

WHITEPAPER

# Digital Transformation for Banks

## Leveraging Conversational AI Platform as Digital Fabric





## Introduction to Conversational AI

Conversational AI is a type of artificial intelligence that facilitates the human like conversation between a human and a software system in real time. It is a piece of software that a person can talk to, like chatbot, social messaging app, interactive agent, or smart device. These applications enable users to ask questions, get opinions, find support, or complete tasks remotely. Conversational systems are powered by a conversational engine named NLP (Natural Language Processing, a branch of AI that deals with linguistic and conversational cognitive science). They make use of large volumes of data processed with machine learning, and natural language processing to aid imitate human interactions, recognizing speech and text inputs and translating their meanings in different languages. Businesses can setup automated chatbots or virtual assistants that can communicate with humans via voice or text and in different languages of user preferences.

Conversational AI leverages three areas:

- Natural Language Understanding (NLU) for understanding the Intent
- Predicting a response using Machine Learning algorithms
- Generating Human-like response through Natural Language Generation (NLG)

These applications help businesses in processes such as customer service, marketing and offering different services to their customers through various digital channels. Other solutions in conversational AI includes tools for speech or text analytics, and proofreading. The usage of conversation AI is growing at very fast pace and the technology has been evolving as a top driver for delivering an enhanced experience to customers. Conversational AI also enables companies to automate highly personalized customer service resolutions which substitutes conventional customer care functions. This makes every communication feel unique and relevant, it also reduces effort and resolution time, hence customers tend to report higher levels of satisfaction.

# Major Conversational AI Use Cases

## 1. Automation of resolutions to common FAQs (Frequently Asked Questions)

Most businesses have set of repetitive questions which AI can answer by identifying different ways people might ask the same questions.

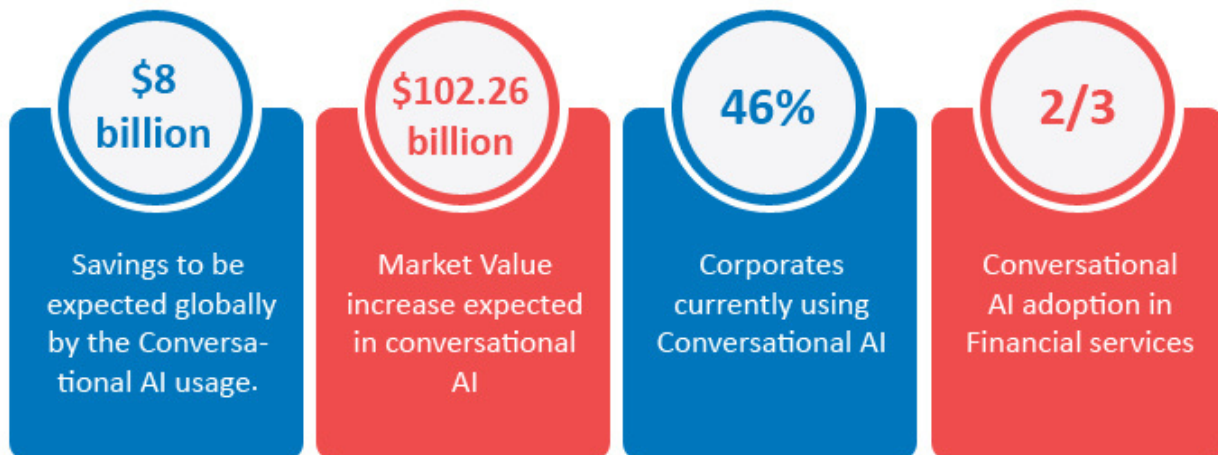
## 2. Improve product approachability

Businesses are relying upon conversational AI to provide more inclusive services to their customers. Text to speech features can help those with disabilities to use business products.

## 3. Rise in Customer Engagement

Conversational AI can proactively reach out to customers along the customer journey or based on behavior signals and provide information at the relevant time. This can help to boost the conversion and revenue.

