

The speed of life

Consumer intelligence series



The consumer-led mobile smartphone transformation

Series overview

Through PwC's ongoing consumer research program, we gain directional insights on consumer attitudes and behaviors in the rapidly changing media landscape. This report summarizes key findings from a quantitative survey and follow-up focus groups with smartphone users, exploring how consumers use smartphones, how the technology has affected their everyday lives, and how much they expect to increase their use of smartphone activities during the next few years.

We conducted a two-phase program to capture this data. In Phase 1, held in spring 2011, we fielded a broad, nationally-representative survey of 3,282 smartphone owners/users aged 18 to 59¹. In Phase 2, we conducted focus groups to gain a deeper understanding of some of the underlying reasons for behavior reported in the survey.

¹ This survey size provided a 95% to 99% degree of confidence.

I. Executive Summary

For today's smartphone consumers, mobility isn't just about making calls or checking email on the go—it's a lifestyle. Since the launch of Apple's iPhone in 2007, smartphones have transformed the way consumers connect with businesses and each other. From downloading videos to buying coffee, checking bank balances to updating Facebook, consumers now rely on their phones for an astonishing range of activities—and their enthusiasm for those devices is only going to intensify in the next two years, particularly as apps become more creative and convenient.

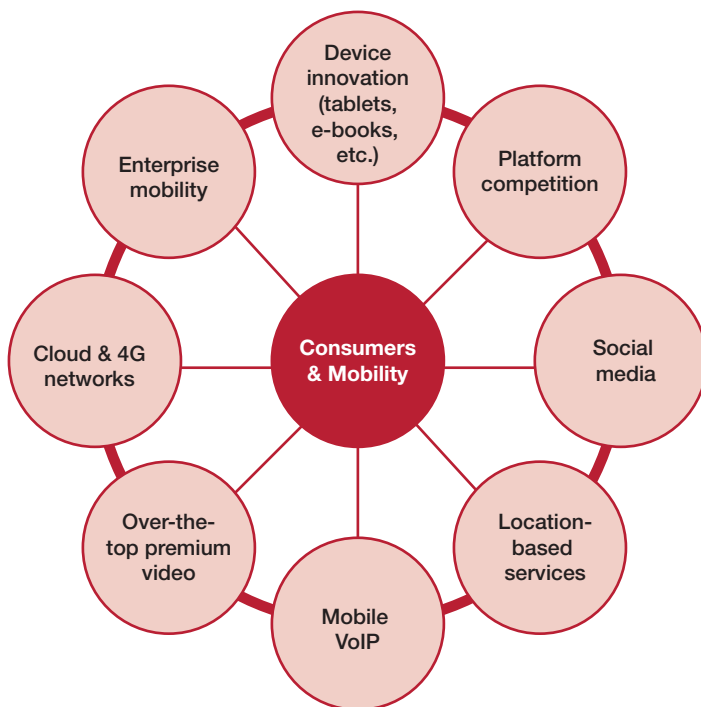
For businesses, this transformation represents a wealth of opportunities. Consumers have an appetite for useful, intuitive apps that make their lives easier, such as location-based apps, and many prefer apps over browser-based access because they're often easier to use. Even tasks that consumers traditionally use their browser to perform—such as purchasing merchandise, managing travel or personal finance, and downloading or streaming videos—are ripe for transition to smartphones, particularly if companies can design apps and functions that make those activities more secure and convenient.

Significantly, consumers expressed a keen interest in using their phones to make purchases, although they want the purchasing process to be easier and more streamlined—more like Starbucks, which allows them to use their phone as a credit card by simply scanning the screen. However, companies must also find a way to allay consumers' myriad concerns about privacy and security.

Clearly, smartphones are here to stay. The challenge for companies is to determine how to use mobility to capture growth and uncover new forms of competitive advantage. To help our clients address this, PwC used a combination of qualitative and quantitative approaches to gain consumer insights on three critical questions listed on the next page.

1. How will consumer preferences and behaviors continue to evolve around popular smartphone-based activities?
2. What business challenges will shape and influence the rate of growth for smartphone-based activities over the next one to two years?
3. Which early-stage activities seem best positioned for growth over the next one to two years?

Technology drivers for future state of the consumer-led mobile transformation



II. Key findings

How will consumer preferences and behaviors related to smartphones evolve?

