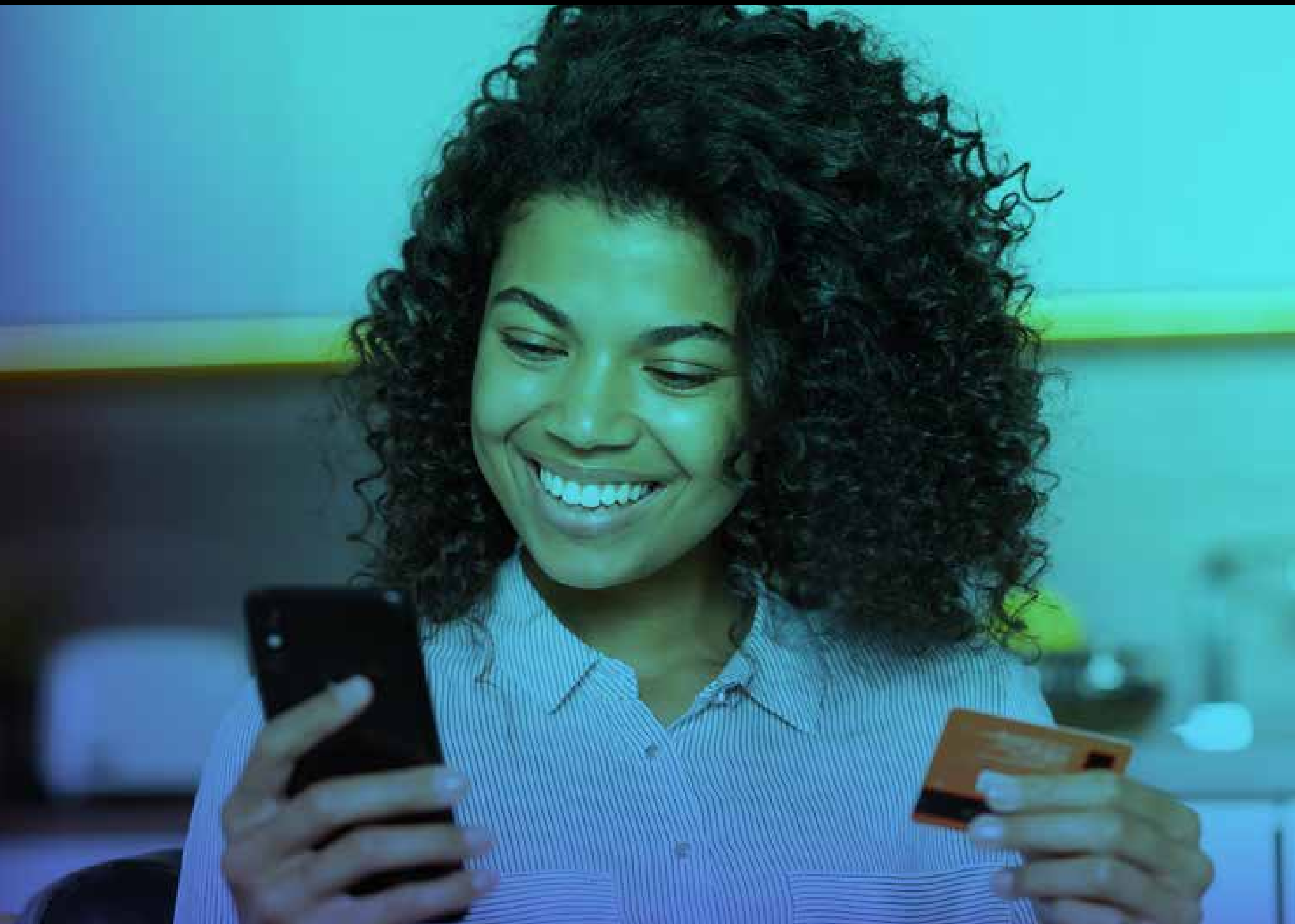
TATA CONSULTANCY SERVICES

Building on belief

Reimagining customer experience monitoring in banks with AI



Abstract

Like any other industry, customer experience has emerged as the key success factor in banking and financial services. Although financial institutions utilize multiple channels like contact centers, branches, ATMs, and mobile banking to drive customer loyalty, they often fail to effectively monitor customer experience, regulatory compliance, and customer sentiment. This is primarily due to the absence of machine-first principles in customer experience monitoring where quality analysis is first performed by machines and only exceptions are handed over to humans. Recent advancements in artificial intelligence (AI) such as natural language processing (NLP), machine learning (ML), speech-to-text, and computer vision can help banks reimagine their customer experience monitoring function.

This white paper suggests advanced technology measures that financial institutions can adopt to automate customer experience monitoring and measure customer sentiment across channels. It also delves into how financial organizations can increase customer satisfaction, ensure compliance, reduce churn, and drive operational efficiencies.

Need for customer experience monitoring and sentiment analysis

Over the past few decades, financial institutions have evolved from the traditional brick-and-mortar setup to digital banking and expanded their channels to take services closer to the customer than ever before. Today, customers can choose their banking channel from a wide range of physical or digital channels, based on their preference and convenience. Banks must ensure that customer experience is consistent, monitored, and reviewed across all channels to ensure topnotch service.

Branch and ATM

Although banks offer various digital services, the branch and ATM are critical physical interaction channels for banking services like deposits, withdrawals, loan processing, payments, and wealth management and investment. Monitoring customer experience across these physical channels is imperative to know whether the services offered meet customer expectations. Bad customer service at the branch and the ATM can create negative customer sentiment, leading to churn. Capturing and analyzing customer sentiment in near real-time across all these touchpoints is critical for delivering a rich customer experience that drives business growth.

Contact center