## Conversational AI Market Statistics

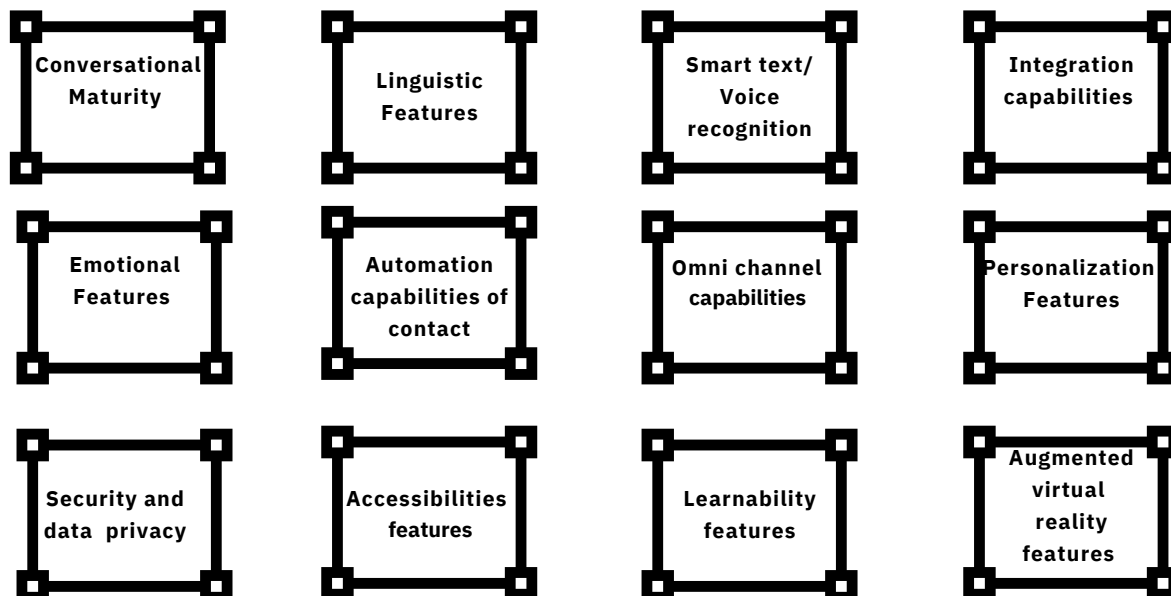


## Advancements in Conversational AI



According to Deloitte, the global conversational AI market, including chatbots and intelligent virtual assistants, is expected to grow at a CAGR of 22% during 2020–25, reaching almost US\$14 billion by 2025. (Graph Below)

Conversational Engines are maturing at a very rapid pace and the Big Tech giants like Google, Microsoft and Amazon have a huge focus and investing heavily on the research and development of conversational AI. Some of the parameters that decides the maturity of a conversational engine are:





# Conversational AI in different Industries

By 2024, 70% of white-collar workers will interact regularly with conversational platforms, according to Gartner.

## Conversational AI in e-commerce:

Conversational AI is making a substantial impact on the e-commerce industry. Conversational AI applications help brands form customer relationships that last, hold conversations that have context, and ultimately achieve higher conversion.

Few examples of conversational AI use cases for e-commerce:

- Upsell products
- Search specific products
- Answering FAQs
- Make relevant suggestions
- Place new orders
- Returned orders

## Conversational AI in insurance:

Conversational AI represents a new means of issuing products and resolving claims. There are also new products emerging which are built on data and analytics.

Examples of conversational AI use cases for insurance:

- Claims management and renewals
- Gather customer feedback and reviews
- Customer awareness and educating customers

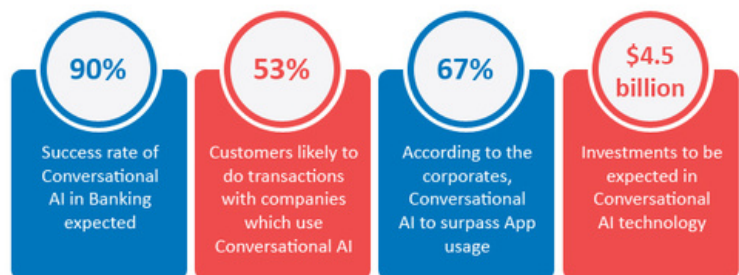
## Conversational AI in healthcare:

Conversational AI can make life easier for patients, doctors, nurses, and other hospital staff in multiple ways.