1. Consumer enthusiasm toward smartphones (and their reliance on the devices) will continue to strengthen.

- Most smartphone owners believe there is virtually limitless potential for what the device can do, a perception enhanced by the hundreds of thousands of available apps, which facilitate the functionality and value of the smartphone.
- “I rarely get my computer out, unless I need to write a long email... I just use my phone so much. It’s just easier to Google something on my phone or check Facebook on my phone, rather than go from my computer...” —Respondent, aged 21–29

We examined fifteen possible smartphone activities, ranging from basic communications to video conferencing to managing healthcare (See Chart 1, p3). **Within the next two years, we expect to see significant growth across all of these activities.**

- Consumers expect that the proliferation of apps will facilitate a variety of these functions (See Chart 2, p3).
- While 98% of smartphone owners already use the device for voice, texting, and email, 46% anticipate that they will increase their usage rates for these basic communication services in the next two years. In fact, 21% expect they will at least double their use of their smartphone for basic communication activities, a trend driven by increased access to the Internet and consequent email and social networking use.
- Only 12% currently purchase merchandise with their smartphones. However, 45% anticipate that they will increase this activity in the next two years, with more than a third of those consumers (16%) expecting to at least double the time spent on this activity, a trend due to their expectation that apps will make the purchasing experience easier.

Chart 1: Benchmarking the state of current consumer smartphone-based activities

Currently engage in activity at least once per week. All 15 activities, ranked by usage frequency

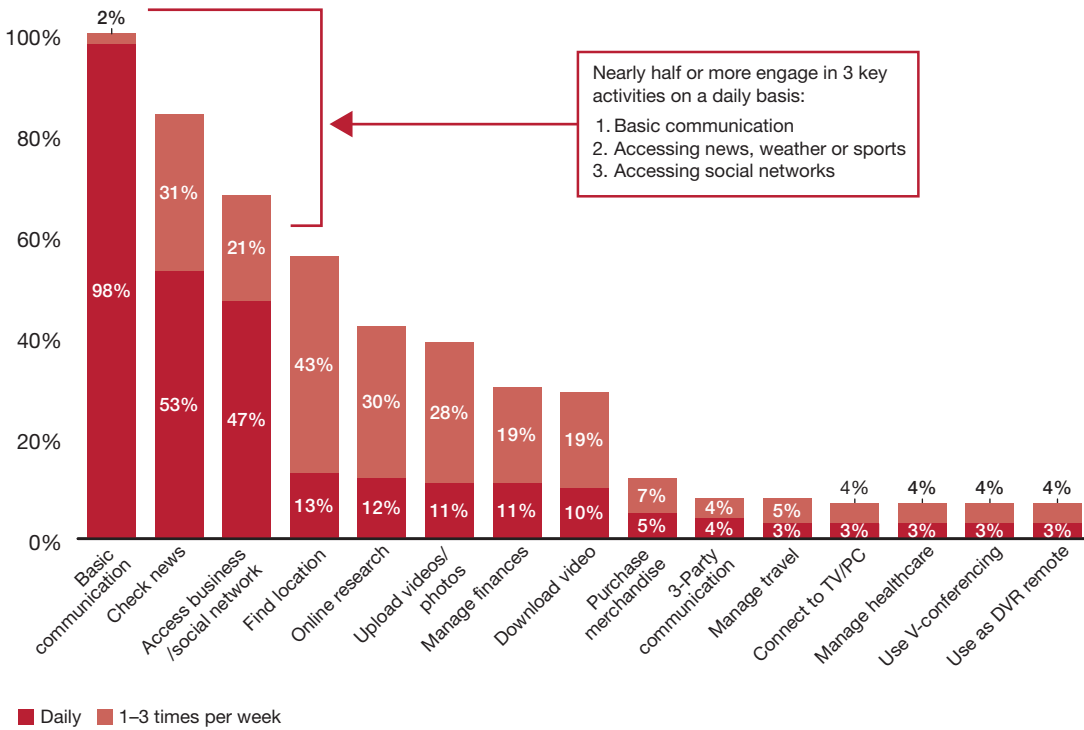
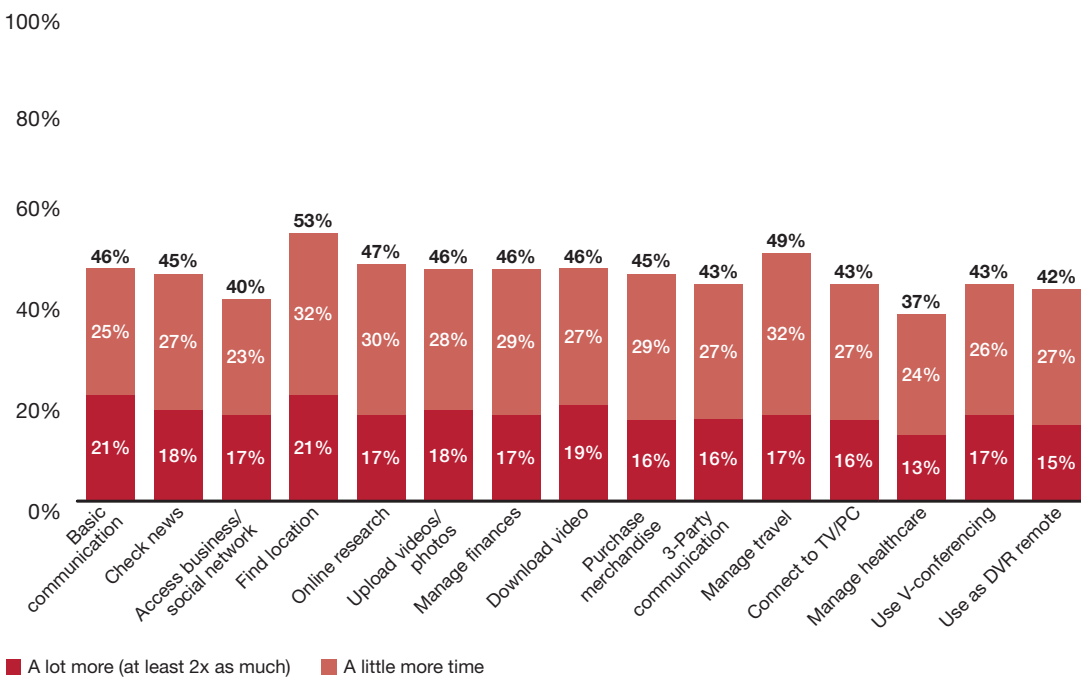


