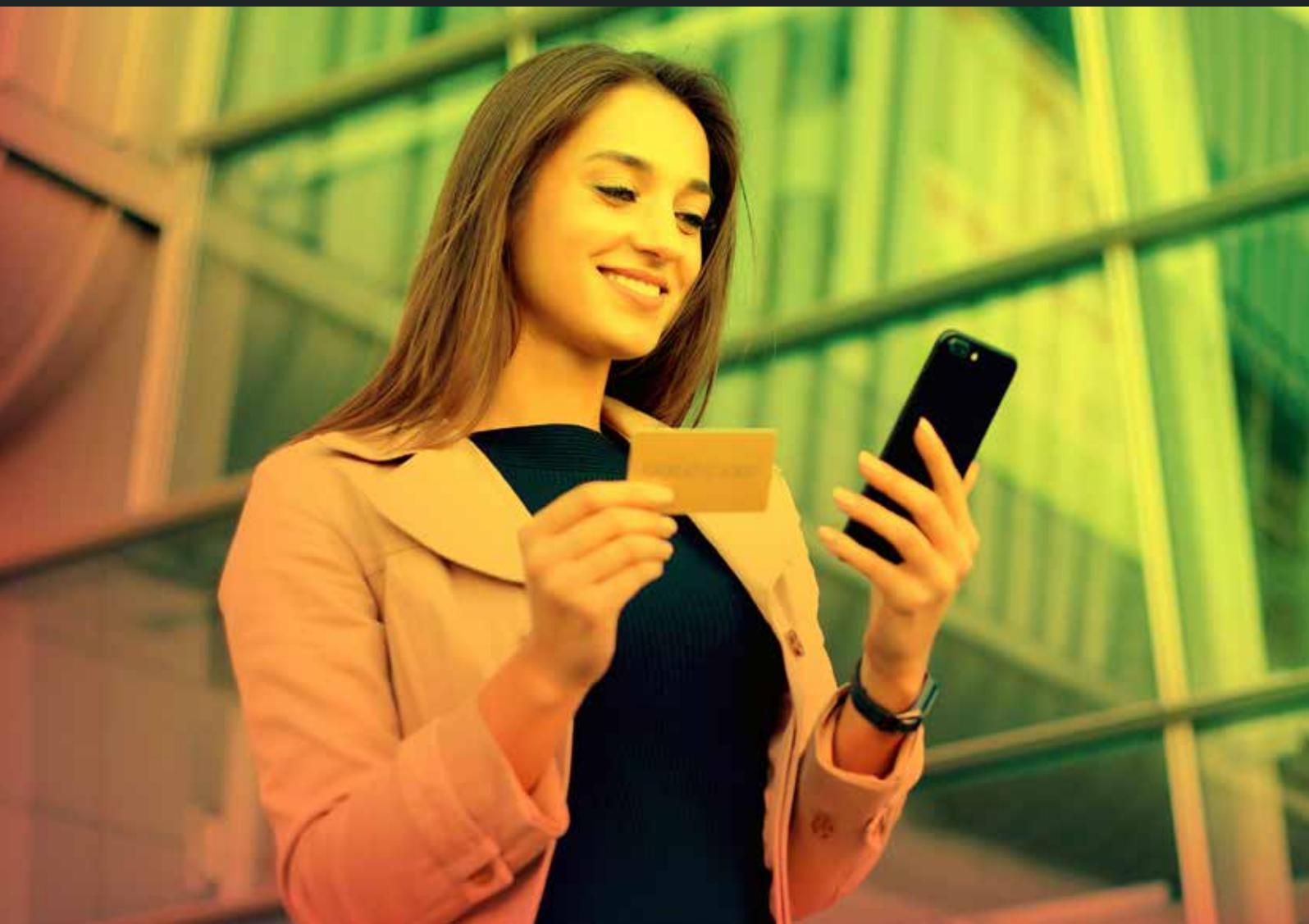# Low-code, no-code platforms: A competitive edge for banks and insurers

# Abstract

Rising customer demand for innovative digital products and services in the banking, financial services, and insurance (BFSI) industry demands a faster application development process to ensure rapid upgrades and quick time-to-market for new offerings. To address this, banks need a new, easy, and secure application development methodology — one that helps leverage readily available frameworks, reusable code, and components.

Low-code and no-code platforms address this need, and enable support for safer, reusable and tested components while reducing the development cost of services and applications. They also have the capability to help banks and insurers introduce new business functionalities at short intervals. This white paper throws light on why low-code and no-code platforms are gaining attention from developers as well as business and leadership teams, and how they can be leveraged to drive successful digital transformation in BFSI firms.

