



# Digital Banking

Delivering Superior Customer Service  
with Conversational AI

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## Retail banking is facing the deepest level of disruption in decades.

Shifting customer needs and a generation of digital natives, born on the Web and resistant to traditional banking methods, are challenging established models. After years of incremental change, banks need to plan for a fundamental rethink of operations in order to thrive in a rapidly digitized and data-driven world. Simply put, customers expect access to information and resources at all times.

This was a truism long before the current economic and societal factors came into play with the COVID-19 pandemic. In fact, the need for better digitized customer experiences has only crystallized and accelerated, with consumers staying home or at the very least staying away from physical bank branches, and others finding themselves in precarious financial situations due to furloughs and job losses — so access to their money is essential.

Contact centers are overwhelmed, banks can't keep up with the demand for digital services and customer satisfaction with their banks is plummeting.

Adding additional employees is either cost prohibitive, too time consuming with training and onboarding, impractical because of contact center locations, or some combination of all of these factors.

As a result, many retail banks are relying more than ever on technology to boost customer care and contact center operations — in particular, conversational AI agents that can engage directly with banking customers, handle first-touch interactions, resolve issues and perform transactions, and escalate matters to humans when necessary. They view these kinds of Digital Employees as an important method of bringing down long customer wait times, improving banking experiences, and elevating overall customer experiences.

In this white paper, we'll review how digital banking has evolved during the past few years, the role that technology and AI have played, and how conversational AI in particular will be critical if digital banking is to maintain and improve customer service both under today's challenges and in the future.