Examples of conversational AI use cases for the healthcare industry:

- Check patient symptoms
- FAQ on health questions
- Appointment booking
- Patients check up
- Medication reminders
- Escalating emergency cases

## Conversational AI trends



# Conversational AI in Banking

Providing Banking & Financial products and services to the customers through variety of digital channels like chatbot, social media, and voiced based virtual assistants has become a necessity for the banks and financial institutions today. It has also been forecasted that conversational way of banking will take over all other forms of banking and the customers would love to avail the banking and financial services over multiple digital channels of their choice and ease.

## **The Rise of Conversational AI in Banking domain-**

An aspect of AI that is redefining customer engagement in banking is conversational banking. This has been fuelled by a rise in conversational AI solutions and natural language processing (NLP) technology that allows us to interact, transact, and collaborate using natural chat. Technically field of NLP has two subvertical, NLU (Natural Language Understanding) and NLG (Natural Language Generation) that makes NLP engines capable of understanding user queries and generating answers accordingly. Conversational AI has also now been powered by machine learning and deep learning algorithms.

As we move from using visual interfaces to using conversational AI, a whole new model of engagement is made possible. Today, conversational interfaces represent one of the biggest shifts in banking user interfaces to date and are transforming how they acquire and retain customers and build their brand identity. The popularity of messaging apps, like Facebook Messenger, WhatsApp, Slack, Microsoft Teams or SMS, and the adoption of voice-activated assistants such as Amazon Alexa, Google Home, or Apple's Siri are bringing conversations back into our digital banking experiences.

Conversational AI has huge potential for improving customer service and overall customer experience specially in the retail banking sector.

AI can help banks and financial institutions in many ways. Helping customers to choose where they are spending their money based on their spending pattern and manage their finances better. Predictive AI helped the global financial industry transform an operationally intensive service delivery model to one that is smart and built around self-service solutions. A higher share of AI-based, self-service solutions helps customers get tasks done without the rigors of navigating a manual process which improves customer satisfaction. It also helps banks and financial institution to save on human capital and reduce cost.

Banks in India and across the globe have the opportunity to go beyond nascent chatbots and shift to AI-enabled conversational banking platform to simultaneously improve customer experience, improve maintainability and reduce cost to serve.



# Advantages of Conversational Banking



1. Faster operation, lower waiting times and time saving

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2. More customer satisfaction as they are able to constantly keep track of their account balance, perform any transactions with just a voice command or few taps and manage the information on their personal profile and portfolios.

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3. Automation of repetitive tasks. Same kind of repetitive questions can be answered even better by one piece of software within practically no time. Multilingual, customer can interact with the conversational systems in any language.

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4. Round the clock consistent service. Conversational banking services are available 24 by 7.

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5. There is no need to stand in lines and wait for the bank timings to open in order to carry out certain operations.

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6. For a bank rendering their products and services in these light-weight conversational channels are cost effective both from infrastructure and implementation perspective, quicker to develop and deploy, low maintenance cost and cheaper when it comes to adding a new product or service to the conversational channels.

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7. Highly secure and compliant with the regulatory requirements of the central banks.

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Although there could be few limitations of conversational banking in terms of maturity of NLP engines to interpret any types of conversations from the end customer in any vernacular; but overall there are huge advantages overpowering the conversational AI in banking making daily operations much easier, cost reduction, saving customer's time, available anytime-anywhere and providing services efficiently to the customer.



## Future of Conversational Banking

# Future of Conversational Banking

Banking that considers conversational interfaces is going to lead the near future. Apart from answering to common questions, conversational AI will handle complex questions, perform complex transactions, understand customer sentiments, and facilitate highly personalized conversations.

Conversational banking can eventually be transformed into a proactive platform that can notify customers about low balance, premium dues or giving recommendations based on previous purchases and financial background. It will be more of a personal financial concierge that will guide customers not only considering the current financial status of an individual, but it will also consider the liabilities and future plans and provide suitable recommendations.

