



Voice assistants – the new glass!



Contents

1. Introduction	3
2. As voice assistants witness uptake, FS firms must adopt too	4
2.1. Voice assistant adoption picks up pace	4
2.2. Increased uptake in retail and e-commerce	5
2.3. The shift in customer behavior	6
2.4. Now is the time for FS firms to chart their voice strategy and journey	7
3. Although voice assistant adoption is slow in FS, some firms identify quick wins	9
3.1. Financial services' innovation challenge	9
3.2. How to identify voice assistant use cases	9
3.3. Potential opportunities	12
4. Devise a strategy for voice-based customer service	13
4.1. The right voice strategy	13
4.2. Understanding the barriers and propelling consumer adoption	14
5. Conclusion	16
References	17
About the Authors	18

1. Introduction

The fast-paced adoption of new technologies, smartphones, and social media is carving out a new digital future. With consumer preferences shifting to a digital paradigm, brands are exploring new ways to digitally drive brand affiliation.

Voice as an interaction channel has become a reality. The release of affordable, voice-enabled devices by tech giants such as Google and Amazon - along with consumer propensity in shopping, payments, etc. - has increased the adoption of voice assistants significantly. Customer adoption of voice assistants globally is expected to reach 1.83 billion by 2021, growing at a rate of 29.4% CAGR.¹ This rapid rise presents a new opportunity for brands to speak with their customer in a completely different way.

Conversations are an essential part of our daily lives. Dialogues help us build interpersonal connections, socialize, and bridge gaps with strangers. The conversational power of voice assistants is a new-found intimacy that offers innovative brands a new channel through which to converse with and listen to their digital customers.

How is the rapid adoption of conversational channels transforming digital commerce? And, what opportunities exist for financial service institutions that embrace this new voice channel?

Read on...

Amazon Alexa, Google Home, Siri, etc. are the foundation of a commerce-bolstering voice ecosystem. Consumers are plugging themselves into the new ecosystem, and brands

have an opportunity to get closer to them. As a result, retail players, automobile giants and other major brands are scouting for voice-as-a-channel use cases. Thus, the ecosystem is growing in three ways: voice assistant providers are increasing the skill set of voice-activated devices, industry players are utilizing these skill sets to create services, and consumers are buying voice assistants and plugging themselves into the ecosystem.

Financial services firms can leverage voice assistants as a *single pane of glass* to both generate new revenue streams and improve customer experience. How? Firms can integrate data and information from various sources, create personalized products and services, and showcase it for customers, via a single tool. Voice assistants allow financial brands to interact with customers using personalized, human-sounding machine-based conversations. It is no wonder a majority of large financial firms have embarked on the voice assistant journey.

Voice as a channel is expanding as the public spends more and more time with personal voice assistants. In the ecosystem of smart devices, financial brands must talk and listen to a new generation of consumers.

Now more than ever, a comprehensive strategy that outlines how to help customers use their preferred channel (voice) to consume financial services is critical to firm success.

¹ Medici, "The Rise of the Voice Payments Ecosystem," Diwakar Mandal, April 16, 2018, <https://gomedici.com/rise-of-voice-payments-ecosystem/>

2. As voice assistants witness uptake, FS firms must adopt too

2.1. Voice assistant adoption picks up pace

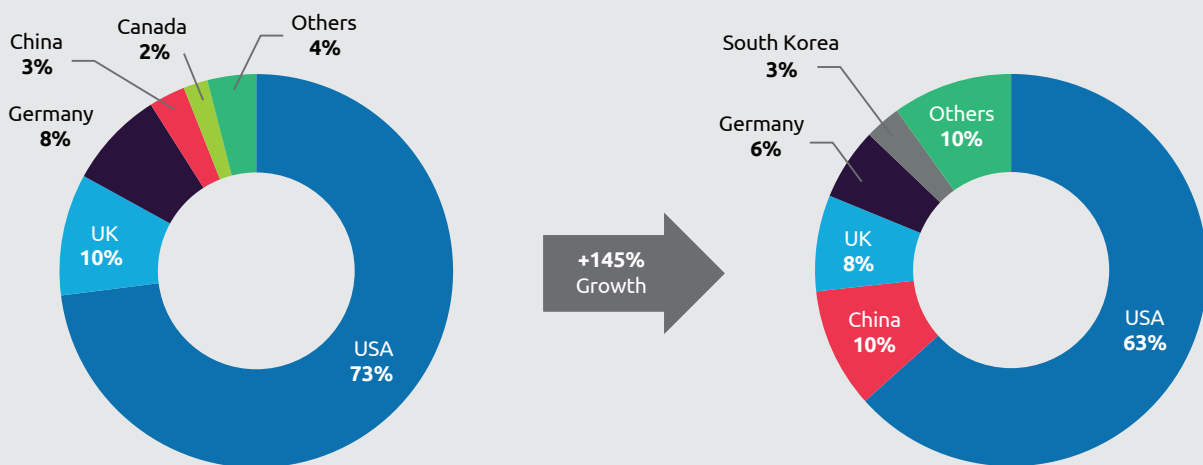
The proliferation of technologies such as artificial intelligence (AI) and an increase in usage of smartphones by customers for voice searches has given rise to AI-based personal assistants.

Apple's Siri, Microsoft's Cortana, and Samsung's Bixby have all been competing for the share of voice, and with the release of devices such as Alexa by Amazon and Google Assistant by Google, the competition has further intensified.

Voice capability adoption grows across geographies

There has been an increase in voice-powered smart speaker adoption across geographies, and the installed base is forecasted to grow by 145% from 40.8 million in 2017 to 100 million in 2018² (Figure 1).

Figure 1: **Smart speakers installed base: Top five countries (%), 2017E-2018F**



Source: Capgemini Financial Services Analysis, 2018; Canals Estimates and Forecasts, Smart Speaker Analysis, June 2018.

The United States is a world leader in smart speaker adoption, with the UK following closely. In the Asia Pacific region, adoption is nascent, but Chinese players such as Alibaba and Xiaomi — realizing the enormous growth potential — have been heavily investing in smart speaker technology.³

Combined with smart speakers and smartphones, voice controls are also expanding across other platforms, including PCs, tablets, connected TVs, cars, and wearables.

This clearly points to digital consumers' natural propensity to interact and do business via voice-activated devices.

Increased adoption of voice-based assistants is expected to give rise to an entirely new channel of customer service and engagement

² Voicebot.ai, "China to Overtake UK and Germany in Smart Speaker Installed Base in 2018," Bret Kinsella, July 10, 2018, <https://voicebot.ai/2018/07/10/china-to-overtake-uk-and-germany-in-smart-speaker-installed-base-in-2018/>

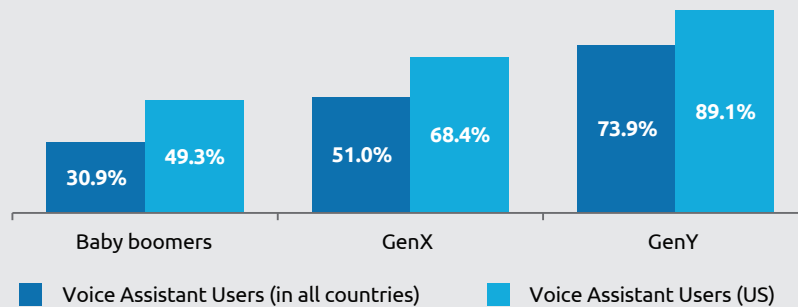
³ Ibid

Customer segments actively using voice assistants

According to the *Conversational Commerce Survey* conducted by Capgemini in the US, UK, France, and Germany, 50.7% of respondents said they use voice assistants.

