

Advancing Digital Banking



Banks see progress in the provision and adoption of digitalization as a result of the pandemic.

The last 18 months has seen a step change in the digitalization of banking. Indeed, some executives in the industry claim to have seen 7 years' of change as a result of the constraints imposed on consumers by the pandemic. Avaya's Life and Work Beyond 2020¹ research confirms 37% of US consumers are doing more of their banking by app and 35% use their smartphones more often to make payments. The growth of cashless transactions has grown, with ATM withdrawals and check use declining.

Our research with industry experts, and the interactions our people have with banks across the country, indicate that further change is anticipated so banks need to adapt their processes.

There are 5 key elements banks should consider in order to digitally evolve through the 2020s:

- 1 Improving digital channels to enhance customer experience
- 2 Making use of data and AI to deepen customer relationships
- 3 Protecting your reputation and your customers from security threats
- 4 Shaping hybrid work success
- 5 Embracing cloud-based solutions securely

Banking in the 2020s	
Strategic challenges	How Avaya helps Avaya One Cloud for financial services
Improving digital channels	Supporting self-service channels
Making use of data and Al	Providing valuable customer data
Protecting from security threats	Secure identification and verification
Hybrid work growing	Collaborative based workflows
Embracing cloud securely	On-person hybrid and cloud solutions
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One banking executive summarized the challenge, "Digitalization means that business leaders need to understand the art of the possible, driving the transformation with processes such as AI that are new and risky. When legacy gets in the way, leaders need a good strategy for steering through it because managing our data and digital transformation effectively will give us a competitive edge".

The end goal is establishing a digital workplace in which unique, personalized experiences are delivered throughout your customers' journeys.

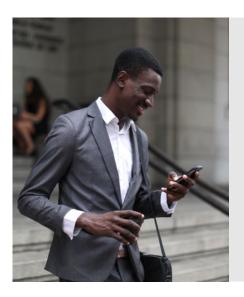
1. Improving digital channels to enhance customer experience



Customer experience must be upgraded to keep pace with changing consumer demands and to benefit from new revenue opportunities.

The shift towards a reliance on mobile applications and online servicing by consumers means banks need to reconfigure and improve the customer experience they offer. With fewer opportunities to build relationships in branches, banks need to provide a great service on their digital channels, for instance, via:

- Voice, email, video chat, SMS
- Live chat with an agent or IVR
- Mobile app, social media
- Virtual agents (bots, chat bots, conversational AI).



At the same time, they need to support existing customers through traditional channels. While banks follow the rationale that simple transactions can be automated using digital tools, banking executives report that 'simple' transactions are not straightforward for all customers, particularly those who are older or less technologically able.

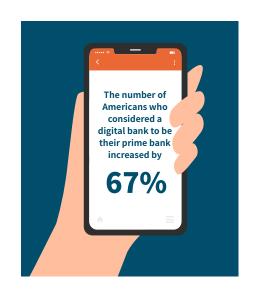
As increased customer interactions will be flowing through both digital and traditional channels, the banks that offer a seamless but engaging, and most importantly, personalized customer experience, will be the ones who will see the most financial benefit. The experts we interviewed confirmed that improvements are needed and recognized that the advances in digitalization made by fintechs provide a good illustration of the way forward.

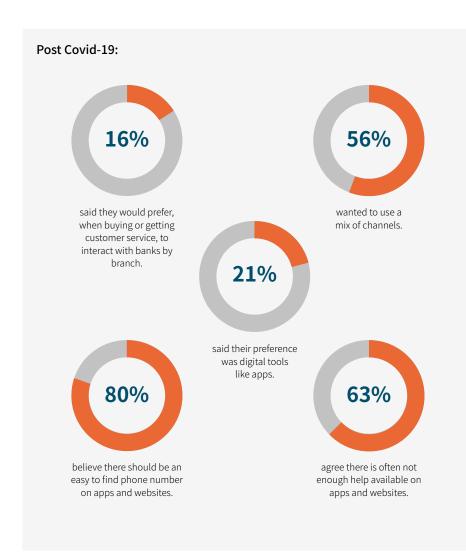


Between January and July 2020, the number of Americans who considered a digital bank to be their prime bank increased by 67%.² Chime currently leads the market in the app bank space with a market share of 12 million users³ and innovations based around apps have further potential to generate new revenues.