## How Conversational Banking upholds Sustainability

Conversational Banking is not only transforming the traditional financial services but also, they are already playing a major role in revolutionizing sustainable finance or sustainability at large.

Firstly, using the power of cutting-edge technologies, like NLP, Machine Learning it has been able to enhance the digital reach of financial services to those segments of population that did not have access to the services through traditional channels. For example - Financial Inclusion is one of those areas where Conversational Banking has been playing a major role by bringing a large section of unbanked population under the financial umbrella using disruptive digital technologies. Also, rendering financial services and making those available to the customers wherever they are available- like, social banking, WhatsApp banking, mobile banking etc. are some of the biggest attempts towards sustainability and green finance.

The second major impact of Conversational Banking is that it has also been able to make financial services affordable for all by bringing down the cost with the use of transformative technologies.

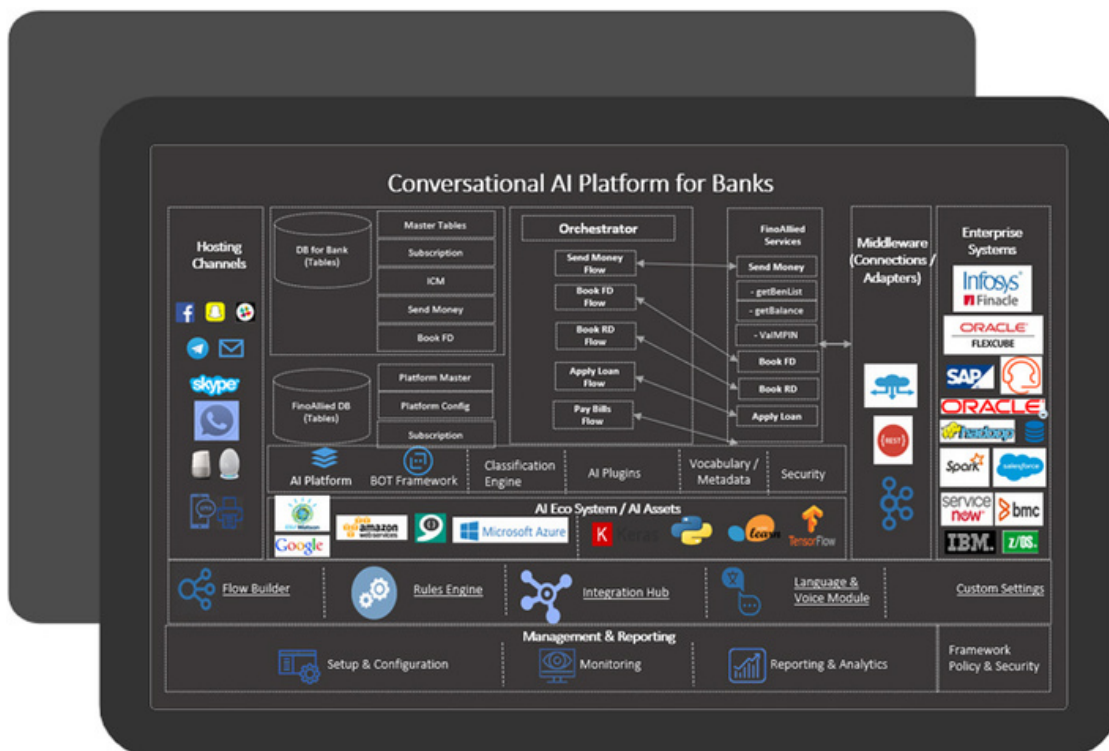


# Introducing FinoAllied Conversational Banking Platform

FinoAllied is a Conversational AI Platform specifically designed for Banking & Finance. This is a Digital Fabric which will wrap over banks existing Enterprise Service Bus connected to the bank's IT systems. So, Its a Plug & Play and Configurable Architecture. The product is designed in a cloud based AI NLP engine, it's cloud native & on DevOps backbone.

It can be deployed in hybrid/multi cloud architecture. Currently 50+ Banking & Financial Services are inbuilt and can be rendered quickly via different digital channels of banks. The product leverages hyper-automation wherein bot can be rapidly customized and administered to deliver all standard and customized banking services over multiple digital & social channels, open channel Digital Banking as a Service (DBaaS).

