

**Deloitte.**

**Unlocking the Value  
of Digital Assistants**



Introduction	03
Shift of Customer Expectations	04
Digital assistants – The Next Frontier	07
Enhancing customer intimacy while optimizing costs & revenue	08
Moving up the Digital Pack	09



# Introduction

Digital assistant technology is opening-up an overwhelming world of innovation, optimization and opportunity. Companies are often lost in translating how this technology shift could open new opportunities and transform their business model.

With this paper, we want to present an overview of what digital assistants are, the trends driving the adoption of this technology, the opportunities and challenges of developing a digital assistant, and how to identify the potential for your company.

We hope you enjoy the reading.



As digital channels become "table stakes", financial institutions must find new ways to differentiate themselves in the eyes of customers.

# Shift of Customer Expectations

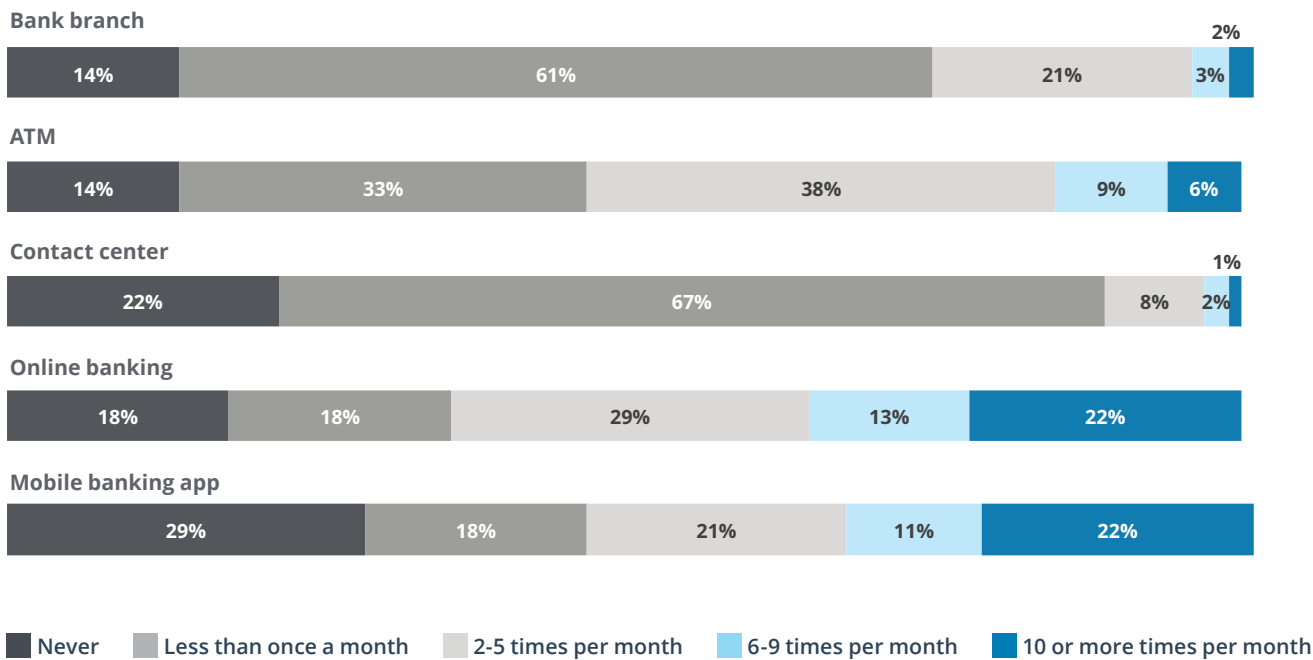
## Acceleration by COVID-19

Consumers are increasingly expecting fast and frictionless service. They are ready for a higher level of digital engagement, as illustrated by the many consumers who already interact with digital banking channels quite frequently.