The survey data indicates that Gen Y (Millennials)⁴ are heavy users of voice technology (Figure 2). Approximately 74% of Gen Y uses it as a new means of commerce for functions such as seeking information and making purchases. Moreover, with Gen Y customers enthusiastically adopting more and more resources, and expected to be one of the most profitable segments soon, voice assistants may be a useful tool to target this segment.

Figure 2: **Adoption of voice assistants – global vs. the US, demographic analysis (%), 2017**



Source: Capgemini Financial Services Analysis, 2018; Capgemini Research Institute, *Conversational Commerce Survey*, October–November 2017, N=5,041 consumers in the US, UK, France, and Germany.

In the United States, along with Gen Y (89.1%), Gen X (68.4%) and Baby Boomers (49.3%) have been the most profitable segments, propelling the mass adoption of voice assistants.

Affluent customers showed a higher adoption of 67.6%, although, with an increase in lower-cost options for these smart speakers, non-affluent customers (45.9%) are gaining ground, as well.

Clearly, digital consumers from all walks of life have a large appetite for voice-activated devices. The ease, intimacy, and affordability of voice assistants are making way into every household. People are ready to embrace voice technology in multiple segments of their day-to-day life.

2.2. Increased uptake in retail and e-commerce

The adoption of voice assistants across geographic regions and demographic segments has started to influence the way customers shop and pay, providing retailers and e-commerce giants with unprecedented opportunities. Around 35% of voice assistant users say they have bought groceries, homecare, and clothes via voice assistants.

Voice shopping sales in the US and the UK are expected to surge from a forecasted US\$2 billion in 2018 to an estimated US\$40 billion-plus in 2022.⁵ This massive 1,900% growth will likely be driven by the increased use of smart speakers at home, such as Amazon's Echo and Google Home.

Amazon's Alexa offers consumers shopping at Amazon.com, exclusive voice deals, also provides them with choice, flexibility, and ease when it comes to purchasing items.⁶ The device offers improved conversational facility, better memory, advanced voice recognition, and an experience that is more akin to natural human interactions.

Google has partnered with Walmart, to offer voice shopping to customers, and this partnership also highlights that the voice assistants provide significant opportunities for retailers to integrate data they receive from voice assistants into their omnichannel offerings.⁷ Along with Walmart, more than 40 large retailers, including Target, Costco, Walgreens, and Home Depot, have partnered with Google to introduce voice-based shopping to consumers.⁸

Not only in retail, but we are also witnessing an impact on other industries too, as we see 34% users have ordered their meal and around 28% have booked an Uber or a taxi service via voice assistants.

4 Gen Y (Millennial) customers are categorized as individuals aged 18 to 31, Gen X represents customers aged 32 to 59, while Baby Boomers represent customers that are aged 60 and older. These groups are mutually exclusive and collectively exhaustive (MECE).

5 *Techcrunch*, "Voice shopping estimated to hit \$40+ billion across U.S. and U.K. by 2022," Sarah Perez, March 2, 2018, <https://techcrunch.com/2018/03/02/voice-shopping-estimated-to-hit-40-billion-across-u-s-and-u-k-by-2022/>

6 *Wirecutter*, "What Is Alexa? What Is the Amazon Echo, and Should You Get One?" Grant Clauser, July 11, 2018, <https://thewirecutter.com/reviews/what-is-alexa-what-is-the-amazon-echo-and-should-you-get-one/>

7 *BBC*, "Walmart and Google to offer voice-enabled shopping," August 23, 2017, <https://www.bbc.com/news/business-41021783>

8 *ZDNet*, "Target partners with Google for voice shopping through Google Express," Natalie Gagliardi, Oct 12, 2017, <https://www.zdnet.com/article/target-partners-with-google-for-voice-shopping-through-google-express/>

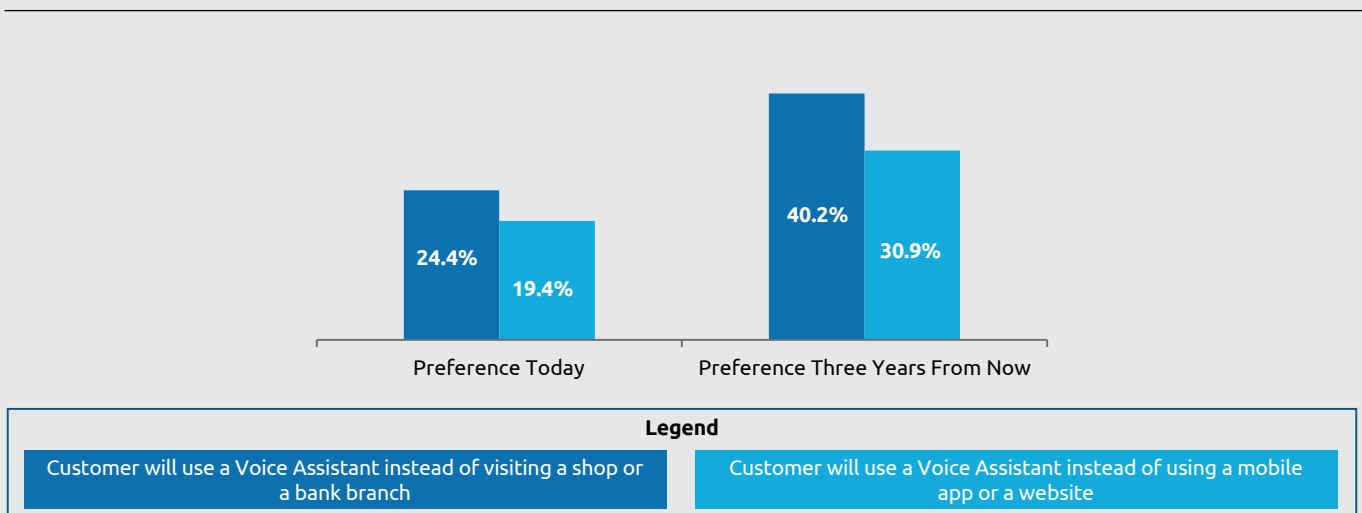
BMW and Ford are integrating Alexa into their cars to let drivers interact with the vehicle regarding the driving environment and to enable on the go access to information.⁹

It is evident that voice assistants are a key player in the growing digital ecosystem. They offer an unparalleled opportunity to build brand intimacy. Brands are strengthening the current digital ecosystem by exploring ways to include voice controls. The digital world is now looking forward to voice-driven commerce in every space.

