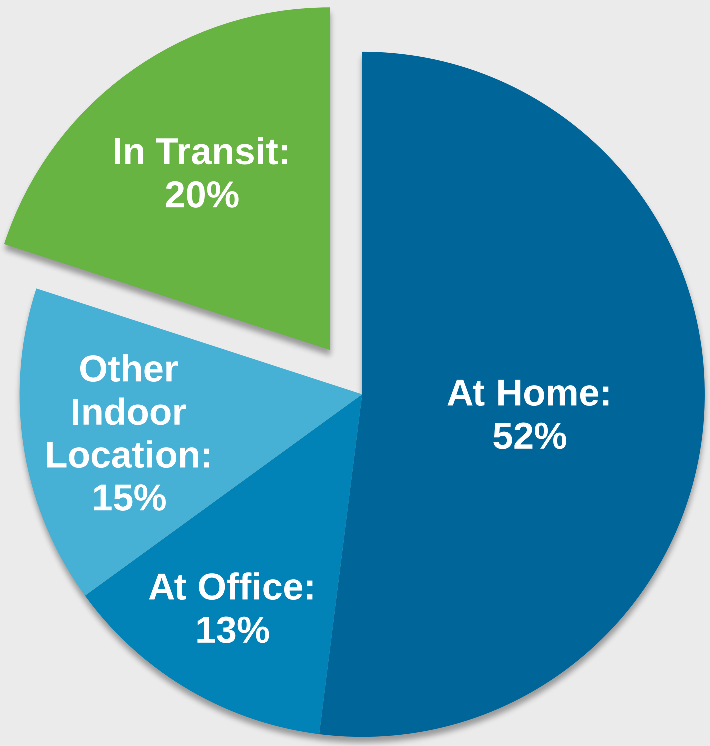
Mobile Data Access Is More Nomadic than Truly Mobile

Time Spent Accessing Internet
(% in different locations)



- 41% of U.K. broadband consumers do NOT access mobile data via mobile phone
- Innovative services such as Wi-Fi offload and small-cell solutions can match this shift in how mobile phones are used, and can meet consumers' requirements for increased data speeds, improved coverage, and quality at reasonable prices

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents who access mobile data (n=308)

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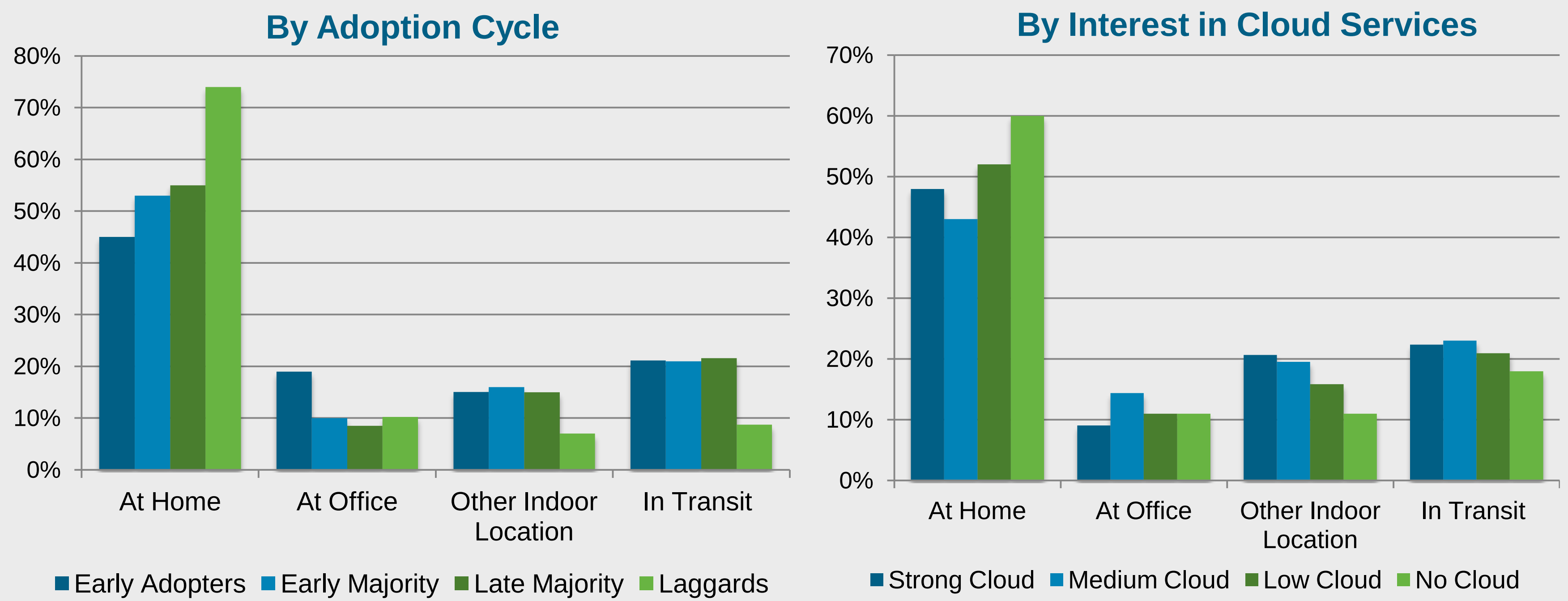
Nomadic Attitude About Mobile Internet Varies by Technology Segment . . .

Time Spent Accessing Mobile Internet by Segment
(% in different locations)



Consider: 55% of Late Majority and 68% of Laggards do not access mobile Internet via mobile phones

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents who access mobile data (n=308)

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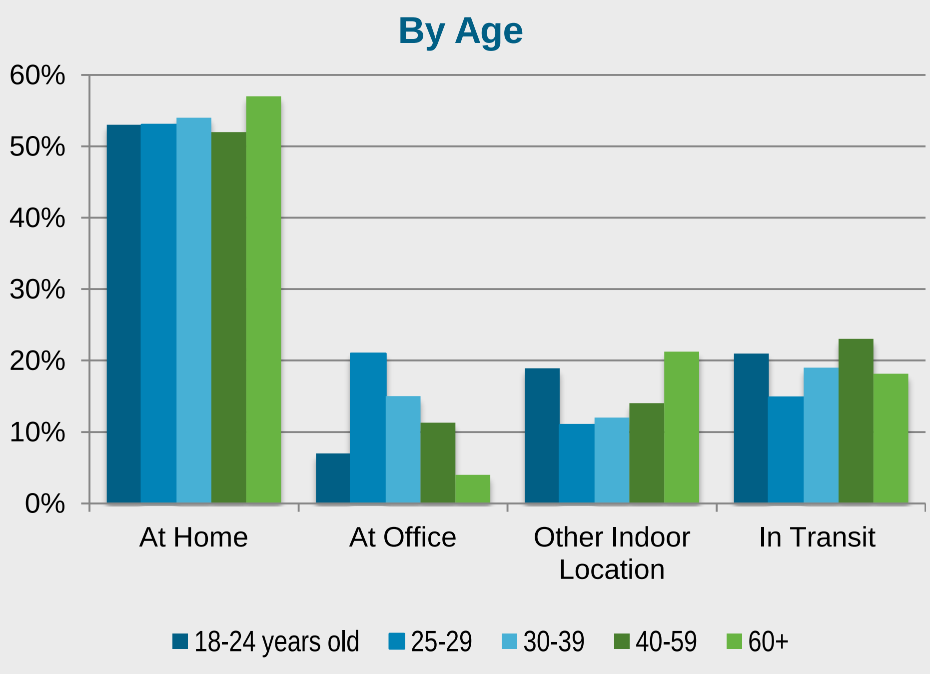
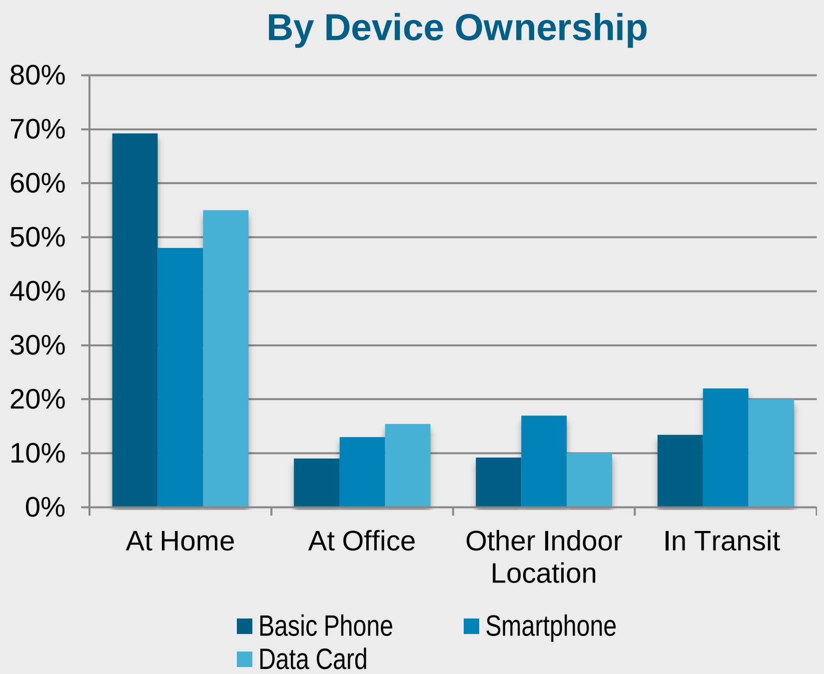
. . .And by Age and Device Adoption

Time Spent Accessing Mobile Internet by Segment
(% in different locations)





Consider: 13% of smartphone users and 72% of basic mobile phone users do not access mobile Internet via mobile phones

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents who access mobile data (n=308)

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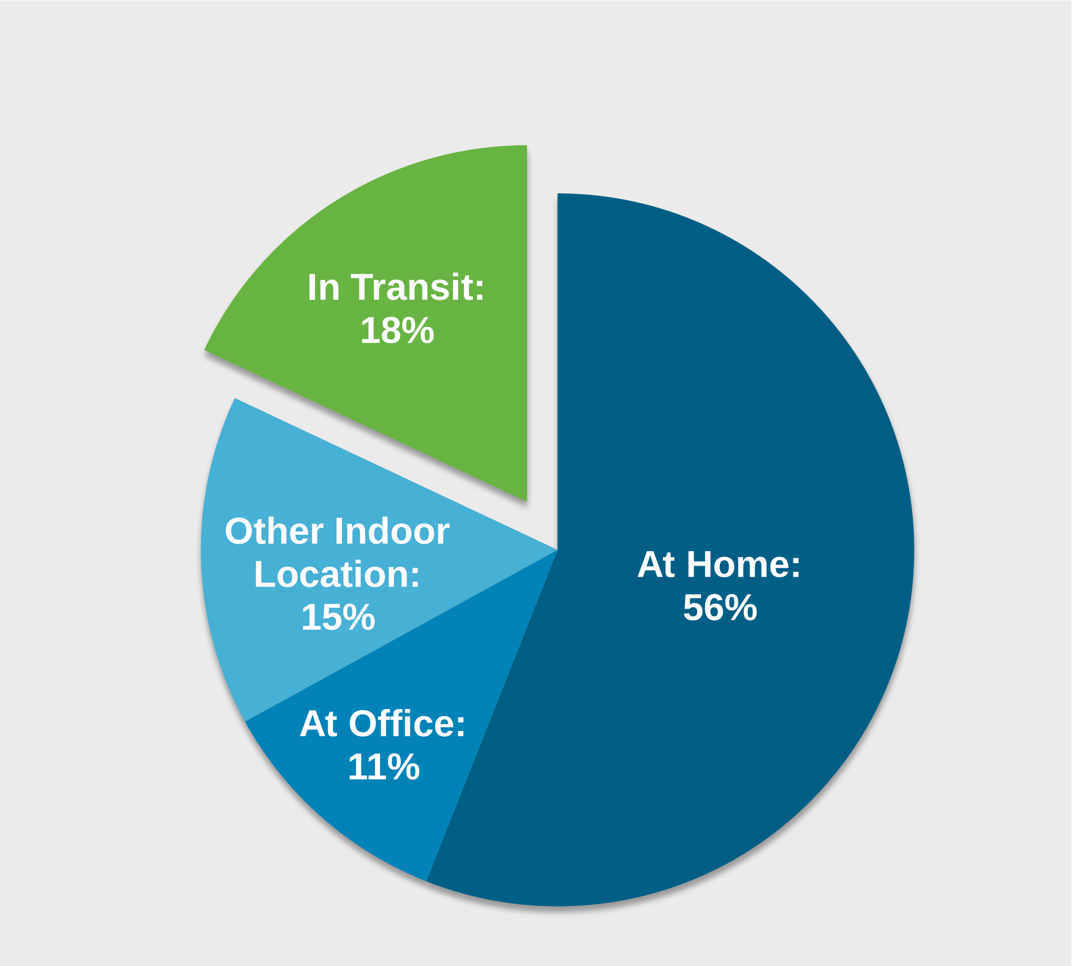
Over Half of Broadband Consumers Access Mobile Video at Home



- Nomadic attitude is even more pronounced among U.K. broadband consumers accessing mobile video services

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents using the service (n=160)