An important part of the technology upgrade is a complete re-design of the customer journey. As know your customer (KYC) compliance and anti-money laundering (AML) requirements often add friction to a customer journey, new digital providers are using open banking application programming interfaces (APIs) to pre-populate forms, speed up approvals and make application processes faster.

According to Avaya's Life and Work Beyond 2020 study of US consumers, undertaken independently by Davies Hickman Partners⁴:







Banking branches are still important in serving customers from certain demographic and geographic groups, as up to a third of customers still prefer cash to electronic payments. Many customers also use a combination of digital and branch services. The challenge now is to ensure branches have visibility of the entire customer journey to complete a truly seamless experience for these customers. Further, as branches can represent up to 30% of total operational costs, in a well-designed digital customer journey that embraces the branch, there is the opportunity to significantly reduce cost.

New channels can be built on the back of straight-through processing, real time data and configurable workflows and contact center agents can be repurposed for more complex tasks, such as advice by video. These new channels have the promise of reducing operational costs and lowering cost-income ratios significantly.



Avaya delivers Experiences That Matter in banking

Avaya builds memorable customer experiences – Experiences That Matter – for banks across the world. Avaya helps ensure banks get the very best outcomes from their interactions both seamless customer experiences and productive employee engagement, enabling banks to meet their customer and employee objectives. Having a single, Alpowered view of the entire customer journey helps banks create this exceptional banking experience.

Avaya supports both simple, self-service mobile banking interactions, such as bank balance look-up or password reset, as well as the more complex queries which require employee assistance. Avaya also offers biometric-based, digital identification verification and authentication to help meet regulatory requirements and save valuable time.



Customers want real connections with their banks. Intelligent routing based on an extensive amount of customer data (interactions, behavior transaction history), situational data (location, weather, time, day) and employee data (skills, experience, performance, location, language, gender) matches the best resource to solve the specific customer need. Avaya can even route customers based on their personality.

In addition, intuitive, composable browser-based desktops enable employees to handle multiple customer interactions simultaneously and receive relevant data from multiple sources, including CRM and business systems, in a consolidated view.

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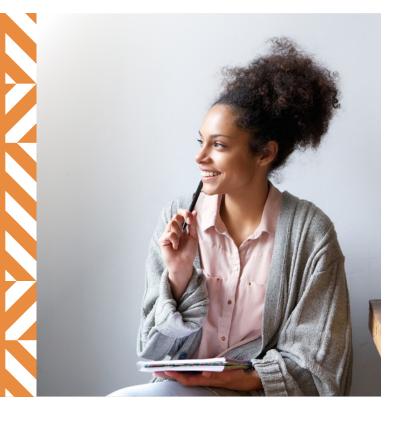




Avaya OneCloud for financial services is composed to address the sophisticated operating model of financial institutions and includes an extensive ecosystem of global industry solution leaders. Avaya enables financial service organizations to swiftly respond and interact with customers, and to communicate more effectively to deliver memorable customer experiences while retaining and selling valued-added services:

- Attract and retain customers with superior customer service
- Improve employee productivity while increasing customer loyalty
- Reduce mortgage, credit, payment, and loan delinquencies
- Grow high value services and revenue through branches, agencies, and brokerages
- Improve the customer experience proactively across all customer touch points
- Deliver 24/7 conversational self-service with options to speak with an employee
- Boost compliance and reduce fraud risk with advanced biometric authentication and data redaction
- Reduce employee attrition by orchestrating a better employee experience.

2. Making use of data and AI to deepen customer relationships



Using a combination of data sources and AI to enable banks to evolve with their customers.