2.3. The shift in customer behavior

As voice-enabled devices become increasingly popular across industries, so too are customers becoming accustomed to voice-enabled services. Brands are coming closer to customers by nurturing a personal relationship. We are witnessing a shift in consumer sentiments as they place more value on the personal relationships offered via voice assistants. This new-found intimacy is driving brand preference and affiliation.

Figure 3: **Customer use of voice assistants: today vs. three years from now (%), 2018**



Source: Capgemini Financial Services Analysis, 2018; Capgemini Research Institute, Conversational Commerce Survey, October–November 2017, N=5,041 consumers in the US, UK, France, and Germany.

Voice assistants are becoming a part of customers' daily lives

In a survey conducted by IFTTT, 60% of users said that they use their assistants more than four times a day, and around 29% users use it more than seven times a day.¹⁰

As shown in Figure 3, customer use of voice assistants is increasing; around 19.4% of users say they will use voice assistants instead of a mobile app or website, and this use will grow to 30.9% in the next three years.

Thanks to the convenience and ease of use offered by voice assistants, users are slowly switching from other devices to voice assistants for their daily tasks, and the average time spent on voice assistants is rising drastically.

Change in customer spending habits

With the use of voice assistants, there is a clear shift in customer spending patterns. Users of voice assistants spend around 3% of their consumer expenditure through voice assistants, but this outlay is expected to rise to 18% over the next three years, which may reduce the share of physical stores (45%) and websites (37%).

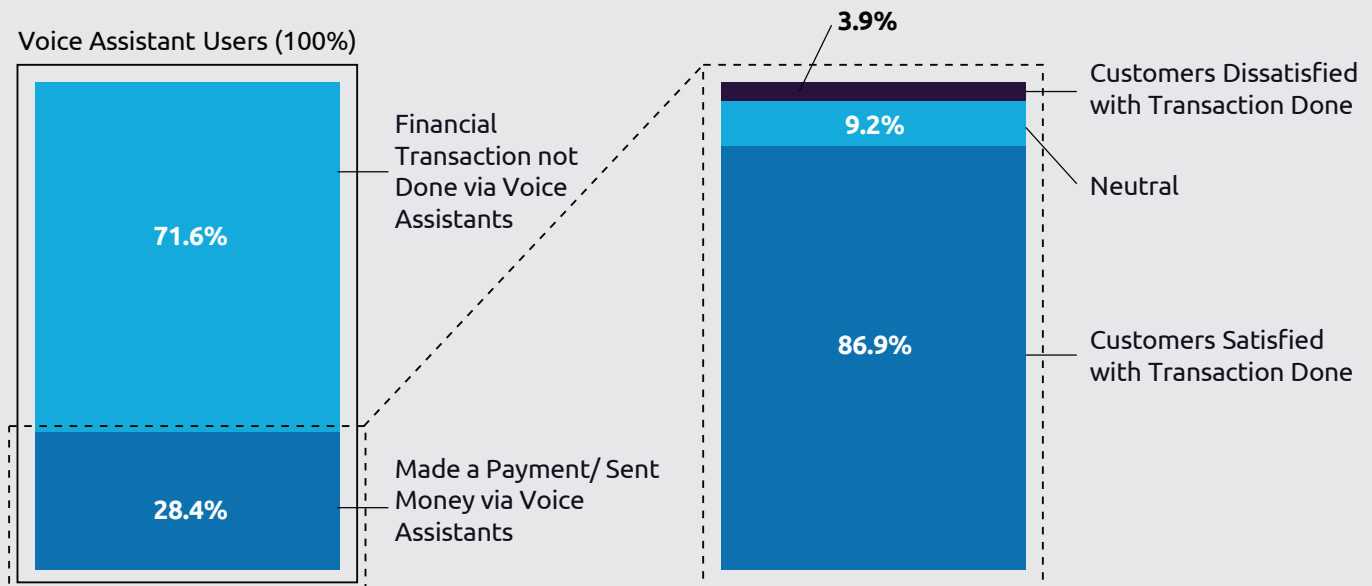
Around 28.4% of voice assistant users have made a payment or sent money through voice assistants. A substantial 86.9% of them say they are satisfied with the transaction (Figure 4).

Brands may generate more business and potentially significant financial gain, as consumers are willing to spend 5% more with a brand following a good experience with a voice assistant.

9 The Verge, "BMW is integrating Alexa into its cars in 2018," Casey Newton, September 27, 2017, <https://www.theverge.com/2017/9/27/16372566/bmw-alexa-integration-2018>

10 IFTTT, "2017 Voice assistant trends," July 12, 2017, <https://ifttt.com/blog/2017/07/voice-assistant-trends-infographic>

Figure 4: **Customers satisfied with transaction done via voice assistant (%), 2018**



Source: Capgemini Financial Services Analysis, 2018; Capgemini Research Institute, Conversational Commerce Survey, October–November 2017, N=5,041 consumers in the US, UK, France, and Germany.

2.4. Now is the time for FS firms to chart their voice strategy and journey

Firms such as Alphabet, Netflix, and Amazon have been using emerging technologies to target today's newer-generation customers. They have changed the way customers shop, relax, and socialize. Digital customers now expect FS firms to provide the same kind of personalization and experience offered by these new-age online platforms and e-commerce platforms.

Around 44% of voice assistant users say they are interested in using voice assistants for banking services (sending money to people, paying credit card bills). Customers expect voice assistants to resolve their queries and issues as a relationship manager might (Figure 5).

With high customer demand for voice-based interactions in FS and a growing voice assistant ecosystem across industries, it makes strategic sense for the financial services industry to leverage this opportunity.

Automobiles now feature voice-assisted technology. Because it is available on customer mobile devices and is used for ordering meals and booking cabs, more customer time is spent on it. FS firms need to be present wherever customers spend time, and as retailers and automobile manufacturers integrate voice assistants and the ecosystem grows, FS firms should make sure they are a part of the ecosystem.

FS firms should be cognizant of changing customer preferences and quickly address these new requirements. Now is the time for financial services firms to chart a comprehensive voice strategy and to decide how to use voice assistants as an engagement channel, how to enable payment and transactions, and how to provide customer support and advisory-related services to customers via voice.

Consumers are willing to spend 5% more with a brand following a good experience with a voice assistant.

Figure 5: **Areas in which customers would prefer that voice assistants replace humans - today vs. three years from now (%)**, 2018



Source: Capgemini Financial Services Analysis, 2018; Capgemini Research Institute, Conversational Commerce Survey, October–November 2017, N=5,041 consumers in the US, UK, France, and Germany.

Successful integration in other industries – coupled with increasing consumer appetite for voice-enabled applications and devices – points to a clear opportunity for FS firms.

3. Although voice assistant adoption is slow in FS, some firms identify quick wins

Compared with other industries, financial services has been slow to adopt voice assistant technology. Except for a few large organizations, most firms have yet to embark on the journey.

3.1. Financial services' innovation challenge

Across the financial services industry, firms face challenges such as regulations, cybersecurity, and stakeholder buy-in for significant investments, which hamper innovation and impact time-to-market for products and services.

Regulatory compliance is a primary focus for financial institutions because adherence is not an option. Firms are investing vast amounts of money and resources to remain compliant with a growing array of regulations.

