



Consumer Preferences for Wireless Broadband and Next-Generation Services

Wireless communications are not just for talking anymore. While voice calling remains the top form of wireless communication, rapid shifts are occurring in the way consumers use their cell phones and related portable wireless devices. The US is following a trend that began in Japan and South Korea some years ago: use of wireless devices for data applications (text messaging, email, and web access), video downloads, GPS/navigation, location-based services, music/game downloads, etc. While current usage of these services in the US is still relatively small, the “take-off” period is not far away. With the advent of wireless broadband and continually evolving handsets, the wireless platform is being taken far beyond its original purpose, which was simply two-way voice communication from anywhere to anywhere.

The future of wireless communications is both complicated and promising from a business standpoint. Next-generation wireless services depend on both technology and consumer acceptance. Much is already known and has been written about the technological aspects of this evolution with regard to 3G platforms, wireless broadband, WISPs, and “smartphones.” These developments are closely tracked by a wide variety of analysts and the trade press.

However, comparatively less is known about consumer acceptance of these new technologies and services. Do consumers really want these new and more advanced services? Can they even fathom the possibilities that these new technologies offer? Many companies have staked their future on fixed-mobile convergence and the eventual move to smartphones as the premier vehicle of choice for voice, data, and video communications. Telephone and cable companies want to add the full range of wireless services to their own conventional line-ups. It is imperative that these businesses assess their business risks and their opportunities to shape and benefit from consumer behavior regarding new wireless services. At a minimum, that requires an understanding of the appeal of next-generation wireless services from the perspective of the consumer (household or individual). Now, it is possible to gain that understanding.

Centris has the answer...



Centris has Developed a Unique Wireless Survey to Help You Understand

To gain key insights into the actual and prospective behavior of consumers of wireless services, Centris has developed an ongoing, flexible, and wide-ranging survey that is supported by many levels of qualitative and quantitative analysis.

Besides providing valuable business information and insights, the Centris wireless survey offers many unique benefits (especially to Charter members, see box on page 6). Charter members can combine their own proprietary data with survey data and have them custom-analyzed on preferential terms by Centris experts. For example, Centris can develop sophisticated models of consumer behavior that are essential for forecasting and strategic planning. These models pertain both to wireless alone as well as the relationship between wireless and other platforms. Charter members may also participate directly by inserting a limited number of questions of interest into the survey. Charter members will receive all tabulations and underlying statistical results from the survey. Finally, Centris can help to project consumer choice and demand at various levels — from the local (Census Block Group level) market to regional and national markets.

Key Features of the Centris Survey

- Conducted for a representative nationwide panel of households (and individuals within households).
- Designed to be longitudinal, i.e., to follow the same households (and individuals within households) over time (every quarter).
- Records wide-ranging access and usage data (including service provider, service plan, and cell phone handset information), both actual and prospective.

- Records individual-specific demographics, key location information (census block group, designated market area, state and region of residency, etc.).

This design enables the survey to track and project:

- Consumer behavior at the lowest possible level, i.e., the individual consumer of wireless services;
- Subscription, usage, satisfaction, switching, service selection, etc. over time and within local or wider market geographies; and
- Interactions across and substitutions within wireless and wireline access technologies for voice and non-voice communication services, Internet access, and television viewing.

With its pioneering focus on individual consumers of communications services, the design of the Centris wireless survey is both innovative and strategic. Where other industry surveys track technological trends, broad market and financial performance or, at best, limited aspects of consumer behavior for wireless services, the Centris wireless survey is both micro-level and comprehensive. The ability to track and evaluate the decisions and preferences of households and individuals offers the best opportunity to understand the all-important demand side of a rapidly developing — and converging — communications marketplace. Most importantly, this survey offers information on the entire wireless platform,, (i.e., all forms of communication made possible by wireless devices or technologies), not just the use of cell phones for voice and a limited number of other communication services.



