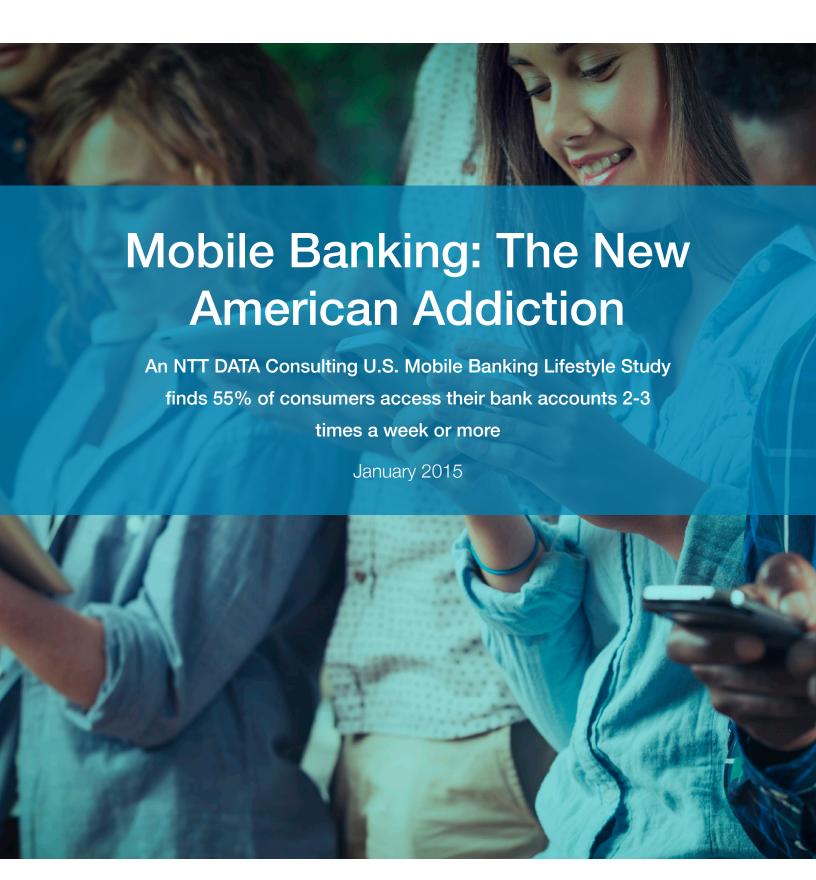
FINANCIAL SERVICES | DIGITAL PRACTICE





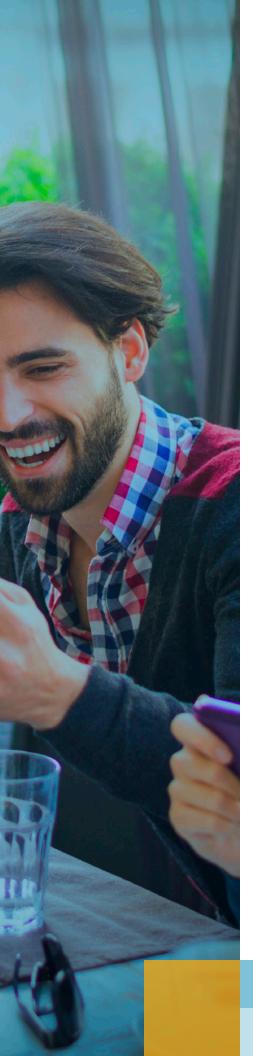


Table of Contents

Introduction	3
America's Addiction to Mobile Banking	5
What's Driving Mobile Banking?	6
The New Device Dynamic	7
There's a Device for That	S
Customers Prefer a Simplified Device Lifestyle	11
The Phablet Phenomenon	12
Wearable Technology: Hype or Hope?	13
Implications for Financial Institutions	14
Conclusion	15
Research Methodology and Demographics	17
Sources	18
About NTT DATA Consulting	19

Abstract

Mobile banking is hyper-accelerating. According to NTT DATA Consulting's U.S. Mobile Banking Lifestyle Study, more than half of U.S. consumers are using mobile banking more often than two years ago, and conducting more transactions while they are logged in.