Chart 2: Consumer expectations for increased use of smartphone-based activities

1-2 years future expectation for activity engagement

Top 2 box: A little more or a lot more. All 15 activities, ranked by usage frequency



2. Some smartphone activities, such as accessing social media, will continue to skew toward specific genders or demographics.

Certain activities appear to have “staying power” in terms of demographic skews over the next one to two years (See Charts 3 and 4 below). Those include:

- Checking news, sports, and weather (currently skews male)
- Accessing social media networks (currently skews female)
- Uploading video (currently skews 18–24)
- Managing finances (currently skews 18–24)

Other skews may diminish as consumer behavior, preferences, and attitudes evolve, especially with respect to Gen X and Baby Boomers. The following activities will experience broader adoption beyond the 18–24 year-old age group (See Chart 5, p5):

- Finding a location/using a GPS (currently skews 18–24)
- Accessing online research (currently skews 18–24)
- Downloading/streaming video (currently skews male, 18–24)

Certain activities that currently appeal only to early adopters demonstrate a broad male skew that is likely to concentrate in the 18–24 demographic in the next year or two:

- Using mobile video conferencing
- Connecting to a TV/PC
- Use as a DVR remote

Chart 3: Gender skews with staying power

Skews with staying power for the next 2 years

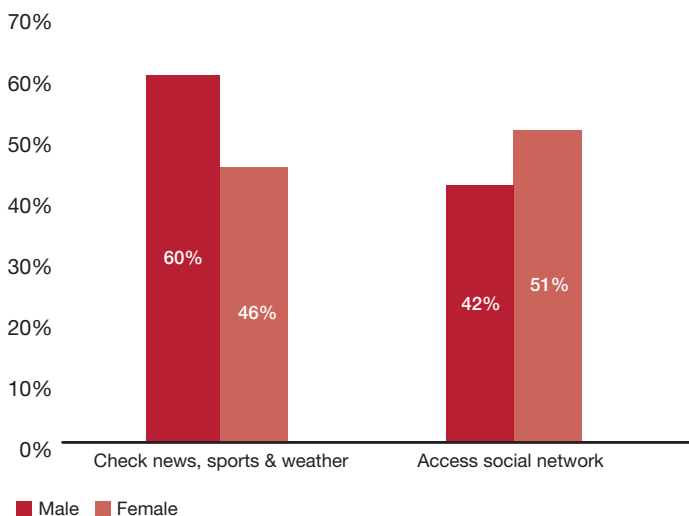


Chart 4: Demographic skews with staying power

Skews with staying power for the next 2 years

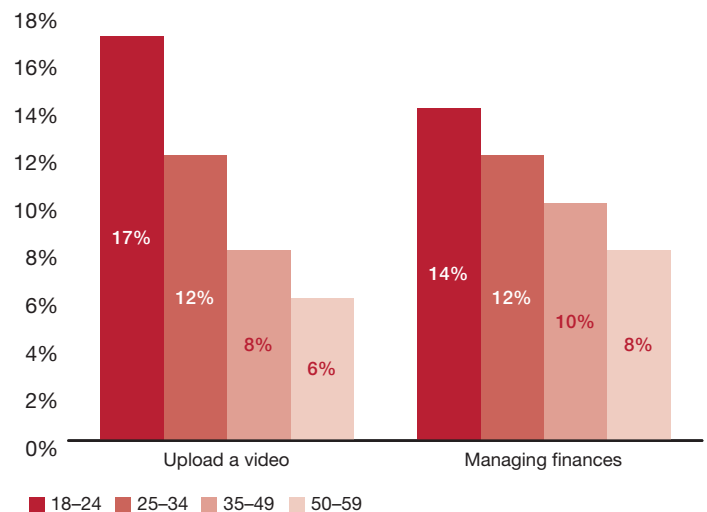
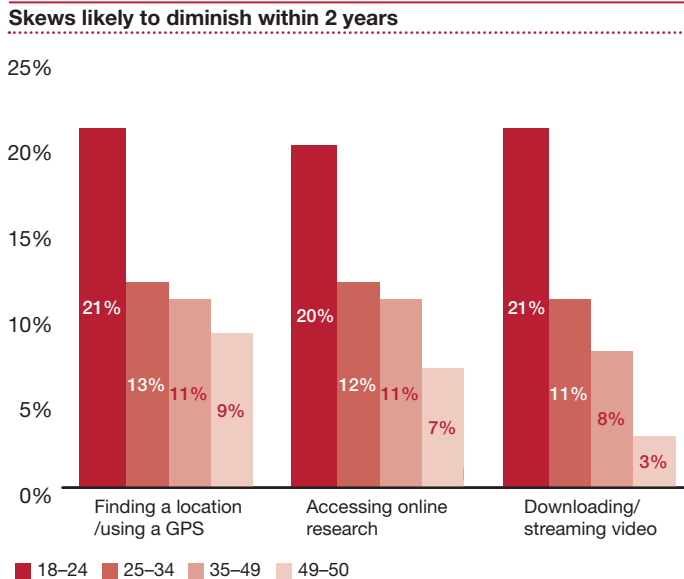


Chart 5: Current skews more likely to diminish in one to two years, moving to a broader appeal



