

The Right Architecture for Next-Generation Banking



DIGITAL REPORT 2021

ORACLE

THERIGHT ARCHITECTURE FOR NEXT-GENERATION BANKING







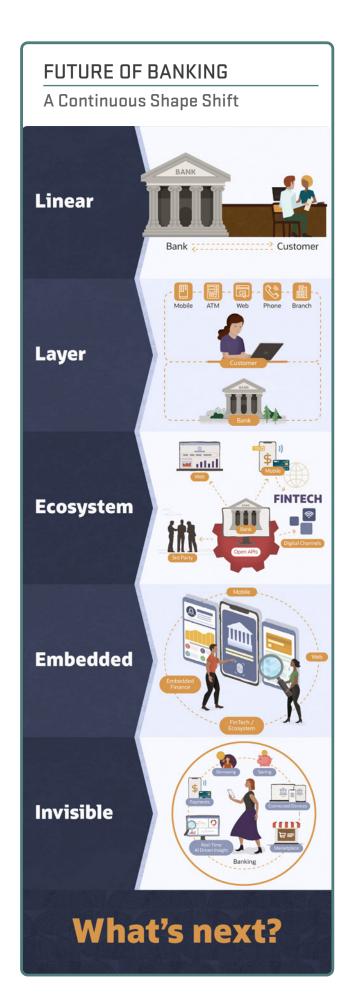
Sonny Singh shares how Oracle's agile, deeply-invested banking architecture has been designed for success in a FinTech innovation-fueled landscape

racle offers an integrated suite of applications, plus secure, autonomous infrastructure in the Oracle Cloud. Oracle Financial Services, the fintech business of Oracle, enables financial companies to deliver better services. Oracle defines these services as being truly centred around the customer, digitised in their entirety, intelligent in process, and resilient as a growth enabler. Powered by cloud infrastructure and technology innovation, its financial services portfolio is built with deep domain expertise and a best-of-breed acquisition strategy.

Today, Oracle's solutions blend decades-long knowledge of banking with consistent product innovation and investment to make it the industryleading platform for banks. It offers a mix of deep functionality, coupled with modern architecture and model choice deployment—giving financial institutions the best options based on their operating models and business strategy.

The foundation of next-generation banking success begins with the architecture and technology decisions made today

Customer demographics, demands and shifting technology paradigms will decide the shape of next-generation banking. Digital natives and adopters now demand banking embedded in their lives with seamlessly connected actions, advice, and support that is personalised to them and based on their life moments.





As a result, banks will need to reinvent themselves at a breakneck pace to retain and win new customers. There will always be fintech innovators offering a better customer journey, leveraging the latest data-driven capabilities that can take customers off the market. Therefore, banks must be inherently agile, open, and architecturally flexible. According to Oracle, this is the only option.

To help banks adapt, Sonny states, 'Oracle's banking architecture is developed to provide banks with the power to determine their success path in a rapidly changing landscape, based on their customer demands. Our strategy has been to provide

"Prepare for change, expect continuous disruption and build for instability"

SONNY SINGH

EXECUTIVE VICE PRESIDENT & GENERAL MANAGER, ORACLE FINANCIAL SERVICES



ORACLE FINANCIAL SERVICES AT A GLANCE

- Manages \$200 billion (USD) in revenue
- Processes transactions for more than 730 banks and FIs across 160 countries worldwide—including Tier 1 global
- Processes \$400 million (USD) in life and health insurance policies each year
- 23 out of 30 globally systemically important
- Stands as one of the fastest-growing
- Leads in asset finance solutions, including

a functionally rich and componentised product suite that helps banks drive a progressive transformation and continuous innovation strategy with built-in innovation. Our customers can focus on outcomes and not waste time experimenting with new tech and architectures, and we give them a complete choice on deployment. This sets them up for the next generation of banking'.

Overall, Oracle Financial Services takes an architectural-first approach to provide a blueprint for banks to continuously adapt to the shifting shape of banking. To do so, it gives customers a complete choice of deployment that will set them up for the next generation.

