

# Realizing the Omni-channel Banking Dream

## Abstract

The financial services industry has witnessed an explosion of customer touchpoints and sales channels over the last few years. While customer adoption of these channels has been rapid, banks and financial services firms have to incur significantly high cost to serve customers across these channels. The relatively sluggish pace of global economic recovery and shrinking profit margins have made it imperative for financial institutions to control operational costs. At the same time, delivering a consistent brand experience across channels is a business priority. This paper discusses the key technology aspects that are fundamental to a financial firm's omni-channel customer engagement strategy.

## Omni-channel Banking is the New Normal

Banking needs today can be met through a variety of options – online portals, mobile apps, or the good old bank branch. Needless to say, customers expect a consistent, seamless experience across all these channels and banks must ramp up efforts in this direction in order to improve customer interactions and deepen relationships. Adopting a comprehensive omni-channel approach is therefore a business imperative for banks. In addition to helping financial institutions deliver superlative customer experience and save operational costs, an omni-channel approach will help them gain a holistic view of their customers' lifestyle, behavior, and preferences, paving the way for targeted marketing.

Apart from the convenience of ubiquitous access to banking services, customers expect to use their preferred channel and seamlessly switch to a different channel without any loss in communication or disruption in interaction experience. For example, a customer may start a transaction on a mobile device on the way to work, continue to browse through the available options on his laptop after reaching the office, and finally switch back to the mobile phone, picking up the thread later in the evening and taking the task to closure.

## The Downside of Existing Banking Systems

Most banks have built a complex web services infrastructure that creates channel silos and makes it difficult to deliver a consistent, seamless user experience. Another fallout of such an environment is high maintenance cost, as adding or tweaking a functionality will require significant rework to multiple codebases and backend systems. Each channel sources data from different systems creating data consistency issues across channels, which adversely affects customer experience. Moreover, a complex web services environment makes it difficult to run analytics and gain insights that can help banks improve decision-making and customer service.

A channel agnostic, omni-channel software solution that integrates a bank's offerings, tools, and processes across channels, and provides seamless access to customers will not only help deliver a consistent, seamless experience but also resolve operational issues. Backed by a simplified IT platform, an omni-channel solution will help banks achieve their digital transformation goals spanning seamless multi-channel support

for improved customer interactions, increased customer satisfaction, faster time-to-market, and reduced IT costs.

## What it Takes to Deliver Superior Omni-channel Experience

At the core of a bank's omni-channel customer engagement strategy lies a strong and robust software solution, which should be designed keeping in mind the following aspects:

**UI framework:** Delivering a consistent user experience across channels requires a responsive user interface (UI) design, which means that the UI codebase for all the channels should be the same. In addition, the codebase must have the capability to adapt to and serve multiple channels and devices. Responsive UI design offers the flexibility to deliver to the screen dimensions of any channel or device used by the customer. This design can be used to serve multiple channels, which significantly reduces development and maintenance costs. A consistent user experience across channels makes it easier for banks to communicate their brand image and build an emotional connect with customers.

**Unified IT services and backend systems:** The web services that are used to serve or update data across channels should be identical, so that the source and destination of data remain the same – basically, a central repository where data is stored. This ensures data consistency across channels as the data is sourced from the same backend systems and any updates to data will reflect across channels. Another key advantage of using the same web services across channels is that introducing a new functionality or tweaking an existing one, or fetching additional data elements, will entail minimal rework. Lesser rework, in turn, translates into lesser effort, lower costs, and higher efficiency.

**Business rules engine:** The solution should include a rules engine to carry out the required business steps depending on the channel being used by the customer. Financial institutions should refrain from building a monolithic codebase – the code should be segregated based on channels, to allow developers to configure channel-specific rules. A business rules engine helps enable separate workflows within the codebase for each channel, making it easier to configure channel-specific rules and tweak them as and when needed. For instance, a bank may want to include geolocation features in its mobile channel in order to push relevant offers to customers based on their location. The mobile channel will therefore require some

additional rules to be configured to accommodate this feature when compared to the online channel that usually does not include a geolocation feature. In addition, a rules engine offers more flexibility to business users by enabling them to configure business rules instantly in the production environment. A business user can feed the requirements in business language, based on which the rules engine automatically generates the code to configure it.

**Security:** Using the same web services infrastructure to serve multiple channels means that the channels are identical in terms of the data that is made available, or the transactions that can be initiated. However, not all channels are equally secure; the degree of security and the authentication level of each channel must determine the type of information that customers can access through that channel. Banks mandate different user authentication levels for different channels. For instance, mobile channels often require two-factor authentication to provide an additional layer of security; a wearable device may mandate three-factor authentication. The omni-channel solution should include a framework that restricts the data made available on channels depending upon respective security vulnerabilities and user authentication levels. For example, given the security vulnerabilities of smart watches, banks may choose to restrict the type of account information that customers can access or the transactions that can be conducted through this channel.

**Big Data analytics:** Both structured and unstructured data are important when we talk about deriving insights that support business decision-making, and help gain customer context and channelize marketing efforts. Each banking channel is a source of rich customer data offering immense opportunities for actionable analytics. However, an IT services environment with different codebases for each channel presents challenges around data gathering, collation, and consolidation. An omni-channel software solution underpinned by Big Data technologies facilitates better analytics through collation and consolidation of data from multiple channels in a central repository. It facilitates uniformity in the way the data is stored, making consolidation easier, even when the data is stored in disparate systems across different locations. A Big Data platform that sources customer information from a plethora of interactions across multiple channels will drive a shift toward client-centricity, enabling banks to anticipate customer 'wants' and personalize the banking experience, rather than just meeting their 'needs'.

## Looking Ahead

Customers today are increasingly driven to interacting with banks through a multitude of digital channels. The number of channels that banks will need to serve and manage will only increase as social media banking and IoT applications become mainstream in the financial services industry. Irrespective of the channel used, customers expect consistent, seamless user experience at every touchpoint. Banks must proactively implement an omni-channel infrastructure with the robustness and scalability to accommodate new digital capabilities. This will help them gain a distinct competitive edge in enabling new channels, building loyalty, and driving customer retention and acquisition.

**About The Author****Naval Mishra**

Naval Mishra is a Delivery Manager with TCS' Banking and Financial Services (BFS) business unit. With around 12 years of experience, Mishra is responsible for delivery of ecommerce projects and omni-channel transformation for TCS' banking clients. He has a Master's degree in Computer Applications from Osmania University, Hyderabad, India.

**Contact**

Visit the [Banking & Financial Services](#) page on [www.tcs.com](http://www.tcs.com)

Email: [bfs.marketing@tcs.com](mailto:bfs.marketing@tcs.com)

Blog: [Drive Governance](#)

Subscribe to TCS White Papers

TCS.com RSS: [http://www.tcs.com/rss\\_feeds/Pages/feed.aspx?f=w](http://www.tcs.com/rss_feeds/Pages/feed.aspx?f=w)

Feedburner: <http://feeds2.feedburner.com/tcswhitepapers>

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

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled, infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at [www.tcs.com](http://www.tcs.com)