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5 EMERGING TECHNOLOGY TRENDS IN THE BFSI SECTOR

Open Banking APIs | IPA | Chat & Voice | IoT | AR/VR

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With organizations across all industries currently focusing on providing a better experience to their users, the banking industry is not far behind. Digital banking, coupled with mobile banking applications are some of the recent disruptions in the field that managed to grab a larger share of customer transactions.

And now with technology disruptions like artificial intelligence, machine learning and IoT capabilities in the field, the need to provide a seamless banking experience has never been greater.

Here's a look at the most promising emerging technologies in the sector:

OPEN BANKING AND APIS

With the adoption of open banking standards across financial institutions, it's possible for traditional banks as well as fintech platforms to create a diverse new range of solutions. The data that banks possess, coupled with the disruptive technology and business models that fintech firms bring in, is set to significantly enhance the customer experience.

Banks can expose a wide range of anonymized big data from different systems via APIs and make it available for third-party developers to build new solutions. They can productize and monetize these APIs and bundle them according to different use cases for different third-party requirements.

APIs also enable banking organizations to gather data from both internal and external sources, like buying habits, financial goals, risk tolerance, and social interactions. This can strengthen the banks own data-driven decision making, enhancing their offerings, the delivery channels used, increasing revenue streams and improving the customer experiences.

According to the World Retail Banking Report (WRBR) 2017, published by Capgemini in conjunction with Efma, fintech firms are more likely than traditional banks to provide consumers with positive banking experiences. That said, more collaboration than ever is taking place between banks and fintech firms, leveraging the benefits that each can bring to the table to create customer-centric solutions. This collaboration has lead to the emergence of Open Banking and APIs, using customer data and innovations to create new revenue streams and more contextual services.

> **Banks that open up their APIs to a global community of web developers can tap into a stunning amount of innovation.**
>
> *- World Retail Banking Report*

Citigroup leverages APIs to collaborate with third-party companies for the creation of new products and services for their corporate customers. Banks like BBVA, Fidor and Citibank have developed an API marketplace in order to work in collaboration with other stakeholders for new functionalities like online banking, payments, cards etc.

> **Open Banking offers banks an opportunity to retain and grow their customer base as they add the varied services of third parties to personalize and customize products and services. For banks that don't think strategically and establish a role in Open Banking, there is a chance they will be disintermediated from their customers.**
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> *- Anirban Bose, Global Head of Banking and Capital Markets, Capgemini.*

INTELLIGENT PROCESS AUTOMATION

In the next 10 years, the global generation of data will grow from 16 zettabytes, to 160 zettabytes, says an estimate by IDC. In addition to this, the forecast by Deloitte claims that unstructured data is set to grow at twice that rate, with the average financial institution accumulating 9 times more unstructured data than structured data by 2020.

Such an explosive growth of unstructured data in the coming years makes it difficult for banks to process it all by solely manual means. And a technology solution with the power to mimic human action and judgement, but with high speed, scalability, quality and lower costs are among their top priorities.

160 Zetabytes
Predicted global generation of data in the next 10 years
- IDC

Enter intelligent process automation (IPA). It leverages artificial intelligence, machine learning, and natural language processing algorithms to collect, and segregate the unstructured data, as well as draw insights from it. IPA helps banks and credit unions accelerate their growth by executing pre-programmed rules across a range of structured and unstructured data. It also has the power to make decisions based on configured rules, and effectively reduces 50% of the costs involved in administrative and regulatory processes, while improving quality and speed.

Banking operations such as claims processing, opening retail accounts, loan processing are now a matter of few minutes. Reduced costs, better compliance, and lower error rates are some other benefits of IPA.

No matter the size of your financial institution, the business case for cognitive automation is robust. The technology solution can empower your banks, and reduce customer churn by remarkably improving your level of service and compliance.

Bancolombia Bank was able to automate 40 business processes within the first year of a major processing automation project, leading them to win an Eye on Innovation Award in 2017. Their automation project translated into a $1.4 million reduction in operational costs and a $7.5 million increase in the bank's income.

AI CHATBOTS AND VOICE-FIRST BANKING

With the growth of explosive data and availability of technologies like cloud computing, big data, and machine learning algorithms, one-on-one customer service can now be performed by intelligent chat and voice and assistants.

CHATBOTS

AI driven chatbots have become an important part of enabling a smooth and hassle free transactions for customers in the banking sector. Their usage varies from answering customer queries, to giving them investment advice on the basis of market analysis.

According to PwC, "Chatbots have gone from a digital tool to a digital assistant, and can now learn and evolve on the fly to meet the increasingly complex demands of clients and customers. Not only do they reduce time spent on answering FAQs and general queries, but as chatbots, they can now initiate action, and even be used to advertise financial services such as RDs. The chatbots are using APIs to integrate with data management platforms."

One such success story is of Bank of America's Erica. The AI-driven chatbot can send notifications to customers, provide balance information, suggest how to save money, provide credit report updates, pay bills and help customers with simple transactions. Since its inception, the chatbot usage has now surpassed 6 million users and has processed over 35 million requests.