CUSTOMER SPOTLIGHTS

WITTY

The smart finance innovator uses Oracle for hyper-personalised yet highly relevant financial services

W1TTY aims to put customers in charge of their finances by delivering hyper-personalised services at transparent rates. As a disruptor to the status quo, W1TTY needs to move fast on all fronts. W1TTY chose Oracle Banking to deliver an easier and more rewarding financial experience to customers. The Oracle Banking suite, equipped with payments, a digital core, microservices, comprehensive open API set, and cloud-ready architecture, helped WITTY provide digital services with native apps in a fully mobiledriven experience to customers in just 13 months.

Launching in the fall of 2021, W1TTY will expand its suite of services, flexibility, and scalability with the latest cloud technology. 'The role of financial services in the next era is to operate on a more personal level', Ammar Kutait, Founder of W1TTY explains. 'You have to tailor each offering based on your customer's current financial situation, life circumstances. and goals'. In Oracle, it found a truly scalable solution that will serve its global ambitions for years to come.



Building the next-generation transaction bank with Oracle

Mashrea Bank, one of the United Arab Emirates' leading financial institutions, envisions building the transaction banking business of the future. It believes that multi-channel coverage, end-toend digitisation, seamless integration with client value chains, and analytical frameworks will be the fundamental elements of next-generation transaction banking. As the industry shifts, Mashreq foresees a bigger role for distributed services, APIs, and emerging technologies.

Mashreq also wants to build a business model that is fundamental 'client native'. With this vision in mind, it chose Oracle Financial Services to provide the platform for its next-generation transaction banking. Wisam Mahmood, EVP, Co-Head, Global Transaction Banking, explains, with Oracle, we have 'the foundation of innovation and product development, built with the best in class microservices technology which enables us to add agility and product innovations, scalability, connectivity, and flexible deployment models globally'.

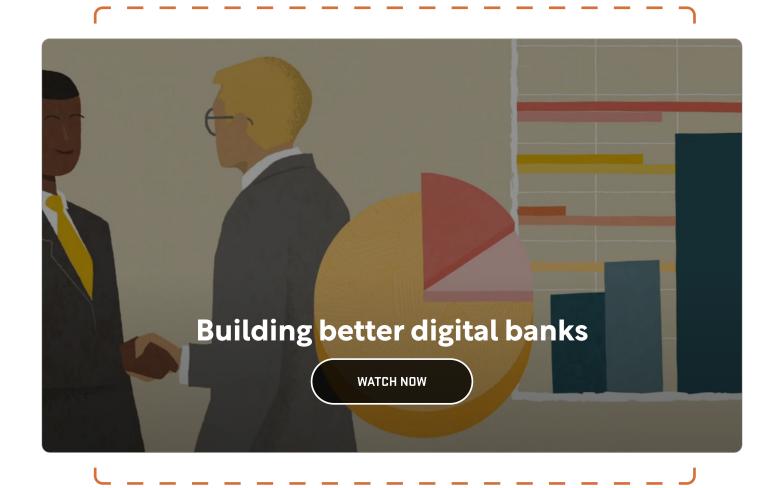
With its componentised framework and bestin-class microservices, OFS will enable the bank to be highly responsive, ready for disruption, and deliver value back to corporates by offering services and solving problems at a lower cost.



Charting an alternative banking future with Oracle

A fintech specialising in the B2B payments in Europe, finXP challenges traditional European banking. By capitalising on the rapid expansion of open banking to business, it provides faster, more simplified payments to next-generation businesses that prefer flexible payments and banking. This agility is why finXP chose Oracle to build its open infrastructure.

According to Jens Podewski, CEO and Co-founder of finXP, financial services will grow increasingly flexible. 'Payment and banking service providers will need to adapt and have the right infrastructure, mindset, and business model to handle new customer demands. Our customers will expect commercial banking to be more similar to consumer banking—a frictionless experience. In Oracle, we found a platform that enables us to empower our customers by being agile and a versatile payments and banking provider'.