3. Location-based services appear poised for growth

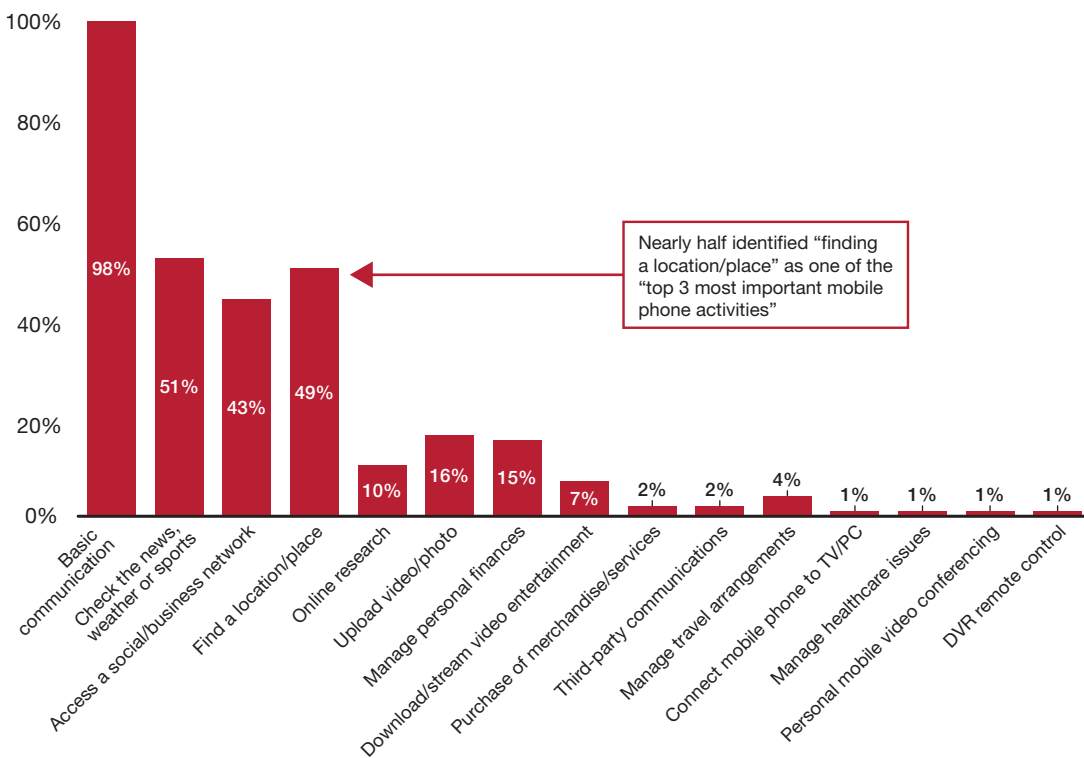
Smartphones are moving beyond the ability to simply provide directions. Some examples of current apps include Yelp!, Fandango, and Urbanspoon. These, amongst other apps, provide consumers with recommendations for where to go and what to do. Interestingly, smartphone users seem willing to forgo some privacy concerns in return for the **right value proposition**.

- Consumers, especially in younger demographics, increasingly use this technology.
 - More than half (56%) use their device at least weekly to find a location or place
 - Among 18- 24-year-olds, 69% use this feature at least once per week, while 21% use it daily.
- Smartphone users view location-based services as one of the top three most important mobile activities (See Chart 6, p6), ranking it behind “checking the news, weather or sports,” and view it as about half as important as basic communications (voice, email, text).
- Over the next two years, 53% of smartphone consumers believe they will increase their use of location-based services. **No other activity covered in this report measured higher for increases in expected future use.** This represents a huge opportunity for commercial applications, such as foursquare.

Chart 6: Consumer smartphone-based activities considered “top 3 most important”

Top 3 most important mobile phone activities

All 15 activities, ranked by usage frequency



4. Consumers will continue to embrace apps over browser-based access

Today’s most popular activities (other than basic communications) are primarily accessed via apps (See Chart 7, p7).

- Consumers view apps as key drivers to making smartphone functionality quicker, easier, and better
 - “There are more and more apps. There’s an app for everything that you do ... It makes everything easier.”—Respondent, aged 30–45
 - “They are quicker and easier. The only reason I ever use a browser is to Google stuff.”—Respondent, aged 21–29

What business challenges will shape and influence the rate of growth for smartphone-based activities during the next two years?

