

How to Accelerate the Bank 4.0 Journey with HCLTech's Total Experience Suite on AWS

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Digital continues to redefine the customer journey for banks, and the usage of digital channels is driving the next generation of customer experience.

Brett King, a world-renowned futurist and Amazon best-selling author, describes Bank 4.0—the latest banking paradigm—as “Banking Everywhere, never at a Bank.”

This trend has accelerated with the pandemic, as demonstrated by the following use cases:

Work from home (WFH)
The global pandemic has made WFH quite popular, and operations are being enabled for anytime, anywhere, any device access and interaction handling. This has brought the need to redefine traditional contact center agent experiences (AX) and facilitate their roles with easy access, simplified journeys, and faster resolutions.

Cost and differentiation
With a flat or below average topline growth, banks are looking at the innovative use of technologies such as artificial intelligence (AI), cloud, and automation for customer service. These technologies help reduce operational costs and help banks differentiate themselves and enhance the business experience (BX).

Customer engagement innovations
Customers are expected to be away from branches for a while. As a result, conversational banking, video banking, and mobile banking are becoming hugely popular and replacing the traditional brick and mortar. Customer experience (CX) is today's game-changer and will define the leaders in the post-pandemic era.

Almost all of the contact center modernization initiatives being prioritized by leading banks falls under one or more of the A-B-C (Agent – Business – Customer) layers. This holistic approach is what we refer to as Total Experience (TX) Transformation, which is cited by Gartner as a top strategic technology trend for 2021.

TX Transformation is fluid and can be enabled as part of a client's existing infrastructure setup, or as a fresh modern platform such as Amazon Connect.

In this post, we'll discuss HCLTech's Ziva solution and its critical industry components, such as API Hub and FluidCCI for Bank 4.0 enabler. We'll also explore Ziva's extensibilities that leverage AWS Contact Center Intelligence (AWS CCI) and Amazon Connect to drive customers' TX transformation.

HCLTech is an AWS Premier Tier Services Partner with the Amazon Connect Service Delivery and AWS CCI launch partner accreditations. HCLTech also holds AWS Competencies in DevOps, Migration, SAP, Storage, and Mainframe migration, and is a member of the AWS Managed Service Provider (MSP) Partner Program.

Introduction to Ziva, APIHub, and FluidCCI

HCLTech has built a suite of solutions—Ziva, APIHub, and FluidCCI—to accelerate a bank's transformation journey to Bank 4.0 and equip them with the digital muscles required for providing elevated customer and agent experiences.

All of these solutions are built on Amazon Web Services (AWS) and provide fast, secure, and high-quality personalized service. They are available on consumption-based pricing models. Each helps deliver productive customer conversations and accelerate a bank's ROI and time to value.



Ziva

Ziva is an intelligent banking assistant, which replaces or augments traditional touch-based and Automatic Speech Recognition (ASR)-based experiences with Natural Language Understanding (NLU)-driven conversational banking.

Ziva is an omnichannel solution and offers standardized AI-based self-service across voice, chat, mobile, and social channels. It comes pre-built with a repository of utterances for banking, such as accounts, balance, payments, eligibility, credit cards, and more to make self-service easier and deployments faster.

Ziva supports voice biometrics-based authentication, has multi-linguistic capabilities, and offers a business-friendly user interface (UI) to configure next best actions (NBA) and fallback mechanisms.



APIHub

The HCLTech APIHub is an integration accelerator that enables internal and external integrations across a bank's landscape of diverse applications running on disparate technologies.

APIHub is a standards-driven open banking platform which enables Ziva to get fast and secure access to customer data held across multiple databases and CRM systems.

APIHub aggregates data across diverse system APIs so that Ziva can offer seamless AI self-service through a single, consistent interfacing layer. It allows quick and easy consumption of data across systems and database, thus taking away a bank's burden of dealing with complex and non-standard integrations.



FluidCCI

FluidCCI enables enterprises running large on-premises contact center platforms with thousands of agents, as well as small and medium companies using modern cloud-based contact center platforms, to equip themselves with next-gen AI, automation, and analytics capabilities.

This helps banks elevate the customer experience with ease and do so without the need to redefine or migrate any of their existing interactive voice response (IVR) applications, customer journeys, or existing processes.

FluidCCI is fully built on communication platform-as-a-service (CPaaS) technologies leveraging AWS and Vonage on a pay-per-use model, thus giving faster ROI to businesses.