NTT DATA Consulting surveyed 1,005 U.S. consumers online and conducted qualitative phone interviews with executives at the top 20 U.S. financial institutions to understand what is driving mobile banking growth and how the changing size and shape of mobile devices (the "form factor") will influence the way Americans do their banking in the 21st century.

Introduction

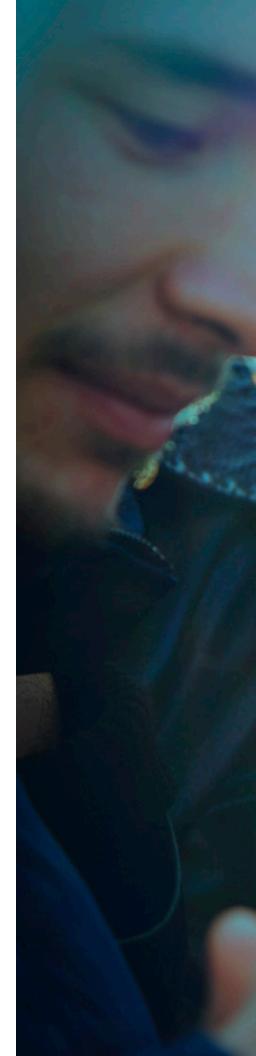
Mobile banking is hyper-accelerating. According to NTT DATA Consulting's U.S. Mobile Banking Lifestyle Study, more than half of U.S. consumers are using mobile banking more often than two years ago, and conducting more transactions while they are logged in.

NTT DATA Consulting surveyed 1,005 U.S. consumers online and conducted qualitative phone interviews with executives at the top 20 U.S. financial institutions to understand what is driving mobile banking growth and how the changing size and shape of mobile devices (the "form factor") will influence the way Americans do their banking in the 21st century.

NTT DATA Consulting's research focused on four device types – laptops, tablets, phablets* and smartphones. These four device types comprise virtually all consumer interaction with their banks online. Desktop computers were not included in our research because of their declining usage, nor were wearable devices because of their as yet unproven role in financial services. However, the survey did ask questions on wearable technology, which led to noteworthy findings discussed on page 13.

NTT DATA Consulting's analysis revealed that users have an appetite for managing their finances across multiple devices, and they expect a high degree of consistency in features and functions across the platforms that they use. With most banks aspiring to provide a digital omni-channel customer experience these days, NTT DATA Consulting's research reinforces the importance of managing customer experience consistently in an environment characterized by device complexity.

* For the study, NTT DATA Consulting defined a phablet as a smartphone with five- to seven-inch diagonal screen size, such as the Galaxy Note 4 and the iPhone 6 Plus.

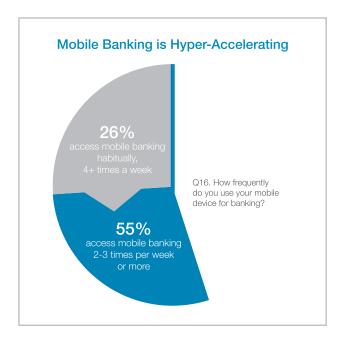




American's Addiction to Mobile Banking

"Mobile moments" are part of our everyday lives.

Americans are increasingly wed to their mobile devices as they text, tweet, email and click through news feeds. In fact, the average American smartphone user checks his/her phone 110 times a day¹. As Americans continue to adopt technology that enables them to be online



from virtually any location, this number promises to climb.

Checking
bank accounts
online is
clearly
becoming a
part of many
Americans'
mobile
moments.
NTT DATA
Consulting's
research
found that
55% of

Americans access their accounts via mobile banking 2-3 times per week and, of that number, a full 26% use mobile banking habitually, logging on 4 or more times per week. This group of habitual users is of particular relevance to banks, as they not only use mobile banking more often, they also spend more time doing it.

For banks, opportunities arise from this trend. Banks are increasingly able to engage with their customers whenever and through whatever device their customers choose. As customers spend more time on mobile banking, banks must leverage the platform to increase loyalty, enhance brand image and continuously improve customer experience and satisfaction.

What's Driving Mobile Banking?