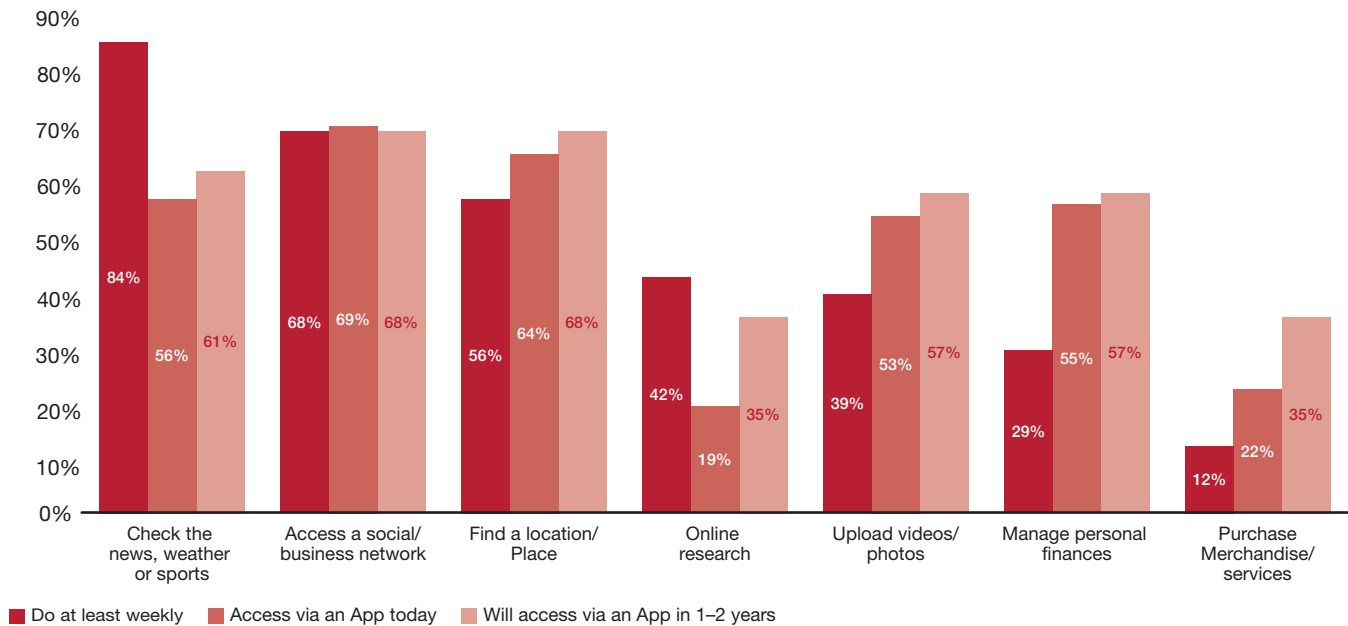
1. M-commerce (mobile commerce) growth hinges on change in consumer attitudes toward security and convenience.

Most consumers (86% in the past year, 42% weekly or more) have used a smartphone to research possible purchases of service and merchandise. But comparatively fewer (52% in past year and only 12% weekly or more) are making purchases on their mobile devices. Qualitative research points to some of the disadvantages of using a smartphone for retail transactions as well as when it can be advantageous:

- **Not secure enough:** Some consumers said they were concerned about the safety or confidentiality of transmitting or storing bank account and credit card data on a smartphone. The survey found a direct correlation between those who are hesitant

Chart 7: Preferring app access for the most popular activities (vs. browser)

Growing popularity of apps



to share personal information (such as credit card numbers) and those who purchase things online less frequently.

- “I will check it out, but I’m not going to buy it on my phone because I’m still not 100% comfortable typing in my credit card number and all that stuff. But I research it on the phone and go home and buy it.”—Respondent, aged 21–29
- “There’s a fine line for security purposes. If you lose your phone, therefore, you’ve lost everything that means anything to you.”—Respondent, aged 21–39
- **Too small a screen:** When it comes to purchasing, consumers complained about difficulties with viewing purchase details and entering a lot of information, including credit card numbers and home addresses.
 - “I’d rather buy on a computer. I feel like I can see everything in front of me more clearly. It’s more comfortable.”—Respondent, aged 21–29
- **The virtual wallet:** Transactions where the smartphone can be used more like a credit card to scan barcodes to investigate and/or pay for items are highly appealing for their ease and convenience—creating a “virtual wallet.”

- “I use the Starbucks mobile app every morning to pay for my coffee. I’m looking forward to seeing more applications like that, where I can store my financial information and instead of having to take a credit card out of my wallet, I can just flash a barcode in front of a scanner at the store and pay for it.”—Respondent, aged 30–45

2. Marketing ROI growth for mobile advertising depends on consumer attitudes toward privacy.

Sharing personal data is still a sensitive issue (See Chart 8, p8). Many consumers are reluctant to share information (likes/dislikes, hobbies, interests, current location, mobile purchase history, home address, etc.) even if it would mean receiving marketing communications customized to personal preferences, such as ads, offers or discounts.

- **Most consumers (61%) were at least “somewhat willing” to share personal information in return for customized marketing messages**, but far fewer (20%) are “extremely or very willing” to do so. The youngest age segment (18–24) is the only one that is slightly more willing to share (31%).
- **More are trusting of the mobile services carrier:** Given the choice, more consumers (30%) say they are more comfortable sharing personal information

with carriers than third-party Internet sources (such as Facebook) or handset manufacturers. However, nearly as many (25%) said they were not comfortable with any of these three. Mobile carrier service companies were the ones trusted by a majority (65%) to share/transfer information to a new handset or across multiple mobile devices.