The use of omni-channel in the banking processes and workflows provides broader customer insights which generate opportunities to build stronger customer relationships, increase brand loyalty, generate new revenues and protect long term earnings. However, digitalization also gives customers greater ability to switch providers if they find a better offer.

Personalization is key to a strong customer relationship and banks are investing in data collection and storage, as well as analytics and AI, to build this functionality. This investment creates a better understanding of individual customer personas and customers' journeys across bank channels.



In return, the banks garner opportunities to:

- Send prompts to customers
- Make customer help available when and where needed
- Route calls and chats from customers to the best resources
- Enhance security and fraud protection
- Give 'next best actions' to agents and employees when serving customers.

The research highlighted the development of new niche consumer segments that are appearing as societal structures evolve which will provide new opportunities for revenue. In order to benefit, the banking sector needs to become less one size fits all and be more tailored to individuals. For example, 44 million⁵ US workers are self-employed and some providers are developing products which serve this group effectively. Others in the sector are focusing on certain ethnic groups while another has developed a banking product solely for creatives who work in the marketing industry.

Increasingly banks such Goldman Sachs and JP Morgan are investing in fintech to digitalize customer journeys and build new channel strategies. The competition is evident in buy now, pay later apps such as Klarna, while point-of-sale financing is attracting younger customers. Embedded finance is generally becoming more widespread as the goods and services that consumers demand are being linked directly to banking services.

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Avaya technology uses data to support banks

Avaya OneCloud creates and uses data to provide memorable customer experiences for banks. Our technology enables composable and personalized customer experiences, which enables banks to select different applications for their customers' specific needs.

Avaya OneCloud provides a wealth of insight from contact center interactions, as well as APIs to other data sources, to meet key contact center objectives. For example, Avaya has incorporated the Experian API which allocates customers to specific marketing segments and provides better data to banks to build revenues and relationships.

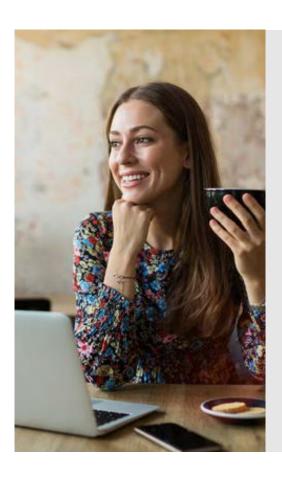


Avaya OneCloud sends customer transcripts, sentiments, and intent details with contextual content to agents and supervisors during live conversations to help agents create more efficient, accurate and meaningful customer engagements.

Avaya OneCloud also uncovers business intelligence that has previously been invisible in the voice channel. For example, it tracks customer conversations about pricing issues, new policy changes and service issues providing vital business intelligence to banks. Typically analysis of issue resolution occurs 2-3 days after customer contact, now it can be done in real-time providing agents with training faster.

In addition, conversational sentiment scoring identifies and intercepts a customer conversation that is going poorly. It enables remediation to improve customer satisfaction by reacting in real-time to resolve while the conversation is happening.





Avaya OneCloud for financial services includes:

- Live services: Transcription services, entity and intent identification and customer sentiment
- CRM integrations: Al generated abstracts, transcriptions, and customer field bi-directional exchange and populations
- Knowledgebase integration: Integrated for actions, workflow, action, and dictionary
- Workflows: Rules based intent and workflow design
- Analytical tools: Real time Supervisor and Executive dashboards with integration to Avaya OneCloud CCaaS Analytics and Reporting
- Customer workflow triggers: Event based execution of a workflow or insertion of an object into a workflow based on sentiment as well as keyworks and interaction triggered rules
- API access: Unlimited API access to data including streaming.

3. Protecting your reputation and your customers from security threats



Investing in security remains the priority.