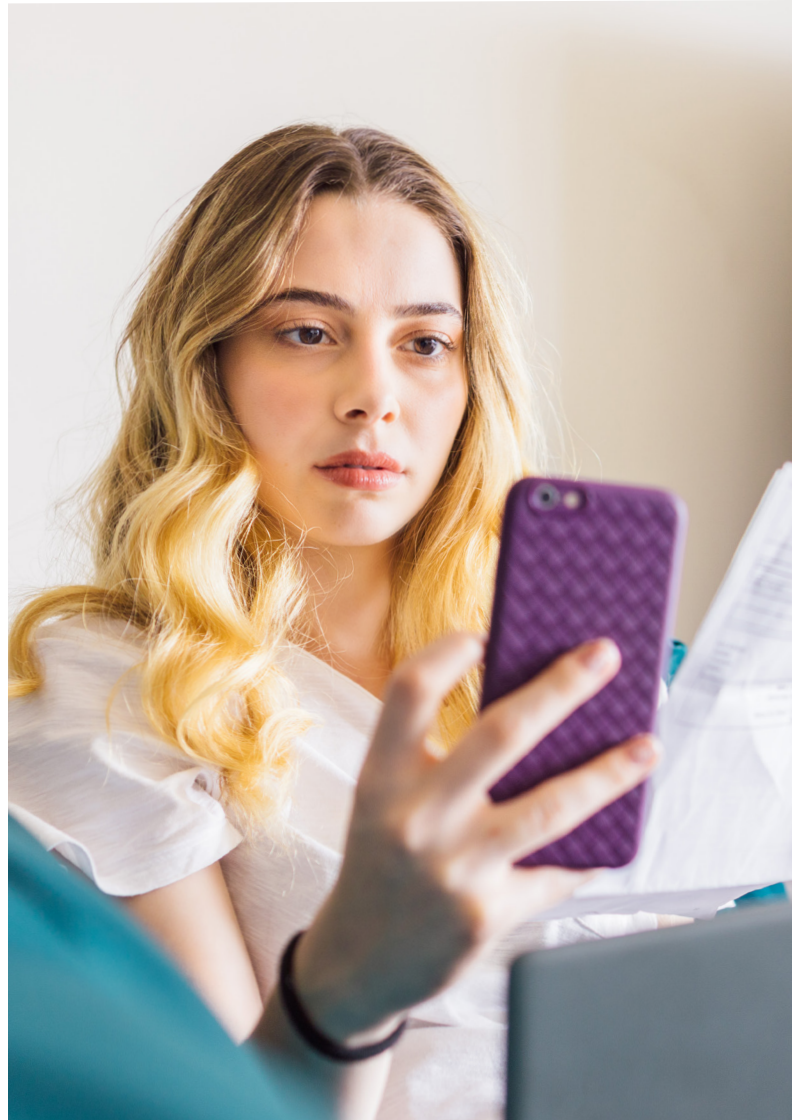
## The Current State of Digital Banking

Although consumer relationships in the retail banking space have never been particularly strong, a 2017 McKinsey survey of millennials revealed that four of today's leading banks are amongst the ten least loved brands. To a certain extent, this may be connected to the financial crisis that began in 2007. We're a couple of years removed from the survey and today's generation is still dealing with increasing student loans and personal debt, which has increased skepticism and has diminished trust between younger customers and retail banks. As a result, today's hyper-connected consumer associates personal finance with crowdfunding, virtual currencies and online payment apps — rather than paper checks, bank branches and ATMs.

Due to an increasing number of FinTech entrants and emerging startups, competition across all industries is fierce. Against this backdrop, customer loyalty and retention is paramount to success, making it critical for retail banks to reform their business models quickly. McKinsey research has found that highly satisfied customers are two and a half times more likely to open new accounts/products with their existing bank than those who are merely satisfied.<sup>1</sup>

For banks, the key is to prioritize high-impact journeys and systematically redesign them from scratch—a process that can take about three to four months and result in at least a 15-20% lift in customer satisfaction.<sup>2</sup> Any cost-saving measures that sacrifice quality of customer experience will result in a heavy backlash from customers who have a fast growing wealth of alternatives.

There's also the ongoing pressures of implementing, and absorbing costs related to, evolving compliance regulations.



Together these competitive pressures represent a significant threat to the status quo.

With this backdrop, the march to leveraging AI and cognitive computing has continued and reached something of a tipping point, in terms of implementation among traditional and net-native banks and financial institutions. Banks, and indeed companies across more industries, have come to realize that the future of the hybrid workforce — with digital and human workers collaborating on virtually every aspect of business — is an inevitability, and it's better to try and stay ahead of this trend, than be rendered irrelevant in the long term.

AI will provide a catalyst for operational change that has the potential to unleash unprecedented growth for legacy industries, like banking.



Hybrid workforces are estimated to give the global economy a productivity injection of between 0.8% and 1.4% of global GDP annually. “Considering the labor substitution effect alone, we calculate that, by 2065, automation could potentially add productivity growth in the largest economies in the world (G19 plus Nigeria) that is the equivalent of an additional 1.1 billion to 2.3 billion full-time workers.”<sup>3</sup> AI will provide a catalyst for operational change that has the potential to unleash unprecedented growth for legacy industries, like banking.

Hybrid workforces will make it possible to automate vast proportions of knowledge work, managing data at record speeds and capacities while harnessing the same information for invaluable insights.

Removing these tasks from human workers will enable bank employees to tackle more high-value work. New cognitive-based solutions will also enable a more pro-active and personal customer experience at lower cost. This is driven by AI’s ability to build knowledge at high speed, understand natural language, and run operational processes in a fully compliant fashion.

With new capabilities that can optimize value rapidly, banks can both compete and team with FinTech entrants and other disruptors that have quickly gained mass appeal among customers of all demographics, regional markets and socioeconomic groups.

Given AI’s overall potential to transform the industry, banks that harness conversational AI solutions will gain the advantage of improving customer experience with cross-channel, targeted, on-time products and services.

But deploying conversational AI takes a framework to ensure that any solution is hitting the proper use cases, addressing customer pain points, and delivering business value.

Banks need a plan, one that simultaneously considers conversational AI’s impact on operations, customers, service delivery and customer care, among other areas.

## Winning Customer Loyalty in the Age of Conversational Banking

AI will only be impactful if customers are willing to engage with it and that means understanding how this technology can best be used to provide access to information and services. The advent of the internet has created the most educated generation of financial services customers in history. Digital natives have access to constant comparison information and visibility of alternative financial solutions, which have seized considerable market share from more traditional financial institutions. Winning the trust and loyalty of digital natives, however, is becoming more and more difficult, as increased competition has made it harder for retail banks to differentiate based on pricing or offerings alone.