How it Works

Customers typically use traditional channels (like voice) or digital channels (social media or chat, for example) to engage with their financial services or banking partners through Ziva.

Ziva's conversational AI layer is built on Amazon Lex, a chatbot AI, with AWS Lambda for slot-based fulfillment. For NLU in languages which are not available in Amazon Lex yet, Amazon Translate is used for translating customer requests to non-English languages (such as Chinese or German).

Once English responses are looked up from the slots, they are translated back to native language using Amazon Translate, after which Amazon Polly performs speech-to-text to the customer.

The entire integration layer is tightly coupled to avoid any performance lags or latencies. Ziva can seamlessly integrate with a bank's website or mobile app using standard software developer kits (SDKs) or AWS Amplify.

Ziva is also integrated with Amazon Comprehend to understand real-time customer sentiments. It can transfer to an agent using standard APIs if a customer's negative sentiments exceed the business-configured threshold value at any given time during the conversation.

If agent-based interaction is needed, for clients already with the contact center hosted on Amazon Connect the solution natively blends in with Amazon Connect to provide the omnichannel customer engagement on AWS.

This interface simplifies the complex integration, speeds up the application roll out, and helps financial services customers quickly elevate customer experiences to the next level.

If agent-based interaction is needed, for clients who want to continue staying with existing on-premises or cloud contact centers such as Genesys and Cisco, Ziva works in combination with FluidCCI to transform the customer experience with both AI and analytics capabilities.

FluidCCI offers next-gen solutions such as real-time agent assist and historical analytics, which seamlessly blend in with any of the client's existing platforms like Genesys Engage, Cisco UCC, and Genesys Cloud to provide personalized customer experience without any impact to existing IT systems or architecture.

The HCLTech APIHub acts as the middleware between Ziva, FluidCCI, and the bank's backend systems, CRMs, and databases. It performs the pass-through aggregation and format conversion for the different non-standard integrations.

The “security first” aspect in APIHub's design allows data at rest and in motion to be encrypted, leveraging cloud-native key management services.