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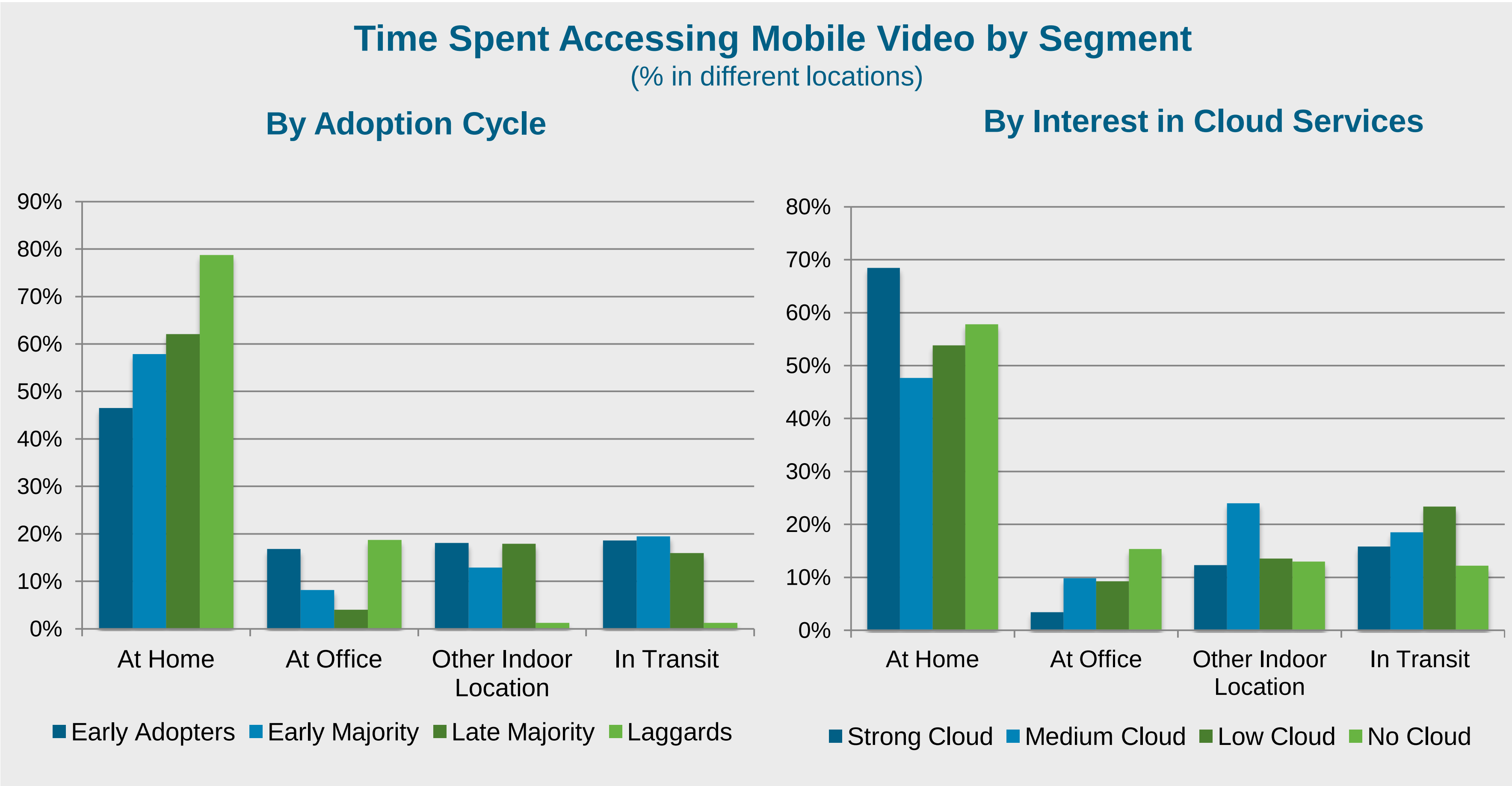
Nomadic Attitude about Mobile Video Varies by Technology Segment . . .



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents using the service (n=160)

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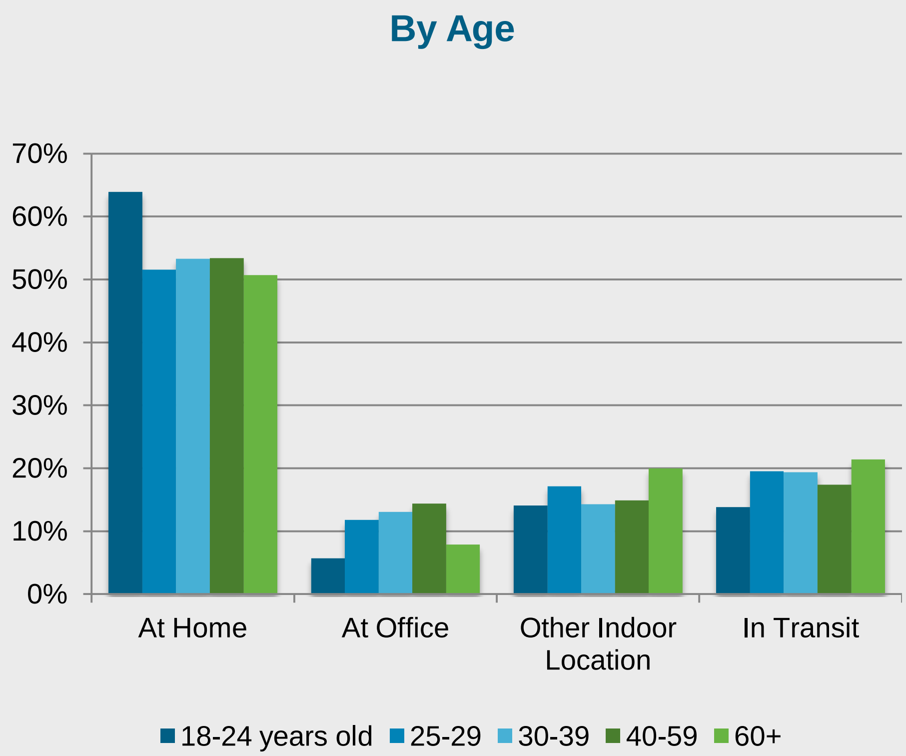
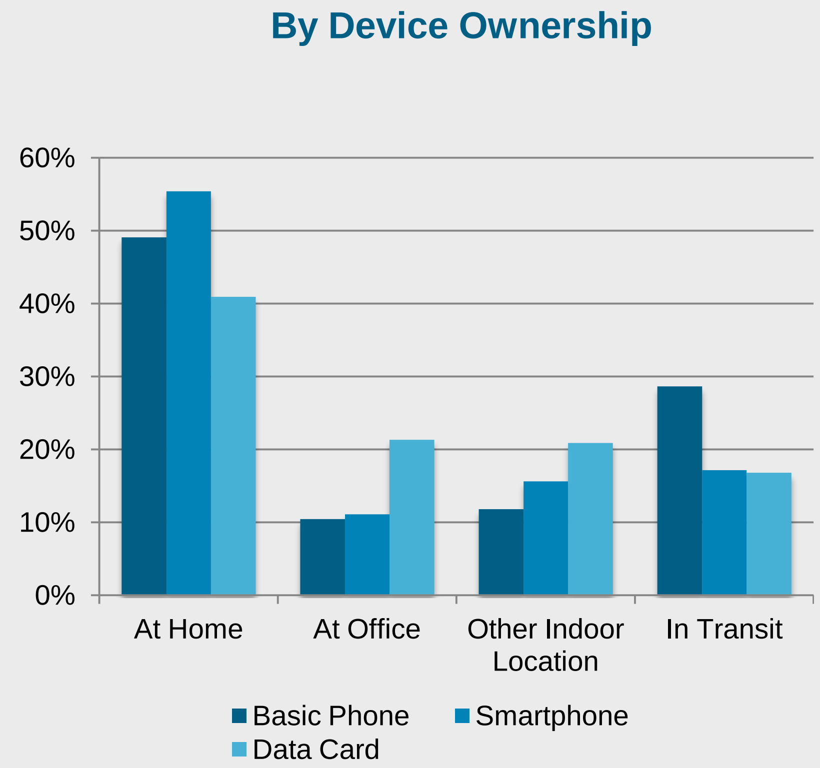
. . .And by Age and Device Adoption

Time Spent Accessing Mobile Video by Segment

(% in different locations)





Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents using the service (n=160)

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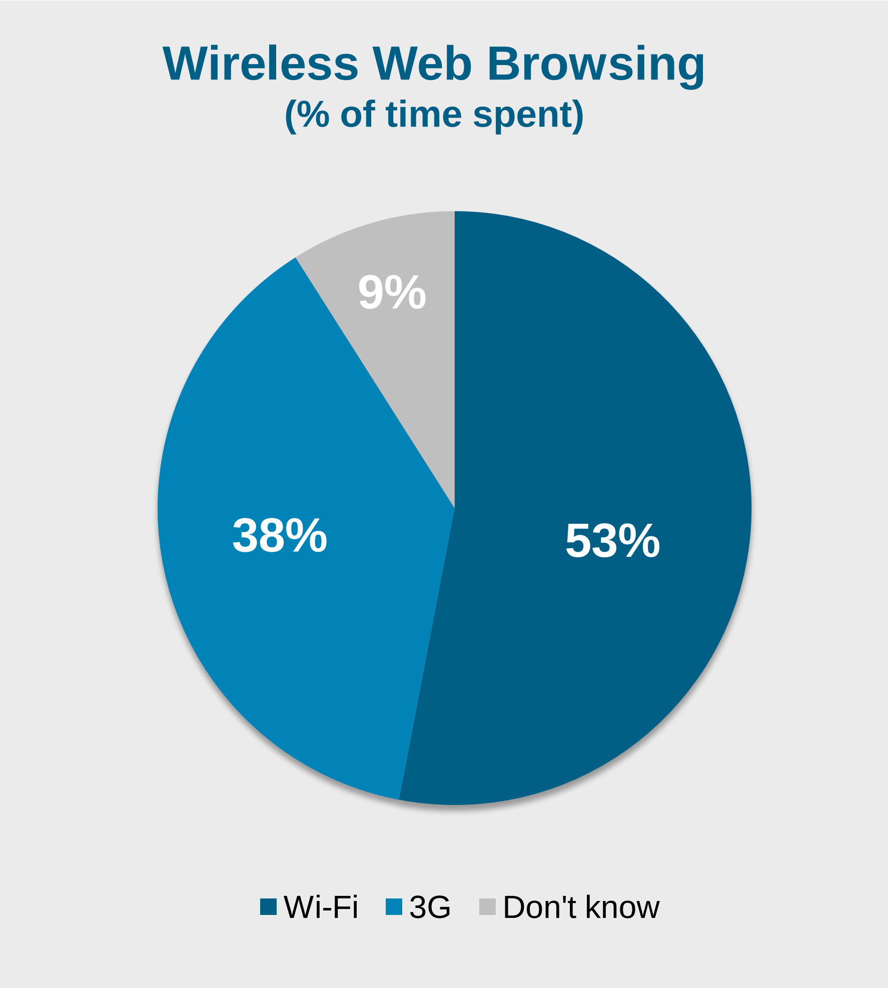
High Acceptance of Wi-Fi for Wireless Web Browsing



- Wi-Fi has become pervasive among smartphone users, who want to take better advantage of Wi-Fi for coverage and cheaper service
- We see market opportunities for mobile operators who can develop subscriber-friendly services that drive mobile data offload
- The use of Wi-Fi
  - Can increase loyalty by addressing in-building coverage and increasing data offload
  - Can improve application performance (particularly video)
  - Can eliminate expensive international roaming fees

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents using smartphones (n=269)

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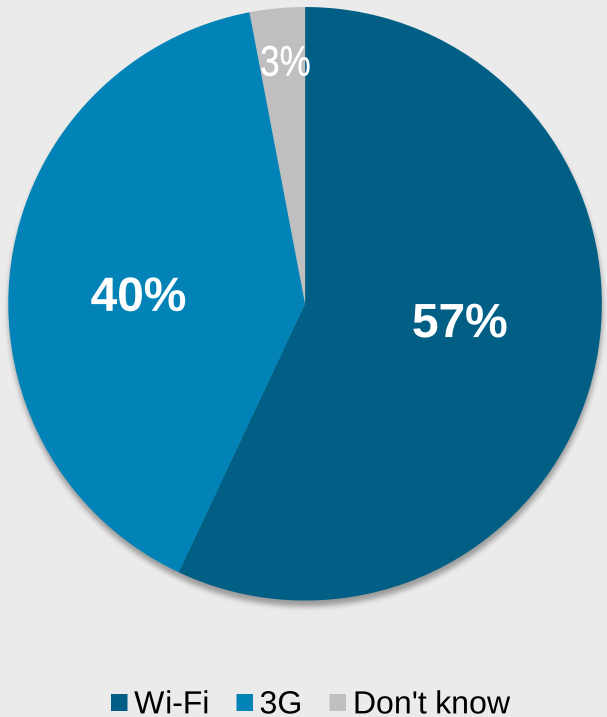
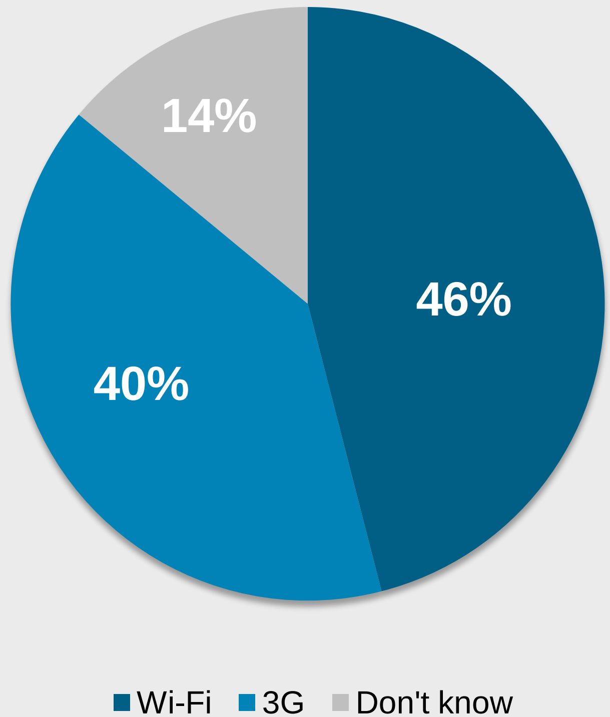
Easier GUI / Solutions Extend Heavy Smartphone Wi-Fi Use to Late Majority

Early Adopters' Wireless Web Browsing (% of time spent)



Late Majority's Wireless Web Browsing (% of time spent)



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers from each segment

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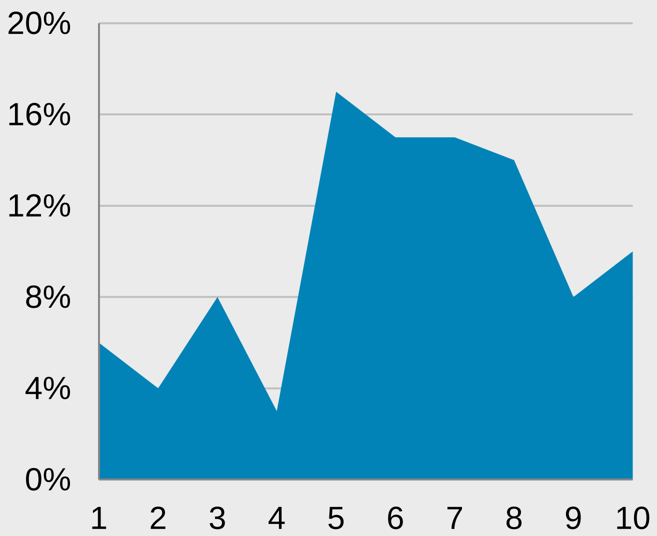
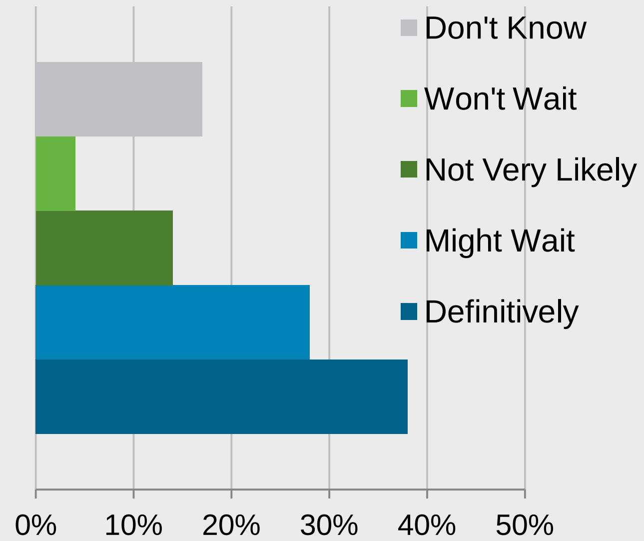
Users Willing To Compromise on Mobile Benefits for Lower Wi-Fi Cost

Willingness To Compromise on Quality To Avoid Mobile Data Charges
(% of mobile data users)



1 is “not at all willing” and
10 is “extremely willing.”