The contact center remains the preferred first point of contact for many customers when it comes to service-related queries. This leads to a significant increase in call volumes. Managing customer experience and analyzing the service quality of contact centers is important because one bad call can negatively impact customer sentiment and jeopardize customer relationships and future business opportunities. Some critical challenges in contact center operations faced by leading banks in North America, LATAM, and APAC regions include:

- Inadequate quality checks: The current monitoring process covers only a sample of the total number of customer interactions. Our interactions with clients in North America reveal that only 5-10% of calls are monitored for quality.
- Manual monitoring and scoring: Quality assurance agents listen to the calls and assign scores according to predefined checklists. For many banks in North America and the LATAM region, the checklists are quite long with over 20-50 parameters for certain call types.
- Non-calibration of agents' performance: Organizations lack in-depth insights into agent performance to identify areas for improvement as quality checks are limited to a representative sample.
- Regulatory non-compliance risk: Banks must ensure regulatory compliance for all customer interactions. Inappropriate or absence of disclosures related to call recording, missed do not call (DNC) provisions, or personal health-related inquiries can lead to adverse regulatory action.

Digital channel

The pandemic has accelerated digital adoption in the financial services industry, and customers are increasingly leveraging digital channels to fulfill their financial needs. Today, customers expect to enjoy the same level of seamless, rich experience in financial transactions as in online retail or entertainment applications. Monitoring customer experience and sentiment across digital channels is critical for continuously delivering outstanding customer experience. If customers face system capability or service unavailability issues while completing a transaction, that should be immediately captured and proactively acted upon.

Technology to the rescue

Monitoring customer experience across all touchpoints and performing customer sentiment analysis is impossible without embracing machine-first principles. Machines can be used to capture customer experience from all channels and perform automated quality review and scoring and flag negative experience or non-compliance that require corrective action. This ensures that only exceptions are pushed for manual review.

For example, technologies like computer vision can help analyze facial expressions of the customers in the physical or video channels; speech-to-text can help examine customer voice in contact centers; and natural language processing (NLP) and machine learning (ML) can help build the core component of monitoring and analytics for all channels, including digital (see Figure 1).