Deloitte's 2019 Consumer Banking Survey found that many consumers do not visit a physical bank anymore – they prefer

to engage digitally, especially younger customers. Nearly half of all young adult respondents used a mobile device to purchase a banking product. Beyond that, fintechs are developing more of a full-service capability on the smartphone, accelerating digital adoption and engagement. Many millennials think they may not even need a physical branch in the future.

### Respondents used mobile and online channels most frequently



**Note:** Percentages may not total 100% due to rounding.

**Source:** Deloitte Center for Financial Services analysis.

This transition to digital interactions and sales has only been accelerated during the COVID-19 crisis. In a matter of months, COVID-19 has forced radical changes in customer behavior, moved significant portions of the economy online, and increased customers' comfort and willingness to engage digitally.

35%

of customers have increased their online banking usage during COVID-19

**Source:** Deloitte Insights: Accelerating digital transformation in Banking, Global Consumer Survey on digital banking, and analysis on the value of bank branches and online banking channels.



## The Opportunity for Financial Institutions

Financial institutions around the world are realizing how investments in digital technologies could benefit customer acquisition and satisfaction. For example, [Bank of America](#) currently receives more deposits from its mobile channel than it does from its branches.

But satisfaction is relative. Growing online and mobile channels raise a need for new ways of customer intimacy and a seamless experience across channels. Leading technology companies, such as Apple, Google, Amazon and Microsoft, have become the gold standard for digital engagement.

As COVID-19 accelerates front-end digitization, customer experience becomes a differentiator to attract and retain customers.

According to the Institute of International Finance, digital assistants will likely become the next battleground, as financial institutions look to make digital interactions more personalized and human-like.

Banks and insurers have a unique position when it comes to leveraging digital assistants. They are sitting on unique data of their customers' financial situation that generally remains largely underutilized for enhancing customer interactions.

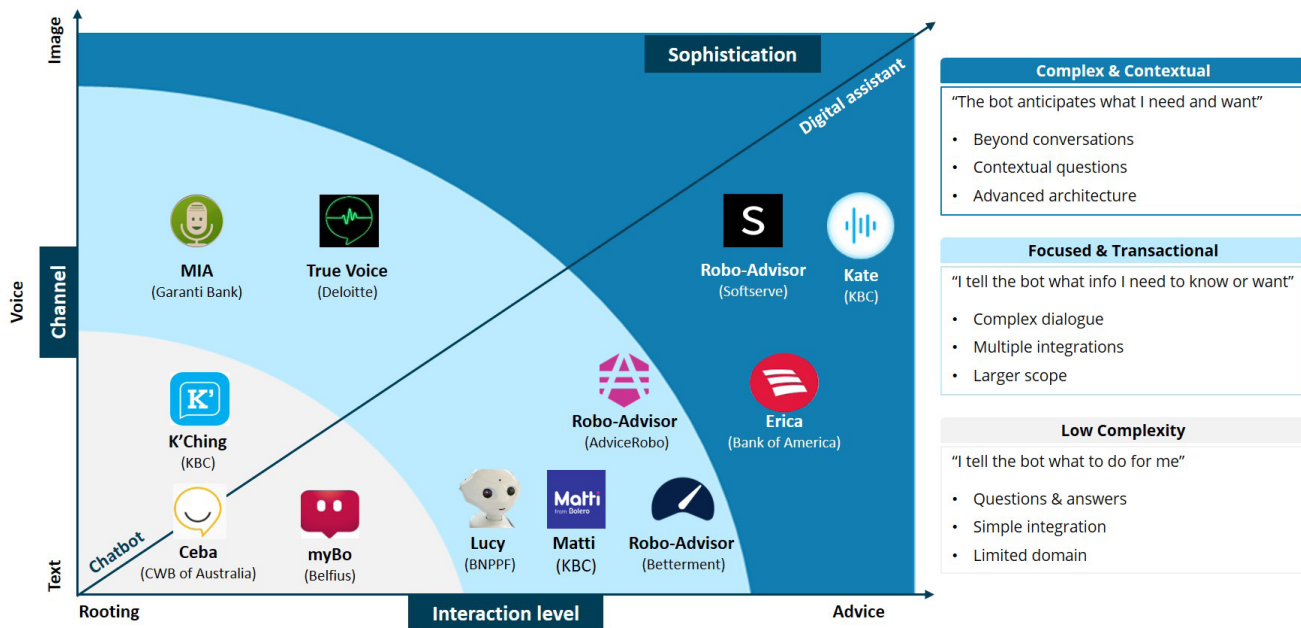
As data quality is a key differentiator for digital assistant services, banks and insurers have an opportunity to use this asset to create real customer intimacy through digital assistants. This combination of unique data and artificial intelligence capabilities (not limited to natural language processing) is what will create the difference with 'just another chatbot'. And it will support financial players in remaining close and relevant to their customers.