# Rapid application development: A critical imperative

BFSI firms are under pressure to accelerate the delivery of new products and services and upgrade existing offerings to meet changing customer demands. In addition, enhancing business agility is an imperative to respond quickly to market shifts while reducing maintenance effort is critical for business continuity. A rapid application development platform is a critical prerequisite to meet these demands. However, banks and insurance firms operate with legacy platforms with significant technology debt making rapid application development or upgrades a big challenge. We believe that low-code and no-code platforms can help overcome these limitations (see Figure 1) as they offer well-defined integration patterns and technology tools suitable for legacy systems. Additionally, these platforms are ideal to quickly develop and launch applications that undergo frequent changes as in the BFSI industry.
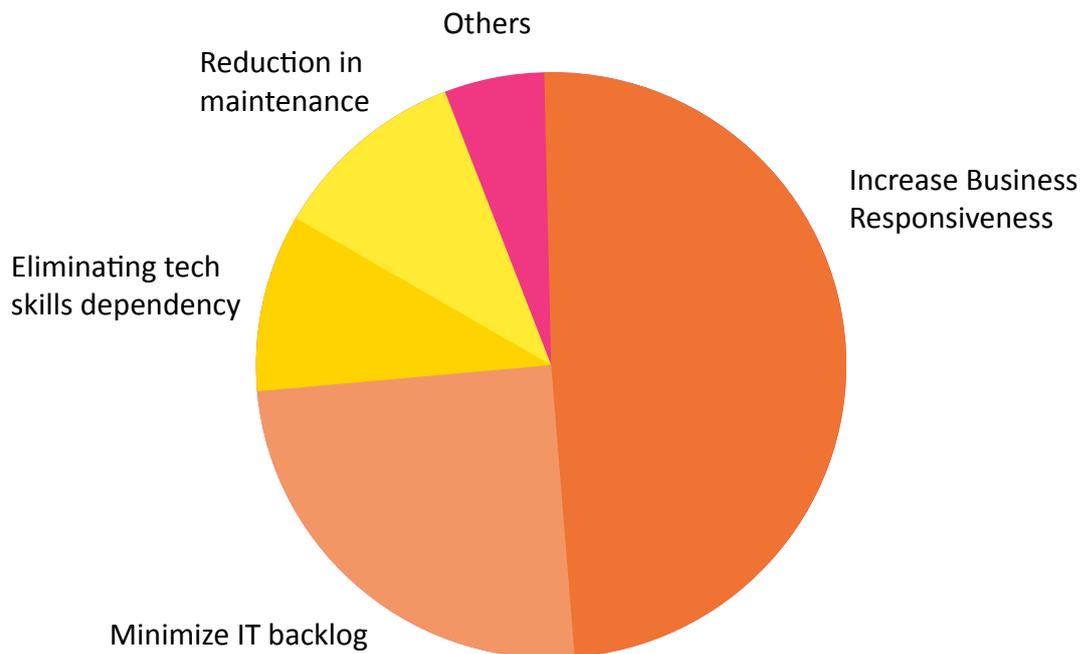
Tata Consultancy Services

*Figure 1: Key drivers for the adoption of low-code and no-code platforms*

The software development process has undergone several changes and matured over the years. While the development methodology has evolved from waterfall to agile, code development has embraced open source and reusable application programming interfaces (APIs) with better DevOps tooling resulting in cloud-ready code. However, with the growing use of digital and mobile platforms and customers demanding faster digital services with rich user interfaces, BFSI firms need to embrace newer languages and implementation methods, while becoming familiar with new hosting environments. Moreover, banks and insurers need to adapt to different integrated development environments and tools, for various time-consuming application development methodologies. Low-code and no-code platforms simplify the development process and help create flexible banking and insurance applications.

Traditional application development involves manual coding resulting in slow launch of offerings to the market and costly support. Low-code and no-code platforms help business and IT teams maintain applications at a lower cost while ensuring quality, and accelerated delivery of business applications. This helps increase business responsiveness, reduce IT backlog, and cut dependence on niche technical skills. Low-code and no-code development platforms have inbuilt tools such as domain and user interface (UI) models, business process workflows, and data integration components that help focus on transaction processing rather than creating application functions. This helps create function specific reusable components on the platform to enhance application scalability, flexibility, and maintainability.

# Leveraging low-code, no-code development in BFSI

Low-code and no-code development platforms are ideal for applications that need to be built from scratch and require customization. For instance, using low-code and no-code platforms, BFSI firms can develop customer-facing and self-service applications for customer onboarding, mortgage origination, loan origination and management, debit and credit cards, and campaign management. In addition, BFSI applications tend to have a longer development cycle and are subsequently enhanced in response to customer expectations, evolving industry demands, and regulatory and compliance requirements. This implies that BFSI firms are in a constant cycle of enhancing applications by adding features and services. Low-code and no-code platforms are most suitable for such development environments.