"Next generation banking systems will be autonomous, intelligent, available in real-time, and highly secure"

SONNY SINGH

EXECUTIVE VICE PRESIDENT & GENERAL MANAGER, ORACLE FINANCIAL SERVICES

A perfect blend of functionality and flexibility

It's time to think differently as the rules of banking are being redefined. Finding new revenue models, accelerating roadmaps to digitalise experiences, managing risk and regulation while delivering more with less is the new mandate. Market-leading banks will need to rapidly adjust to these new conditions, and as we mature into an ecosystem of embedded banking, survival will be based on the ability of banks to rapidly adapt their products and services to new channels and open ecosystems.

For example, younger customers are interested in payment methods other than traditional credit and lending. Oracle's 2020-2021 Global Retail Banking Consumer Trends Survey & Report found that 20% of banked customers aged 30 and below are very likely





to use an alternative method for all payments in the next 12 months. Exploring customised lending options and participating in market collaborations to offer revenue value-adds like POS financing or specialised consumer lending options creates a new revenue stream and customer acquisition path. In this type of ecosystem, banks with limited functionality will lose market share to their competitors.

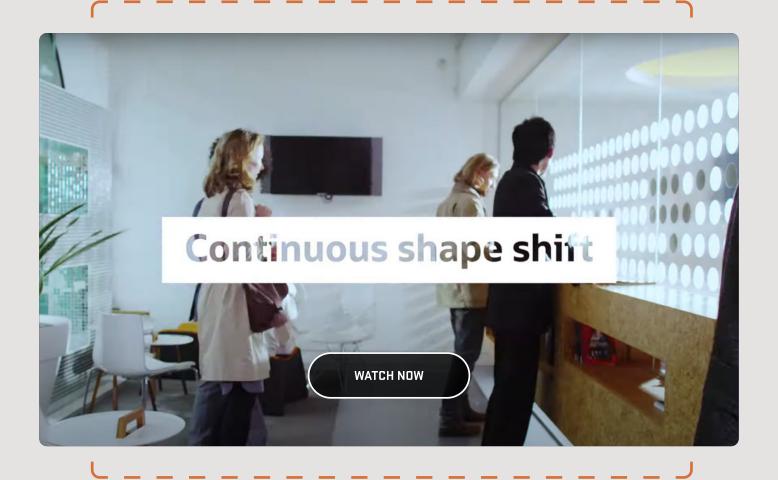
Therefore, to succeed in the next generation, banks will need to deliver quality yet agile services that provide a differentiated experience. As such, Oracle's banking portfolio is built with the richest functionality. This creates a domain-driven design approach that spans retail banking, corporate banking, and business lines from financial inclusion to Islamic banking.

Open and interoperable right from the start

Oracle's product engineering prowess ensures that its banking solutions are open. With 3000+ exposed microservices and open APIs across its platforms, its systems are designed to be interoperable, secure, and seamless across systems, gateways, and regulatory interfaces. Oracle Financial Services is also an early adopter of standards, making its services easy to consume and connected right from the start.

"Oracle is continuously investing to create the most modern digital, data and core platforms in the financial technology space"

> SONNY SINGH **EXECUTIVE VICE PRESIDENT & GENERAL** MANAGER, ORACLE FINANCIAL SERVICES



Programmed for continuous innovation

Oracle Financial Services leverages enterprise innovation to quickly deploy early-market and industry-leading technologies, like cloud services, to stay ahead of disruption, bringing benefit to each of the customers regardless of size or geography. For example, banks have quickly deployed use cases—such as approvals on wearables, peer-to-peer payments, voice-assisted transactions, chatbot-based self-originations, and microtransactions via Quick Response (QR) codes.

The company is embedding artificial intelligence capabilities and automation processes into its systems to help banks track customer behaviour and preferences. The more banks know, the better they can adapt to consumer demands and thrive in an ever-changing financial landscape.

Oracle's technology paradigm of continuous innovation and continuous delivery supports this philosophy—and DevOps plays an important role in its iterative, agile design. All of its applications work together to pave the way for the effective digital bank of the future.

