



Demand for hyper customization drives low code adoption in financial and banking software

Today over 90% of large banks in the world continue to use legacy systems at their core. But surely the banking industry is evolving towards digital, and technology developments like low code are fueling innovation and growth, and operationalizing hyper customization at scale. Banking is changing, across the board.

White Paper

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BANKING IS CHANGING ACROSS THE BOARD

“As FDIC chairman, one of my key priorities is to encourage new bank formation,” wrote Jelena McWilliams, Chairman, Federal Deposit Insurance Corp. Her focus was in enabling small and community banks, but the sentiment applies more widely, especially in times of the pandemic.

The banking ecosystem is seeing dramatic changes: FinTech has grown leaps and bounds, disrupting payments and transactions. It is no longer a fringe offering, but mainstream among end-consumers of banking services; EY finds that 96% of their respondents aware of at least one money transfer and payment FinTech service, and nearly half of them use an insurance fintech service. FinTech deals in Asia surpassed the US in Q3 2019, with India and China leading the pack, and Ant Financial on a path of its own.

As options increase, customers are demanding digital services – Citibank is said to have seen an 84% increase in daily mobile check deposits in May and a tenfold surge in activity on Apple Pay. This isn’t just in the US – the bank saw a 116% surge in mobile app downloads from February to April in Mexico, “while digital bill payments rose 78%”.

This might be the obvious outcome of lockdowns of COVID-19, what’s remarkable is that banks have also been digitizing processes that were decidedly paper-based for very long. For example, Citi is facilitating digital onboarding; JP Morgan’s wealth advisors are offering personalized recommendations remotely; the “in-person, wet signature” requirements for mortgage transactions are being replaced by e-signatures.

THE FUTURE OF BANKING IS DIGITAL

With challenger banks at the heels of traditional banks, a few key trends emerge:

Digital is the differentiator: Whether one is a challenger bank, traditional banking services company or a FinTech player, enabling digital services will be the key to success or failure.



Omni-channel experience is critical: Digital today includes far more than an online banking application. Customers seek mobile banking, WhatsApp banking, as well as seamless integrations with the payments, budgeting and other apps they use for money management.

Personalization needs to be a default feature: While replicating the warm and fuzzy relationship with the branch manager is still a while away, customers today demand that digital banking solutions offer services that are most relevant to them. They also expect that apps save their preferences and save time in each transaction.

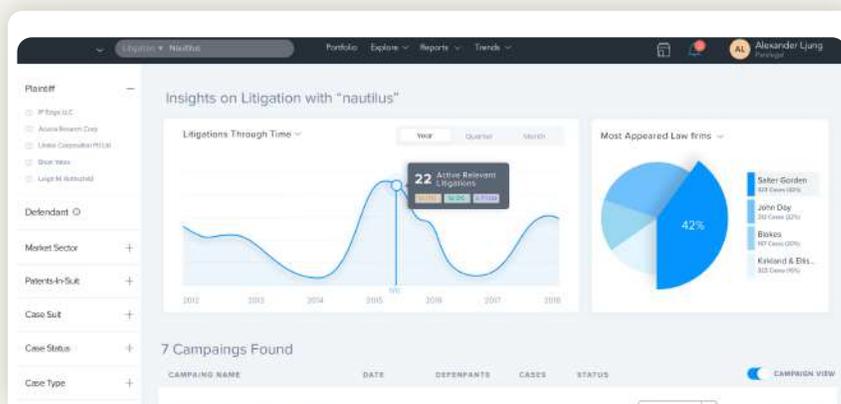
Localization is fundamental: As a highly-regulated industry, one of the key needs of any banking solutions provider is local compliance. But localization must go beyond that. It needs to accommodate the tastes, practices, values and preferences of the customers it seeks to serve.

TECHNOLOGY POWERS INNOVATION, GROWTH

It is becoming increasingly clear that for banks and financial institutions in the 21st century, technology will be the fuel that will accelerate business growth. When IT was a support function, banks used to employ in-house teams or outsource to service providers to manage it. Those days are over, though. In the digital world, IT is at the core of business. Therefore, it is a lot more than just maintenance — application development, modernization, big data analytics etc. are a fundamental part of IT prerogatives.

Today, banks and financial institutions address their technology needs in two ways:

- In-house tech teams: Hiring large, complex and multi-skilled teams to build cutting-edge tech products.
- Independent software vendors (ISVs): Buying pre-built products for use within the banking organization.



Both have their pros and cons. Internal teams are better for security, agile development practices and areas where deep domain knowledge is necessary. However, running complex development projects in-house can be expensive.

ISVs, on the other hand, bring the convenience of an existing product, the maintenance and upgrades of which are managed by someone else. Yet, customizability is a key concern.