Built-in connectors embedded in low-code and no-code platforms enable data exchange between functions by accessing systems of record from applications of ecosystem partners, which can help BFSI firms develop internet of things (IoT), artificial intelligence (AI), and machine learning (ML) backed applications. The main advantage of using built-in connectors is that the applications can be easily integrated with third-party service provider systems and data sources, enabling a transition to ecosystem banking models. Firms can also use these platforms for process-based approvals, messaging channels, self-service reports, and customer service, thus reducing the application development cost, improving time-to-market, and enhancing return on investment (RoI).

# Selecting the right low-code, no-code platform

To succeed with low-code and no-code application development, BFSI firms must choose the right platform that ensures ease of use and flexibility. Considering that banking and insurance applications are customer-centric and data driven, the chosen platform should provide better user experience as well as integration support for different digital assets including legacy systems and existing enterprise wide platforms. BFSI organizations must take care to avert vendor lock-in while choosing the platform – the platform must deliver required benefits as well as allow firms the flexibility to quickly and easily switch to alternative platforms. In addition, the chosen platform must allow seamless integration of third-party products that BFSI firms may be using and avoid the creation of silos and consequent complex business processing.

Once the platform is chosen, the next step is to move the application development on to the new platform. However, before implementing the low-code, no-code application development platform, banks and insurers must initiate a few preliminary steps:

- Identify pain points for digitalization

- Define the use cases for low-code and no-code platforms

- Select a suitable low-code and no-code platform to meet requirements

- Design and execute prototypes for suitable workloads

- Validate business and technical requirements to meet digitalization goals

- Finalize enterprise level transformation roadmap using low-code and no-code platforms

# Succeeding in the era of low-code, no-code

We observe that the adoption of low-code, no-code platforms is picking up. Going forward, we believe that BFSI firms will embrace low-code, no-code application development despite limitations across customization, deployment, and hosting of these platforms as well as restrictions related with application revisions due to less code and inflexible prebuilt components and configurations. Moreover, applications that are built with these platforms are locked in with the vendor. For special and enhanced application features, BFSI firms may have to fall back on custom code, resulting in longer integration time and increased cost.

However, given the rising demand for new innovative digital offerings and the need for their integration with legacy systems and external ecosystems in the BFSI sector, the benefits of adopting low-code, no-code platforms far outweigh the challenges. Low-code, no-code platforms are the best bet for banks and insurers to quickly launch innovative offerings, deliver value to customers, and keep pace with ever-increasing customer expectations from digital experience.

# About the authors

## Sudheendra Ullura

Sudheendra Ullura is a solution architect in the Canada Technology and Solutions group with the Banking, Financial Services, and Insurance (BFSI) unit at TCS. He has over 19 years of experience in distributed technologies, with expertise in Java Enterprise Edition, open source, and cloud technologies. Ullura specializes in software architecture, system architecture, design, development, and hosting in multiple environments. He has a Bachelor's degree in Electronics and Communication Engineering from Bangalore University, Bengaluru, India.

## Lakshmi Prasad Narayana

Lakshmi Prasad Narayana is an enterprise architect in the Canada Technology and Solutions group with the Banking, Financial Services, and Insurance (BFSI) unit at TCS. He has over 20 years of experience in developing IT architecture and solutions using complex distributed technology platforms. Earlier, he led the Microsoft group in the BFSI Technology Excellence Group (BFSI TEG), where he was involved in designing enterprise solutions for various banking clients. Narayana specializes in consulting, solution designing, and roadmap definition for banking and insurance customers. He has a Bachelor's degree in Mechanical Engineering from SV University, Tirupati, India.

**Contact**

For more information on TCS' Banking, Financial Services, and Insurance unit,

visit https://www.tcs.com/banking-financial-services or https://www.tcs.com/insurance

Email: bfsi.marketing@tcs.com

**About Tata Consultancy Services Ltd (TCS)**

Tata Consultancy Services is a purpose-led transformation partner to many of the world's largest businesses. For more than 50 years, it has been collaborating with clients and communities to build a greater future through innovation and collective knowledge. TCS offers an integrated portfolio of cognitive powered business, technology, and engineering services and solutions. The company's 469,000 consultants in 46 countries help empower individuals, enterprises, and societies to build on belief.

Visit **www.tcs.com** and follow TCS news **@TCS_News**.