FS firms handle customers' highly-confidential financial and personal data which keeps susceptibility to breaches and cyber attacks top of mind. They must plug all vulnerable entry points to ensure maximum security.

To venture into technologies such as artificial intelligence (AI), advanced data analytics, and real-time data processing, FS executives are challenged to quantify specific benefits, establish return on investment (ROI), and evaluate potential risks. A sound business case must convince stakeholders that a significant investment is worth making and risks are worth taking. Moreover, finding this right talent to deploy these new technologies may be challenging, as skilled resources are not widely available within the industry.

Although financial services firms face challenges, they need to innovate and experiment with new technologies to create a sustainable business that meets the demands of a competitive future.

FS firms may have had a slow start in adopting voice assistants, but they will need to identify opportunity areas and build a sound, comprehensive strategy to realize voice-as-a-channel goals.

3.2. How to identify voice assistant use cases

Customers are making voice-based assistants an integral part of their daily lives, and with more industries adopting voice assistants, FS firms will need to start integrating these voice-based technologies into their customer acquisition and retention strategies, marketing, sales, and customer experience strategies.

Leveraging voice assistants for internal operations

FS firms can leverage voice assistants for their internal operations to increase the productivity and efficiency of their employees and sales executives.

Intranet-based voice assistants can act as a self-service portal that enables banks/insurance internal employees to raise issues, tickets, and consult for decisions and process support.

Voice assistants can support internal communication by gathering employee insights from different branches and upon analyzing the data collected it can enable the managers/stakeholders to take more informed and innovative steps.

Additionally, voice assistants can provide banks/insurance sales personnel with detailed product information and clients' 360-degree profile, allowing the right products to be pitched in a personalized way. Voice assistants can support sales executives in setting meetings and schedules, and in tasks such as filling out forms and information validation.

Insurer **New York Life** is rolling out *Alexa* features to its 12,000 agents, enabling them to get quick details on policies and prepare for meetings. Agents can rely on *Alexa* to figure out details such as the number of policies and policy value held by a customer or to update them on the latest products and services the insurance firm is offering.¹¹

UBS is piloting intelligent virtual assistant *Amelia* on its back-office employees. *Amelia* is working with client sales assistants responsible for moving funds from deceased account holders to beneficiaries and is helping staff confirm information and fill out forms. UBS began an initial U.S. pilot with a dozen client sales assistants and planned to get the application up and running for its client sales assistants around the world this year. UBS is also running another *Amelia* pilot with the bank's internal tech desk in the U.K.¹²

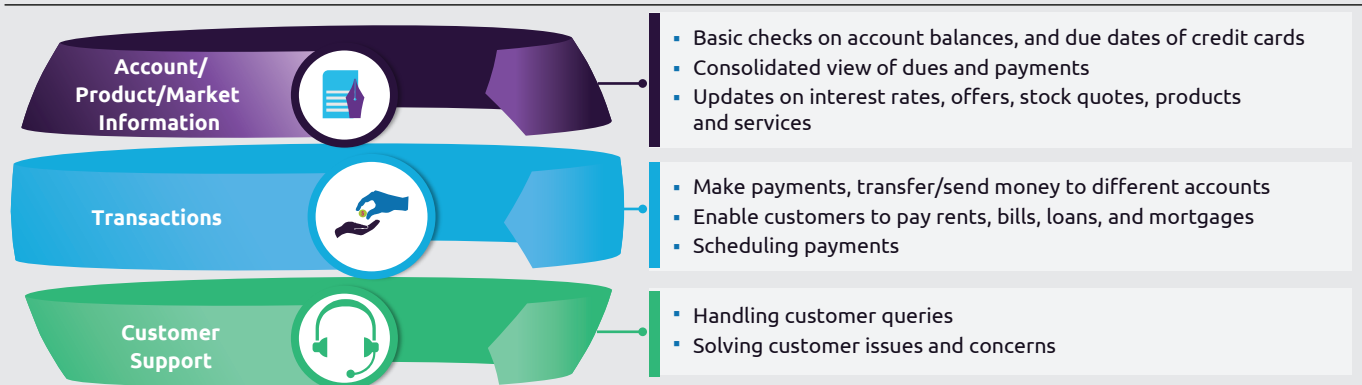
Voice assistants for banking firms

While voice assistants can help to organize and manage customers' daily-life routines, they can act as a channel and offer voice-based services that extend beyond personalized assistance to provide banking services, too.

Customers have been using financial apps for personal banking for a long time as it allows them to perform banking tasks on mobile devices without personal interactions. Voice-enabled digital banking goes a step further, by providing the convenience and luxury to the customers, enabling them to make banking operations using only voice.

11 *Bloomberg*, "JPMorgan Brings Amazon's Alexa to Wall Street Trading Floors," Hugh Son and Katherine Chiglinsky, March 26, 2018, <https://www.bloomberg.com/news/articles/2018-03-26/jpmorgan-brings-amazon-s-alexa-to-wall-street-trading-floors>

12 *Tearsheet*, "UBS is testing a cognitive agent on its back-office employees," Suman Bhattacharyya, September 5, 2017, <https://www.tearsheet.co/artificial-intelligence/ubs-is-testing-a-cognitive-agent-on-its-back-office-employees>

Figure 6: Voice assistant use cases for banking

A few banks have started supporting fundamental voice interactions, such as checking account balances, transferring money, and making payments. Voice assistants enable better segmenting, targeting of customers, and delivering personalized offers based on customers profile data or life events. Targeting the right customers based on their profile data, and catering to them with the right products and services at the right time and right place, can significantly increase the conversion rate. Voice assistants can also enable basic customer query and issue resolutions.

Some banks provide customers voice-assisted services today.

Capital One¹³ was among the first to enable customers to access their accounts via the Amazon Alexa device. Realizing that conversational interfaces are the future of technology engagement, Capital One provides a differentiated customer experience, that makes it easy to manage money —whenever and wherever. Capital One Skill enables real-time access to everything from bank accounts to credit cards and loans. Customers can control their money hands-free and intuitively.

BBVA's artificial intelligence voice assistant MIA was launched within Turkish bank Garanti to enable users of the mobile app to make transactions by voice. A customer can access the latest account activity, perform transfers, and learn the exchange rate, via voice. Around, 1.3 million customers have had more than 12 million interactions with MIA.¹⁴ Customers also can receive regular updates on existing mortgage rates, interest rates, stock and portfolio updates, etc.

Barclays¹⁵ has enabled mobile payment for its customers via Apple's virtual voice assistant Siri. Customers have an option to pay existing payees or mobile contacts without having to open the banking app or put in any passwords. Using their voice, Barclays customers can ask Siri to make their payment and authenticate it using Apple's Touch ID fingerprint recognition. Voice assistants can enable banks to provide customers, information about transactions and spending's, giving customers a consolidated view on loans and mortgages, track their dues on credit cards, and bill payments.