# Digital assistants – The Next Frontier

## Beyond chatbots

While globally we see financial organizations offering chatbots to meet this new standard, forward-thinking organizations are taking the next step by creating their own digital assistant.



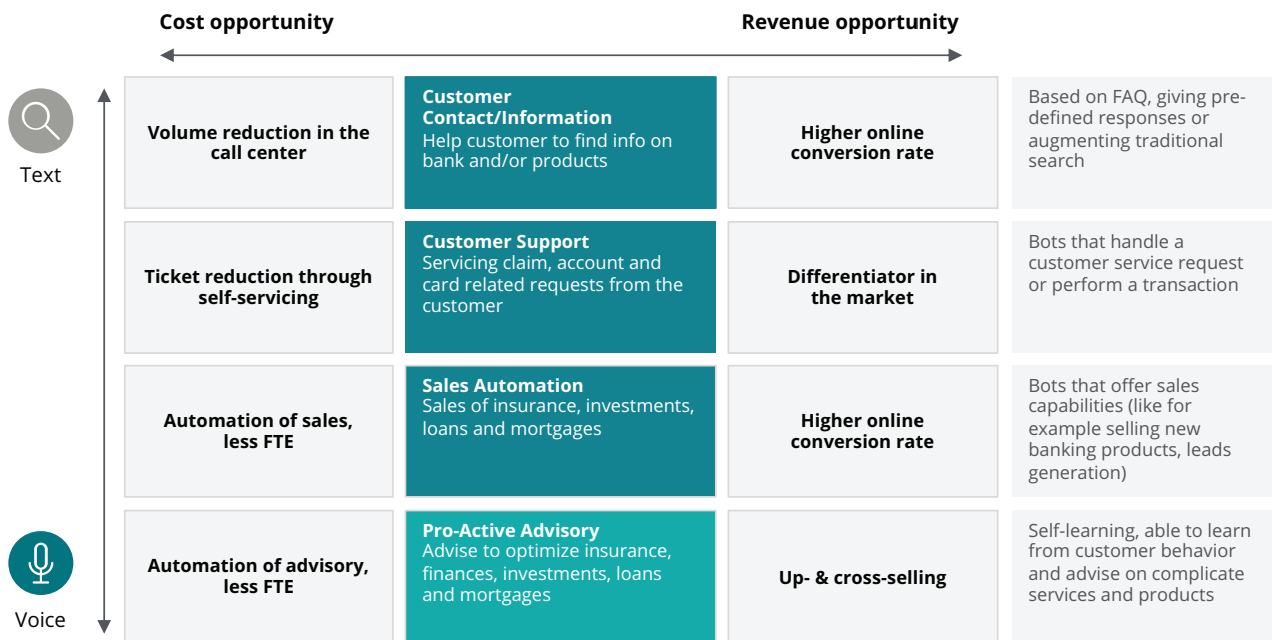
Digital assistants move the needle from reactive to proactive customer assistance and can provide a fast and frictionless experience across channels. For example, they can create more insights into spending behaviors and proactively recommend products that fit the customer's needs.