Key Applications of the Centris Survey: Consumer Preferences for Wireless

For next-generation wireless services, the survey is useful for tracking:

- Consumer preferences regarding the access technologies they use for various next-generation services
- Viewership of several forms of video (television) programming
- Willingness-to-pay for wireless broadband service and various features and functions made available by next-generation services
- Switching services and services providers
- Locations and life scenarios in which next-generation services are used

Key Benefits of Analysis Based on the Centris Survey

Statistical and qualitative analysis based on the Centris wireless survey sheds light on the future of the wireless platform in several ways:

- Explains how consumers change their behavior or adapt as market and general economic conditions evolve
- Tracks and explains consumer movement from one mode of access for next-generation services to another
- Tracks whether or not television viewership patterns change over time or differ across markets and regions
- Identifies consumers associated with specific clusters of television programming (i.e. sports events, news and weather programs, dramas, sitcoms, etc.)

- Identifies opportunities for services providers to introduce next-generation services in unserved or underserved markets or regions
- Predicts long-term viability of popular services like GPS/navigation or Internet games when received over smartphones as opposed to other portable devices specifically designed for them
- Explains trends in intensity of use of voice and next-generation services and whether changes in service plans or monthly allowances affect usage
- Identifies geographic locations, activities, and life scenarios in which next-generation services are most likely to be used
- Produces more meaningful trends and forecasts of future multimedia wireless consumption

To understand consumer preferences for wireless services, the Centris wireless survey focuses on four key areas of consumer behavior:

- **Modes of access**
- **Viewership of video programming**
- **Internet and video access and usage by wireless means**
- **Willingness-to-pay for service**

These four areas are featured in great detail in Centris' comprehensive report on "Consumer Preferences for Wireless Broadband and Next-Generation Services." This is a sneak peek into the contents of that fuller report.

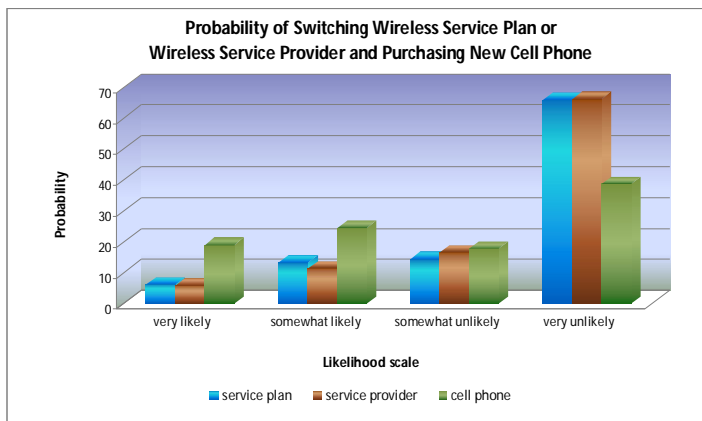


Modes of Access

Detailed findings in the comprehensive report cover a multitude of topics in this area of consumer behavior. All analysis is conducted at either the household or the individual consumer level. Examples of topics analyzed include:

- Cell phones, by feature/function capability, by location/purpose of use
- Wireline phone numbers, by local service provider
- High-speed Internet modes of access (dial-up, cable modem, DSL, satellite, wireless, fiber), by service provider
- Video (TV) modes of access (cable, fiber, wireless, satellite), by service provider
- Portable devices for wireless access to Internet (desktop and laptop computers, game consoles, Mediaplay, etc.)
- Portable devices for wireless access to video, music, GPS, etc.
- Wireless access to broadband (WISP, WiMax, etc.), by service provider
- Fiber access technologies (FiOS, U-Verse), by service (for FiOS)
- Modes of access for Internet games
- Modes of access/channels for video programming by type of programming

The chart below shows the consumer's probability of switching in the next year — for service plans, providers, and cell phone handsets. It shows that, over the next year, there is a higher probability to switch or purchase handsets than to change plans or providers. More detailed breakdowns of these probabilities, such as by usage levels, consumer demographics (age, sex, and income), and residency/market location are available from the comprehensive report which is available for purchase or subscription (see details regarding Charter Membership on page 6).



69% of consumers rate wireless broadband service in a fixed setting as “very important” or “somewhat important.” In contrast, less than 44% of consumers feel the same way about mobile wireless broadband.