Indeed, banks need to customize their services across regions, languages, users, compliance regimes, and even design requirements. Achieving a fine level of customization—hyper customization—through traditional in-house development teams or using ISV vendors can be expensive, if not impossible. It is here that low code platforms offer hyper-customizability at scale, without compromising on technology (cloud deployments, microservices, containerization, etc.), security, scalability, interoperability, robust architecture, and standards compliance.

HYPER-CUSTOMIZABILITY FOR BANKING APPS

No two banks are the same — and no two banks that are the same can compete effectively in the market today. In order to offer differentiated solutions to the customer, banks and financial institutions need hyper-customized applications.

Regional customization: An important example of customization based on region might be in Islamic banking. The rules that govern Islamic banking are unique, requiring tech applications to be hyper-customized. Yet, that's only one of the many use cases of regional customization: In countries like India, gold is an important asset, and loans against gold are a key vertical; crowdfunding is emerging as a way to raise capital in many countries; insurance is a default need in some countries, while a luxury in others.

Banks instinctively know this. They design their offerings for their markets carefully. Yet technology they use isn't customizable in the same manner that human thought is!

Language customization: The next billion users won't be English-speaking Westerners. To reach banking services to the nooks and crannies of the world, applications need to speak the local language.

Building applications that offer this customizability in-house can take much time and energy. Such hyper-customizability might not be available in software built by ISVs.

User-driven customization: The teller doesn't need to access the enterprise data lake, the data analyst mustn't see personally identifiable information of the bank's customers.

Hyper-customizable applications need to enable the right access to the right user, without compromising security and privacy of the customer.

Compliance-related customization: It is one thing to hyper-customize applications to meet the regional changes in compliance requirements. It is also important to ensure that it is possible to continuously adapt to evolving customization standards.

Customizing an application for compliance is not a one-time need or operation, but a continuous process.

Design customization: Last, but not the least, it is also important for banking applications to have user experience that is customizable for various needs. This might be for languages that are written from right to left; for countries where specific colours signify certain things; or for hardware that is dated compared to modern tech elsewhere.

Hyper-customization must allow the same application to look and feel comfortable to a variety of users, while working the same way for them all.

LOW CODE IN HYPER-CUSTOMIZATION

Low code is an intuitive visual approach to application development, allowing developers to drag and drop components onto a canvas and then integrate these components using pop-up dialogs and plain language. This plays a significant role in enabling hyper-customizability. Here are some key features of low code that enable this:

Prefabs, templates and components for consistency + customizability

Low code platforms allow businesses to accelerate repetitive development activities with prefabs, templates and components, for both front-end and back-end needs. While developers can drag and drop components to build their own customized application, without compromising on consistency and architectural principles.

Customization configurations across application layers

Low code platforms allow banks and banking industry ISVs to build hyper-customized services that can enhance existing applications. This helps ISVs deliver high-value customized solutions without having to disrupt their product roadmap.

Customization self-serve machine

Without depending on UX designers, developers and IT specialists, both business users and end-consumers can onboard themselves and customize the application based on their needs. User-centric error messaging and responsive app feedback ensures that business users aren't intimidated by the tech jargon.

This saves significant time and energy not only in application development, but also taking new services to market.

API-first architecture

Low code platforms use REST APIs to enable enterprise applications to plug-n-play seamlessly with other systems in the bank. Open standards-based code generation ensures compatibility across layers. This offers an easy way to modernize legacy applications in a staggered manner, without having to break the monolith all at once.

In-built security compliance across all customizations

“Application weaknesses and software vulnerabilities continue to be the most common external attack method,” finds [Forrester's The State Of Application Security, 2020](#). For long, customization was seen as a security loophole, and standardization as the security best practice.

With low code, banks can have both. A good low code platform comes in-built with features that enable automatic upgrades, declarative configuration to fine-tune compliance levels, robust authentication and authorization protocols, as well as protection against Top 10 OWASP vulnerabilities.



CASE STUDY | Fortune 500 fintech co builds a disruptive banking system

A client of WaveMaker, a Fortune 500 financial services company was experiencing rapid global growth. They needed to onboard banks in different markets with complex compliance requirements quickly. Not having the ability to customize for the unique needs of each geography was a key challenge.

WaveMaker connected with their platform APIs to enable them to build applications that offer a highly differentiated brand and banking experience.

- PoCs showed 80% less coding than hand-crafting
- Seamless deployment to AWS in one-click from WM studio
- Consumer banking application rolled out after a 3-month agile project run
- Downstream solutions built using the plug-n-play model for bank customers

FUTURE OF BANKING WITH LOW CODE

Low code offers speed-to-market unlike any other application development paradigm before. The bigger advantage is that it does so without compromising on technological innovation (cloud deployments, microservices, containerization etc.), security, scalability, interoperability, architectural robustness, and compliance requirements. A good low code platform will also enable banks to integrate custom code, as and when needed, offering a best-of-both-worlds solution.

If you're a banking services provider or an ISV building software for the BFSI industry, get a demo of WaveMaker low code platform now.

For more information and resources, visit www.wavemaker.com