Digital assistants are not just chatbots or based on a simple question-answer mode. They are able to interpret human speech and even respond via synthesized voices. They can manage intelligent tasks, such as payments, deposits & withdrawals, checking insurance coverage, and so on.

In Belgium, KBC has successfully launched 'Kate', a personal, fully digital assistant. Even in the first release, Kate can perform basic customer transactions, asset inquiries, and even go beyond banking (e.g. offering an energy switching service). Kate is an important step for expanding the KBC online platform into a true digital platform, creating an ecosystem of financial and non-financial services.

# Enhancing customer intimacy while optimizing costs & revenue

Digital assistants allow financial companies to get closer to their customers while providing opportunities to lower costs and increase revenue.



Digital assistants offer consistently **high service levels 24 hours a day** without the need to increase resources in areas such as call centers, so employees can concentrate on more specialist, added-value projects. The result is that customer support is able to provide more high quality service to more customers while passing repetitive administrative tasks and standard requests to the AI system.

More advanced digital assistants can be more **digitally proactive** and unlock business insights to anticipate the customers' needs. This could significantly augment sales and up- & cross-selling. This potential is not limited to the financial company's services & offerings. Financial companies should take a look at the wider ecosystem and see where they can build meaningful partnerships. This way they can provide a more complete ecosystem of services that meets the customers' needs (for example, like KBC's Kate is doing).

On the customer side, digital assistants can increase **digital inclusion**. Not all customers are digital natives or digitally savvy. Digital assistants (voice-based) could allow financial companies to further develop digital channels while still reaching their customers who want to talk to a representative of the bank.





# Moving up the Digital Pack

Despite these compelling reasons for digital assistants, some organizations have been more cautious. They view such capabilities as complex, expensive to develop, and outside their core strategy or legacy strengths. However, recent technology developments have simplified meeting the technical requirements and the remaining complexity has shifted to the integration of back-end functionalities.

Below we summarize our point of view on 3 key technological advances to consider.

**First, cloud technologies and cloud data hosting** enable faster development, test and roll-out cycles. While financial services organizations have traditionally been quite risk-averse when engaging on cloud, there is a growing acceptance of the fact that cloud actually offers enhanced security and functionality to traditional on-premise data servers.

**Second, developments in voice recognition and natural language processing (NLP)** are unlocking the potential of digital assistants to a wider range of organizations. This makes them easier and more affordable to develop and launch than ever before. Cognitive capabilities are now, in many cases, quite capable to detect the underlying request of the customer, even if the exact wording is different. Additionally, recent development also allows for customer sentiment detection: happy or displeased? Frustrated due to lack of support? When a customer becomes frustrated, the system can quickly redirect to a call agent.




In the coming years, we can expect 'conversation generators' to become even more widely adapted as a consequence of the development of models such as GPT3. This language model, released in July 2020 by OpenAI, contains 175 billion

parameters and will be able to create fluent conversations with the only required training input being the raw, unprocessed customer requests.

**Third, the evolution to more modular front-end developments** means that out-of-the-box speech capabilities can provide fluent voice-to-text machine conversions (e.g. Wavenet by Google) or connections to other communication channels such as Messenger or Skype through built-in integrations or APIs. These capabilities can even be expanded to include a digital avatar to interact with your customer (e.g. UneeQ – a partnership with Deloitte Netherlands).

# If you plan to adopt a digital assistant

To the financial organizations ambioning to embed digital assistants in their third parties interactions, we suggest starting by mapping the possible customer interactions you want to address, based on the framework below. This framework focuses on a more holistic approach, where unlocking more value comes from mapping interactions across domains and focusing both on revenue-increasing as cost-reducing opportunities.