Studies consistently show that bank customer loyalty is fickle; 80% of consumers would switch financial institutions for a better experience.<sup>4</sup> Banks that lead in the customer experience index have a recommendation rate that is 1.9 times higher than banks at the lower end of the index, their share of deposits is 1.9 times higher, and their customers are 2.1 times more willing to take up new products and services from their bank.<sup>5</sup>

Additionally, banks that let their customer experience decline risk losing up to 12.5 percent of their share of deposits; at the same time banks with high customer experience metrics increased their share of deposits by 16.5 percent.<sup>6</sup>

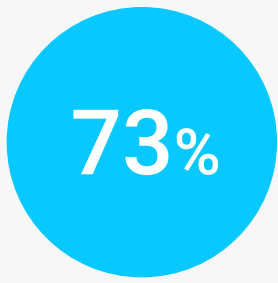
Analyzing successful FinTech initiatives shows that the principal factors customers want are: (1) cross-platform (2) straight-through response 24x7 (3) easy to use and (4) low cost.



FinTech companies offer the same cross-platform experience for financial services as consumers expect from their favorite apps and online services.

Accessible anywhere at any time is the starting point. Customers can open a bank account in minutes or get immediate confirmation of a loan. Both these services offer the same simple straight-through process that consumers have come to expect through other services such as Facebook Messenger.

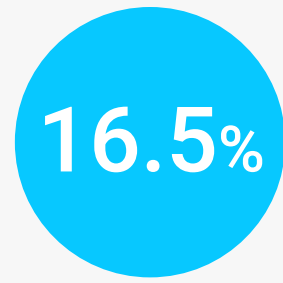




73% of Americans aged 18-34 were willing to buy financial products from tech companies



Customers are 2.1 times more willing to buy new products and services from a bank with a good CX



Banks with high customer experience metrics increased their share of deposits by 16.5%

Sources: "The Kantar 2018 Customer Experience Advantage Ranking" (Kantar); "Evolving the Customer Experience in Banking" (Bain & Company)

The price point of FinTech offerings is typically lower than that of traditional banks too. While each individual service itself might not appear to pose a major threat to banks, when assimilated into a broader offering their influence can change overnight.

Another source of competitive threat is coming from large global enterprises, such as online retailers that fully integrate important banking processes within their own broader business experiences. They minimize the banking activity to an administrative necessity and because these companies fall outside of bank regulations, they are able to operate at much lower costs than traditional banks, and so offer lower prices for customers.

Large global B2B and B2C platforms like Amazon offer lending products as part of a buying experience. These organizations are able to underwrite these loans themselves and are looking for banking balances to finance these loans. Even retail giants, such as Walmart, are now offering checking account products.

Established technology giants (such as Apple, Amazon and Facebook), as well as FinTech startups, offer new services that

will likely increase the size of the payments market especially as cash usage declines and cross-selling opportunities arise from better use of data.

Where do banks still have an advantage? Regulations, as already noted above, may not even out the playing field as new players prove so adept at circumnavigating them. The second source of advantage one might consider is capital. Banks have the capital necessary for lending at scale but again FinTech players are catching up with the banks. They can benefit from investments by pension and hedge funds, for example, that are looking for capital gains yielding more than the low interest rates currently available.

The third area of advantage for the established banks is trust, traditionally a prime characteristic for banks. Unfortunately, this advantage is slipping away as consumer confidence grows stronger for non-bank financial services providers. A 2017 Bain/ Research Now Customer Loyalty in Retail Banking Survey found that 73% of Americans aged 18-34 were willing to buy financial products from tech companies. In addition, US and UK consumers ranked PayPal and Amazon nearly as high as banks for trust with their money.<sup>7</sup>

## How Conversational AI Can Help

Technology is changing the fundamental processes carried out in every part of banking, and the roles of bank staff will evolve from executing operations directly to managing the AI systems that execute work. In order to take a closer look at the impact on processes, we can segment a bank's operations into its five core functions. These are (1) front-office including branches, call centers, mobile channels; (2) back-office functions such as data entry and processing; (3) the financial backbone functions such as Asset Liability Management [ALM]; (4) the analytics functions that focus on risk and opportunity management; (5) and the policy setting functions such as those managing regulations, specific products and so on.

