



# Making banking services work harder

Supporting customers and partners with technology

by Diana Ost

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**B**anking in Vietnam is big business. In 2019, approximately 93% of the adult population of Vietnam owned smartphones, and the country had about 68 million internet users by January 2020.

More than 50% of the Vietnamese population had access to a bank account in 2020. With the explosion of mobile devices and the growing digital infrastructure in Vietnam, customers could easily manage their financial services—including banking—via smartphone or tablet.



Orient Commercial Joint Stock Bank (OCB), a Vietnamese bank founded in 1996, provides financial services and products to retail and commercial customers and partners. OCB recognized that its tech-savvy customers were positioned to benefit from the bank's products and services, and from those of its affiliate partners.

With that realization, OCB decided to investigate a way to provide more

services and products to its business partners and OCB customers. OCB needed a robust technical solution to address these needs, and to support an API-based solution that would enable partners to participate in the API economy.

Building an API solution like this would be a big job, but taking this direction could provide many rewards to OCB and its partners and customers.

“In the past few years, there have been many pioneering banks implementing OpenAPI solutions.”

**Nguyen Tuan Khang**, Country Leader, Cloud and Cognitive Software, IBM Vietnam

OCB collaborated with

20

partners to develop nearly 100 APIs

1 OCB partner had about

1

million transactions in 1 month

# OpenAPI specification supports banking innovation

OCB decided to use the OpenAPI Specifications (OAS) with OpenAPI after researching and analyzing the standard. Using the OAS would provide OCB with a vendor-neutral format that is also a widely adopted industry standard.

OCB selected the [IBM Cloud Pak® for Integration](#) solution with an external API gateway. IBM Cloud Pak for Integration provides API management, application integration, end-to-end security and enterprise messaging. It also supports additional tasks such as enhanced API test generation and API portal



and workload balancing. This choice provided the bank with a complete, intuitive and scalable API platform that supports creating, exposing, managing and monetizing APIs across clouds.

“OpenAPI is the foundation for OCB to optimize connections to partners and to customers,” says Du Xuan Vu, Chief Information Officer at OCB.

IBM was already providing many of OCB’s technology systems, such as [IBM Cloud Pak for Business Automation](#) software to provide AI-generated recommendations and analytics, and [IBM® Integrated Analytics System](#), a high performance hardware platform and database query engine for analytics and reporting.

While ensuring the core technology foundation at OCB is unified, IBM supports security and efficiency within the operation.

OCB chose to use Open Banking combined with an OpenAPI library that partners could access. Open Banking works with OpenAPI to enable developers to easily build applications for financial institutions. OCB’s OpenAPI technology configuration is based on IBM Cloud Pak for Integration with an external API gateway. Open Banking provides open access to banking transactions and other consumer financial data from banks and financial institutions when customers opt in for services. The OpenAPI library has a portal that allows partners and

developers to register and use APIs from the library.

OCB and IBM Business Partner Southeast Asia Information Technology Joint Stock Company (SEATECH) worked together to research and analyze the OAS. Later, SEATECH worked in partnership with OCB to implement the technical portion of the OpenAPI journey.

“In the past few years, there have been many pioneering banks implementing OpenAPI,” says Nguyen Tuan Khang, Country Leader, Cloud and Cognitive Software at IBM Vietnam. “Companies are creating new business models with this technology. OCB has joined them.”

# Securing the API Ecosystem with IBM

Working with IBM Cloud Pak for Integration has allowed OCB to manage an entire security-rich API ecosystem across multiple clouds—including boosting API socialization and monetization—while supporting API security using the OAS 2.0. OCB can, in turn, provide API access to business partners for their financial transactions, such as bill pay or online retail store sales.

Recently, the bank applied open platform technology to use fintech apps like AirPay, VnPay and MoMo. Fintech users can pay utility bills such as electricity, water and

internet and top-up phones right on the app. Users can also transfer money into electronic wallets to purchase and pay for services.

With the new self-service API library, the bank began sharing APIs. The API library allows partners to access APIs quickly. Partners can supply OCB customers with access to their services with the APIs without writing any code.

The bank has built and implemented more than 30 APIs for banking-specific products such as accounts, savings, money transfers and

payments. OCB plans to continue to enlarge the API catalog. It was able to create, expose, manage and monetize these APIs with IBM technology.

After implementing and running OpenAPI for one year, the bank successfully engaged over 20 partners and exploited nearly 100 APIs. OCB found that the monthly transaction volume for just one partner had exceeded one million transactions. This milestone confirms that OCB is one of the leading banks that is applying technology to banking in Vietnam.

OCB celebrated the successful implementation of OpenAPI by sponsoring and hosting the well-attended OpenAPI Challenge 2020. The contest received attention from many organizations and logged more than 50 entries. The products demonstrated novel ideas that were feasible and suitable for the target market.

At the close of the competition, 21 teams presented ideas for the financial sector to the jury. The eight best ideas from the final round were created by Aspire, Casso, Credify, EM&AI, FinFin, Jingo.Live, Jirnexu and OCB.

“The coming major expansion projects with OpenAPI give us a lot more confidence in learning, researching and successfully applying many new technologies, and providing more value, experience and benefits to customers and partners,” says Vu.

“OpenAPI is the foundation for OCB to optimize our connections to partners and to customers.”

**Du Xuan Vu**, Chief Information Officer, Orient Commercial Joint Stock Bank



### About Orient Commercial Joint Stock Bank

Headquartered in Ho Chi Minh City, Vietnam, [OCB](#) (external link) was founded in 1996. After more than 25 years of operation and development, OCB currently has nearly 200 business units spread across all regions, provinces and key economic centers across the country. OCB is a leader in digital transformation with impressive growth rates in Vietnam compared to the whole banking system in the last 5 years.

#### Solution components

- IBM Cloud Pak® for Integration
- IBM Cloud Pak for Business Automation
- IBM® Integrated Analytics System



### About Southeast Asia Information Technology Joint Stock Company

IBM Business Partner [SEATECH](#) (external link), headquartered in Hanoi, Vietnam, has years of experience implementing large projects in banking, finance, securities and government. SEATECH has participated in implementing national-scale information technology projects, including for OCB with the OpenAPI project

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