## Conversational AI platform for Banks



# Key Features of FinoAllied Platform

1

Ready 50+ configurable services/transactions for banking and finance. Which means four weeks of average deployment time.

2

The platform boasts loosely coupled Microservices based Architecture to quickly integrate existing Banking APIs and Systems.

3

The backend NLP engine is most exhaustive, equivalent to Oxford dictionary with global multilingual support

4

The pricing model is Catalog & Subscription Based, so Pay for what you use per month.

5

Deliver services via Several Digital Channels, such as Web, Mobile, WhatsApp, Social, Voice Devices , example – Alexa, Siri, Google Home. Smart Watch etc.,

6

The platform bundles High-End Analytics with Machine Learning capabilities for banks as well as end customers

7

Contact with bank about an unrecognized transaction on my card

8

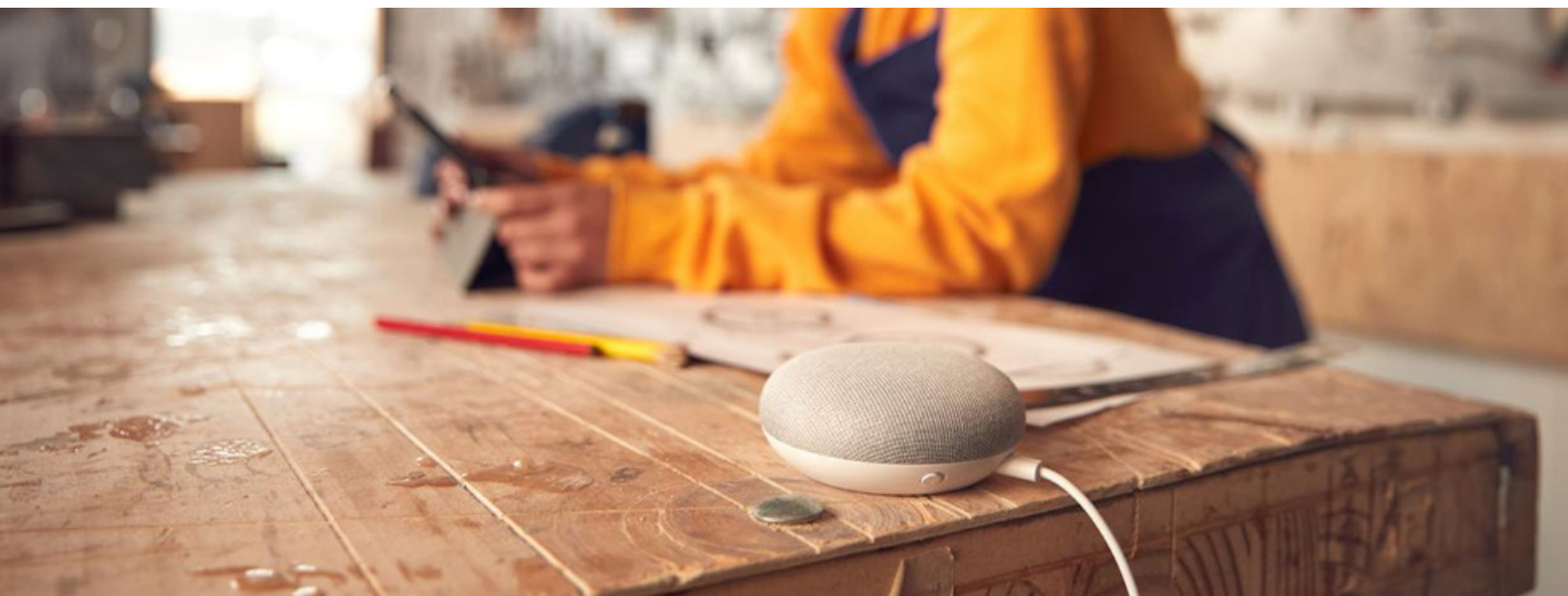
As Security & Data Privacy are of utmost priority, a holistic Security architecture is implemented including Localized Data

9

The product is best compliant with RBI and other Central Bank's IT Policies & Guidelines

10

And finally, to mention that the product has low-cost maintenance and single window support



# Platform Capabilities



FinoAllied Platform has a range of capabilities. It supports omni channel, voice enabled, multilingual and can get integrated seamlessly with various banking applications with the help of its plug & play Integration Hub.