What factors contribute to the likelihood that customers will use mobile banking? Conversely, what may repel users from using mobile banking? NTT DATA Consulting's study determined that there are three factors that make it more likely for consumers to engage in mobile banking:

- 1. Ease of use
- 2. Ability to make payments
- 3. Better features

The maxim goes that you only have one chance to make a first impression. This is especially true in mobile apps. If a mobile app is poorly designed, not intuitive and/or offers an ineffective feature set, users will not log on a second time. In many cases, users will delete an app that provided a negative first experience.

Mobile banking customers are highly sensitive to design that focuses on ease and efficiency. In fact, more than 60% of respondents declared that they were much more likely to use mobile banking when it is easy to use and offers features that make their lives easier. Outside of features, functionality - specifically the ability to make payments - is driving mobile banking.

Do the following factors make you more or less likely to use mobile banking?

	Less Likely	Neutral	More Likely
Ease of Use	4%	26%	72%
Ability to Make Payments	7%	30%	65%
Better Features	4%	32%	65%

Q19. Compared to two years ago, do the following factors make you more or less likely to use mobile banking? (1-much less likely, 5-neutral,10-much more likely)

Habitual mobile banking users – those who access their accounts 4+ times per week – have the greatest focus on usability. Virtually all of the habitual users in NTT DATA Consulting's survey told us that they are more likely to do mobile banking when features and functions are easy to use. Conversely, habitual users can be expected to disengage quickly from a mobile banking platform that is difficult to use.

As banks increase focus on the mobile environment, their success will depend on the ability to provide a simple, intuitive and useful customer experience.

A mobile app that is hard to use will only set a bank up for failure.

The New Device Dynamic

Features and ease of use aren't the only drivers of growth in mobile banking. When survey respondents were asked, "What devices do you plan to purchase in the next 24 months?" the smartphone was by far the most popular choice, with 84% of respondents expecting to buy a smartphone in the next two years.

The devices consumers are buying with mobile banking in mind are also helping to shape the new landscape. Survey participants were also asked, "Which of the following devices do you expect to be using for mobile banking in 24 months?" The results in the chart on page 8 indicate that we are approaching a period of significant change.

What these percentages reinforce is the decisive shift from browser-based banking to mobile devices/apps.

Laptop - Still Relevant

Laptop use, which currently enjoys a prominent place in the respondents' device landscape at 84% for mobile banking usage, will go down slightly. It is the only device type that showed a reduction and NTT DATA Consulting predicts that laptop use will remain flat over the next two years.

Smartphone — Front Runner

The use of smartphones for mobile banking will

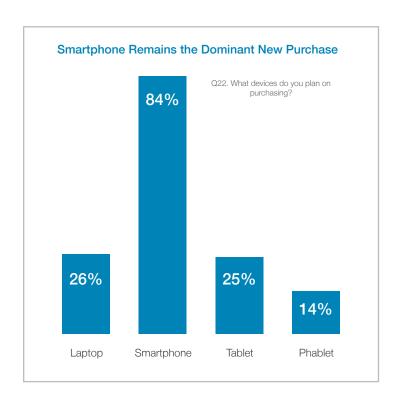
increase by about 20% in the next two years. When asked which device consumers will purchase in the next 24 months, more than 80% of respondents stated their intent to buy a smartphone. This was the highest rate of anticipated purchase and shows the smartphone as the preferred form factor.