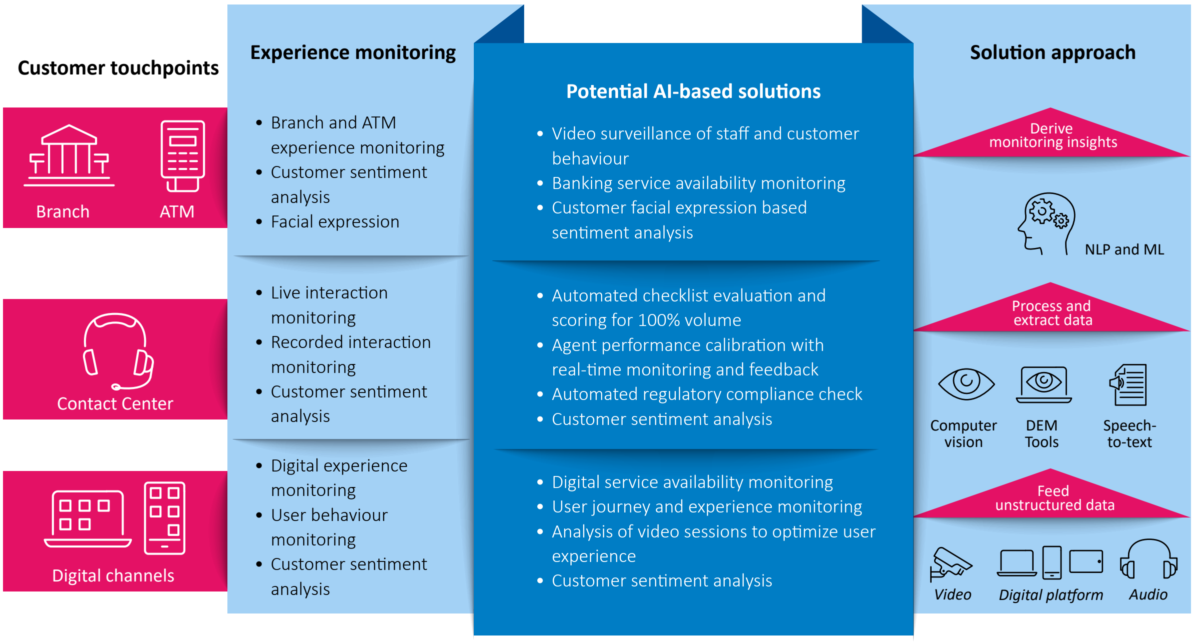


Figure 1: Customer experience monitoring solutions for banks

Clearly, the way forward for banks is to embrace machine driven monitoring of customer experience across differing channels to enhance customer satisfaction.

Branch and ATM experience monitoring

Banks can maximize video surveillance to drive customer experience monitoring both for branches and ATMs. Video analytics can help enhance situation awareness, drive operational productivity, and improve customer service. With the help of video monitoring, banks can assess customers' facial expressions, attitudes, sentiments, and behavior. The video content can be leveraged further to understand how customers are managed, reasons for long queues, what delays customer service, and other actionable intelligence. However, banks must ensure that they comply with local and regional privacy regulations while recording audio and video interactions with customers for future analytics.