Willingness To Compromise on Immediacy
(% of mobile data users)



- Price reduction is top priority for broadband consumers; they will accept compromises to avoid breaking tiered plans and keep low bills
- They will embrace innovative solutions for traffic offload at reasonable prices

Source: Cisco IBSG Connected Life Market Watch, 2011 Base: U.K. respondents using smartphones (n=269)

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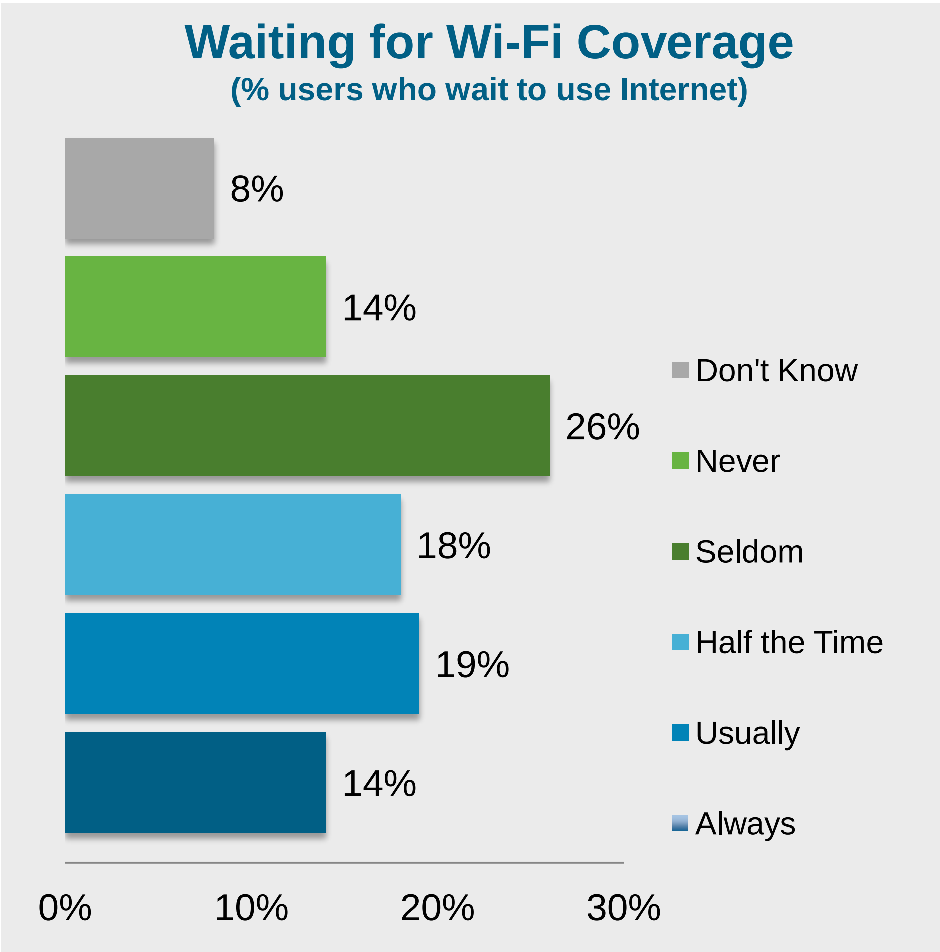
Smartphone Users Wait for Wi-Fi Availability To Access Internet



- Heavy data users will likely start limiting their use of expensive 3G data packages with tiered pricing models in favor of Wi-Fi networks that provide unlimited access
- Smartphone users plan their access to data-heavy, media-rich programs via Wi-Fi

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents using smartphones (n=269)

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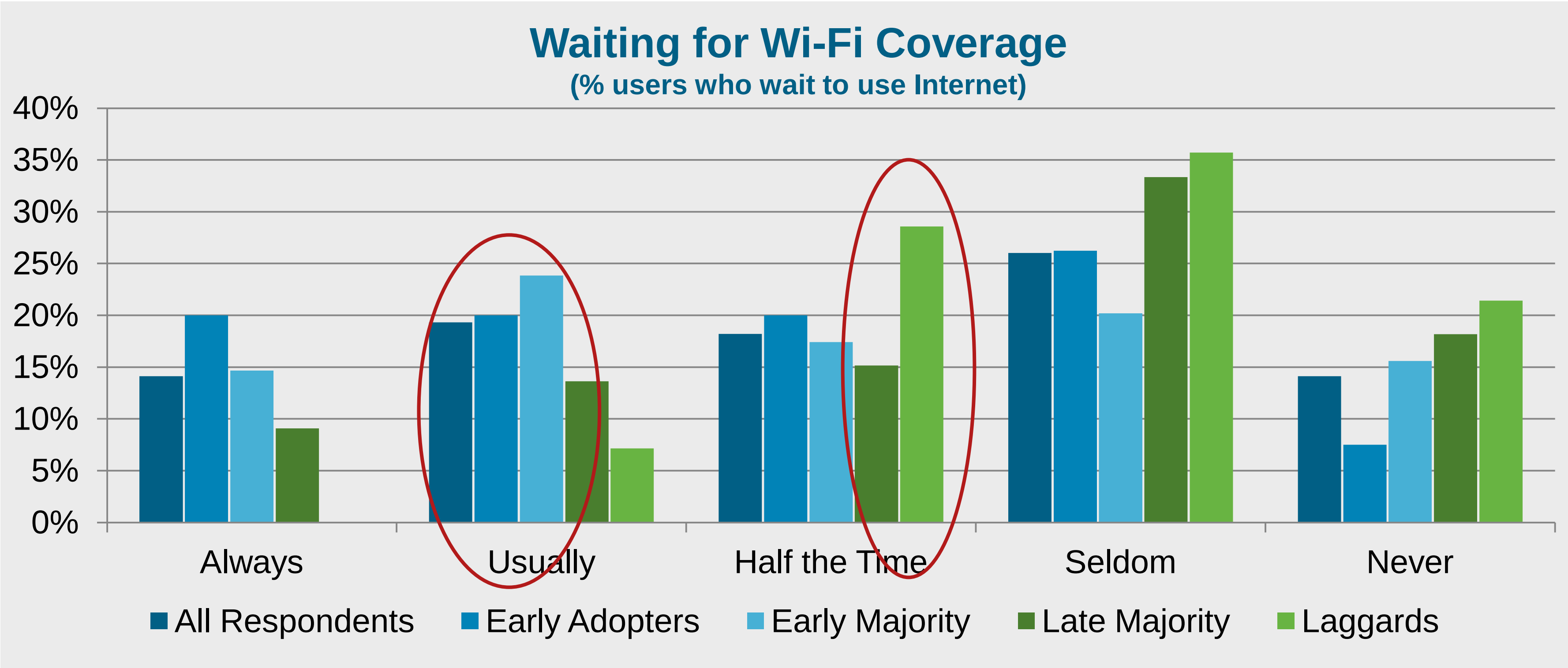
Easier GUI Boosts the Wi-Fi Waiting Phenomenon



Smartphone interfaces have become easier to navigate for non-tech-savvy users, making the process of locating and logging on to Wi-Fi much simpler; this is boosting willingness to wait for Wi-Fi coverage

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents using smartphones (n=269)

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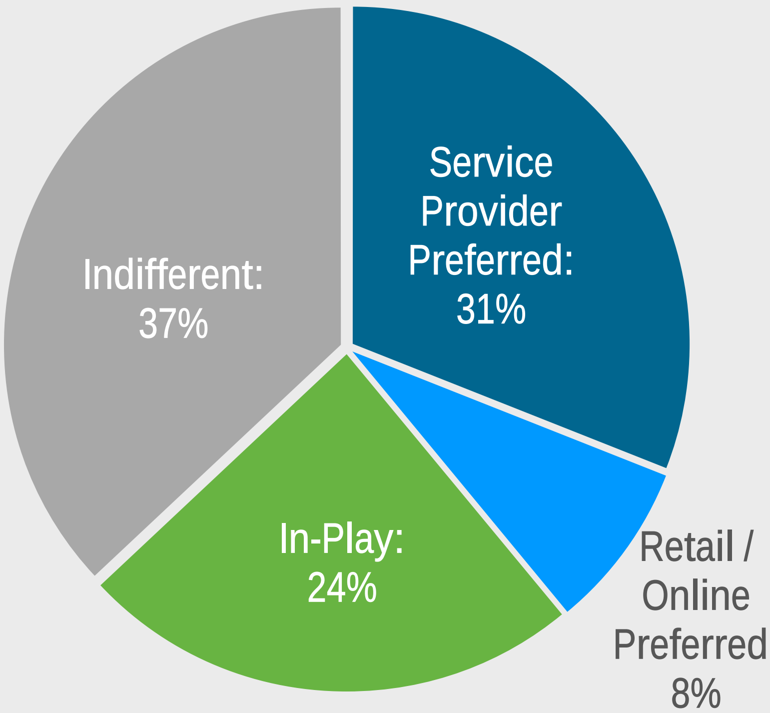
No Clear Preferred Provider for Internet-to-TV Solution

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 ALL factors
- **Strong Retail / Online:** These consumers believe retail/online provides a better experience in ALL factors
- **In-Play:** These consumers' channel preference shifts from factor to factor; SP prevails in 3 areas, Retail in 2, and the remaining areas are quite balanced
- **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.K. broadband consumers

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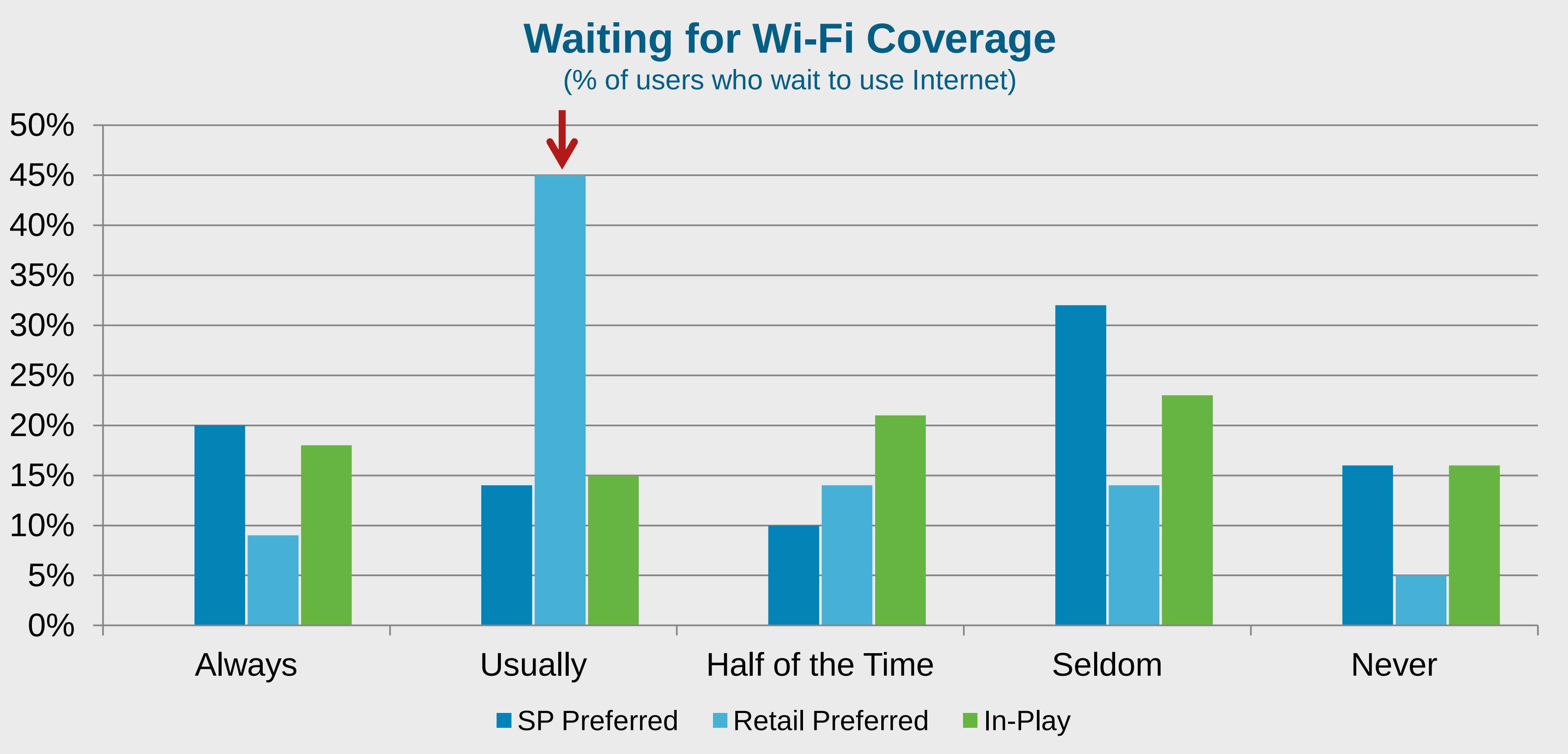
Retail Consumers Show Stronger Orientation To Wait for Wi-Fi Coverage