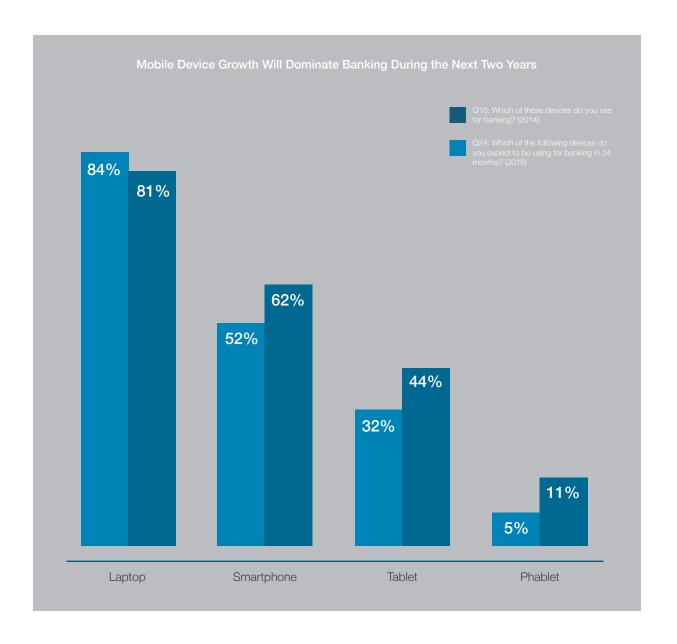
Tablet — Not a Contender

While tablet use will increase over the next two years, fewer than 50% of respondents plan to use a tablet for mobile banking. Today, less than a third of consumers use their tablet for mobile banking. NTT DATA Consulting believes that tablets are increasingly and primarily used as media consumption devices, with users watching more Netflix and Hulu on their tablets than doing mobile banking.

Phablets — Next Big Thing

Use of phablets for mobile banking will see the most profound increase in the next two years. Using a phablet for mobile banking will more than double, cresting at 11% by 2016. While the growth rate is impressive, the percentages for phablets are still low. With the release of the Samsung Note series in 2012, and iPhone 6-Plus in 2014, NTT DATA Consulting believes phablets will grow rapidly in market share.





There's A Device For That

Bank customers are expanding the number of banking activities that they conduct across their devices. No single device is used for a particular mobile banking activity. Users increasingly expect to conduct the transaction of their choice on the device of their choice whenever they want. Because of these expectations, it is essential for banks to assess their progress toward building seamless customer experience that transcends both channel and device. Customers

increasingly expect to be able to start in one place and finish in another when it comes to managing their finances online.

High frequency activities

On the whole, mobile users log on, review their balances, move their money, look at recent activity and then logout. It is imperative that banks get these table stakes transactions right or face the risk of users becoming disengaged and looking elsewhere for a more effective mobile banking platform.

Gaining Popularity

Although these transactions are less frequently used, consumers have an increasing expectation to receive notifications and alerts, fill out applications for new products and services and perform an eSignature.

Today 70% of users are leveraging the notification and alerts features offered from their banks and they exhibit no preference on which device they receive them.

Users clearly want to receive their notifications and alerts on the device that they have with them at that moment, which ties back to the need for digital omnichannel.

Less Common

Applying for a mortgage or a brokerage account are the least-used features from the survey. This is not because these features are poorly-designed, but they are transactions conducted only a few times during the average American's lifetime. When you look closer at the preferred devices for these transactions, the laptop

is the dominant device, but mobile does have a role. The norm for users is to default to a laptop for the often intensive data entry at the front end of a mortgage or brokerage application, then move the follow-on conversation regarding clarifications and updates to a mobile environment.

Quintessentially Mobile

Depositing checks with mobile devices is a predominantly mobile transaction. Our research found that more than 60% of smartphone and phablet users are using their mobile device to deposit checks. This has been a significant development for individuals and small business owners, enabling a level of convenience that was impossible only a few years ago. Consumers do not use laptops or tablets for this transaction to nearly the same frequency that they use mobile, most likely because of the picture taking complexity of other form-factors.

What Are Mobile Banking Customers Doing With All Of These Devices?

Top 4 most frequent mobile banking activities in America:



viewing balances



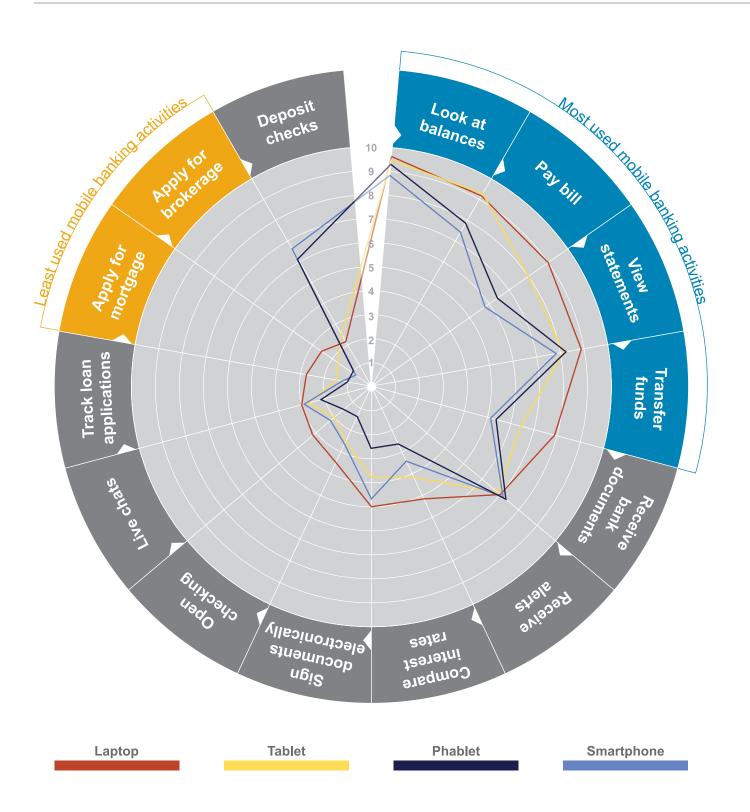
transferring funds



reviewing transaction history



paying bills



Despite Multiple Device Ownership, Customers Would Prefer a Simplified Device Lifestyle

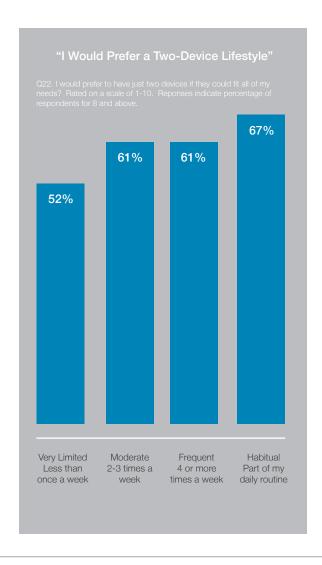
NTT DATA Consulting's research shows that the majority of Americans today have a three device lifestyle: very often this is a laptop, a tablet and a smartphone. Despite the fact that most users have three devices and anticipate the degree of complexity staying intact or even increasing, NTT DATA Consulting sees a pent-up desire for greater simplicity. Our study findings indicate that more than half of respondents (57%) would strongly prefer two devices on which to manage their personal and professional lives, but don't see how to get there at this time.

Are phablets the answer?

As users crave greater simplicity in the number of devices they use, it is possible that the phablet may be part of the solution. Phablets are a popular choice for consumers seeking a larger smartphone with a form factor similar to a tablet. Having all your data on a single phablet offers greater convenience and a possible path to a simplified device lifestyle. As phablet sales have increased, there has been a visible reduction in tablets sales. 1 While there is correlation in time across these two trends, any statement around direct causality should be treated as conjecture. At this time, it is not clear if the phablet will unlock the two-device lifestyle that so many want.

"If an alien race swooped down on the planet and forced earthlings to use only a single computer, I'd choose the iPhone 6 Plus. If you're looking for one machine for everything, a phablet like this isn't a bad way to go."

- Farhad Manjoo, New York Times



The Phablet Phenomenon

Whether or not phablets are the key to a more simplified device lifestyle, they certainly have become a phenomenon in America. According to NTT DATA Consulting's research, phablet use for mobile banking will grow by more than 100% percent over the next two years. Additionally, BI Intelligence reports that global phablet shipments will hit 1.5 billion in 2019, a marked increased over prior years.²

NTT DATA Consulting believes that phablets will corner approximately 30% of the mobile device market share by 2020. We also project that tablet use will decline as a device on which to do banking, given that our study found 68% do not prefer to use tablets for banking today.

What does the phablet mean for banks?

The value of a phablet is simple: it offers more screen space on which to manage the customer experience. A phablet not only offers banks more digital real estate for an expanded feature set, it also provides opportunities for promotional offers and marketing initiatives that may have seemed intrusive on a smaller screen.

100%

growth in phablet use for mobile banking over the next 24 months, across all demographics

46%

of Americans are more likely to conduct mobile banking due to larger mobile devices, such as the phablet

1 in 6

U.S. consumers believe mobile banking is an important reason to buy a large screen smartphone/ phablet

2015

2016

Year

2017

2018

SOURCE: NTT DATA Consulting U.S. Mobile Banking Lifestyle Study

2012

2013

2014

2011

2020

2019

Wearable Technology: Hype or Hope?