The analytics function is often talked about as a new banking function. In truth, however, it is one of the oldest functions. Credit risk management, fraud detection, market projections are all traditional, analytics driven banking roles. In practice, however, this area is moving fast from being seen as an art to a science. AI makes it possible to use advanced analysis techniques such as machine learning and apply it to huge amounts of data in a way that was not previously possible. For instance, solutions like Watson or Sentient Technologies can analyze huge amounts of structured and unstructured data to deliver recommendations to advisors or traders.

These solutions will enable banks to make important decisions in real-time. For example, they will support instant credit decisions or cross-sell suggestions. Smaller start-ups like Narrative Science enable banks to turn complex analytics into simple stories people can understand and act on. In addition, machine learning tools are boosting the effectiveness of marketing related

analytics by enabling strategies on "next product to buy," churn prevention and micro-pricing.

In the front-office, conversational AI agents will automate an increasing amount of customer contact. Powered with intelligence provided by other systems, these agents will provide a far richer and efficient experience. With customer patience becoming ever shorter, always available service will become a necessity in order to maintain customer loyalty. According to the Arise 2017 Customer Service Frustration Series, two-thirds of respondents said they were only willing to wait 2 minutes or less before hanging up. About 13% said no hold time is acceptable.<sup>8</sup>

### Digital agents integrated in mobile apps and websites are beating the convenience of the current generation of apps and websites.

Moreover, conversational AI agents will make it easier for customers to access their bank as they are "always-on" and will never deviate from best practice compliance regulations or have a "bad day." Digital agents integrated in mobile apps and websites are beating the convenience of the current generation of apps and websites. For example, a customer who has just lost his debit card can immediately start a chat with the digital colleague to explain succinctly what has happened and have the issue resolved without delay.



By contrast, existing apps would oblige the customer to search and select the right menu option and follow a much slower and rigid process. Because the digital colleague can answer questions in the same way as a human, the process is much more efficient for the customer.

In the back office, robotic process automation (RPA) is already being used to populate data entry and increasing processing speeds for all elements containing structured data. Together with other technologies and policies, this will lead to a radical slimming down of back-office organizations within the next five years. Complexity reduction is being driven by new regulations at the same time as cost reduction is being enabled by increasingly capable automation tools. Business Process Management platforms can automate processes up to the micro-session level whereas some banking platforms are becoming full straight through processing (STP) platforms as well.

The business cases for automation are becoming better, even for legacy products. From an IT operations perspective, the roles that will remain valuable in these back-office functions will be those that manage the AI and automation engines powering the processes. In parallel, some policies will be managed entirely by expert third parties

that have created intelligent platforms to deal with highly specialized and complex processes, such as regulations.

So what is the result of tying all these developments together? It will be the emergence of a fully automated bank driven by a hybrid workforce. Clients will be interacting in natural language with the bank's digital agents that are on standby 24/7 via their mobile. Real-time intelligence systems and automated back-offices will enable the digital colleague to make educated decisions (e.g., on credit) and execute processes in a compliant way. The bank's financial backbone will be managed in a proactive fashion as the underlying machines in the bank will exchange data and will accurately predict upcoming events. In case of a policy change or a new role, the rules embedded within the technologies will be quickly updated and all processes subsequently executed following the new standards.

In the sections above, we introduced four criteria for winning the hearts and minds of the customer, (1) cross-platform, (2) straight-through response 24x7, (3) easy to use and (4) low cost. Conversational AI can play a crucial factor in each of these areas and make it possible for them to transform customer experience and perception, as seen in the figure on the next page.





### Cross-platform

AI will help banks unlock the value of the wealth of data they have in-house. Banks have an unprecedented historical perspective at both the macro and micro level that can be leveraged to generate value.



### Easy to use

Automation will help banks to integrate specialist third party services in a very flexible way. New tools will facilitate integration and conversational AI agents will make it faster to train and activate a customer facing agent to sell these services to all clients.