The Retail / Online segment (8% of the market) believes retail/online provides a better experience in ALL factors

Source: Cisco IBSG Connected Life Market Watch, 2011 Base: U.K. respondents using smartphones (n=269)

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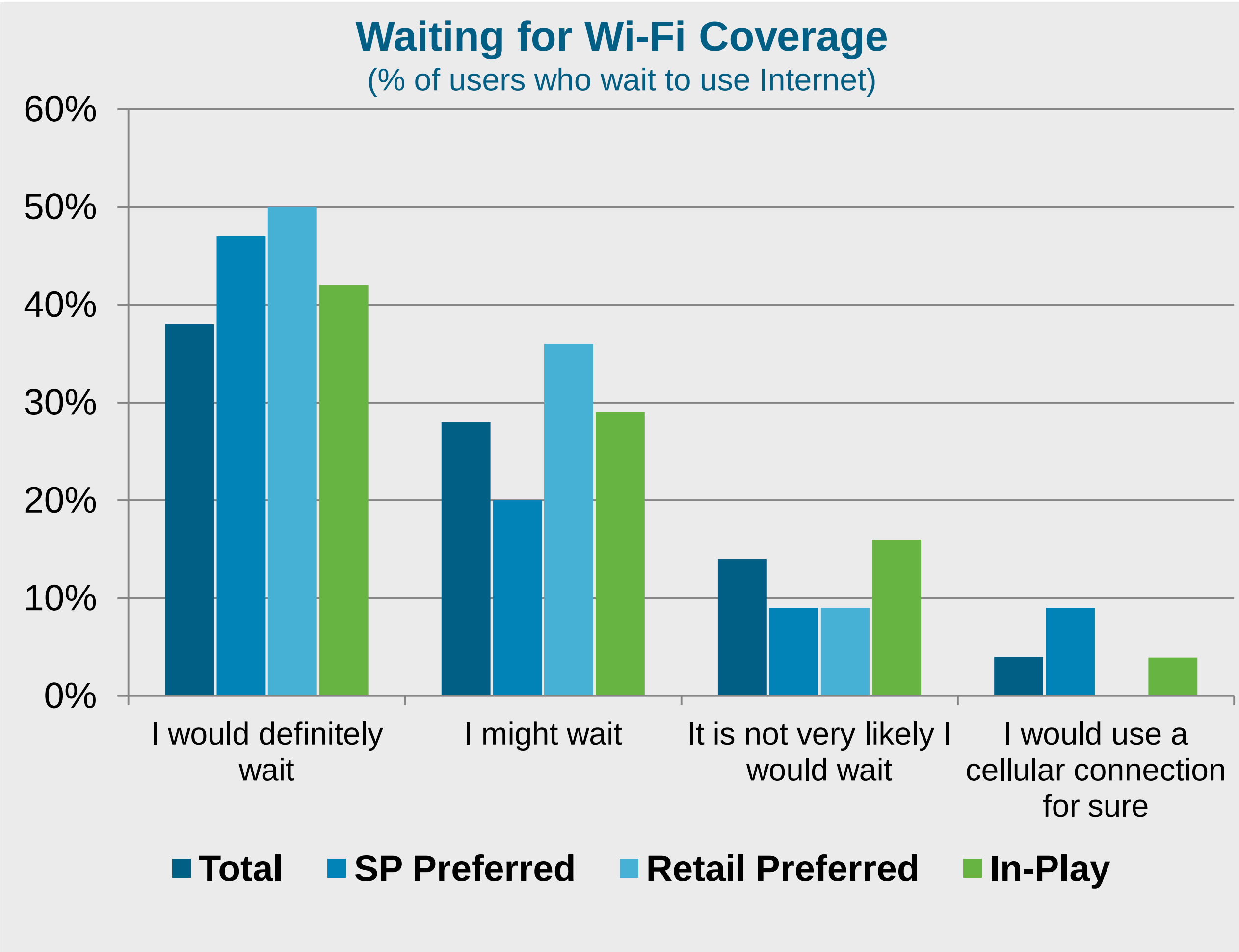
Planning Mobile Data Activities Is Even More Common



- Planning to use Wi-Fi instead of a cellular network is more common for heavy data users on their smartphones (for example, downloading a video file)
- Retail consumers show higher tendency to do so

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents using smartphones (n=269)

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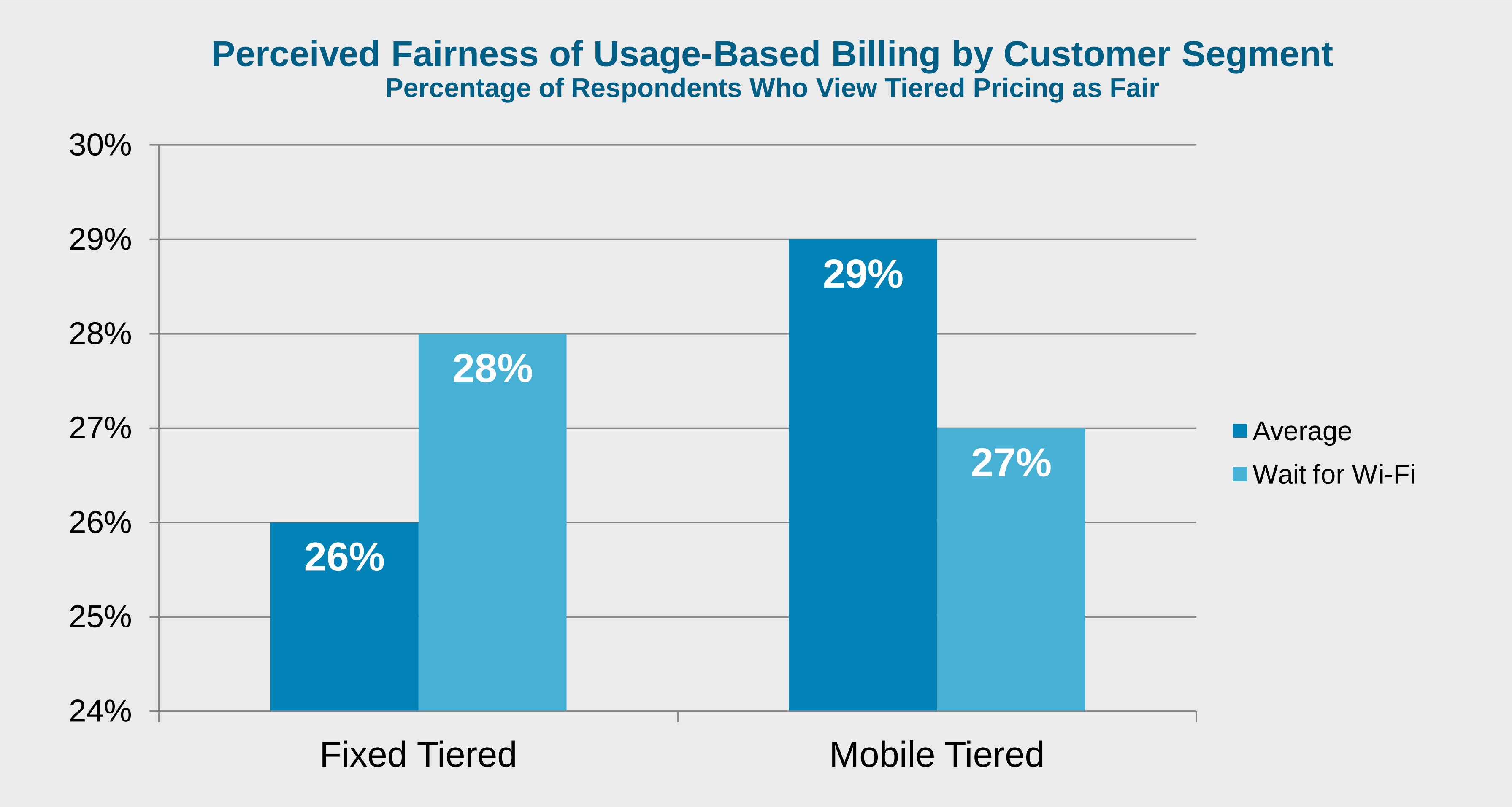
“Wi-Fi Waiters” Vary in Attitude Toward Fixed and Mobile Tiered Pricing



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents waiting for Wi-Fi (n=139)

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5

Consumer Cloud and Connected Life

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Consumer Cloud and Connected Life: Key Takeaways

- Cloud services offer consumers an enhanced Connected Life experience
- Each cloud enhancement positively impacts about 20% of respondents’ reactions
- 10% to 15% of U.K. consumers are already starting to expect their Connected Life services to include the top four cloud enhancements:
  - Single payment; immediate access; remote monitor /auto fix; automatic backup
- Cloud enhancements impact Connected Life buying behavior: consumers more likely to buy when cloud enhancements are included

Source: Cisco IBSG Connected Life Market Watch, 2011

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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 ▪ Intelligent Personalization	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 ▪ Companion Device	Help me match my online social behavior to my real-life social behavior

Source: Cisco IBSG Connected Life Market Watch, 2011

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Cloud Impact on Consumers' Buying Behavior Using Kano Methodology

How Each Cloud Enhancement Influences Consumers' Assessment of a Connected Life Service

Consumer Attitude Toward a Particular Cloud Enhancement	Critical	Differentiating	Mandatory	Neutral	Negative
	Consumers are happy when it's present and dissatisfied when it's not	Consumers don't expect it to be included, but thrilled when it is	Consumers expect it to be there. Not thrilled when it is, but very displeased when it is not.	Consumers are indifferent to its presence	Consumers are displeased when this enhancement is present
Enhancement included with your service?	Positive	Positive	Neutral	Neutral	Negative
Enhancement NOT included with your service?	Negative	Neutral	Negative	Neutral	Neutral

Sources: ASQ, 2005; Cisco IBSG, 2012

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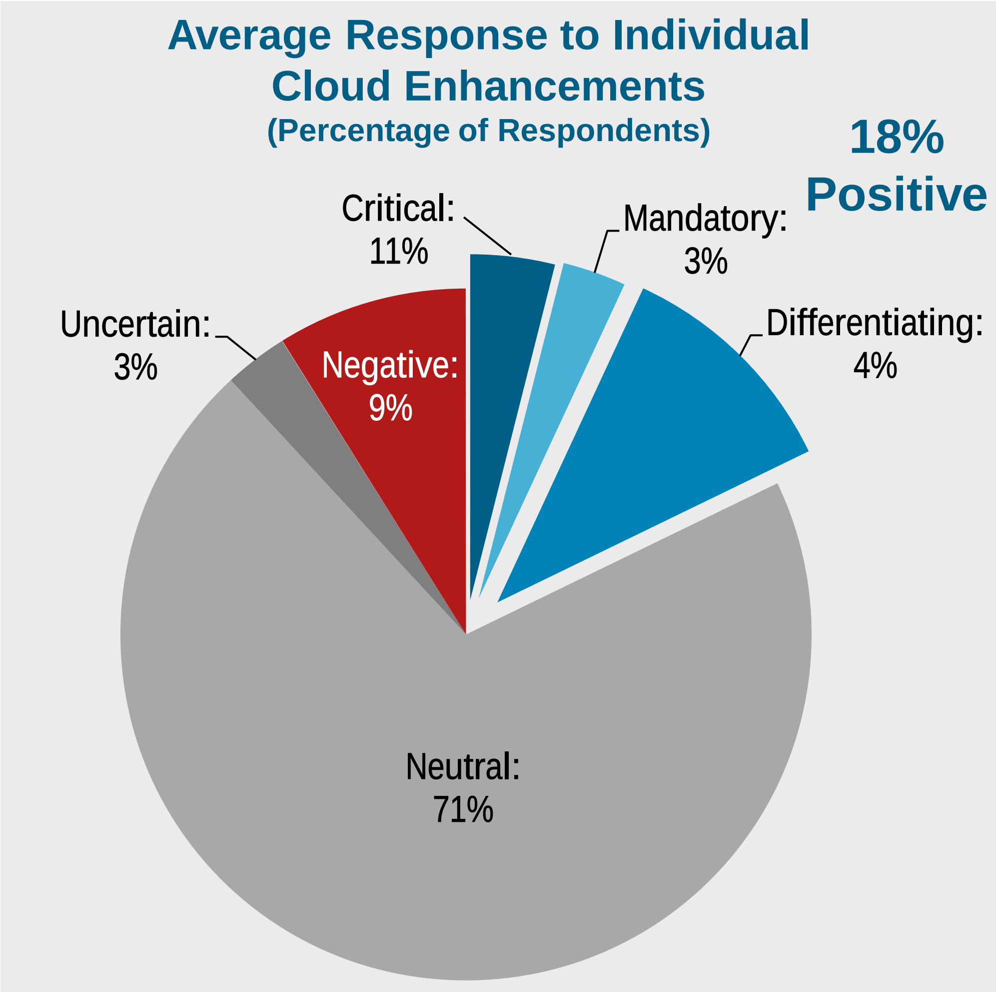
Each Cloud Enhancement Positively Impacts 18% of Respondents' Reactions

Kano methodology shows how each enhancement influences consumers' assessment of the Connected Life service:

- **Differentiating:** 4% are surprised and delighted when cloud enhancements are present
- **Critical**: 11% react very positively when the attribute is present and react negatively when it's not
- **Mandatory:** 3% already expect cloud enhancements as an integral part of the experience