18%
OF U.S. CONSUMERS
PLAN TO PURCHASE A
WEARABLE DEVICE

What will it take to make wearable technology a success?



ATTRACTIVENESS

53% say it is important for your device to look attractive



NOTIFICATIONS

39% are interested in receiving notifications and alerts



PAYMENTS

30% are comfortable making a payment with a wearable device



82%

of U.S. consumers wouldn't purchase any wearable device



"Wearables are a significant trend in technology, although their utility to financial services remains to be seen. NTT DATA Consulting believes that wearables are a must-watch development in fintech."

- Byl Cameron, Digital Practice Lead

Implications for Financial Institutions

As one senior executive at a top 10 U.S. financial institution explained, "The world we live in is our biggest obstacle." An ever-increasing consumer demand for instant gratification is seeping into every facet of our lives, including how we bank. People have no patience for waiting – for anything – particularly Gen Ys and Millennials who have grown up online.

When a 20-year-old college student requests funds from her parents, she expects to see the money instantly appear in her bank account when she views her account balance on her mobile device. When a mobile app doesn't work the first time, it's likely to be deleted. In mobile technology, as in life, if you don't get it right the first time, you may not get a second chance.

While the increasing consumer appetite for effective digital platforms poses challenges for organizations, the benefits are very real. Recent research from Forrester indicates that companies that invest in digital transformation outperform the S&P index by about 44%.3 This drives home the point that investment in innovation and revenue growth are deeply linked.

The path to digital success

Financial firms are struggling with how to prioritize investments across five platforms that almost all companies have: mobile web, smartphone app, tablet app, secure web and public web. Today, financial institutions assume the need for a certain degree of complexity in their online and mobile environments. But NTT DATA Consulting's research suggests that there are opportunities to simplify online and mobile environments, even when customers use multiple mobile devices.

All of NTT DATA Consulting's recommendations revolve around delivering an excellent user experience through ongoing digital transformation, which is the key success factor for banks in today's rapidly-evolving technology environment.

Don't Abandon the Legacy Online Banking Platform

Rumors of legacy online banking's demise are greatly

exaggerated. Many consumers still have a strong preference to use the laptop as their go-to platform for online banking. Consequently, ongoing rigor in maintaining and expanding the online banking platform is essential to ensuring that customers have a positive and engaging user experience. NTT DATA Consulting believes that a "mobile first" strategy makes sense, but not to the detriment of legacy online banking.

Plan for Larger Devices

NTT DATA Consulting believes financial institutions will have new opportunities to offer features and functions that might be considered undesirable on smaller smartphones. Banks should capitalize on the extra device real estate of a phablet by assessing the opportunities it presents — such as increasing mobile advertising, re-architecting navigation, adding new functionality and much more.

As the expectations around user experience rise in the coming years, so too will expectations around efficient and effective use of the increased screen size — by consumers and bankers. Sales and marketing opportunities may be one of the biggest beneficiaries of this interconnected trend. What once appeared cluttered and intrusive on a smaller smartphone screen may now look clean and useful on the screen of a larger smartphone or a phablet. All financial services firms stand to gain from re-evaluating their customer experience in the context of form factor growth trends.

The banks that move first to leverage the extra space offered by phablets/larger smartphones will be better-positioned to increase their share of wallet. That means usability studies to investigate different customer preferences and behaviors on larger smartphones should be kicked off now.

Pursue a Digital Omni-Channel

One of the key user experience themes that financial institutions are wrestling with is how to manage a seamless experience across the multiple channels and varied devices that characterize the modern banking customer. The main question is this: What simplification and streamlining opportunities would enhance the mobile customer experience?

NTT DATA Consulting believes that the answer to this

important question may involve building a holistic online and mobile customer environment. Most customers who use their bank's public website, secure website and smartphone app don't think they have used three different systems. Customers look at all three as a single process – interacting with their money. One way to move toward an environment where the "many" become "one" is to look at a digital omni-channel. A digital omni-channel simply means developing all of your online and mobile applications to work together. It produces an environment in which users can start an application in one platform and then finish it in another. It is one in which expected features like secure messaging and alerts are accessed from any and every platform a bank offers.