Bank of America's¹⁶ early vision of voice-assisted service led to investment in *Erica*, which was designed to help customers manage their financial lives using predictive analytics and cognitive messaging. Modeled on a personal banker, Erica took customer relationships to the next level of personalization. Erica has all the customer's data, along with thousands of machine learning inputs that provide even more information about the customer. Customers use Erica to search for past transactions across all accounts, navigate the mobile app to view bills and schedule payments, and transfer money between accounts. As Erica learns from these transactions, she can offer customers insights and advice and, from there, proactively advise rather than recite stored information.

13 Alexa Blogs, "The Story of the Capital One Alexa Skill," Zoey Collier, December 16, 2016, <https://developer.amazon.com/blogs/alexa/post/c70e3a9b-405c-4fe1-bc20-bc0519d48c97/the-story-of-the-capital-one-alexa-skill>

14 BBVA website, "Efma recognizes Garanti Bank's mobile voice assistant," Luz Fernández Espinosa, February 17, 2017, <https://www.bbva.com/en/efma-recognizes-garanti-banks-mobile-voice-assistant/>

15 CNBC, "People in the UK are now able to make payments by asking Apple's voice assistant Siri," Ryan Browne, August 23, 2017, <https://www.cnbc.com/2017/08/23/barclays-customers-can-now-use-apple-virtual-assistant-siri-to-bank.html>

16 *Tearsheet*, "Inside the development of Erica, Bank of America's AI-powered bot," Tanaya Macheel, July 28, 2017, <https://www.tearsheet.co/artificial-intelligence/inside-the-development-of-erica-bank-of-americas-ai-powered-bot>

Voice assistants for insurance firms

The insurance industry can benefit from voice assistants to improve different aspects of their business across the value chain.

Today's customer wants to purchase a product or service that is personalized without going through the complicated process of paperwork or interacting with a customer representative. Based on a customer's intrinsic needs, insurance firms can enable voice assistants to select the right product for them.

Voice assistants can detail out different policies, providing comparisons between different policies so that customer can choose the best policy. Voice assistants can collect specific information from customers and generate an insurance quote.

Insurer **Liberty Mutual** offers an Alexa skill to help navigate the insurance-quoting process. Customers can obtain an auto insurance estimate through voice interaction with their Guestimator tool.¹⁷

Insurance companies can use assistants to imitate sales representatives for conversion of leads and to upsell or cross-sell their products and services.

Voice assistants can substantially reduce the claims management process, by providing the data for FNOL (first notice of loss) and FROI (first report of injury) in a structured and efficient manner. Claim adjusters will have structured information available and will be able to focus on the client.

With the level of complexity involved in insurance policies and processes, voice assistants can act as a perfect customer representative and resolve customer issues.

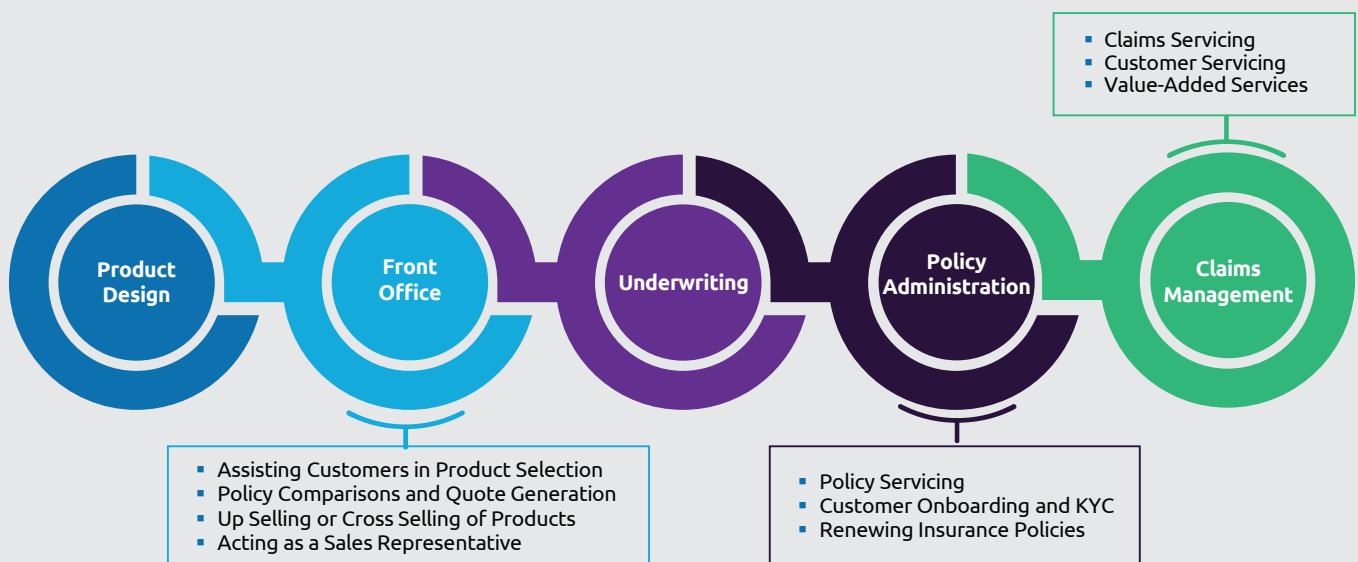
The customer can have immediate answers to day-to-day questions without calling the insurance company, thereby reducing calls to customer representatives. This will free up customer representatives, time for entertaining more critical issues or queries.

Multinational insurer **Aviva** was the first UK insurer to launch an Alexa Skill on Amazon's Echo voice-activated device. Aviva is experimenting with an insurance jargon-buster skill on Alexa, which will allow its users to get instant voice-controlled access to a glossary of over 300 insurance terms and their meanings.¹⁸

The customer can regularly check account details such as claim eligibility, policy expiration, etc. – all the related policy details 24/7.

Allstate Insurance is releasing a new account-specific skill for Alexa to help customers resolve questions regarding the due date or minimum amount of their next invoice.¹⁹

Figure 7: Voice assistant use cases for insurance



Source: Capgemini Financial Services Analysis, 2018

17 Liberty Mutual Insurance website, "Amazon Alexa Skill for Liberty Mutual," <https://www.libertymutual.com/liberty-mutual-mobile/amazon-alexa>, Accessed August 2018

18 *Actuarial Post*, "Aviva launch Alexa Skill on Amazon's Echo," January 4, 2017, <http://www.actuarialpost.co.uk/article/aviva-launch-alexa-skill-on-amazon%E2%80%99s-echo-10528.htm>

19 Allstate Insurance website, "Allstate Insurance Skill for Alexa," <https://www.allstate.com/alexa-skills.aspx>, accessed August 2018

Voice assistants can support smooth customer onboarding and know-your-customer (KYC) processes. During policy renewal, voice assistants can provide an update on the policy, or if there is any need to change for a better policy. Similarly, they can handle requests for vehicle assistance, advise a customer while buying a home or a car, and provide feedback on a customer's driving.

3.3. Potential opportunities

FS firms that have embarked on this journey have yet to realize the full potential of the voice-assistant channel. Firms are providing basic interactions, and consumers are left to hop between channels to finish their activities.