- **Implications for behavior:** There were four times as many 18-24 year-olds as 50-59 year-olds among the pool of consumers most willing to share their personal information. However, it will be crucial to consider whether there is divergence in terms of their actual behavior. In other words, how likely is it for attitudinal differences across generations to be mitigated by the right value proposition?

Which early-stage activities seem best positioned for growth over the next two years?

1. Never say “never:” Certain activities are ripe for transition to smartphones

Our data showed that many smartphone users have never used their device for activities where corresponding online behavior is already entrenched (See Chart 9, p9).

These activities include:

- purchasing merchandise (46%),
- managing travel (41%),
- managing personal finances (38%)
- downloading/streaming video entertainment (31%)

While challenges related to convenience, security and privacy could be driving the high percentage of “nevers” for these activities, directional insights from our qualitative data imply that increased usability—facilitated by business model innovation and better use of mobile app design and development—could go far to overcome such concerns.

- “On [travel websites]... You have to click on so many little things. I have to get my finger right on the little link to go to the day or whatever. So, nine times out of ten I’ll wait and get on my computer to do it when I get home.”— Respondent, aged 21–29

Chart 8: Willingness to share personal information in exchange for customized marketing information

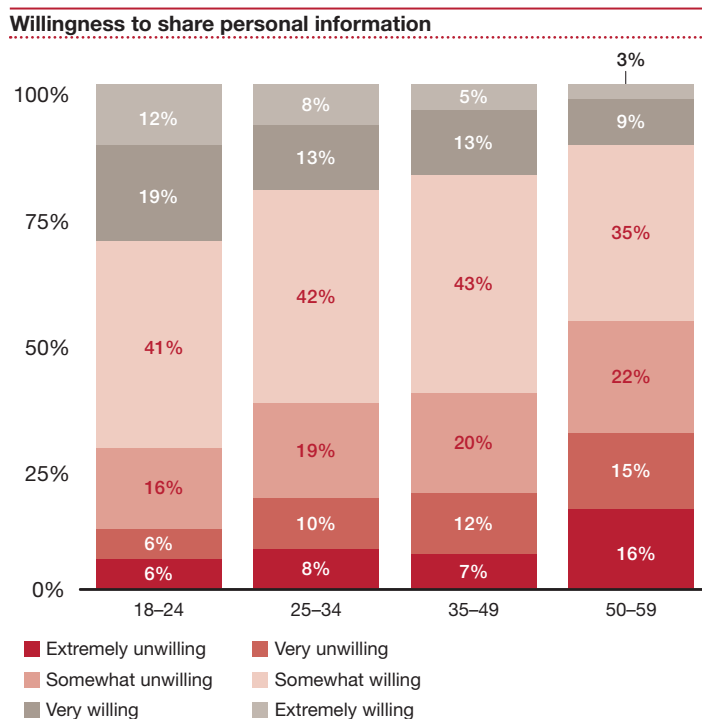
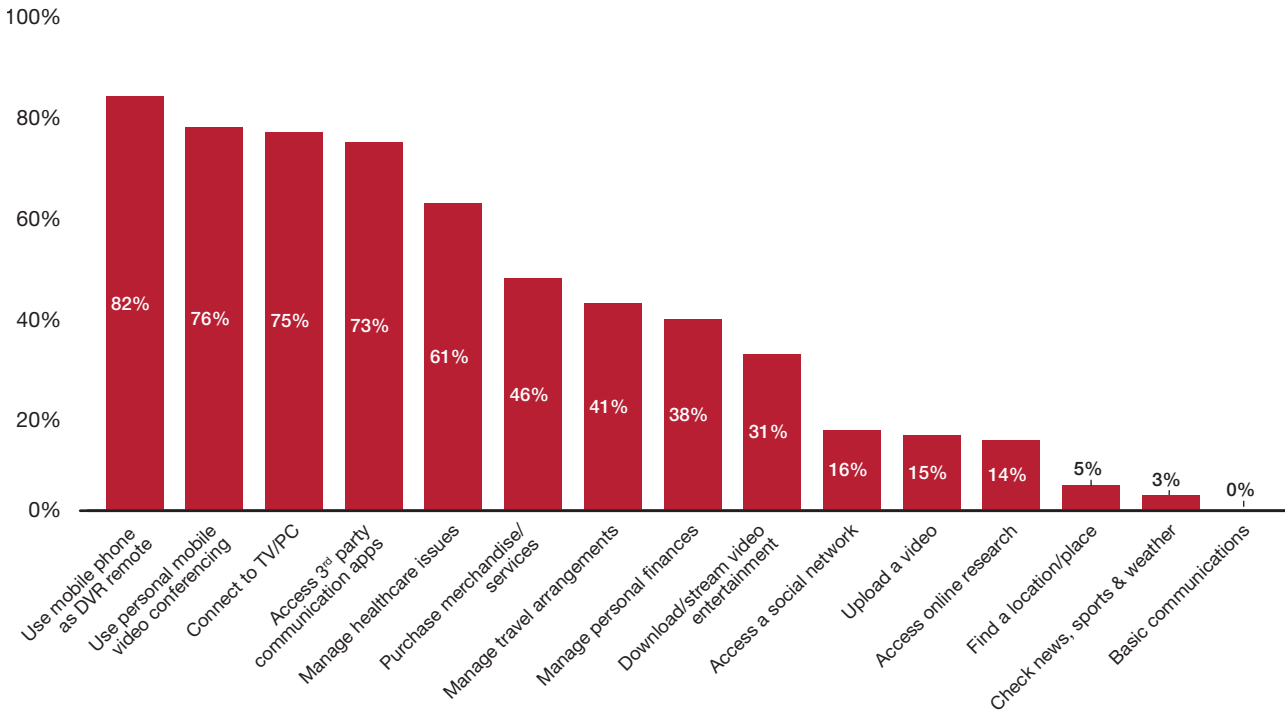