It's important to emphasize that NTT DATA Consulting does not believe that a pure digital omni-channel always makes sense. An example of a feature that doesn't need to be on every platform is online check deposit – our data tells us that isn't a sensible investment for laptops. Rather, financial institutions will benefit from identifying the missing pieces of a positive customer experience on each platform, and then work to close those gaps.

Conclusion

Banking has become a central part of many American consumers' mobile moments – those moments throughout the day when mobile users check email, Facebook, Twitter and also manage their finances.

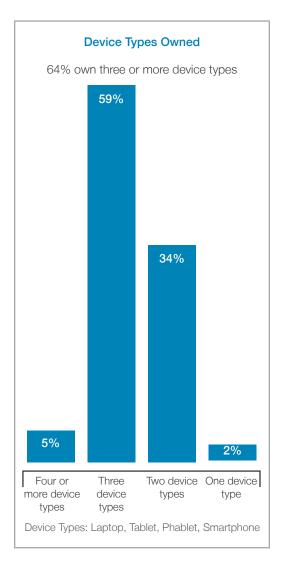
NTT DATA Consulting's study shows that Americans are addicted to mobile banking as never before, and that bank customers want to conduct their banking activities across all of the devices they own: laptop, smartphone, phablet and tablet. They expect to be able to do the transaction of their choice at the time of their choice and on the device of their choice. In such an environment, it is imperative that financial services firms focus on customer experience as never before. Delivering an environment that is easy to use and seamlessly integrated across channels will position firms for success.

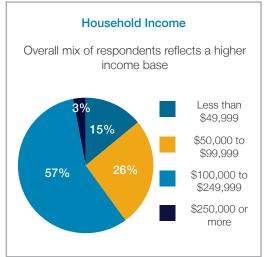


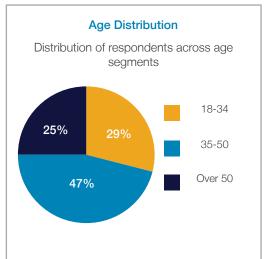


Research Methodology and Demographics

- 1,005 survey responses
- All respondents live in the U.S. or are U.S. citizens
- The survey was conducted online
- Participants were recruited from an online research panel
- Participants were required to be over 18 years of age
- Survey gender was representative of the U.S. population (48% male, 52% female)







Sources

- Reisinger, Don. (2 February 2015). "Down go tablet shipments for the first time ever." CNET. http://www.cnet.com/news/ worldwide-tablet-shipments-fall-for-first-time-ever-in-q4/
- Danova, Tony. (10 July 2014). "The Phablet Phenomenon: Trends and Growth Forecast For the Device That Is Taking Over Mobile." Business Insider. http://www.businessinsider.com/the-phablet-phenomenon-trends-and-growth-forecast-for-the-device-that-is-taking-over-mobile-sai-2014-6
- Lima, Paul (@Paul_Lima). "Companies that invested in digital transformation outperform the S&P by 44% according to #forrester #AdobeSummit. 10 March 2015, 2:30 p.m. Tweet.





About NTT DATA Consulting

NTT DATA Consulting takes an industry-centric approach to business and technology consulting. We seamlessly integrate business strategies and enabling technology to help clients accelerate business-driven transformation and compete in the digital world. NTT DATA Consulting has the unique ability to create endto-end solutions by tapping the entirety of NTT DATA's global technology and business process capabilities. In financial services, our 1,000-plus business consultants and 4,000 technology experts work with 25 of the leading financial institutions in North America. Visit www.nttdata.com/USconsulting to learn more.

About NTT DATA

NTT DATA is a leading business and IT services provider and global innovation partner with 80,000 professionals based in over 40 countries. NTT DATA emphasizes long-term commitment and combines global reach and local intimacy to provide premier professional services, including consulting, digital, managed services, and industry solutions. We're part of NTT Group, one of the world's largest technology services companies, generating more than \$100 billion in annual revenues and partner to 80% of the Fortune 100. Visit www.nttdata.com/americas to learn more.

> www.nttdata.com/usconsulting 704.936.1600

ntt.data.consulting@nttdata.com



@NTTDConsulting



in /NTTDATAConsulting

NTT Data