Another interesting aspect of Modes of Access concerns household or individual perceptions of a wireless broadband service. For example, how do they rate receiving wireless broadband at a fixed location relative to receiving it while mobile (on the move)? Or when using that service for very high speed Internet access, email, watching TV or video programs on a smartphone, web surfing, multiplayer Internet games, social networking, downloading music, uploading photos, or shopping online? Also, what importance do they attach to having Internet access everywhere or doing so without cables or wires?

The charts on the next page show that about half of US consumers rate wireless broadband access in a fixed location as very important; however, less than half as many feel the same way about mobile broadband access. This raises several questions: the most obvious is why? Is it due to low awareness about the nature and scope of wireless broadband service or perceptions of higher prices associated with mobile access?

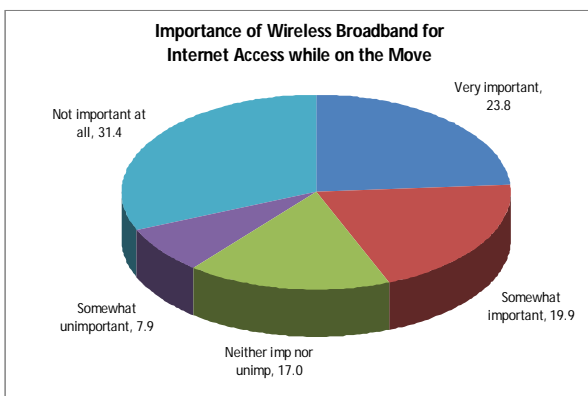
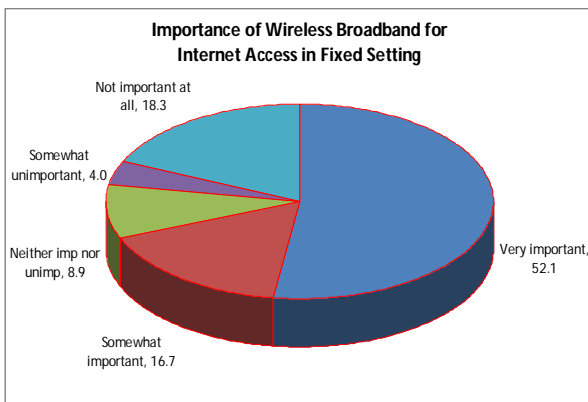


Or, is it that consumers do not presently see a great need for Internet access while on the move, rather than distaste for the mobile access technology itself? What does this difference imply for the rollout of WiMax and other wireless broadband services? Are there new features and functions that should be pushed in order to increase the demand for wireless broadband services? To answer these questions, the analysis contained in the comprehensive report on “Consumer Preferences for Wireless” can help.

Viewership of Video Programming

Viewership patterns for TV programs (and video programming in general) are important to understand when marketing or advertising to consumers. Two trends are making this fact even more important today. First, as consumers seek a more diverse selection of video programming, advertisers and content providers see opportunities to venture into new areas.

Second, because of the convergence of access technologies, TV and video programming can increasingly be viewed on smartphones and other wireless or portable devices, besides the more traditional TV sets, desktop computers, and other fixed devices. This section of the comprehensive report on “Consumer Preferences for Wireless” focuses on household and individual viewership patterns for video programming. Examples of topics analyzed include:

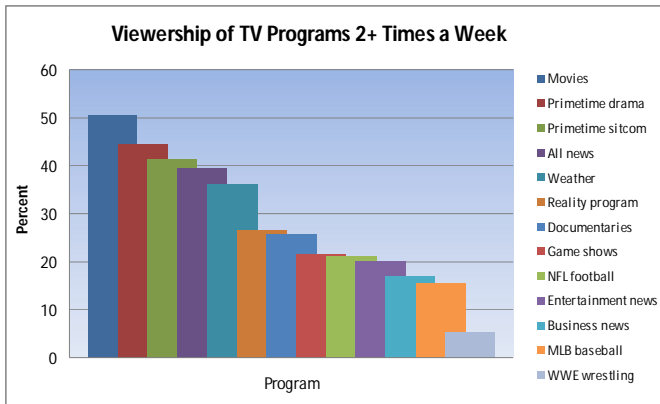


- Frequency with which each type of programming (13 in all) is watched
- Correlations in viewership among various types of programming
- Use of various viewing technologies/channels (computer, cell phone/portable device, social network, etc.) to access each type of programming
- Various types of programming accessed by each viewing technology/channel
- For each type of programming, correlations in the use of different viewing technologies / channels

While the probability of switching cell phone handsets in the next year is fairly high (43%), consumers are far less likely to move to new service plans (20%) or service providers (17%).