Moving beyond customer service, chatbots could serve as a personalized interface for the customer, thus discouraging them from seeking other institutions. They can form the basis of data driven decision making in the banking sector, bringing in key intelligence around customer behaviour and preferences. And eventually, with their capabilities to integrate with other technologies like facial recognition, VR, and IoT, they could become the sole interface for users to access their entire gamut of financial information and transactions.

VOICE-FIRST BANKING

According to Google, voice is already used in 20% of all searches, and its market share is expected to rise to 50% by 2020. Interestingly, the BFSI sector is not far behind in leveraging this technology to gain their market share.

Large organizations like Ally Bank, U.S. Bank, and Capital One have begun to engage customers via Alexa devices, empowering them to get quick account-related answers, receive affordability insights, and pay bills, all via voice.

According to the Digital Banking Report, 71% of financial institutions surveyed considered "transferring money between accounts or making payments" as an "extremely" or "very important" part of their future voice capabilities.

Many believe that in the next five years, 50% of all banking interactions will be via voice-first devices. Beyond this, voice enabled transactions can also ensure self-service and deflect calls from the call centers, thus saving costs.

> **"I think you ignore this [voice channels] at your peril if you're a financial institution, because as we get more comfortable and as we have more devices and this becomes a habit, it's clearly what we're going to want to do a lot of financial transactions on as well."**
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> *- JP Nicols, bank innovation expert*

IOT IN BANKING

With 2021, the Internet of Things (IoT) market is expected to double to $520 billion. Leveraging machine-to-machine connectivity to gather data can open up multiple opportunities for banks, giving them the capability to better analyze, track and fulfill the demands of their customers. They can use it to provide far more personalized experience to their customers.

Barclaycard makes use of IoT enabled Dine & Dash solution to provide its customers with supreme end-to-end dining experiences. The technology ensures zero wait-time at restaurants, performs payment transactions on behalf of customers and sends expense receipts subsequently.

Additionally, IoT can help banks:

- Monitor and manage systems like CCTV, digital signage, ATMs remotely
- Streamline operations to set up digital banking machines to reduce queue time
- Bring flexibility in their service
- Generate personalized customer cross sell opportunities
- Devise better ways of risk management, cost reduction and improve operational efficiency

Business clients and customers can get a much more holistic view of their finances, and access their accounts from any device with the use of their biometrics. The data from these devices also enables banks to make tailored offerings for their customers, and make other vital decisions for their business.

AUGMENTED REALITY AND VIRTUAL REALITY

Leveraging augmented and virtual reality in their operations can enable banks and financial institutions to transform their user experiences. It can give bank customers autonomy in terms of at-home banking. Hybrid and virtual branches can come into existence. And this will enable customers to make use of AR to get information via chatbots, self-service, or robots and connect with an actual bank representative through live video if need be.

Visual holograms and projections, creation of personalized offers displayed onto real-life surroundings, account opening, closing, and transaction handling could all be done via AR. This will have incredible benefits particularly in remote areas, where there is a shortage of qualified professionals. Clients in these areas could have access to qualified banking professionals right from their physical location.

Augmented and virtual reality solutions delivered on the ever expanding mobile and application network can increase the reach of financial institutions into remote areas.

The National Bank of Oman has its AR app to enable customers to locate the nearest bank branch or ATM. Customized deals and offers can also be showcased as customers walk through the streets and use their smartphone cameras to bring together their real-life surrounding and an AR projection.

Similarly, the Commonwealth Bank of Australia has their AR app to target customers looking to buy or sell a home. The app makes use of data to provide past information related to property sales, price tendencies, current listings, and properties that have been sold successfully recently. All this information allows the customers interested in real estate to make smart sale and purchase decisions.

AR and VR are set to achieve their peak in the banking industry in the years to come, and it is only wise that the banks have a strategy in place to tap into these opportunities. This will ensure they have a positive impact on customer service and brand loyalty.

LOOKING FORWARD

The banking industry is undergoing a disruption, one that will bring tremendous changes in its operations, and customer experience. The above mentioned technologies are expected to have a tremendous potential and a lot of the leading brands in the BFSI space have already started leveraging them to create new revenue streams.

So the ideal way to keep up with the disruption in the industry is to tap into these solutions when you still can. Because some of these technology solutions are still evolving, getting started now gives you time to strategize, execute and iron out the kinks in the system before customers start expecting the highest level of connected experience and seamless solutions.

SRIJAN

Srijan is working with leading BFSI enterprises, aiding their digital transformation journeys, leveraging data science and analytics, APIs, AI, machine learning, and chatbots to create tailor-made solutions. Our teams work closely with digital experience leaders and other enterprise stakeholders; helping implement the right technologies that will deliver on their ambitious business goals.

Looking for a technology partner to help create innovative solutions?

Let's do a little brainstorming and identify areas where Srijan could be of help.

TALK TO OUR EXPERTS

ABOUT SRIJAN

Srijan builds and modernizes digital systems to help enterprises adapt to changing business models and market demands. We create feature-rich platforms for experience, engagement, collaboration, and insight - designed to be high-performing, digitally transformative, scalable, and secure.

SOLUTION OFFERINGS:

Drupal | DevOps | API Management | Data Science & Analytics | Conversational Interfaces

We are 300+ strong with operations in 7 countries, supporting clients with distributed agile teams across geographies.