Data security, already a challenge for the banking sector, is increasingly vital given the extra emphasis on digitalization triggered by the pandemic. The sector is particularly vulnerable to attacks given its customer data storage as well as its access to significant financial assets. In addition, the shift to cloud and API based ways of working, while helping this sector become more agile and innovative, has also resulted in more devices, applications and data no longer being contained within an organization's official security perimeter. Regulatory changes such as open banking and innovations like blockchain and crypto currencies also increase the probability of data loss.

While regulators are clear that responsibility for controls lie with both the banks and the technology providers, the sector is finding it increasingly harder to protect against breaches due to its interconnecting systems and services and its need to balance appropriate access with complex authentication.

The impact on customer trust of any data breach is significant yet consumers' self-monitored behaviors are not effective as they often don't know how to protect themselves from risks such as fraud. Therefore, it is important for banks to think differently when using data analytics, security tools, organizational culture, and customer education to protect customers' data and money. The recent increase in remote working is expected to result in more insider fraud as activity will become more difficult to measure.



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Avaya builds in Zero Trust by design

A network that is Zero Trust by design, individually encrypts and verifies an input from one entity, but never shows the result to the other party.

Using the power of Journey's Zero Knowledge Network, Avaya's OneCloud enables faster, more secure, and less costly digital identification and verification. Verifying identity and authenticating customers can take up to 2 ½ minutes, but together with our partner, Journey, we can reduce this time significantly, saving time and cost.

Take your contact center out of the scope of compliance

Security and privacy regulations like the Banking Secrecy Act and PCI have guidelines that organizations must adhere to. Falling afoul of these regulations can mean enormous fines, damage to reputation, and possible loss of revenue. Compliance is essential, but expensive and complicated. If you do it right in the contact center, you can vastly reduce your scope of compliance - reducing your risk, cost, and effort.

Together with Journey's Zero Knowledge Network, Avaya OneCloud proves customer data without revealing it. This can mean sensitive customer data like bank account information or a social security number, any payment information, or virtually any data that would all be subject to compliance.

Avaya's OneCloud solution encrypts the data, verifies it from the appropriate source (a payment processor or backend database, for example) and returns a pass/fail to the agent. This means that no regulated data ever touches the contact center tech stack, and therefore takes the entire contact center out of the scope of compliance. This vastly simplifies the work of your risk management team who is responsible for compliance of any type.

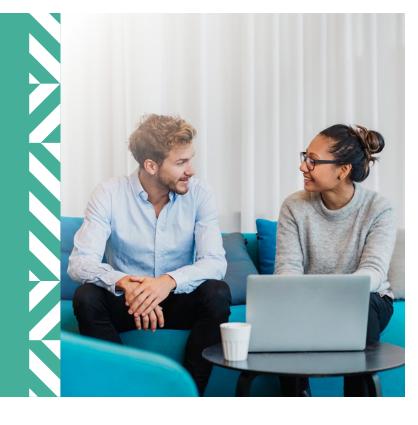


Avaya OneCloud for financial services Authentication and Fraud Detection Services provides authentication, secure payment processing, and PII (Personally Identifiable Information) collection services.

The approach addresses identity verification, authentication, and customer data privacy throughout the customer journey, and across voice, digital and in-person interactions.

APIs are used to integrate existing applications and customer systems in addition to a set of pre-packaged applications such as customer authentication, continuous agent authentication and privacy preserving "clean screen" agent applications that can be rapidly deployed from the cloud.

4. Shaping hybrid work success



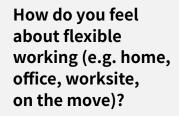
Developing strategies for future workers.

As the pandemic took hold, the banking sector was at the vanguard of home working by quickly moving contact centers and head office teams to remote working. Some executives reported major gains in productivity, while others were less sure. Some leaders have encouraged people back to the office and then recanted, while other organizations are currently trialing different options.