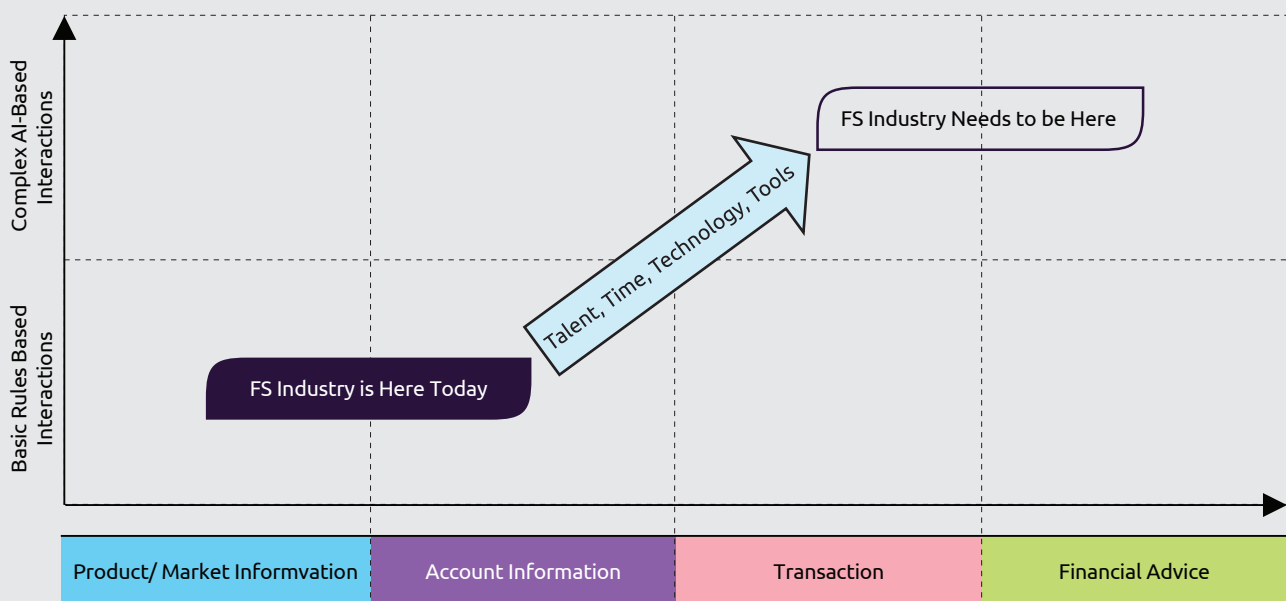
There is a need for financial service firms to shift to more complex interactions in which voice assistants answer open-ended questions, provide consultative and advisory services, and customers experience a conversation rather than a rules-based interaction (Figure 8).

FS firms can use a voice assistant as a personal financial manager to provide financial advice to the customer, such as determining:

- Whether customers' retirement savings will be sufficient
- The amount of upfront investment necessary to purchase a home
- Whether a long trip is financially feasible.

Financial services firms still have a long way to go. With maturing conversational ability of voice assistants, firms will be able to perform more complex tasks and provide more personalized and contextual advice to customers. For this shift, financial services firms need to invest their time, talent, technology, tools, and platforms.

Figure 8: **Level of conversational maturity — FS voice assistants**



Source: Capgemini Financial Services Analysis, 2018

Given the high expectations of customers and relatively mundane experience offered by today's voice assistants, banks are left with the rather steep task of upskilling to meet user demand.

4. Devise a strategy for voice-based customer service

The opportunity is clear. To embrace Conversational Commerce channels, scope lies in the following areas:

1. Ease circulation of basic information, such as transactional information and market information
2. Expedite account activities such as transfers, profile updates, etc.
3. Provide quick and intelligent input to the users regarding product recommendations and PFM (personal finance management) recommendations
4. Integrate firms' content to aid users in different phases of their buying journey.

As voice has emerged as a new channel and can no longer be ignored, strategy is critical as firms determine the best approach for voice implementation.

4.1. The right voice strategy

What is the right voice for a firm?

Humans by nature crave intimacy, and they are much more likely to get emotionally attached to their assistants and forge a personal connection through voice. A resounding 72% of users in Singapore wanted their brands to have unique voices and personalities for their apps.²⁰

FS firms that build their own voice assistants can find their voice and develop a closer relationship by earning customers' emotional affinity. Firms can offer customers a natural voice experience while communicating with business systems and making transactions. Defining the right voice is crucial as it must fit the brand and articulate attributes that build brand identity. To make their brand recognizable, firms need a voice character based on their persona that sounds functional, or playful, or efficient dependent on the brand while keeping interactions consistent over time.

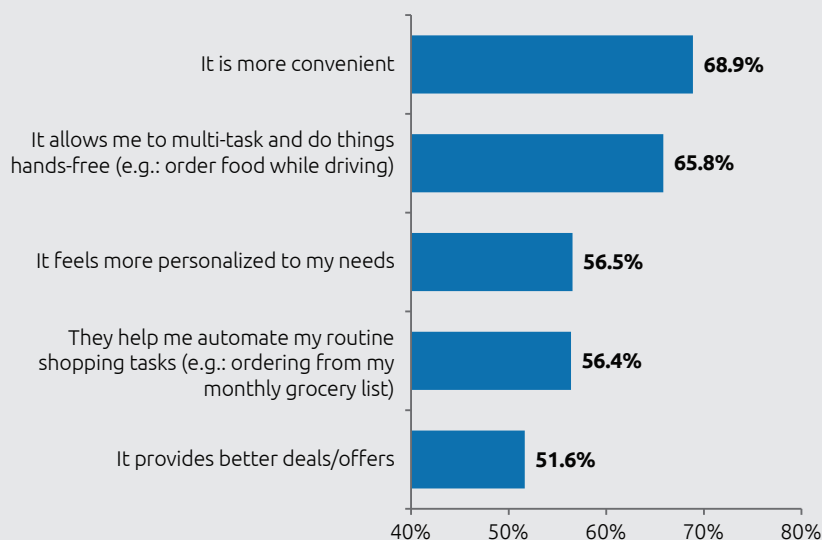
Should firms start thinking from an omnichannel perspective?

Voice assistants may soon become a mainstream channel as more than two-thirds of customers find voice more convenient than mobile or any other channel (Figure 9).

The most notable benefit for the customer is the convenience part, as for some scenarios voice is just a better interface, more comfortable than navigating an application on a device, that may or may not be close by.

It allows the customer to perform hands-free operations, without the need to touch the screen or type anything, which saves time and allows the customers to multi-task.

Figure 9: **Reasons for customers preferring voice assistants over mobile apps/websites**



Source: Capgemini Financial Services Analysis, 2018; Capgemini Research Institute, Conversational Commerce Survey, October–November 2017, N=5,041 consumers in the US, UK, France, and Germany.

²⁰ *Forbes*, "Voice Assistants: This Is What The Future Of Technology Looks Like," Herbert Sim, November 1, 2017, <https://www.forbes.com/sites/herbertsim/2017/11/01/voice-assistants-this-is-what-the-future-of-technology-looks-like/#60781f4c523a>

With more customers preferring voice assistants over mobile and websites, FS firms should prepare strategies that consider mobile and website as well as voice.