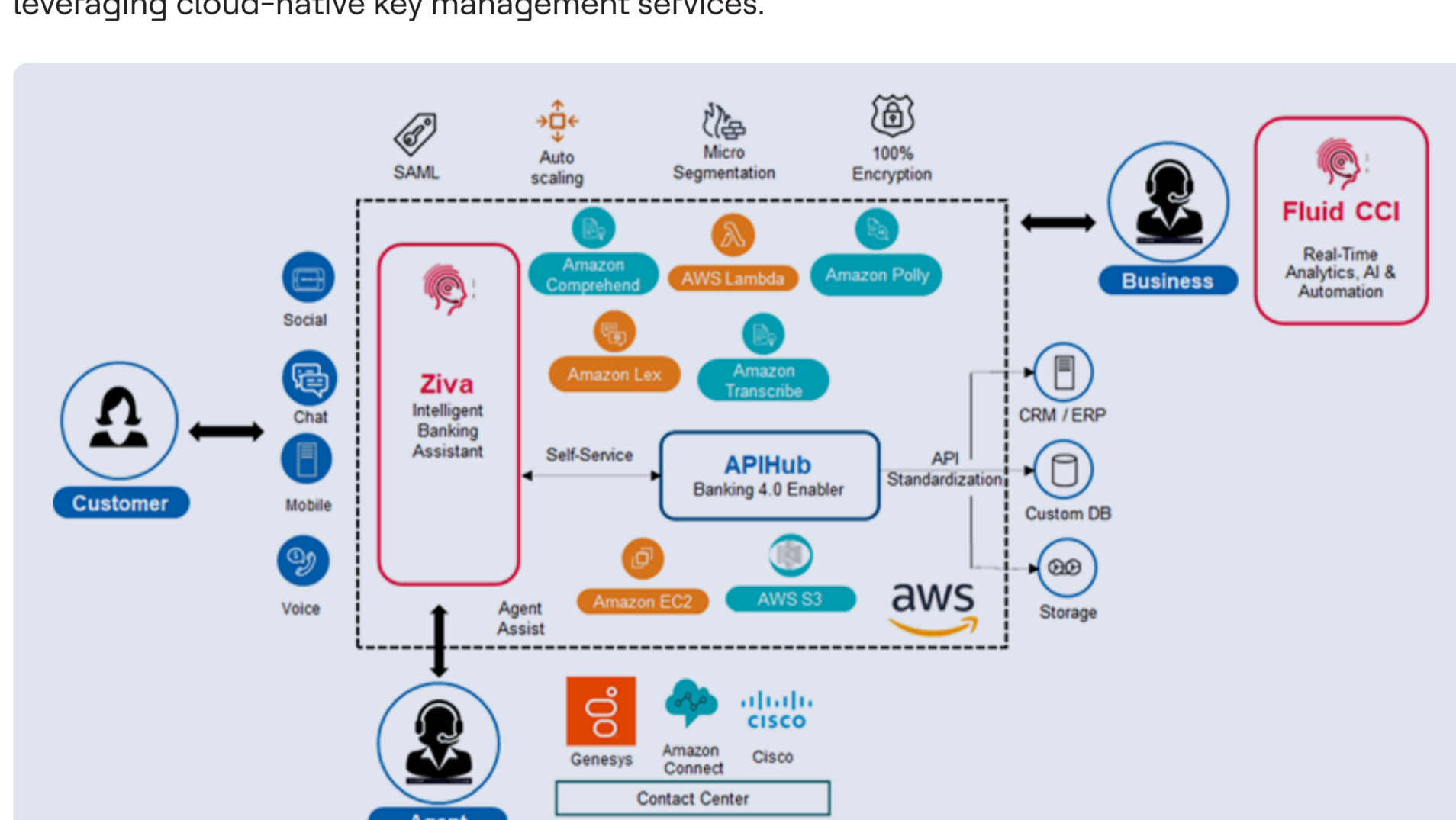


Figure 1. TX Transformation for banking with Ziva, APIHub, and FluidCCI

Together, Ziva, FluidCCI, and APIHub form a compelling portfolio with end-to-end channel, intelligence, and middleware for customers at the frontend, agents at the backend, and businesses at the center for a total shift in experience.

All three solutions can work separately or in conjunction to offer varied capabilities of digital maturity for banking clients based on business needs. They are built to scale on demand and support elastic scalability, auto-scaling deployment to cater the instant and flexible load, and manage unexpected peaks or drops in customer interactions.

They can also fit into the customer experience strategy of clients at both ends of the industry value chain:

Digital adopter banks who are looking to stay relevant in the industry by elevating their contact center with digital channels, analytics, and conversational AI.

Digital native fintech startups who want to offer differentiated customer experiences and aspire to be early adopters of these next-gen technologies.

Delivering Results

The following table illustrates the TX Transformation business benefits Ziva, FluidCCI, and APIHub brings to clients:

Agent Experience	Business Experience	Customer Experience
Automation of agent activities post call helping in reducing after call work (ACW) time by 40%.	Reduce cost of operations by 25% using next-gen technologies (AI, cloud, analytics) in your contact centers.	Consistent intelligent self-service with across customer-facing channels helps reduce AHT by 10-15%.
Real-time knowledge assist and script guidance to assist new agents on SOP and next best actions.	Shorten time to market by 40% for digitization, providing vital competitive advantage.	Personalized CX with name and language preference, intent prediction features.
Real-time transcription and translation of voice calls to agent “language of choice” inside desktop, making experience easier.	Design thinking-led UX keeps users happy and engaged, improving brand loyalty and recognition.	Empathetic, situation-driven customer service using real-time sentiments.
Understands intents, sentiments, insights from customer conversations to help contextually.	Faster ROI with potential in approximately 10-12 months post deployment.	Eliminates customer frustration, reduces channel abandonment and call drop-off rates.
Improved agent productivity and utilization by automating routine tasks, such as case creation and work summary updates.	Increased digital deflection, potential to reduce voice calls by 4% the first year, saving infra cost and improving agent efficiency.	Effortless experience across end-to-end journeys blending in multi-channel hand-off, starting from authentication till call closure.

Conclusion

HCLTech's Ziva, FluidCCI, and APIHub solutions are fully built on AWS and form an end-to-end Bank 4.0 offering for traditional and digital banks looking to transform their agent, business, and customer experiences for digital differentiation and/or cost reduction initiatives.

While Ziva provides banks with digital channels and intelligent assist, FluidCCI enables businesses with real-time intelligence and insights. APIHub provides a standardized API layer which can integrate across any of bank's CRM and backend systems.

These HCLTech solutions are built with a rich set of features and shorten time to market for banks while reducing service cost, providing faster and increased ROI, and improving user experience.

Reach out to Sales BU at reachawsbu@hcl.com to learn more or schedule a workshop!