Source: Cisco IBSG, based on Kano methodology, 2011

Base: U.K. broadband consumers

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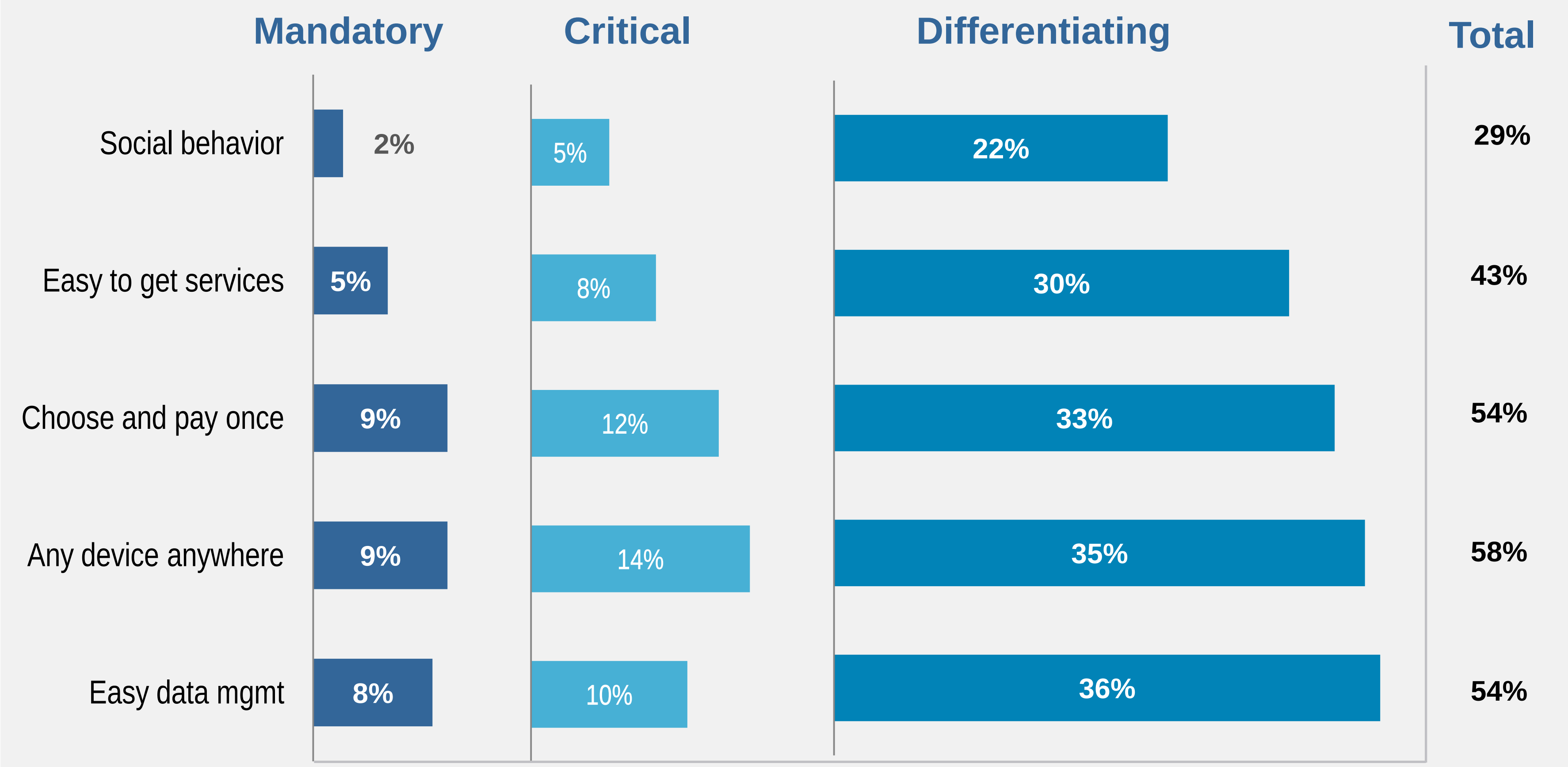
Cloud-Enabled Enhancements Spread Uniformly Across Consumer Needs

Impact of Cloud Enhancement, Grouped by Consumer Needs



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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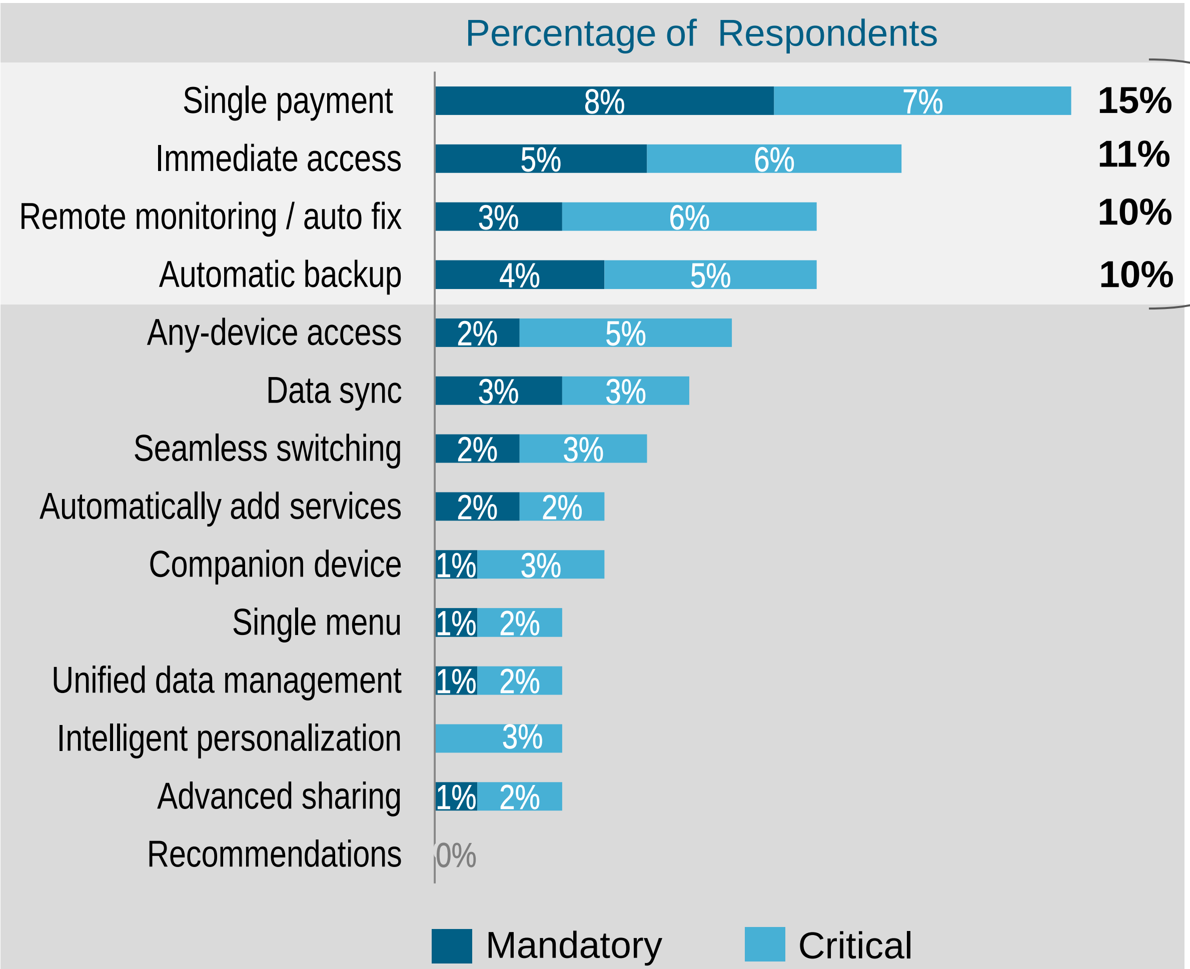
Some Cloud Experiences Have Stronger Impact than Others

Impact of Mandatory and Critical Enhancements on Connected Life Services



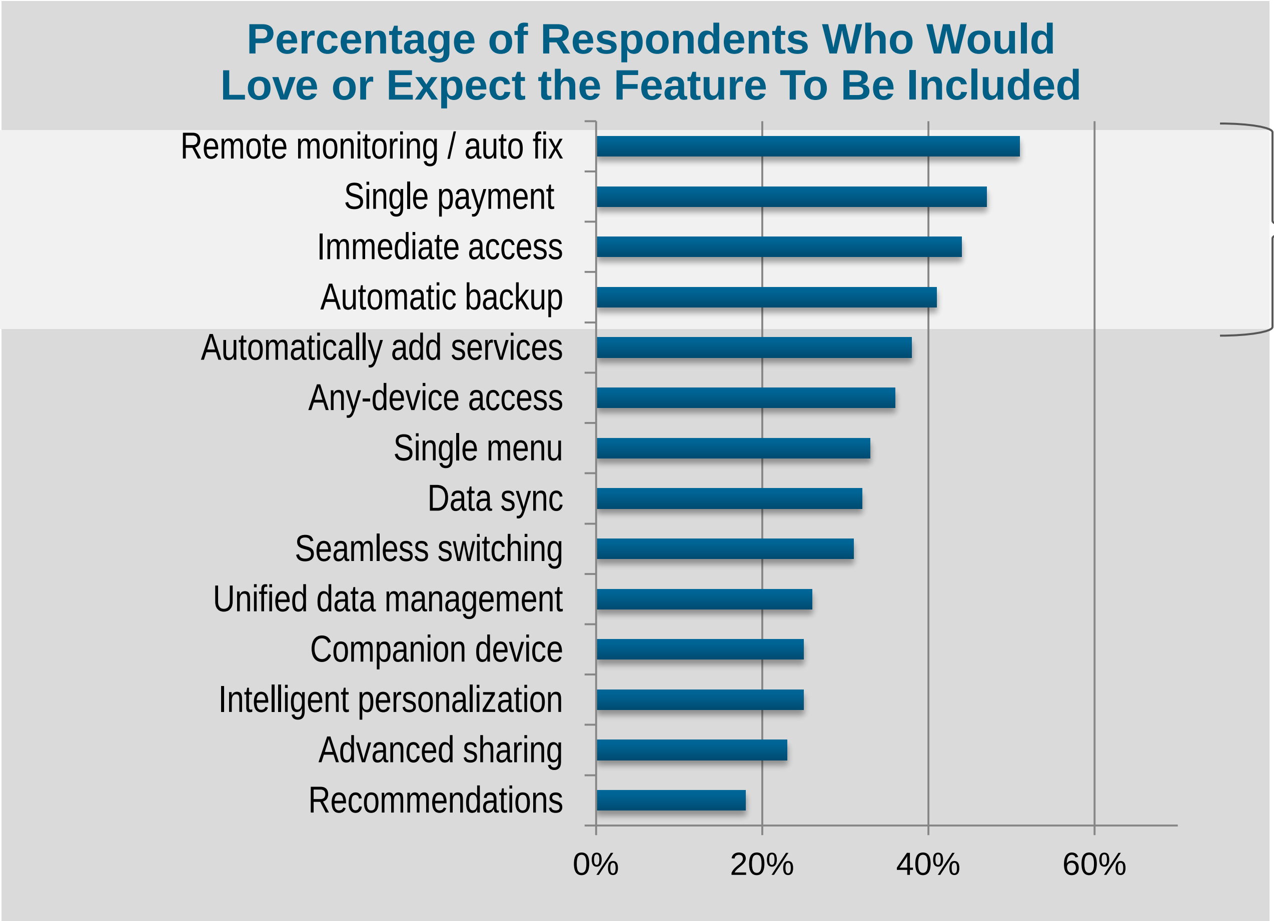
- 10% to 15% of consumers are already starting to expect their Connected Life services to include certain cloud enhancements:
  - Single payment
  - Immediate access
  - Remote monitor / auto fix
  - Automatic backup
- These consumers will react to a Connected Life service negatively if these cloud enhancements are not present

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

Cloud Enhancements Have Broad Appeal with Consumers

On Average, 34% of Broadband Consumers Expressed Interest in Individual Cloud Enhancements



- Cloud-based, “hassle-free” features further enhance the experience
- For 4 of 14 cloud enhancements, 40+% of broadband consumers expressed strong interest

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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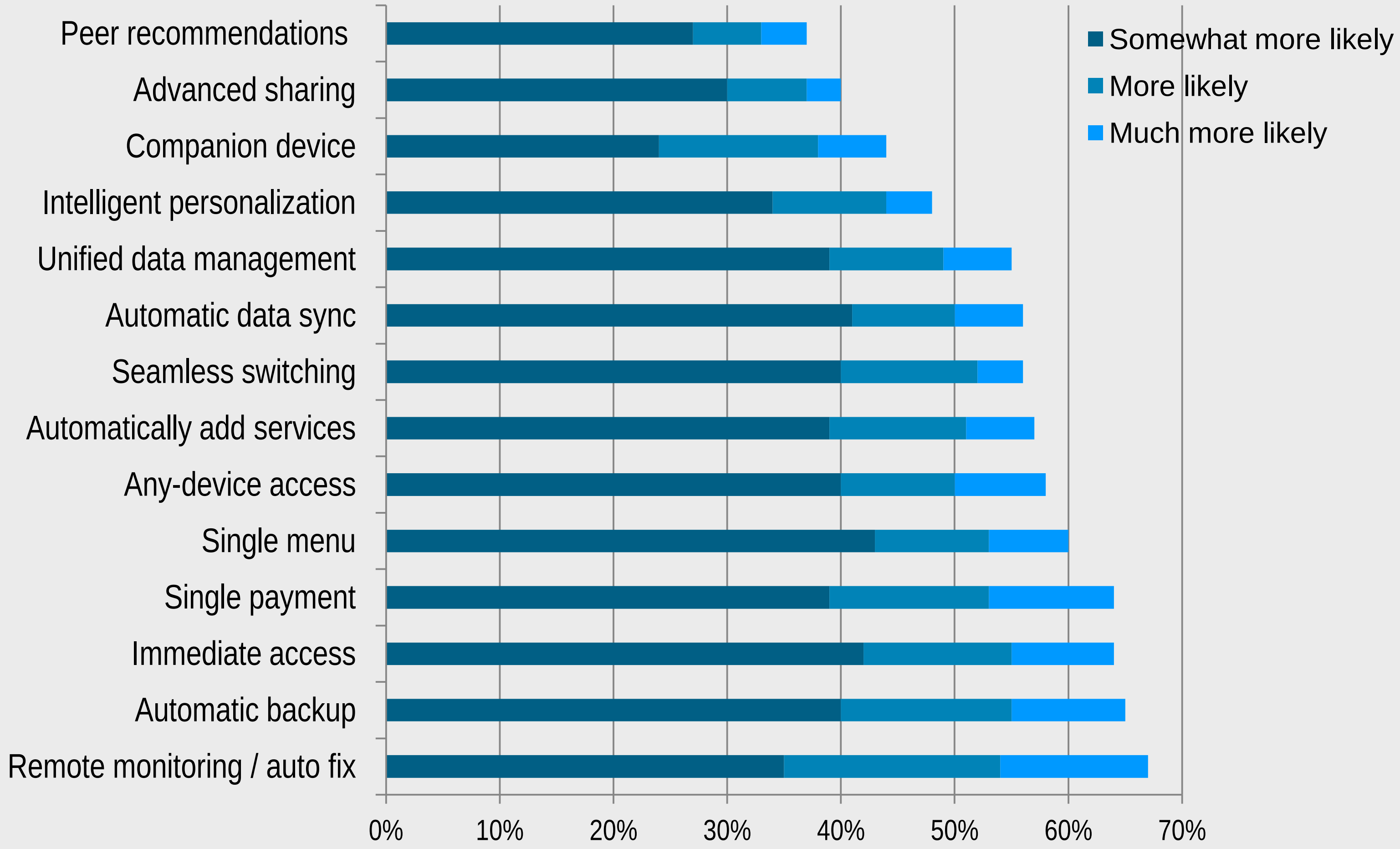
Even One Cloud Enhancement Makes Consumers More Likely To Buy