Should firms take a device-agnostic approach?

While building a voice-assistant app or device, firms must remain future-focused and create their platform not on today's technology, but with a vision that can scale. Firms will need to have the technology, infrastructure and a team of agile developers to realize this vision. If the firm doesn't possess these capabilities, then the best bet is to find a flexible solution to run on third-party devices currently used by customers.

To set the voice assistant stage, firms will need to look deeper to understand the technology and how well the potential platform can adapt for the future, or risk continually chasing the next big thing which may harm customer experience.

4.2. Understanding the barriers and propelling consumer adoption

As voice assistant technology matures, there are risks and limitations posed by present-day voice assistants. FS firms will need to plan strategies to overcome them or minimize their impact.

Privacy

Voice assistant devices are always in the listening mode, as they are waiting for the activation phrases, and once it is awake, it records what is said and sends that recording (over an encrypted connection) to the backend servers. The potential danger from "always listening" is that, there is always a possibility of someone hacking into these devices remotely and using it as a listening device.

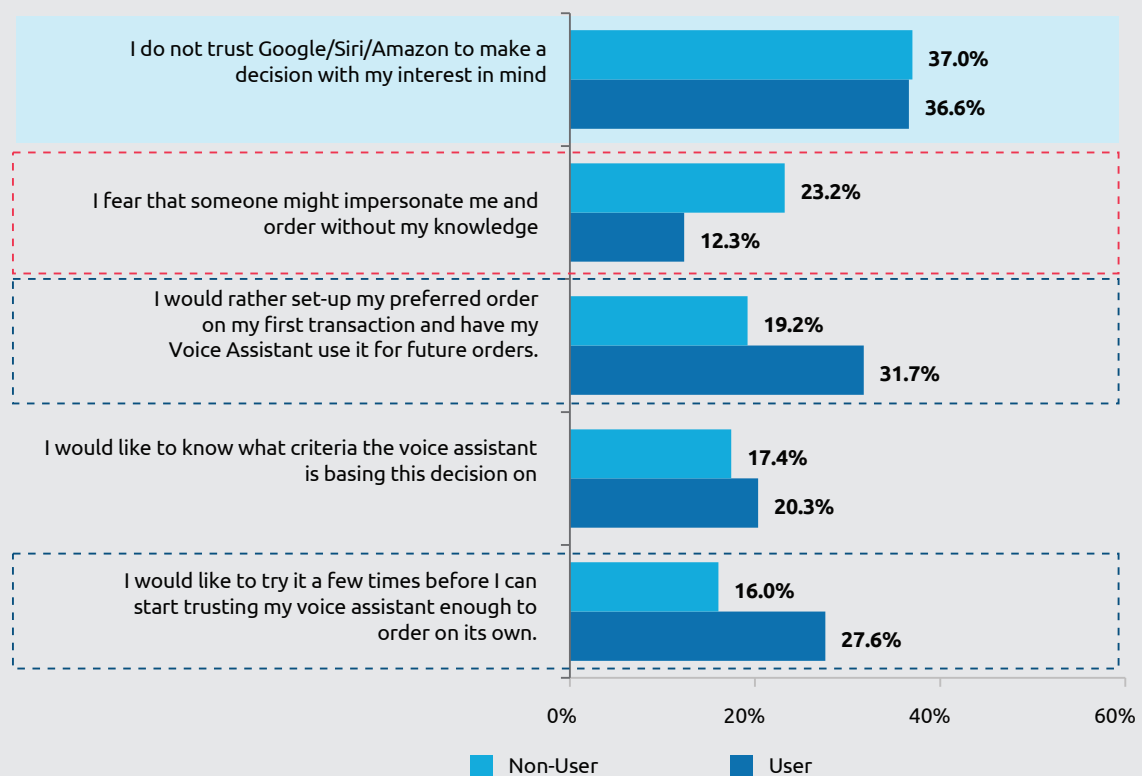
Security

Security remains a significant hindrance as users/non-users do not trust voice assistants to make decisions on their behalf (Figure 10).

Many voice assistant users are open to experimentation and are ready to automate some routine transactions. For non-users, one of the biggest deterrents is the possibility of impersonation; someone else might transact without their knowledge.

Firms are working toward a solution, maybe a two-factor authentication where more than one authentication method is used such as a fingerprint or retina scan. Currently, voice assistants can only recognize speech (anyone's voice). They do not identify one specific voice for biometric purposes. However, voice recognition technology is improving, and the end goal may be to verify a voice signature.

Figure 10: Top concerns for users and non-users hindering making a purchase via a voice assistant



Source: Capgemini Financial Services Analysis, 2018; Capgemini Research Institute, Conversational Commerce Survey, October–November 2017, N=5,041 consumers in the US, UK, France, and Germany.

Understanding diction and accent

A total of 80.5% of respondents in our survey said they would feel compelled to use voice assistants if they could understand the respondents' diction and accent.

Humans speak in many different languages, slang, and dialects, and due to a lack of punctuation, voice assistants may find accents challenging to grasp. Voice recognition accuracy has been steadily improving, and Google reported a word error rate decrease from 8.5% in July 2016 to 4.9% in May 2017.²¹

Voice recognition aims to understand these nuances, but it is still not perfect. Technology firms continue to pursue efforts to expand and perfect these capabilities.

Conversational maturity

Voice assistants are not intelligent yet. Conversational interface technology must leapfrog before it can be called intelligent. Firms can add more context, such as location, calendar information, past behavior, and sensor data from the phone, which could narrow this down, and enable a better and quicker response from the voice assistant.

Thus, there will be scenarios in which voice assistants will need to be supported by manual interventions. Whenever the intelligence of voice assistant is limited, there will be a need for support by actual CSRs (customer service representatives).

²¹ *Techleer*, "Google gives just 4.9% word error rate in Speech Recognition," Sidhant Kandpal, May 22, 2017, <https://www.techleer.com/articles/30-google-gives-just-49-word-error-rate-in-speech-recognition/>

5. Conclusion

In recent years, we have witnessed the rapid adoption of voice assistants across geographies. More industries are now integrating voice assistants. Consequently, interactions between users and voice assistants are growing.

Financial services firms need to understand that voice as a channel is real. Customers are using voice assistants extensively in their daily lives, and with increased time and money spent on voice assistants, opportunities for financial services firms are enormous. Financial services firms need to be a part of this growing ecosystem, be in front of customers who are using this channel extensively. It is vital for firms to consider a full-blown strategy, wherein they identify impactful use-cases using voice as a channel and start plugging their offers.

Voice strategy should be a part of firms' overall digital strategy, rather than a single standalone strategy. Voice assistant experience needs to be integrated into the overall customer journey as the customer is shifting through different channels based on their preference. Financial institutions should ensure they include this voice channel into their overall omnichannel strategy and drive personalized conversations. This requires financial institutions to develop capabilities to bring a unified customer experience strategy across the digital channels with voice channels woven into the overall channel mix.