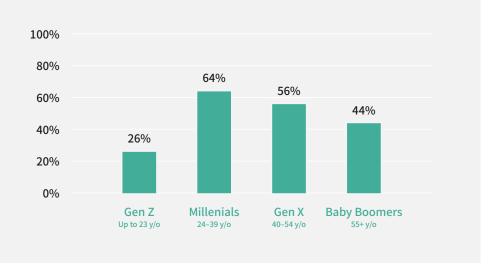
According to Avaya's Life and Work Beyond 2020⁶ study of workers in the US:







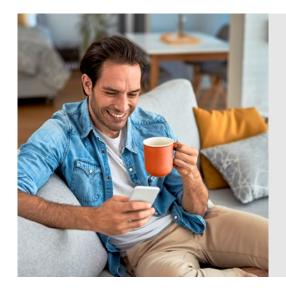
Saying they love it:



For banking leaders, the main concerns about hybrid working are data security, the quality of internet connections and the ability to deliver productivity. Surveys suggest that while many workers want to be able to visit the office or contact center, they also want home working options.

This leaves a strategic quandary for some leaders, as summarized by a senior banking VP, "In the future people will be given the chance to work from anywhere including hybrid, but no-one knows yet. The contact center person hired to work from home will be different to the one who would come into the office. There is less oversight, so more trust is required when the agent is working at home, it's a different discipline and we need the management and monitoring tools to help supervisors in either situation".

Experts add that leadership and management skills will evolve as the need for a high-performance culture is greater than ever. Leaders, managers, and employees will undeniably need more training and support to adapt to the new working culture.



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Avaya enables secure, effective, and efficient hybrid working for banks

Bank employees will continue to be geographically distanced and connecting them into collaborative environments is essential for productivity. Today, many hybrid employees struggle with fatigue from managing too many separate applications.

Avaya's workstream collaboration applications can replace disparate tools and integrate video meetings, chat, posts, file sharing and task management in one application. This empowers teams to communicate in context, in a persistent virtual workspace built on top of workflows and is accessible with any device. Unlike traditional face-to-face environments, workstream collaboration tools like Avaya's provide persistency, ensuring that work continues to progress across time and location allowing an expert-centric approach to business and customer problem solving, ensuring that the right subject matter experts can flow in to and out of teams and customer interactions as required.

With an always-on collaboration-based workflow, things get done faster, easier, and more completely through 'in the moment' sharing, as much as during formal meetings. Collaboration happens organically in response to shifting priorities, the availability of team participants, and the information they're currently sharing, unbounded by time or geography.

All content needed to kick start or progress a project or discussion is organized, time stamped, securely stored, and easily retrieved from within a virtual workspace, enabling true workflow orchestration where all participants are informed, up to date and understand the decisions and knowledge that has been shared. The contextual insight provided with workstream collaboration applications is crucial to improving the way colleagues work.

The power of workstream collaboration can be the bridge across the entire organization. It's a way of bridging siloed Unified Communications and Contact Center applications into one powerful tool with one application.

The need to manage contact center agents effectively and enable supervisors to monitor and train agents is vital to agent development and empowering them to respond to more complex and important queries. Avaya's Workforce Engagement Management technology improves agent engagement and allows for supervisor monitoring, coaching and enablement of agents, wherever they are working. Its suite of tools helps supervisors manage agents more effectively with real-time intelligence

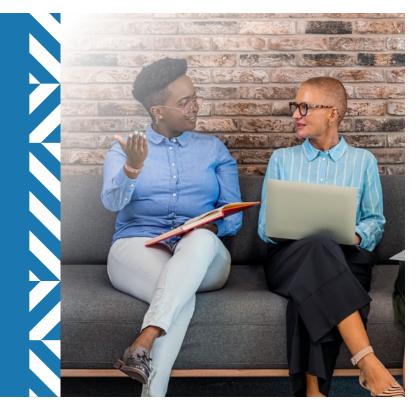
The future of work is hybrid and Avaya, along with our partners offer industry leading communications and collaboration security for employees, including our collaboration tool Spaces, wherever they are.