Consumer Interest in Cloud Service Enhancement

Percentage of Respondents More Likely To Buy Connected Life Service with Each Enhancement



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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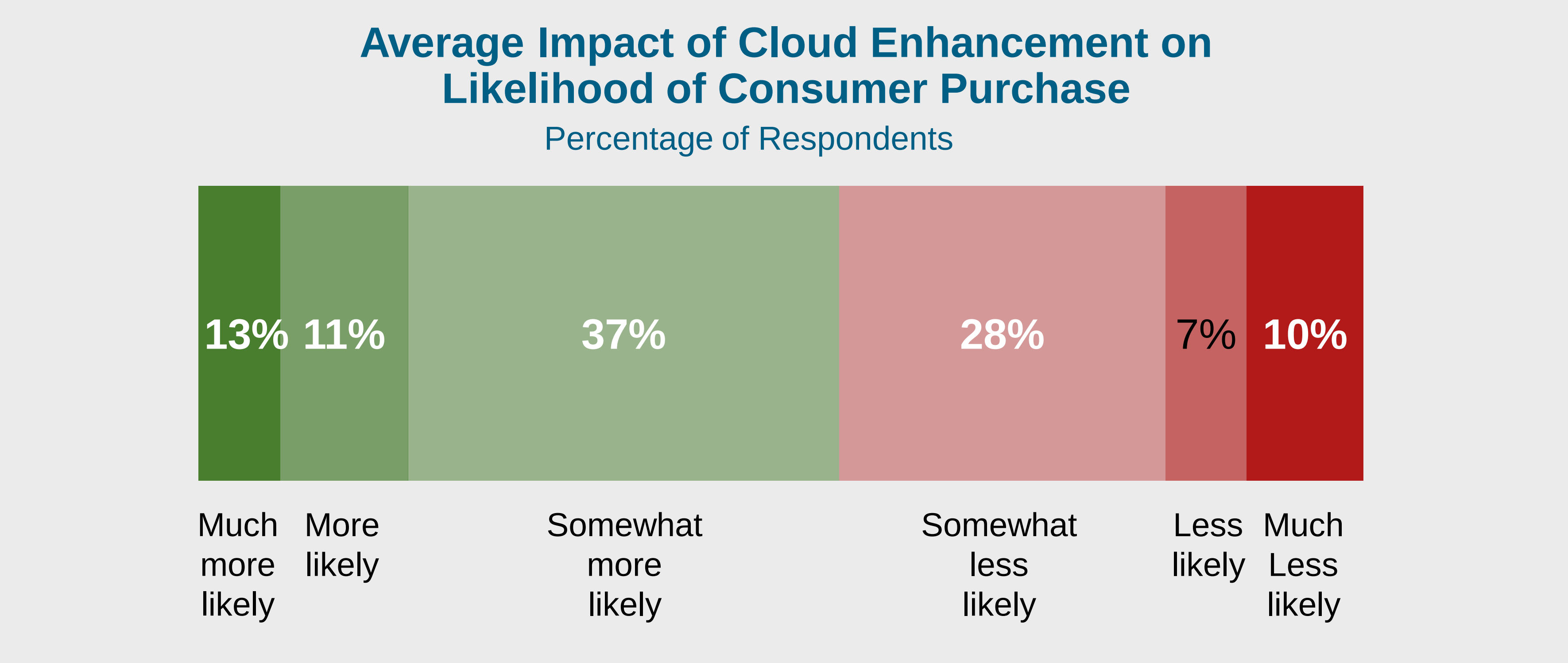
Cloud Enhancements Impact Connected Life Buying Behavior



- On average, 61% of respondents have increased likelihood of buying Connected Life service if it has single cloud enhancement
- 24% are "more likely" or "much more likely," further validating Kano methodology

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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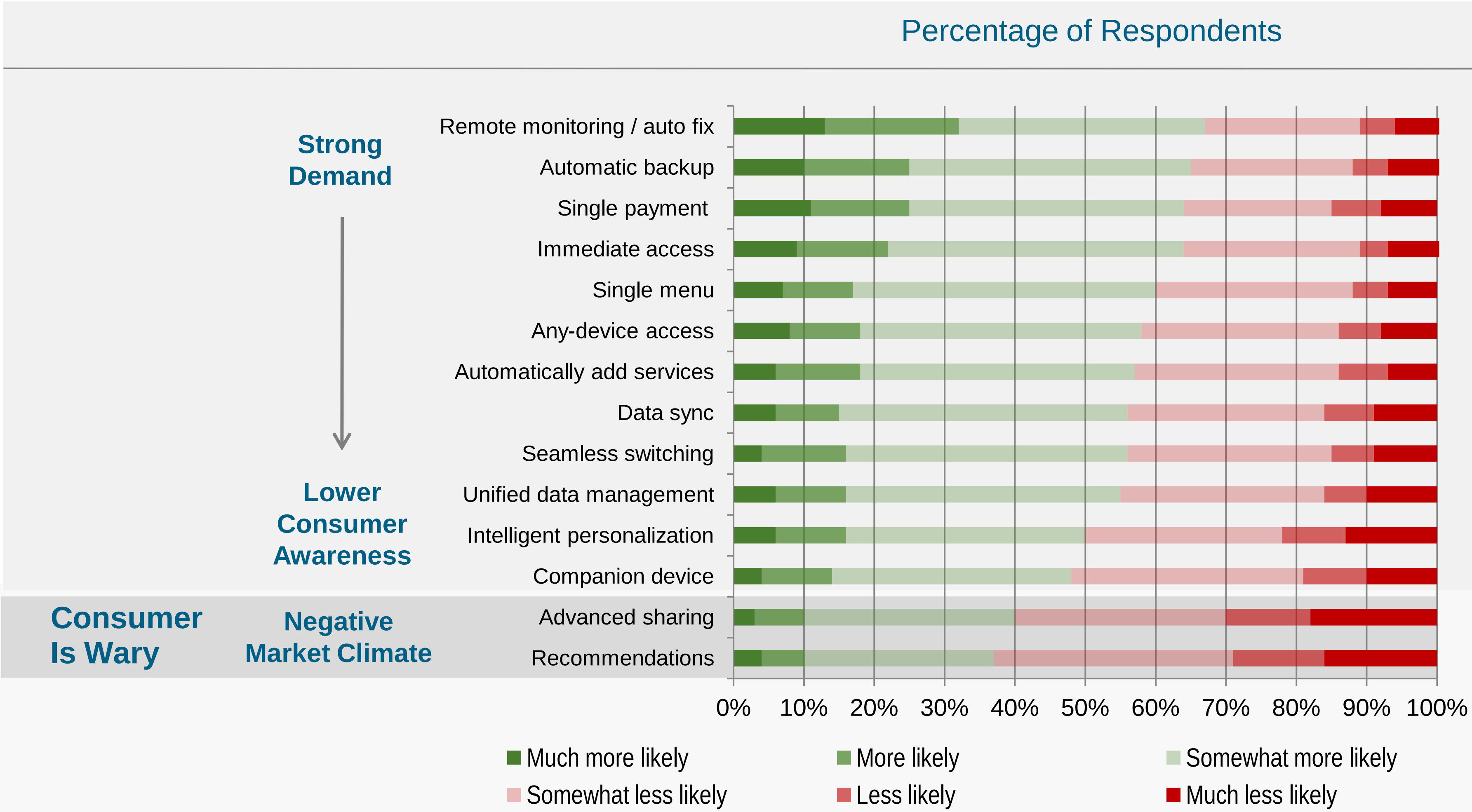
Consumers More Likely To Buy When Cloud Enhancements Are Included

Cloud Enhancements Impact Buyer Behavior



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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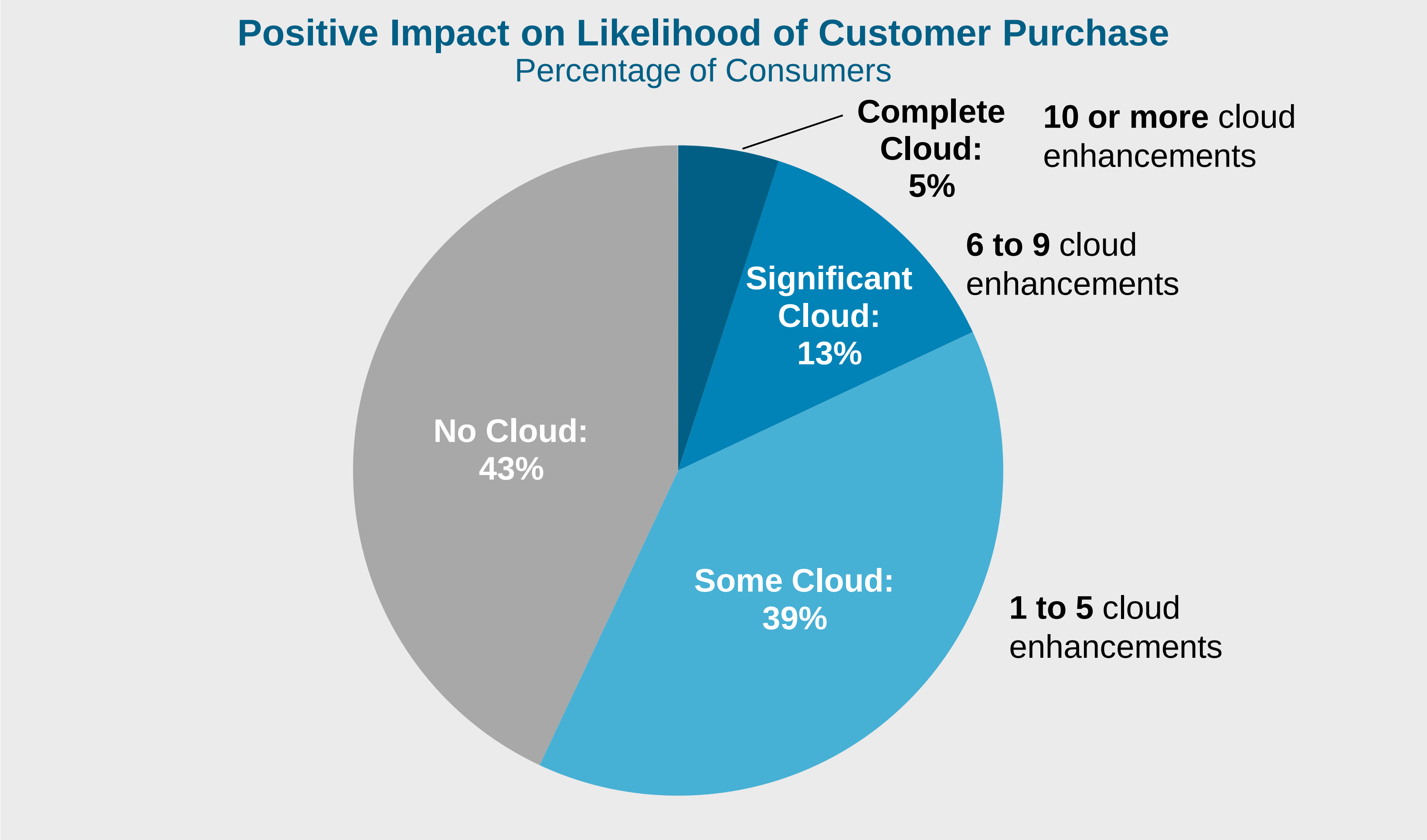
A Fifth of Consumers Are Looking for a Broad Cloud Experience

Most Consumers Are Looking for Just a Few Enhancements



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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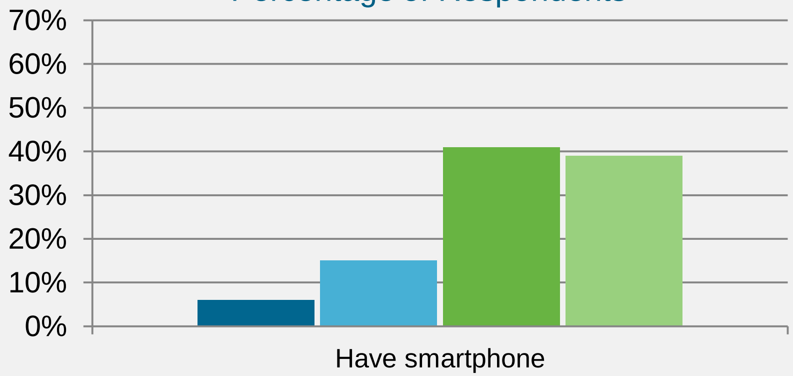
Which Consumers Are Seeking a Complete Cloud Experience?