Knowing the types of programs being watched can aid in deciding which spots are best for advertisements. As seen in the chart above, movies are presently the best way to go for the overall market. However, significant differences may exist when these data are broken down by consumer demographics and residency/market locations. Moreover, the viewership patterns may change in important ways over time, particularly as consumers adapt to new access technologies, new program offerings, and new business models adopted by content providers and operators that offer video programming. A longitudinal quarterly survey is well suited to track these developments. Find out more from the comprehensive report.



Program viewership is strongest for movies (51%), primetime dramas (45%), primetime sitcoms (41%), all news (40%), and weather programs (36%). After these, viewership two or more times per week drops off significantly (27% or less).

Charter Membership Includes:

- Comprehensive syndicated reports in each of three topic areas
 - *The Wireless Trifecta: Access Device, Service Plan, and Usage*
 - *Customer Satisfaction and Loyalty in Wireless Communications*
 - *Consumer Preferences for Wireless Broadband and Next-Generation Services*
- All tabulations based on the survey data
- Ability to customize your data
 - Merge your own data with those from the survey to answer questions of particular interest to you.
 - Insert a limited number of your own questions into our survey. Responses to those questions will be available only to you.
- Expert consultancy
 - Receive additional expert consulting on preferential terms as part of your Charter Membership. Talk to our experts about issues that are important to you.

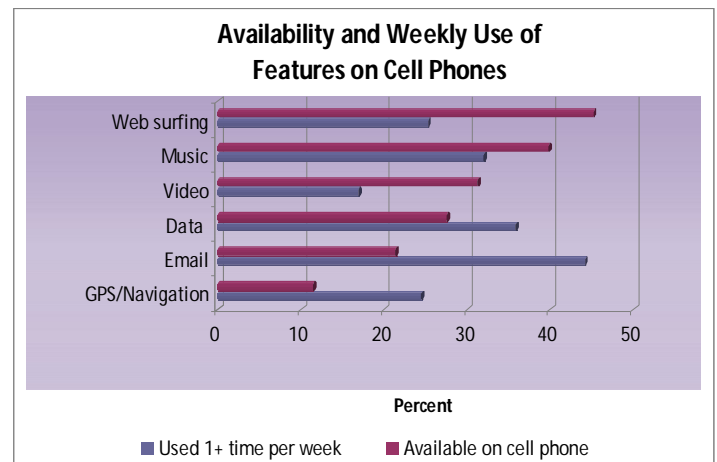


Internet and Video Access and Usage by Wireless Means

As communications access technologies converge, the smart money is betting on wireless (and portable or mobile) devices becoming the preferred means of access for all Internet (and other data) and video services. Besides portending a radical restructuring of communications and media companies, large untapped opportunities exist for designing content and services for delivery over wireless devices. Find out all about how consumers are presently achieving wireless access to the Internet and video sources, and will do so in the future. In this section of the comprehensive report on “Consumer Preferences for Wireless,” learn about:

- Availability and use of data and video-capable smart phones and PDAs
- Make and recency of purchase of data and video-capable cell phones
- Weekly use of data and video services via cell phones
- Availability of data and video services via wireless service plans
- Additional payments made for use of data and video services via cell phones
- Past access and use of data and video services via cell phones
- Discontinuation of access and use of data and video services via cell phones
- Monthly bill for high-speed Internet access
- Alternative modes of access (including wireless) for data (high-speed Internet) service
- Alternative modes of access (including wireless) for video (TV) service
- Availability of other portable devices for wireless access to data and video

The chart below shows the most popular services currently available over cell phones and the weekly uses of those services by consumers. As additional next-generation services become available over wireless devices, the longitudinal quarterly Centris wireless survey and the comprehensive “Consumer Preferences for Wireless” report will track availability and usage trends and service providers and plans selected, using breakdowns by consumer demographics and residency/ market locations.