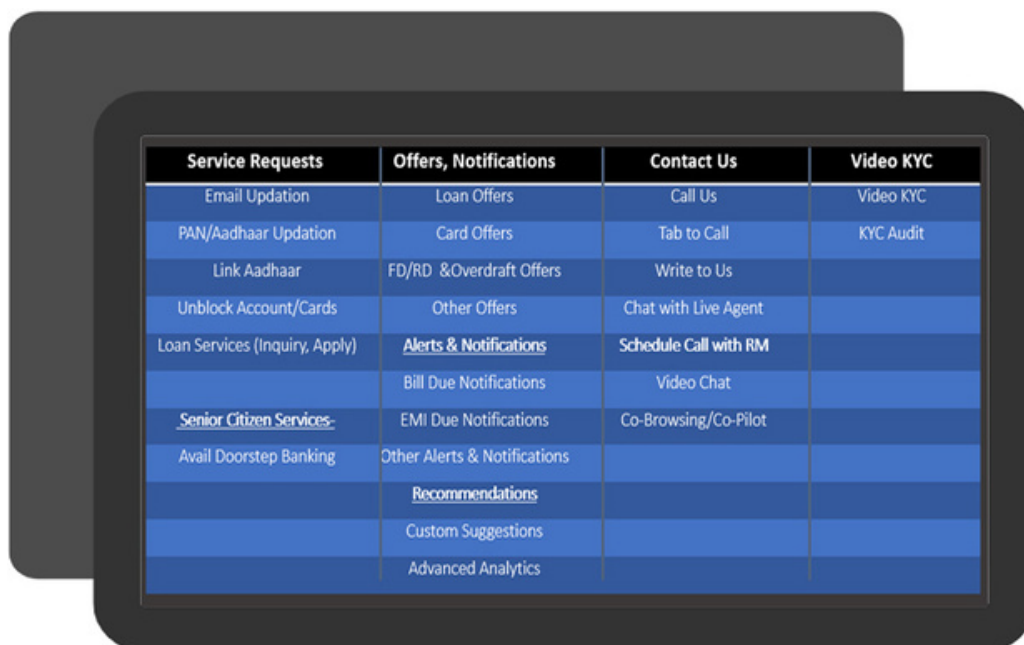
# Banking Services Rendered

| Banking Services                           | Credit Card            | Deposits                   | Loans                    | Insurance                   |
|--|------------------------|----------------------------|--------------------------|-----------------------------|
| Account Details                            | Credit Card Summary    | <u>Fixed Deposits:</u>     | <u>Check Eligibility</u> | Compare Policies            |
| Transfer Fund (IMPS, NEFT, RTGS, UPI etc.) | CC Statement           | <u>Regular FD -</u>        | Apply for Loans          | Apply for Products          |
| Check Balance                              | Recent Transactions    | Monthly Payout             | <u>Loan Products -</u>   | <u>Insurance Products:-</u> |
| Recent Transactions (5)                    | CC Bill Payment        | Quarterly Payout           | Personal Loan            | Life Insurance              |
| Hotlist Debit Card                         | Block Credit Card      | Quarterly Compounding      | Auto Loan                | Health Insurance            |
| Order Statement                            | Redeem Rewards         | <u>5 Yrs Tax Saver:-</u>   | Home Loan                | General Insurance           |
| Order Cheque Book                          | Offers on Credit Cards | Quarterly Payout           | Gold Loan                | <u>Investments:</u>         |
| Stop Cheque(s)                             | CC Upgrade             | Compounding                | Loan Against Property    | Demat                       |
| Pay Bills (Manage Billers & Transactions)  |                        | <u>Recurrent Deposits:</u> | Commercial Vehicles      | Mutual Fund                 |
| Nominee Management                         |                        | Quarterly Payout           | MSME Finance             |                             |
| Personalized Offers                        |                        | Compounding                | Business Loan            |                             |
| Apply for Locker, Securities, Remit etc.   |                        |                            |                          |                             |

**In-Built Banking Services for Ready Use:**

In FinoAllied Platform currently 50+ Banking & Financial Services are inbuilt and can be rendered quickly in different digital channels of banks. It offers Flexible Pricing Model for the banks as features can be subscribed and so can be the different hosting Channels.