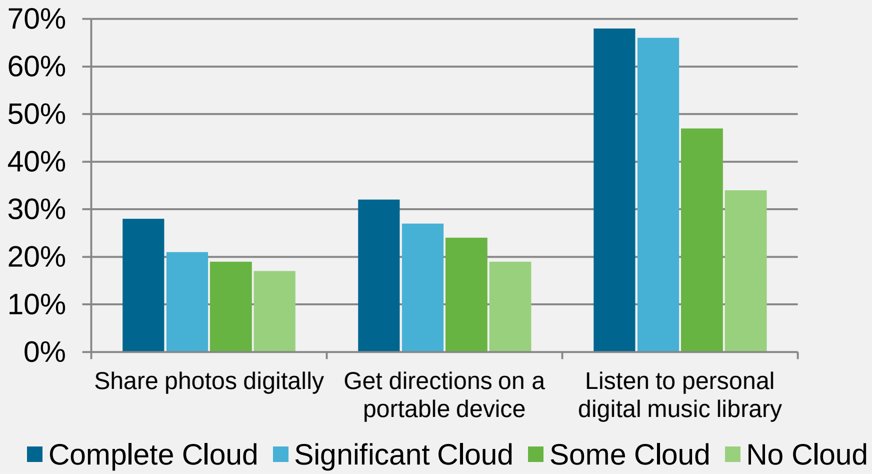
Consumers' Mobile Phone Behavior

Percentage of Respondents



Consumers Engaging in Digital Activities Weekly or More

Percentage of Respondents



- Complete cloud experience is demanded by connected consumers who regularly engage in Connected Life activities
- Consumers with strong demand for complete cloud:
  - Younger (48% under 40)
  - More likely to be male (68%)
- Consumers with no demand for cloud are less engaged in Connected Life
  - No strong channel preferences
  - Likely to be concerned about service contracts

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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6

How To Expand Customer Potential

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How To Expand Customer Potential: Key Takeaways

- To expand customer potential, SPs in the United Kingdom should target “In-Play” consumers—the 24% of broadband subscribers who are up for grabs
- “In-Play” segment is young, tech-savvy, with significant cloud interest
- For “In-Play” customers, *Lower Up-front Cost* and *Troubleshooting* are more important than for other segments
- “In-Play” consumers will tend to wait for Wi-Fi coverage rather than using mobile data

Source: Cisco IBSG Connected Life Market Watch, 2011

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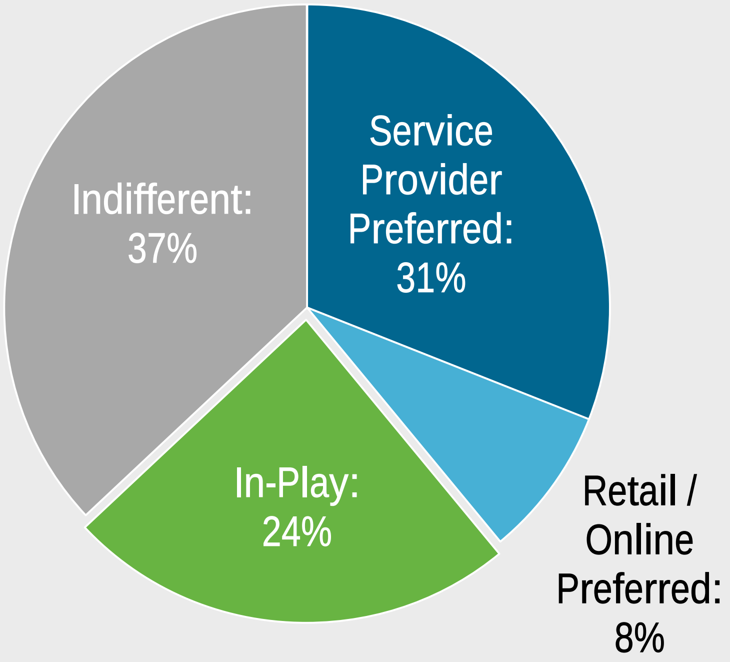
"In-Play" Consumers Represent Best Segment To Target

To increase SPs' customer potential, "In-Play" consumers represent best segment to target

- 37% of consumers are highly indifferent and will be difficult to draw into any Internet / TV purchase
- Another 8% show a strong preference for the retail / online experience and may be difficult to attract
- However, a sizable 24% 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.K. broadband consumers

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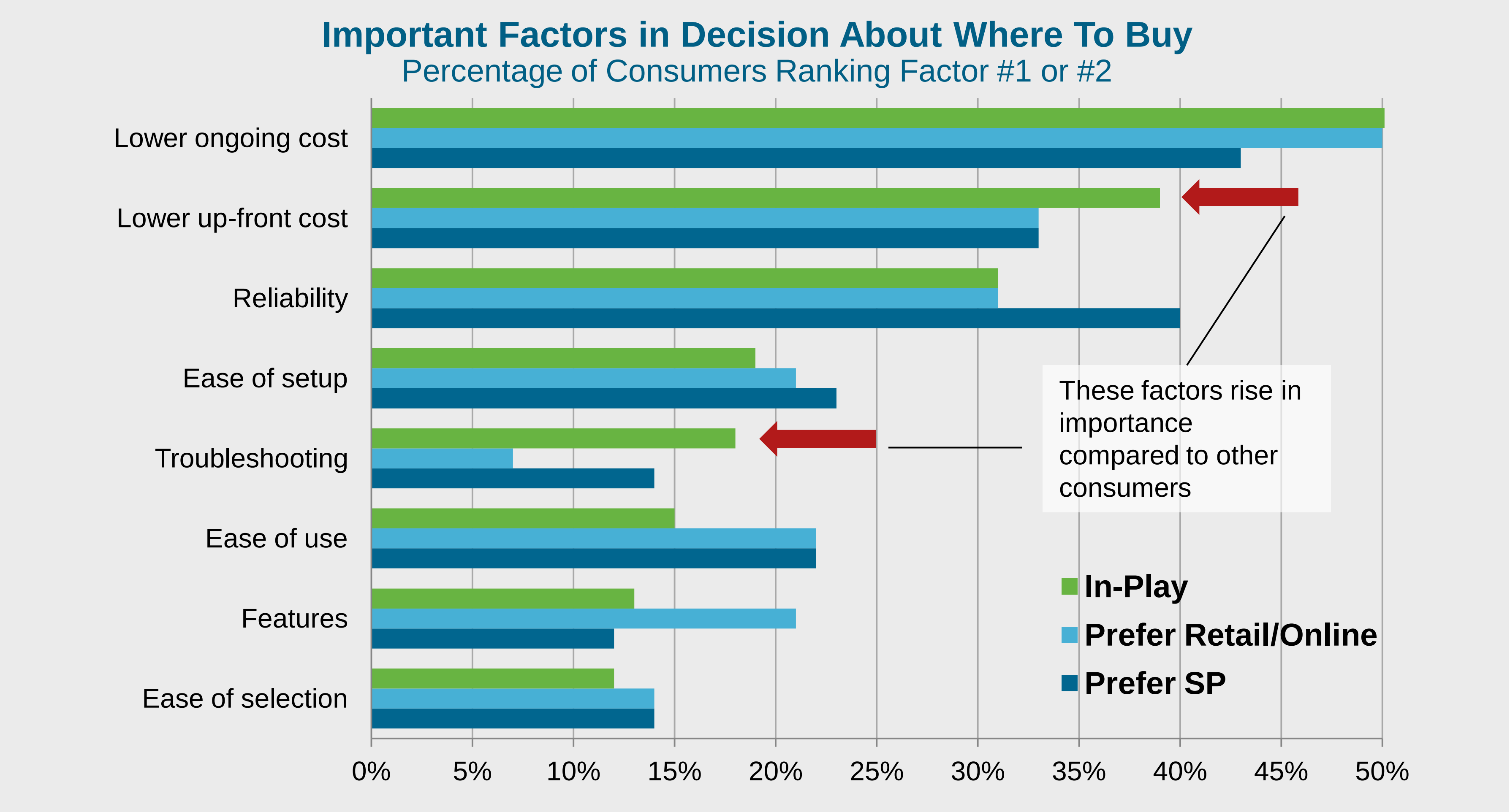
For Those “In-Play,” *Lower Up-front Cost* and *Troubleshooting* Rise in Importance

Top Factors—Cost & Reliability—Are Similar to Other Consumer Segments



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. broadband consumers

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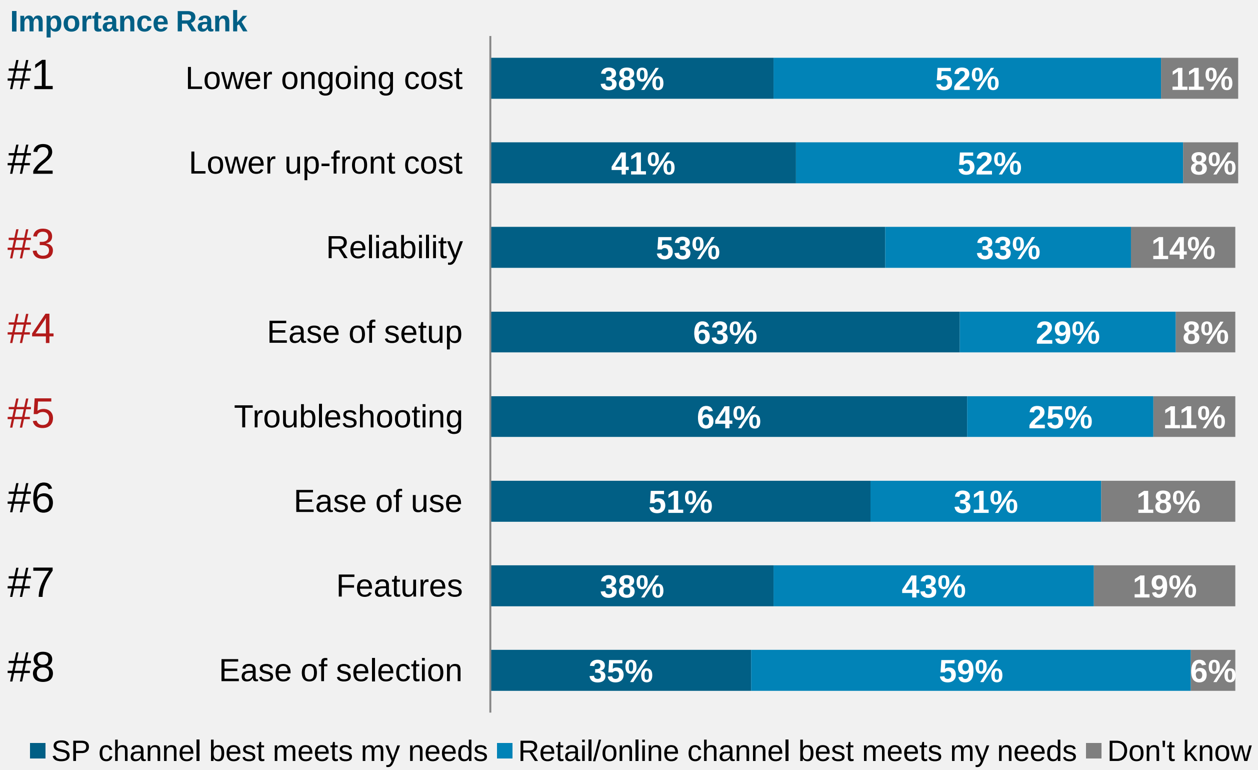
“In-Play” Segment’s Priority Buying Factors Favor the SP Channel

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 channel comes out ahead on cost factors, but SPs have strong lead in the Reliability, Ease of Setup, and Troubleshooting factors that strongly influence “In-Play” consumers’ decision about where to buy
- Retail has a strong lead in Ease of Selection, but this factor is less important

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: “In-Play” U.K. broadband consumers

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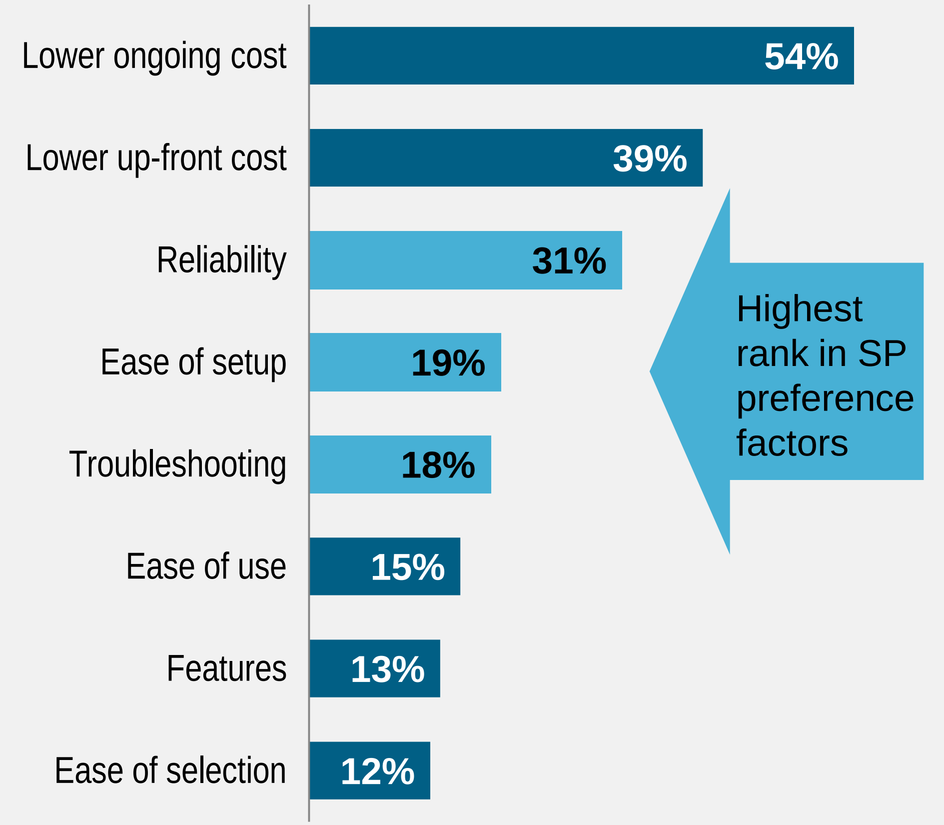
How To Capture the 24% of “In-Play” Consumers Who Are Up for Grabs

“In-Play” Channel Preference Segment: Device / Service Decision Factors, by Importance

Percentage of respondents who ranked 1st or 2nd most important



To win over the “In-Play” segment (24% of BB consumers), service providers need to:

- Attend to the key basics of cost
- Keep leadership on reliability
- Further differentiate on troubleshooting or ease of setup
- SP should simplify and help “In-Play” customers select the right device / service for their needs