Apart from voice, email is the most popular feature currently used on cell phones, followed by other forms of data service and music. Interestingly, while 45% of consumers say their phones are capable of surfing the web, only 26% actually do so at least once a week.



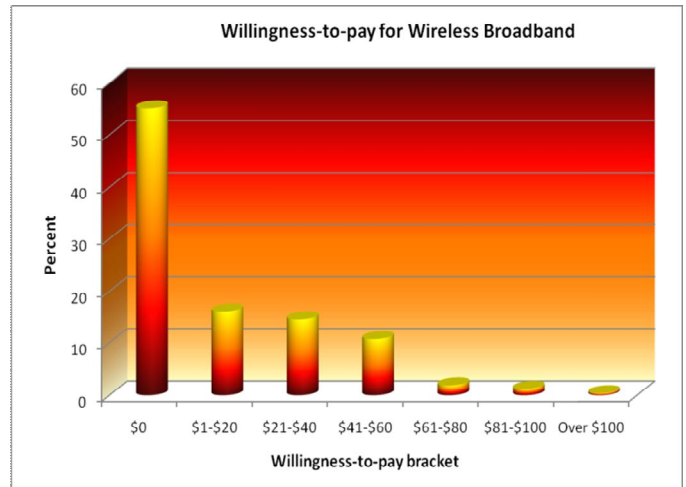
Willingness-to-Pay for Services

No analysis of consumer behavior can be complete without proper account being taken of how much consumers pay for services presently available or their willingness-to-pay (WTP) for new and emerging services.

This section focuses on the consumer's (household's or individual's) WTP for services, features, and functions associated with wireless capabilities. Examples of analyses (with breakdowns by consumer demographics and residency/market locations) available in the comprehensive "Consumer Preferences for Wireless" report include:

- Monthly WTP for various features/functions available on cell phones
- Monthly WTP for wireless broadband
- Price elasticities implied by monthly WTP
- Models that explain WTP in terms of cell phone and consumer (demographic) characteristics

The chart below indicates that price is potentially a significant barrier to consumer acceptance of wireless broadband.



When asked how much they would be willing to pay for wireless broadband, 55% of survey respondents said zero dollars. However, another 31% would be willing to pay up to \$40 per month for this type of service.



Why this Suite of Research Products is a Compelling Purchase for You ...

Other market analysts may be able to provide you with a broad, sweeping view of consumer preferences for wireless consumption. But what Centris can offer you is a comprehensive look at consumer preferences and satisfaction indices (at both household and individual consumer levels) and how they change over time for essentially the same consumers. This is a strategic research package designed to give you consistent tracking information on a nationally representative sample of households, which can be used to project future consumer behavior with respect to wireless devices and services.

Think about the impact that this type of research effort will have on the industry, and what it can do for your business – the competitive advantage that could be gained by signing up for this type of service. This type of research will eventually become a fundamental measuring stick in the wireless arena, as the industry continues to evolve rapidly.

Who would Benefit from *Consumer Preferences for Wireless...*

- Wireless telephone companies
- Wireline telephone companies
- Cable companies
- Broadcast networks
- Internet service providers
- Equipment manufacturers
- Content providers
- Search engine providers
- Advertisers
- Industry analysts

Don't miss out on your competitive advantage. Sign up for Centris' comprehensive report for "Consumer Preferences for Wireless Broadband and Next-Generation Services." Become a Charter Member today and enjoy unique Member benefits!

Call us today to find out more about

**"Consumer Preferences for Wireless Broadband and Next-Generation Services"
Comprehensive Report**

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About Centris

Centris, based in Fort Washington, Pennsylvania, is a member of the AUS Group, a top United States marketing research organization. Centris provides market intelligence on consumer preferences and behaviors regarding the purchase of voice, video and data services across all vertical markets. Centris provides national and local information that helps marketers plan and evaluate marketing strategies, track competitor actions, and optimize their marketing mixes.