## Value Add Services



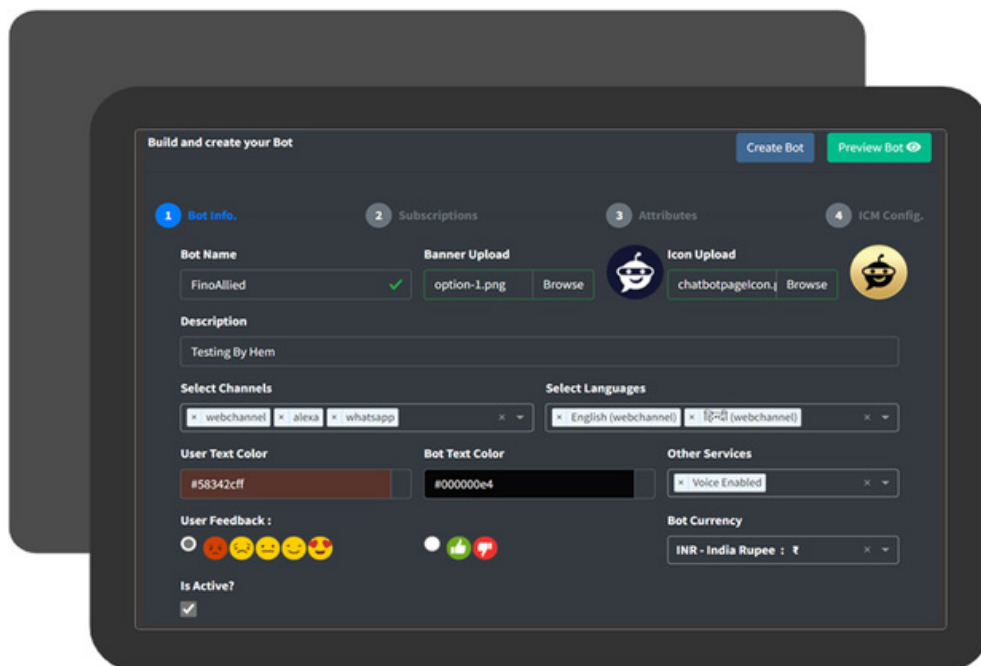
| Service Requests                | Offers, Notifications             | Contact Us            | Video KYC |
|---------------------------------|-----------------------------------|-----------------------|-----------|
| Email Updation                  | Loan Offers                       | Call Us               | Video KYC |
| PAN/Aadhaar Updation            | Card Offers                       | Tab to Call           | KYC Audit |
| Link Aadhaar                    | FD/RD & Overdraft Offers          | Write to Us           |           |
| Unblock Account/Cards           | Other Offers                      | Chat with Live Agent  |           |
| Loan Services (Inquiry, Apply)  | <u>Alerts &amp; Notifications</u> | Schedule Call with RM |           |
|                                 | Bill Due Notifications            | Video Chat            |           |
| <u>Senior Citizen Services-</u> | EMI Due Notifications             | Co-Browsing/Co-Pilot  |           |
| Avail Doorstep Banking          | Other Alerts & Notifications      |                       |           |
|                                 | <u>Recommendations</u>            |                       |           |
|                                 | Custom Suggestions                |                       |           |
|                                 | Advanced Analytics                |                       |           |

**Platform Value Added Services**

The platform also offers value-added services like creating & tracking service requests, various value-added banking & non-banking alerts and notifications. It also provides customer touch point services like Talk to Live Agent, Schedule Call with Relationship Manager (RM) and accessibility services like Co-browsing.