Source: Cisco IBSG Connected Life Market Watch, 2011

Base: “In-Play” U.K. broadband consumers

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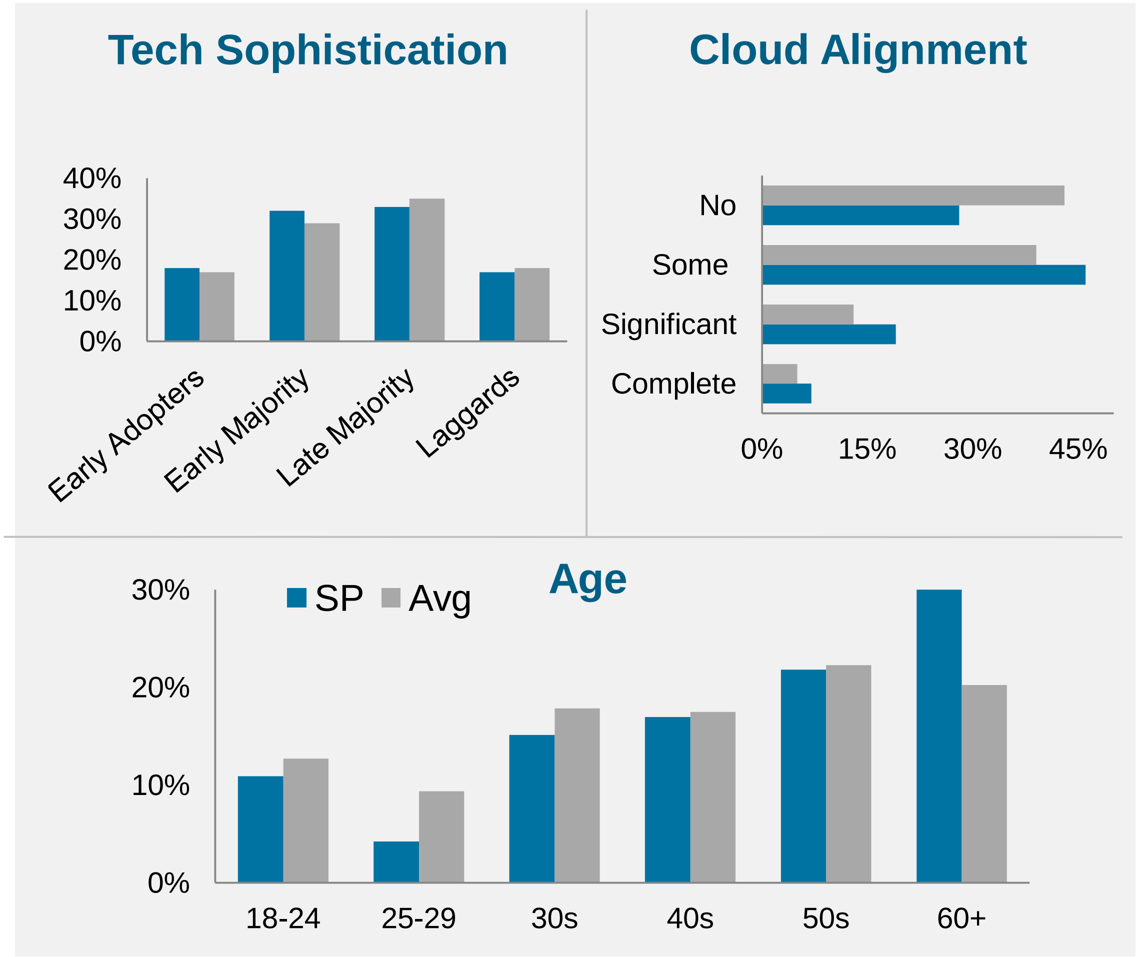
SP Segment: Older, Technology-Aligned, Attracted to Cloud

SP Segment: 31% of Respondents Who Show Strong Preference for SPs

The SP segment:

- Is older
- Aligned with average in technology adoption
- Shows stronger alignment with cloud
- Is more likely to be employed, have children, and possess a lower income



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents with strong SP preference

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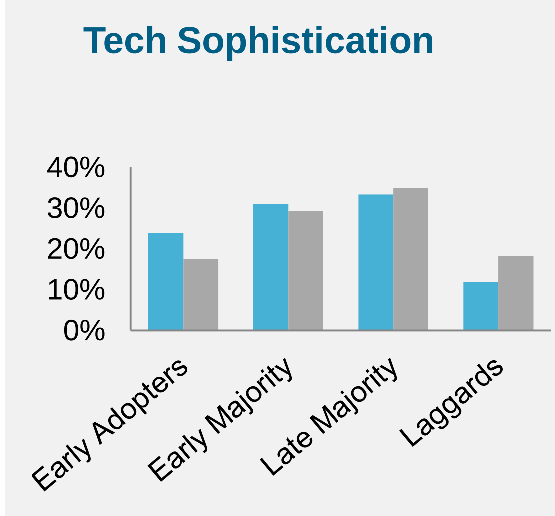
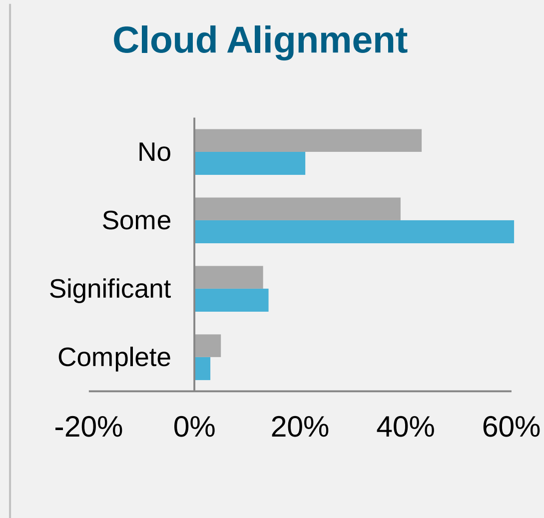
Retail Segment: Slightly More Mature, Some Cloud, Overall Tech Alignment

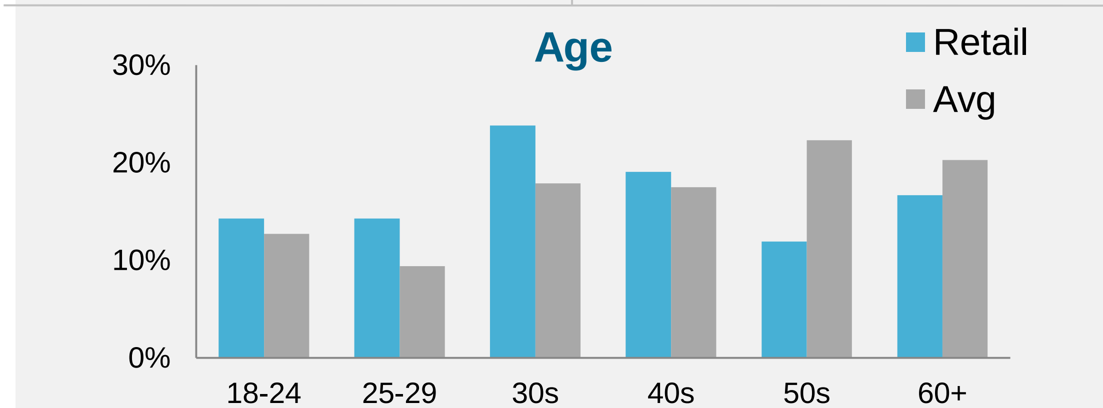
Retail Segment: 8% of Respondents Who Show Strong Retail Preference

The Retail segment:

- Is over-indexed among respondents in their late 20s, 30s, and 40s
- Is over-indexed on "Some Cloud"
- Has strong tech sophistication alignment
- Shows strong alignment for the remaining characteristics







Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents with strong retail preference

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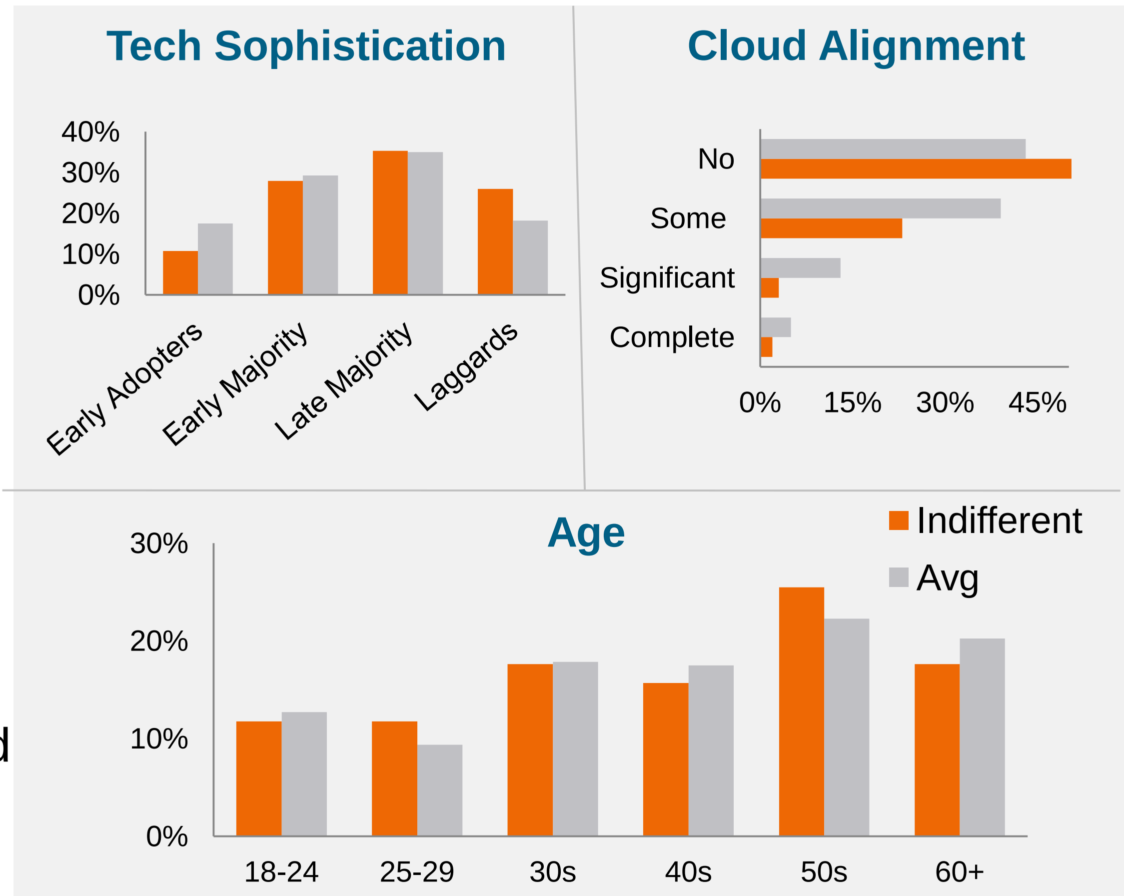
"Indifferent" Segment: Older, Technology-Averse, No Cloud

Indifferent: 38% of Respondents Who Show No Channel or Tech Preference

The "Indifferent" segment:

- Is slightly older—centered in their 50s
- Has low / no interest in cloud
- Is slower to adopt technology
- Is slightly under-indexed on most technologies, including smartphones, online video service, and Connected TV



Source: Cisco IBSG Connected Life Market Watch, 2011

Base: U.K. respondents with no channel preference

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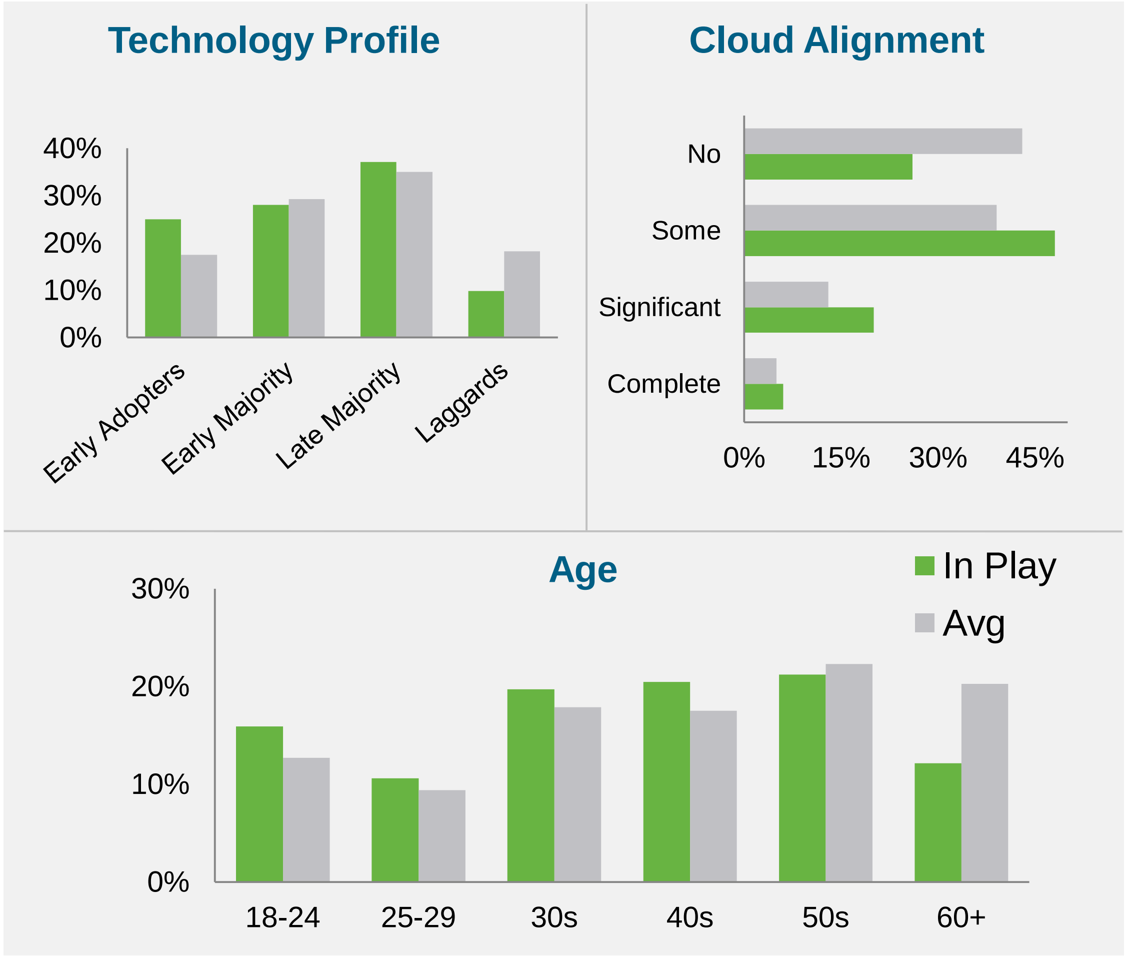
"In-Play" Segment: Young, Tech-Savvy, with Strong / Medium Cloud Interest

"In-Play" Segment: 24% of Respondents Who Show No Strong Channel Preference

The "In-Play" segment:

- Is younger
- Has greatest proportion of early adopters
- Is over-indexed on significant and some cloud alignment: willingness for a wider cloud experience
- Tends to have higher income and is over-indexed on home security, mobile data / mobile data card, and Connected TV owners.



Source: Cisco IBSG Connected Life Market Watch, 2011

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

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