	 <b>General</b>	 <b>Banking</b>	 <b>Insurance</b>
<b>Customer Contact/Information</b> Help customer to find info on bank and/or products	Account validation Info on opening hours	Check balance Loan application status Compare credit cards	Check insurance conditions and coverage Check insurance contract periods and fees
<b>Customer Support</b> Servicing claim, account and card related requests from the customer	Update account info Speak to an agent	Make a payment Lost/Lock/Replace card Search for transaction Investigate charges	Insurance claim mgmt
<b>Sales Automation</b> Sales of insurance, loans, mortgages, and investments		New bank account & card management (new card) Loan/Credit/Mortgage application (online)	Take out new insurance product (car, travel, etc.)
<b>Pro-Active Advisory</b> Advise to optimize insurance, finances, investments, loans and mortgages		Spending insights Payment reminders Investment assistant	"Active" insurance products Existing insurance recommendations (up- and down grades)







Once identified, one needs to decide on how the technology capabilities can be developed. The major cloud providers are investing in building up chatbot and digital assistant-like capabilities. Besides the requirement for AI and NLP capabilities, it is also important to check on supported languages, possible integrations with other software, customer authentication and data protection.

Lastly, the development of the customer front-end is a crucial consideration. The digital assistant unlocks a powerful new contact channel that raises key considerations towards the customer:

- How do we want our brand to be perceived?
- What will be the tone of voice?
- What should the potential avatar look like?

Therefore, involving a Customer Experience (CX) expert from the start is a key success factor in developing the right communication flows between the digital assistant and the end-user.

Developing a state-of-the-art digital assistant is a gradual process and takes time but keeping these elements in mind will allow you to embrace this journey with the right levers.

 <b>Identify business opportunities</b>	 <b>Assess technology maturity</b>	 <b>Proof of Concept &amp; Roadmap</b>	 <b>Scale-up &amp; Accelerate</b>
<p><b>Analyze client needs to identify opportunities where digital assistants can add value</b></p>	<p><b>Assess digital assistant maturity and identify the gap with target state (use case requirements)</b></p>	<p><b>Validate key assumptions &amp; define the digital assistant development roadmap</b></p>	<p><b>Scale-up digital assistant to more customers and different use cases</b> <b>Accelerate the roll-out by working in an agile way</b></p>
<p><b>Example questions</b></p> <ul style="list-style-type: none"> <li>• What are our customers asking for? What are the pain points?</li> <li>• How do customers use our existing solution?</li> <li>• Where can digital assistants add most value?</li> </ul>	<p><b>Example questions</b></p> <ul style="list-style-type: none"> <li>• What existing technology capabilities can we leverage?</li> <li>• Which capabilities will we need tomorrow? Do we build, borrow or buy these capabilities?</li> </ul>	<p><b>Example questions</b></p> <ul style="list-style-type: none"> <li>• What are the key assumptions that make or break our digital assistant use case(s)?</li> <li>• How can we validate these assumptions?</li> <li>• Which use cases will we prioritize?</li> </ul>	<p><b>Example questions</b></p> <ul style="list-style-type: none"> <li>• What data do we need to capture when rolling out the use cases to ensure we maximize our learning?</li> <li>• How can we most efficiently capture user feedback?</li> <li>• What does success look like?</li> </ul>

## Remaining common challenges

Creating a digital assistant that meets customers' expectations remains a challenging journey. Below we give a brief overview of the most common challenges.

**Data availability to train models.** Next to the evolution of NLP, a digital assistant also needs training data in order to handle complex discussions with humans, especially in a local language. This forms a necessary condition for a high client adoption.

**Security & compliance.** The financial sector is highly regulated and the trust between financial institutions and their clients is vital for financial institutions to retain their competitive advantage. On top of that, developing a digital assistant will incur high costs to implement, train and maintain this technology successfully.

**End-to-end digital processes.** Many financial institutions still run-on old core systems that do not easily allow end-to-end digital integration. However, financial institutions can leap-frog ahead of the competition by digitizing and automating business processes tailored to the use of a digital assistant.