Chart 9: State of current consumer smartphone-based activities: “never” responses

Top 3 most important mobile phone activities

All 15 activities, ranked by usage frequency



III. Implications to your business

How can you use mobility to capture growth and uncover new forms of competitive advantage over the next one to two years?

1. Certain activities are ripe for transition to smartphones.

Consumers say they rarely use their devices to purchase merchandise, manage travel, manage personal finance, or download/stream videos—partially because of security concerns, but primarily because existing apps are cumbersome. Companies that make these tasks easier and more secure through better apps and functions may be able to boost activity in these areas.

2. Leverage location-based services and sustainable skews to boost advertising and marketing ROI.

- When combined with location-based information, user recommendations and word-of-mouth have become very powerful drivers of consumer behavior. Create strategies that will boost

recommendations through “check-ins” and positive consumer comments.

- Use the power of smartphone functionality and apps to speed the transition from consideration to purchase through the integration of single sign-on (e.g., via traditional social media sites), barcode scans, and one-click purchasing.

3. Integrate mobile apps into the broader online, multi-screen mix to enhance the customer experience.

- Consumers are moving toward a new normal of multiple screens. The smartphone creates a customer experience of “bridging activities” that go across both browser-based and app-based connectivity. To the extent that your smartphone apps can reduce complexity and increase convenience, consumers can be expected to welcome them.

4. Security and reliable data management are highly prized by consumers. Build an effective approach to mitigating customer-related data and identity theft risk in the mobile environment.

- The shift from PC to smartphone-based management of key activities, such as managing personal finances and healthcare issues, remains critically dependent on the ability to deliver secure data management and protection. Building a competitive advantage and capturing growth in the mobile environment requires that the organization's security strategy extends fully into the mobile environment; it needs to provide end-to-end safeguards for customer profile data and transactions.
- Consider potential collaborative strategies with mobile carriers to leverage both their brand and their core data management capabilities. Our survey showed that consumers trust mobile carriers more than other organizations for sharing/transferring their personal information to a new handset or across multiple mobile devices.

For more information on how digital transformation is shaping the entertainment and media industries, please contact one of our specialists:

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Center for Technology and Innovation:

<http://www.pwc.com/us/en/technology-innovation-center/publications.jhtml>

Consumer Intelligence Series:

<http://www.pwc.com/consumerintelligenceseries>

2010 North American Wireless Survey: <http://www.pwc.com/us/en/industry/communications/publications/2010-north-american-wireless-industry-survey.jhtml>