Microservices for the real world, not a buzzword

Oracle Financial Services takes a foundational approach to microservices by building out new capabilities on a cutting-edge chassis that creates resiliency, scalability, and flexibility across the institution's operations. Microservices allow banks to realise the benefits of modern architecture and create a protected,

Sonny Singh

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TITLE: EXECUTIVE VICE PRESIDENT AND GENERAL MANAGER

COMPANY: ORACLE FINANCIAL SERVICES

LOCATION: PALO ALTO, CALIFORNIA, UNITED STATES

Sonny Singh has served as general manager of Oracle Financial Services since 2013 and was named executive vice president in 2019. In this role, Singh has worldwide responsibility for Oracle's product portfolio for the financial services industry across banking, insurance, and capital markets. His organisation spans all business functions including product strategy, research and development, mergers and acquisitions (M&A), sales, consulting, marketing, and customer service. In addition, his operational responsibilities include Oracle Financial Services Software (OFSS), a publicly held company, where he is a member of the Board of Directors.

Prior to his current role, Singh was the senior vice president responsible for all functions in Oracle's go-to-market strategy, including product marketing, competitive intelligence, field enablement, and M&A integration across Oracle's entire product and services portfolio. His organisation delivered all of Oracle's strategic customer engagement capabilities, including solutions and expertise for all industry vertical segments; the Oracle Insight program, Oracle's branded value engineering competency; and Oracle Solution

Centers. Additionally, his organisation was responsible for the expert resources, tools, and capabilities for two key market segments: Oracle Key Accounts and Midsize.

Prior to that, Singh was group vice president for Oracle Consulting, where he led Oracle's services business in North America Strategic Accounts. Singh began his Oracle career in 1990 and has had held a number of leadership roles in Oracle's consulting and sales organisations, focusing on Oracle Applications.

Singh holds an MS in industrial engineering from Stanford University and a BS in mechanical engineering from Punjab University, India.



ORACLE IN BANKING

Continuous Evolution and Results



Extreme Flexibility

Built on core principles on parameterization componentization



Functional Richness

Covers all needed functionality out of the box—CASA to Lending and Asset Finance as well as Investments and Subscription Pricing



Open REST APIs

Global FinTech ecosystems with +3,000 open APIs



KYC & AML

Compliant and comprehensive customer onboarding as well as KYC processes Intelligent AML as well as detecting fraud and trapping customer behavior



Architecture

Evolved with Microservices Architecture



Machine Learning & AI

Offered with smarter intelligence and predictability to detect customer buying patterns, attrition as well as NLP based automation



Payments

Real-time, ISO 20022 platform ready



Multi-Country Deployments

Experience across +160 countries



Business Model Adaptability

From Mobile only to digital only. From Microfinance to Investor Servicing.



Extended Core Regulation, Risk, Finance and Compliance

Integrated with Modern Risk and Finance and Oracle ERP



Cloud Ready

Ready to be deployed on Cloud



Blockchain

Adapted to Blockchain use cases



Digital Experience **Platform**

Core agnostic customer experience and engagement





"Banking should be invisible and embedded within the customer's life"

SONNY SINGH

EXECUTIVE VICE PRESIDENT & GENERAL MANAGER, **ORACLE FINANCIAL SERVICES**



scalable environment to deploy new capabilities quickly, bringing continuous innovation to the marketplace. This provides responsiveness and predictable experiences to customers and bankers and helps them leverage AI/ML for workflow automation.

As the banking ecosystem evolves, microservices and a component-based architecture will help banks weather the unknown and transition away from monolithic and legacy environments.

Cloud as the essential element of adaptability

Cloud will be the default infrastructure option for market-leading banks. Running on Oracle's cloud infrastructure, Oracle Financial Services offers its solutions on a cloud-ready model, with an increasing suite of cloud-native applications. Based on preferred business models, banking customers can choose better methods of deployment. As Oracle sees it, to compete in next-generation services, banks must adapt to a continuous shapeshift. And to achieve lasting success, they'll need the right architecture and technology—Oracle's speciality. •













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