**Integration with external parties.** Banks and insurance companies are entering a crowded market – the average user has more than 80 apps on his phone, so 'app-fatigue' is a concern. The next stage of development is to move beyond apps and integrate with services that are already embedded into consumers' lives, such as social media and messaging platforms, including Facebook Messenger.

## Conclusion

Customers' expectations of their financial institutions are increasing. Customers want their digital interactions to be fast, seamless and personal. In the next years, digital assistants will play an important role in filling this opportunity.

While big tech companies are moving into the financial space and have become the gold standard for digital engagement, this shouldn't discourage financial institutions. After all, financial players currently have richer and more detailed data on their customers' financial situation than most other companies. Financial institutions should explore the opportunities within digital assistants and focus on creating and maintaining a trusted relationship with their clients.

## Get in touch

Deloitte has the breadth and depth of capabilities to help our clients to adopt and apply this technology successfully. We cover business strategy, data / AI strategy & risks, and technology strategy & transformation.

Our digital assistant lab offers a structured approach to imagine what is possible. These labs will be facilitated by Deloitte and supported by its alliance partners, bringing together the deep business and technology understanding.

Financial institutions should use big tech's products and services to their advantage and in combination with their own unique data assets. Getting customers' consent to start leveraging their data to provide a more valuable service will be crucial to maintain a competitive advantage with digital assistants. Given the common challenges we identified when developing a digital assistant, it is key to have legal & compliance departments at the table with the customer experience teams from the start to avoid any roadblocks in the digital assistant implementation journey.

Finally, we encourage you to focus on the learning potential of developing digital assistants. Start with a key set of use cases and learn as you go. It is as much about the journey as the destination.

Deloitte's financial services industry specialists provide comprehensive, integrated solutions to the banking & securities, insurance, and investment management sectors. Deloitte member firms' breadth of services and industry knowledge allow us to understand each client's unique business needs.

We are looking forward to discussing the exciting opportunities that digital assistants offer with you.

### Christophe Hallard

#### Partner Artificial Intelligence & Data

Tel: + 32 2 600 65 18

Mobile: + 32 475 52 00 52

Email: [challard@deloitte.com](mailto:challard@deloitte.com)

### Kasper Peters

#### Financial Services Industry Leader

Tel: + 32 2 749 56 18

Mobile: + 32 472 02 70 20

Email: [kapeters@deloitte.com](mailto:kapeters@deloitte.com)

### Pieter Sauwens

#### Director Strategy & Business Design

Tel: +32 2 800 24 13

Mobile: +32 472 74 76 04

Email: [psauwens@deloitte.com](mailto:psauwens@deloitte.com)

### Barbara Vanhauter

#### Director Customer & Marketing

Tel: + 32 2 301 81 33

Mobile: + 32 494 56 72 33

Email: [bvanhauter@deloitte.com](mailto:bvanhauter@deloitte.com)



# Deloitte.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as “Deloitte Global”) does not provide services to clients. Please see [www.deloitte.com/about](http://www.deloitte.com/about) for a more detailed description of DTTL and its member firms.

Monitor Deloitte refers to Monitor Company Europe, a subsidiary of Deloitte LLP, the United Kingdom member firm of DTTL.

This publication has been written in general terms and therefore cannot be relied on to cover specific situations; application of the principles set out will depend upon the particular circumstances involved and we recommend that you obtain professional advice before acting or refraining from acting on any of the contents of this publication. Monitor Deloitte would be pleased to advise readers on how to apply the principles set out in this publication to their specific circumstances. Monitor Deloitte accepts no duty of care or liability for any loss occasioned to any person acting or refraining from action as a result of any material in this publication.

This communication is for internal distribution and use only among personnel of Deloitte Touche Tohmatsu Limited, its member firms, and their related entities (collectively, the “Deloitte network”). None of the Deloitte network shall be responsible for any loss whatsoever.