References

1. Capgemini Research Institute, Conversational Commerce Survey, October–November 2017, N = 5,041 consumers in the US, UK, France, and Germany, accessed at <https://www.capgemini.com/resources/conversational-commerce-dti-report/>
2. Gartner, Inc.: “Market Insight: How to Exploit Conversational Artificial Intelligence to Drive Digital Commerce,” Adrian Lee, Deacon D.K Wan, August 9, 2017.
3. “AI Will Revolutionize Digital Experiences,” Forrester Research Inc., September 11, 2017.
4. “Begin Designing Your Conversational Banking Strategy Now,” Forrester Research Inc., March 8, 2017.
5. Voicebot.ai, “China to Overtake UK and Germany in Smart Speaker Installed Base in 2018,” Bret Kinsella, July 10, 2018, <https://voicebot.ai/2018/07/10/china-to-overtake-uk-and-germany-in-smart-speaker-installed-base-in-2018/>
6. Alexa Blogs, “The Story of the Capital One Alexa Skill,” Zoey Collier, December 16, 2016, <https://developer.amazon.com/blogs/alexa/post/c70e3a9b-405c-4fe1-bc20-bc0519d48c97/the-story-of-the-capital-one-alexa-skill>
7. Tearsheet, “Inside the development of Erica, Bank of America’s AI-powered bot,” Tanaya Macheel, July 28, 2017, <https://www.tearsheet.co/artificial-intelligence/inside-the-development-of-erica-bank-of-americas-ai-powered-bot>
8. Techcrunch, “Voice shopping estimated to hit \$40+ billion across U.S. and U.K. by 2022,” Sarah Perez, March 2, 2018, <https://techcrunch.com/2018/03/02/voice-shopping-estimated-to-hit-40-billion-across-u-s-and-u-k-by-2022/>
9. Wirecutter, “What Is Alexa? What Is the Amazon Echo, and Should You Get One?” Grant Clauser, July 11, 2018, <https://thewirecutter.com/reviews/what-is-alexa-what-is-the-amazon-echo-and-should-you-get-one/>
10. BBC, “Walmart and Google to offer voice-enabled shopping,” August 23, 2017, <https://www.bbc.com/news/business-41021783>
11. ZDNet, “Target partners with Google for voice shopping through Google Express,” Natalie Gagliardi, Oct 12, 2017, <https://www.zdnet.com/article/target-partners-with-google-for-voice-shopping-through-google-express/lbid>
12. The Verge, “BMW is integrating Alexa into its cars in 2018,” Casey Newton, September 27, 2017, <https://www.theverge.com/2017/9/27/16372566/bmw-alexa-integration-2018>
13. Bloomberg, “JPMorgan Brings Amazon’s Alexa to Wall Street Trading Floors,” Hugh Son and Katherine Chiglinsky, March 26, 2018, <https://www.bloomberg.com/news/articles/2018-03-26/jpmorgan-brings-amazon-s-alexa-to-wall-street-trading-floors>
14. Tearsheet, “UBS is testing a cognitive agent on its back-office employees,” Suman Bhattacharyya, September 5, 2017, <https://www.tearsheet.co/artificial-intelligence/ubs-is-testing-a-cognitive-agent-on-its-back-office-employees>
15. CNBC, “People in the UK are now able to make payments by asking Apple’s voice assistant Siri,” Ryan Browne, August 23, 2017, <https://www.cnbc.com/2017/08/23/barclays-customers-can-now-use-apple-virtual-assistant-siri-to-bank.html>
16. BBVA website, “Efma recognizes Garanti Bank’s mobile voice assistant,” Luz Fernández Espinosa, February 17, 2017, <https://www.bbva.com/en/efma-recognizes-garanti-banks-mobile-voice-assistant/>
17. Liberty Mutual Insurance website, “Amazon Alexa Skill for Liberty Mutual,” <https://www.libertymutual.com/liberty-mutual-mobile/amazon-alexa>, accessed August 2018
18. Actuarial Post, “Aviva launch Alexa Skill on Amazon’s Echo,” January 4, 2017, <http://www.actuarialpost.co.uk/article/aviva-launch-alexa-skill-on-amazon%E2%80%99s-echo-10528.htm>
19. Allstate Insurance website, “Allstate Insurance Skill for Alexa,” <https://www.allstate.com/alexa-skills.aspx>, accessed August 2018
20. Forbes, “Voice Assistants: This Is What The Future Of Technology Looks Like,” Herbert Sim, November 1, 2017, <https://www.forbes.com/sites/herbertsim/2017/11/01/voice-assistants-this-is-what-the-future-of-technology-looks-like/#60781f4c523a>

About the Authors



Babu Mauze

Executive Vice President, Banking and Capital Markets Global Business Unit

Babu is Executive Vice President with Banking and Capital Markets Global Business Unit with more than twenty years of experience in strategic alliances, market development, and solutions



Chandramouli Venkatesan

Senior Director, Digital Go-to-Market Lead for APAC, Capgemini Financial Services

Chandramouli is a Senior Director and Digital go-to-market Lead for APAC in Capgemini Financial Services with more than seventeen years of experience in technology products, services, and business.



Amith Chandrashekar

Senior Consultant, Market Intelligence Team

Amith is a Senior Consultant with the Market Intelligence Team in Capgemini Financial Services with more than six years of IT consulting and strategic analysis experience in the banking industry.



Chayanika Agarwal

Senior Consultant, Digital Experience Team

Chayanika is a Senior Consultant with Digital Experience Team in Capgemini Financial Services with more than five years of experience in business consulting and designing digital solutions.

The authors would like to thank **William Sullivan, Chirag Thakral, and Tamara Berry** for their contributions to this publication.

For further information, please contact Chandramouli.a.venkatesan@capgemini.com or Chayanika.agarwal@capgemini.com



Disclaimer

The information contained herein is general in nature and is not intended, and should not be construed, as professional advice or opinion provided to the user. Furthermore, the information contained herein is not legal advice; Capgemini is not a law firm, and we recommend that users seeking legal advice consult with a lawyer. This document does not purport to be a complete statement of the approaches or steps, which may vary accordingly to individual factors and circumstances, necessary for a business to accomplish any particular business, legal, or regulatory goal. This document is provided for informational purposes only; it is meant solely to provide helpful information to the user. This document is not a recommendation of any particular approach and should not be relied upon to address or solve any particular matter. The text of this document was originally written in English. Translation to languages other than English is provided as a convenience to our users. Capgemini disclaim any responsibility for translation inaccuracies. The information provided herein is on an 'as-is' basis. Capgemini disclaim any and all representations and warranties of any kind concerning any information provided in this report and will not be liable for any direct, indirect, special, incidental, consequential loss or loss of profits arising in any way from the information contained herein.



About Capgemini

A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms.

Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of 200,000 team members in over 40 countries. The Group reported 2017 global revenues of EUR 12.8 billion.

Visit us at
www.capgemini.com

People matter, results count.

The information contained in this document is proprietary. ©2018 Capgemini.
All rights reserved. Rightshore® is a trademark belonging to Capgemini.

All company, product and service names mentioned are the trademarks of their respective owners and are used herein with no intention of trademark infringement.