### Straight-Through Response

Banks can close the gap with the new online providers by offering real-time decisions. Most importantly, however, given their established customer base and expertise they can offer fast access to financial services over a broader and more complex variety of products than a typical start-up could. The convenience factor will allow them to retain a large proportion of clients.



### Low cost

By applying AI to most common processes, banks have the potential to reduce their cost base significantly – taking out an additional 30% to 50% to the current programs of aggressive cost cutting that have already been announced. Many of the reactive service elements can be automated at a fraction of the cost, removing a large part of the volume of incoming requests, doing data entry and manual risk controls.

The prerequisite to affecting this transformation is customer acceptance. Customer experience needs to be superior to today's norms. The decline in face-to-face interactions with tellers and bankers has resulted in weakening levels of brand affinity for banks. The only way for banks to realize the described impact is to put their customers at the heart of their plans and construct an AI revolution which delivers a superior service. Orienting AI simply to create efficiencies for their own financial benefit will lead them to miss key steps and put the overall change at risk.

# Seizing the Competitive Advantage

AI technologies have matured and are ready to implement now. They offer the biggest opportunity in decades to establish new operational models. Insights from analytics engines will identify gaps in current personal finance offerings, uncovering opportunities and advantages that can be seamlessly provided to customers ahead of non-bank competitors. Conversational AI colleagues can capitalize on these insights and provide personalized, informative services at scale making it possible to provide innovative high-quality services at low-cost. This hybrid workforce that combines skilled employees and digital workers equates to a more agile workforce that rapidly addresses tasks and problems across all digital channels in real-time.

While most large retail banks are currently evaluating how to restructure their workforce, few have taken a hard look at fundamentally adapting their operating model to cognitive. This is primarily due to management in the retail banking sector relying on traditional employee structures or systems to drive change. These following three recommendations for embracing hybrid workforces within banks will help them accelerate change:

## **Make it a board priority.**

Although true for all significant organizational changes, this is particularly the case for cognitive transformation, as it will lead to a huge power shift in the bank. In the future, it will be the teams who design the systems and underlying rules that drive the bank. Traditional banking leaders working in operations and risk will manage exceptions and probably be steered by the digital workers.

## **Start building a Cognitive Center of Excellence (CoE) now.**

The organization defining the new ecosystems and underlying rules is crucial for the economic performance of the bank of the future. High quality resources in this space are rare. The resources in a bank need to be fully centralized and have attractive career paths. The CoE also needs a robust mandate to ensure all mundane execution work and decisions are automated by intelligent systems.

## **Build the transformation plan around client needs above cost reduction opportunities.**

Determine in which areas the customer is most helped and will adopt the new AI driven service model. Co-develop the new models with the bank's clients in an agile fashion. Grow the model step-by-step. Avoid the missteps that some banks have recently made regarding data usage and privacy.

By pairing the existing strengths of traditional retail banking with a hybrid workforce, banks can seize competitive advantage amongst a growing number of competitive nonbank forces. They have the opportunity to launch first-of-a-kind services at a speed and cost unmatched by today's services. For instance, retail banks will have the capacity to provide free financial advisors to younger customers who may need guidance but would normally be unable to afford personal support with adherence to regulations. The speed and scalability of cognitive technology will release a constant stream of growth opportunities for banks that adopt these approaches into their strategy now.

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*Editor: John Madden*

*Editor's note: This white paper is based on material previously published by IPsoft.*

## Endnotes

- 1 McKinsey & Company, February 2019: "Rewriting the Rules in Retail Banking."
- 2 McKinsey & Company, February 2019: "Rewriting the Rules in Retail Banking."
- 3 McKinsey & Company, January 2017: "A Future That Works: Automation, Employment, and Productivity."
- 4 TransUnion, October 2018: "Building Loyalty with Gen Z and Millennials Starts with a Better Experience."
- 5 Kantar, December 2018: "The Kantar 2018 Customer Experience Advantage Ranking."
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- 7 Bain & Company, November 2017: "Evolving the Customer Experience in Banking."
- 8 Arise, February 2017: "Arise 2017 Customer Service Frustration Series: Phone Hold Times."



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