## Platform Admin Module

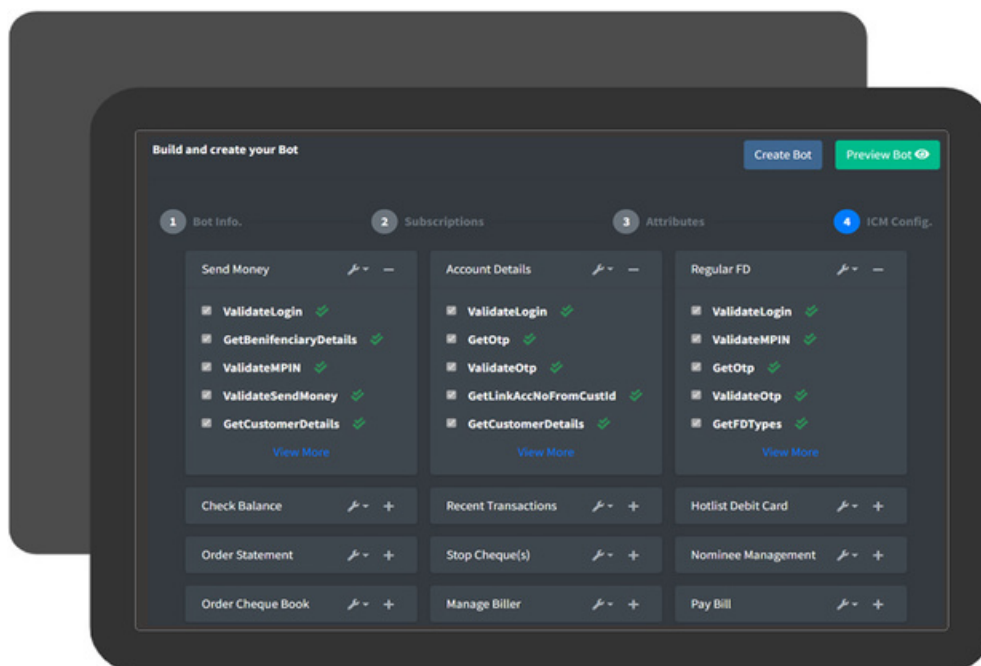


**1.Bot Creation Module:** Spinning up a banking bot is just a matter of few clicks in the FinoAllied platform. A fully transactional bot available in different channels and integrated with banking systems to enable transaction is just few clicks away.

**2.Built-In Banking Services (Transactions):** In FinoAllied platform the banks need not have to build any services or transactions, many services like (transfer fund, check balance, book fixed deposit, pay bills etc.) are already prebuilt. Banks just need to subscribe the services they would like to offer to their customers in different channels like webchat, WhatsApp, Alexa etc.

**3.Subscription Module:** FinoAllied platform provides an easy way to integrate with the core banking systems depending on the services subscribed. It's again just few clicks to integrate with bank APIs.

**4.Backend Integration Manager:** FinoAllied Integration Manager along with API Hub gives the power and flexibility for integration with any system and ESB.



**5. Language Master Module:** The platform can be configured for users to avail banking services in their preferred language. The list of languages includes Indian languages and languages of some other languages of the world.

**6. Customer Analytics Module:** Through FinoAllied Conversational Banking platform, banks can provide high-end analytics to their customers on their spends, purchases and other transactions. It can provide range of self-service and predictive analytics to the customers and to the bank management.

## Summary



*The pandemic has propelled the adoption of Conversational Banking in a great way and the banks has already been rendering more and more services in the digital channels. Faster implementation timeline, low cost, easy maintainability, and huge customer adoption rate are some of the major benefits of Conversational AI in the banking arena.*

*Many small and mid-size banks have now been able to make use of these new channels a fundamental part of their banks' wider customer engagement strategy. Banks have been able to maximize ROI and fast track digital adoption of their products and services leveraging the power of cutting-edge conversational AI technologies.*

*It is also forecasted that conversational banking will feature a rapid growth in coming years and will take over all other forms of conventional methods of banking. A platform like FinoAllied provides a perfect solution for the banks looking for ready to use, plug and play, subscription based flexible model wherein the platform can be integrated with banking ecosystem with three to four weeks time.*

# Meet our Contributors



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