Avaya OneCloud for financial services enables:

- Planning, forecasting, and scheduling employees to meet service level and cost objectives
- Balancing shift patterns and service level goals with employee skills, proficiencies and preferences
- Monitoring intra-day trends and adherence
- Supporting inbound, outbound, blended media, in-house, outsourced, and virtual operations
- Developing long-term plans for capacity, staffing, hiring and vacation.

In addition, Avaya Conversational Intelligence can help organizations comply with internal and external rules and regulations using supervisor initiated or automated business rules. Supervisors can enhance compliance practices with internal policies and external regulations in real-time. Sentiment and sales triggers draw the supervisor's attention to critical moments in calls. Supervisors can then act, coach, or join the calls.

5. Embracing cloud-based solutions securely



Banks move to the cloud.

The banking sector has long been aware of the opportunities that cloud technology offers. Claimed benefits include lower costs, better customer relationships, and faster innovation. Nevertheless, with some banks having up to 6,000 applications across their estate, the use of cloud technology remains low particularly around core systems. Concerns around control, security and regulations keep the adoption rate lagging behind other industries.

Hybrid cloud technology and platforms offered by some providers, allow for a mix of cloud and on-premises solutions. Many banks are adopting a DevOps approach which combines the work of development and operational teams to ensure greater flexibility and speed of deployment. The financial services industry, using AI and APIs, is exhibiting at its periphery the agility, speed and innovation more commonly found in the technology sector, as it is composing banking solutions tailored to each customer wherever they are in the world.

However, there is uncertainty and hesitancy surrounding the use of cloud for core banking processes. 95% of cyber security professionals in financial institutions are either moderately or extremely concerned about public cloud security⁷. Instead, the use of scalable, hybrid cloud solutions is becoming a more popular option for some banks.

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Avaya unleashes the power of a multi-cloud ecosystem

Although the majority of their communications systems may be on-prem, financial services companies can get the benefit of the cloud immediately. For many, a move to a hybrid cloud platform, combining private and public cloud, provides the most robust solution.

A bank's cloud choice (public vs. private vs. hybrid) and their cloud provider should be part of a holistic strategy to accelerate digital transformation and maturity. Avaya partners with industry-leading cloud providers such as Google, IBM and Microsoft Azure to build security for high-risk organizations in financial services that often work with sensitive data. This process involves providing highly secure and regulatory compliant cloud capabilities. Included in the Avaya technology solution is data centers in different geographies to meet regulatory requirements and proactively eliminate security problems.



Avaya OneCloud for financial services is composed to address the security, resilience, and sophisticated operating model of financial institutions. To achieve this composition, Avaya OneCloud includes an extensive ecosystem of global industry solution leaders.

Methodology

Avaya combined its knowledge of the banking industry with research from Davies Hickman Partners to understand the key drivers of change. This report is the result of this research and analysis:

- A full survey of published sources on the banking industry
- Depth interviews with senior executives working in the largest banking organizations
- A survey of 1,000 consumers carried on a near nationally representative sample using online surveys
- Workshops and discussions with Avaya executives based on their insight around the banking industry

The report was written in November 2021.

Avaya is a leader in Contact Center, Unified Communications & Cloud Business Solutions, more information about Avaya can be found at www.avaya.com.

The research was carried out independently for Avaya by Davies Hickman Partners. The data and views in this report have been prepared in good faith but neither Avaya nor the authors of the report can be held responsible for any actions or otherwise taken by those reading it.

Notes

- 1 Avaya, Life and Work Beyond 2020 Report, 2020
- 2 Forbes, The Online Bank Insurgency of 2020, 2020
- 3 Forbes, Challenger Bank Chime Reaches the 12 Million Customer Mark, 2021
- 4 Avaya, Life and Work Beyond 2020 Report, 2020
- 5 Forbes, Nearly 30% of Americans are Self-Employed, 2020
- 6 Avaya, Life and Work Beyond 2020 Report, 2020
- 7 AWS, Cloud Security Report, 2020