Contact center experience monitoring

Financial institutions automate the monitoring of customer interaction quality and sentiment analysis in their contact center operations, to ensure quality checks for 100% of the interactions and enable insights-driven corrective actions. In our experience, leading banks in North America, LATAM, the UK, and APAC regions are keen to unlock value by adopting this approach. However, to accomplish this, they will need to build some critical capabilities:

- Live interaction monitoring
  - Real-time customer-agent interaction monitoring
  - Real-time call etiquette guidance
  - Automated checklist evaluation and scoring
  - Exception reports and insights for contact center productivity improvement
- Recorded interaction monitoring
  - Batch-based interaction monitoring for recorded conversations
  - Automated checklist evaluation and scoring
  - Exception report and input for contact center productivity improvement

- Customer sentiment analysis
    - Capture and identify customer sentiment in near real time from the interactions across channels
    - Notify supervisor in case of high negative customer sentiment

Digital experience monitoring

While using existing digital services, customers may face several issues related with application performance, network, infrastructure resources, or user devices, resulting in unsatisfactory user experience and negative sentiment. Traditionally, most organizations use application performance monitoring tools that focus only on software performance from a technology perspective. As organizations embark on digital transformation journeys, they must implement digital experience monitoring (DEM) tools. Alongside, user behavior analytics and sentiment analysis tools can be used to measure and monitor customers' digital experience across all aspects – reachability, availability, reliability, and performance. This will help banks capture the customer journey across all digital channels and identify failure points that result in negative customer sentiment. DEM covers monitoring of devices, applications, networks, and other resources, and once the issues are identified, auto-healing capability can be added to ensure customer experience is not impacted.

The way forward

Customer experience monitoring is crucial to delivering an enriched customer experience. To achieve this goal, banks must define and implement a strategy with focus on the following aspects:

- Select channels where monitoring customer experience is important for meeting business goals (for example, branch interactions, ATMs, contact centers, digital channels).
- Identify what needs to be monitored (for example, call quality, customer sentiment, quality of customers' digital experience, branch service quality).
- Choose relevant key performing indexes (KPIs) and map them to business goals such as customer satisfaction index, customer sentiment score, call quality, and compliance score.
- Select the appropriate technology depending on input data format and capability requirement (for example, computer vision for video stream input, speech-to-text for audio input).
- Create proofs-of-concept to validate the feasibility of the technology and the accuracy of output as well as understand requirements and approach to enhance accuracy especially for AI backed technology tools.
- Design and implement monitoring solutions built upon machine-first principles.
- Embed monitoring outcomes into customer-facing or front-office applications for immediate actions.
- Set up governance frameworks to measure effectiveness of customer experience monitoring and continuous finetuning.

Manual experience monitoring of sample interactions is not adequate given that customer experience is the top priority for financial service organizations. The way forward is to implement advanced, automated customer experience monitoring solutions to gain insights from all customer touchpoints in both physical and digital channels. Quick action is imperative to gaining a competitive edge in the financial services industry where experience is a key differentiator.

About the authors

Kumaravelu I

Kumaravelu is the industry advisor and transformation head in the Banking, Financial Services, and Insurance (BFSI) business unit at TCS. Over the past 26 years, he has worked with multiple banking and financial services customers across the globe. Kumaravelu's current responsibilities include transformation, innovation and strategic initiatives in the US and LATAM regions.

Surajit Kar

Surajit is transformation consultant and technology head in the Banking, Financial Services, and Insurance (BFSI) business unit at TCS. He has more than 16 years of experience in leading strategic and transformation initiatives for global banks and insurance companies. Surajit's current role involves consulting, technology research and trend analysis and innovation for leading BFSI clients across the US and LATAM regions.

Kamruzzaman Shaikh

Kamruz is a solution architect in the Banking, Financial Services and Insurance (BFSI) business unit at TCS. Over the past 15 years, he has worked on various strategic and back office transformation initiatives for global banks and insurance clients. He has worked extensively in conceptualizing and implementing innovative solutions in the areas of intelligent and robotic automation and other next-gen technologies for TCS' leading BFSI clients across the US and LATAM regions.

Awards and accolades

TOP 3
IT SERVICES
BRAND

FASTEST GROWING
IT SERVICES BRAND
FOR THE DECADE
2010 - 2020

Contact

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

visit https://www.tcs.com/banking-financial-services and 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 500,000 consultants in 46 countries help empower individuals, enterprises, and societies to build on belief.

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