BOOST BUSINESS VALUE THROUGH EXCEPTIONAL CUSTOMER SERVICE
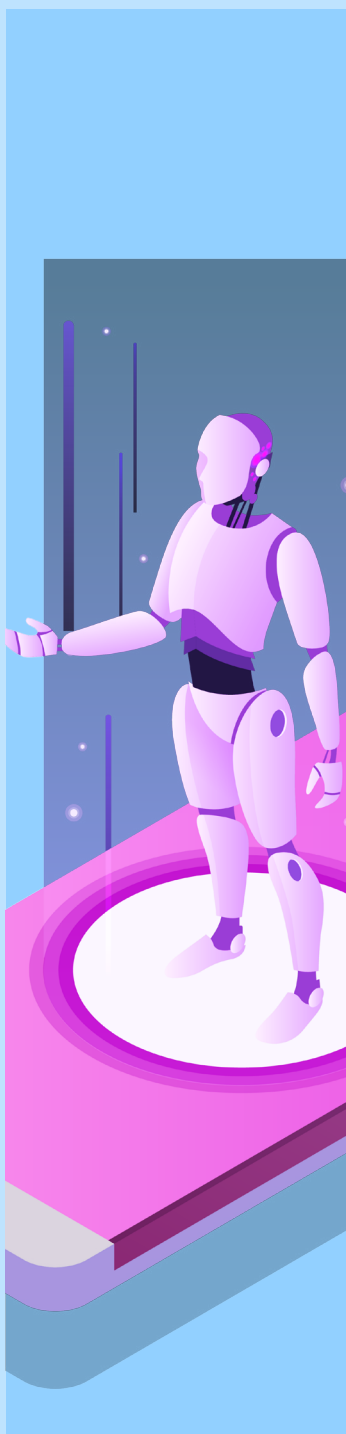
Create a smart workforce with the
Infosys Conversational AI solution

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Users all over the world are becoming more comfortable at interacting with chatbots through natural language. Chatbots (or conversational AI) are primed to become the universal interface for query response. For enterprises, this is an opportunity to improve their responsiveness whereby any internal stakeholder can have their query addressed almost instantly with a 24/7 bot. Further, these internal conversations can be leveraged to train the bot and improve accuracy.

Applications of Conversational AI

Across functions like:

Knowledge mining

Insights

Customer service/self-care

Cross-sell/up-sell

Transactions

For different purposes like:

Entertainment

FAQ (products/services)
Recommendations

L1/L2 support

Internal help-desk for employees

Prospecting

Automation

Through various channels like:

Web

Social

Messenger apps

Mobile

Smart devices

IVR

SMS

Wearable devices

What exactly comprises a chatbot?

Must-have features for value generation

Here are some features that can make chatbots the ideal AI solution for your enterprise:

• Diverse UI capabilities with a personality to indulge in small talk with customers

• Ability to use NLP to understand intent and context and have a dialogue while integrating with various channels like Facebook Messenger, Skype, mobile applications, etc.

• Ability to integrate with various personal assistant devices like Amazon Alexa, Google Home, etc.

• Ability to connect to various enterprise applications in order to provide information or act on user requests

• Ability to understand diverse languages and perform sentiment analysis

• Ability to integrate with voice channels (including IVR) as well as with live-agent chat solutions to transfer a conversation

if the user is not satisfied with the response

Infosys solution for Conversational AI

Delivering a comprehensive chatbot experience for enterprises

Infosys AI and Automation services provide a variety of intelligent chatbot-driven offerings to streamline and accelerate query and issue resolution for your enterprise. Built on industry-leading platforms like Infosys Nia, IBM Watson, MS Cortana, etc., our services and solutions can be easily applied to diverse areas like HR, finance, IT, procurement, and more:
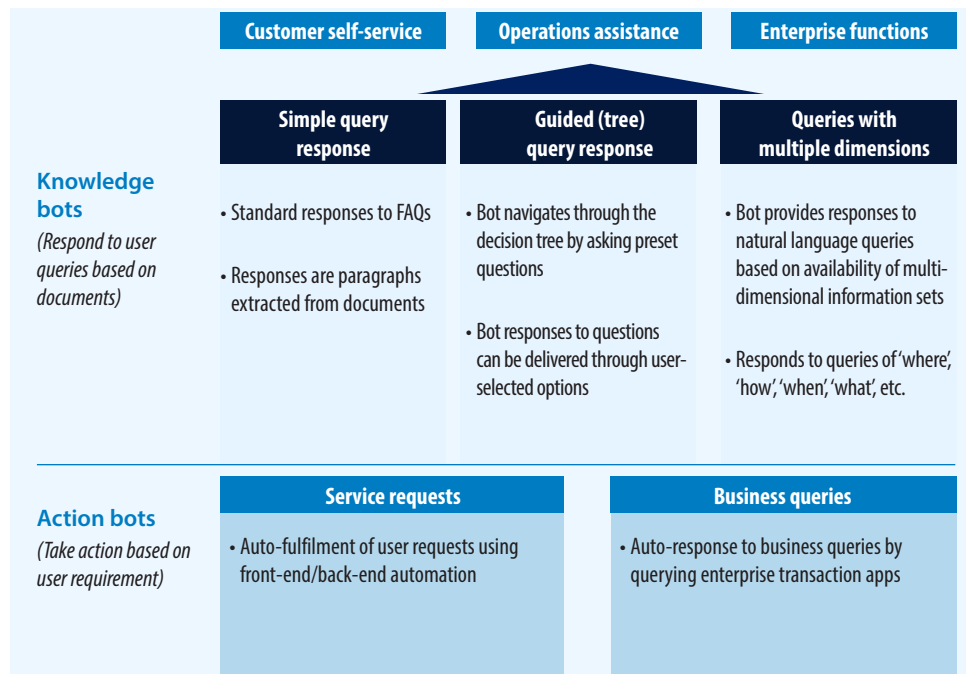
	Customer self-service	Operations assistance	Enterprise functions
Knowledge bots *(Respond to user queries based on documents)*	**Simple query response**	**Guided (tree) query response**	**Queries with multiple dimensions**
	• Standard responses to FAQs • Responses are paragraphs extracted from documents	• Bot navigates through the decision tree by asking preset questions • Bot responses to questions can be delivered through user-selected options	• Bot provides responses to natural language queries based on availability of multi-dimensional information sets • Responds to queries of 'where', 'how', 'when', 'what', etc.
Action bots *(Take action based on user requirement)*	**Service requests**		**Business queries**
	• Auto-fulfilment of user requests using front-end/back-end automation		• Auto-response to business queries by querying enterprise transaction apps

Fig. 1 Conversational AI – A comprehensive chatbot experience by Infosys

Challenges in implementing a Conversational AI

Right use case : Choose robust and credible use cases to be implemented to ensure that the business is able to realize tangible benefits

Change management : Transition employees to the new UI by educating them that instead of replacing jobs, AI helps employees improve productivity

and increase value while enabling the organization to reduce cost and become more efficient

Bot personality : Be careful to avoid merely mimicking humans and instead promote lively user interactions with the bot through a personal touch

Future-proof : Ensure the bot is able to keep pace with emerging technology and business changes by incorporating

machine learning and self-learning for the bot

Conversation design : The chatbot needs to exhibit knowledge while simultaneously conversing in the most 'human-like' way possible

Human intervention : Establish a way for users to reach out to a human agent when needed through adequate channels
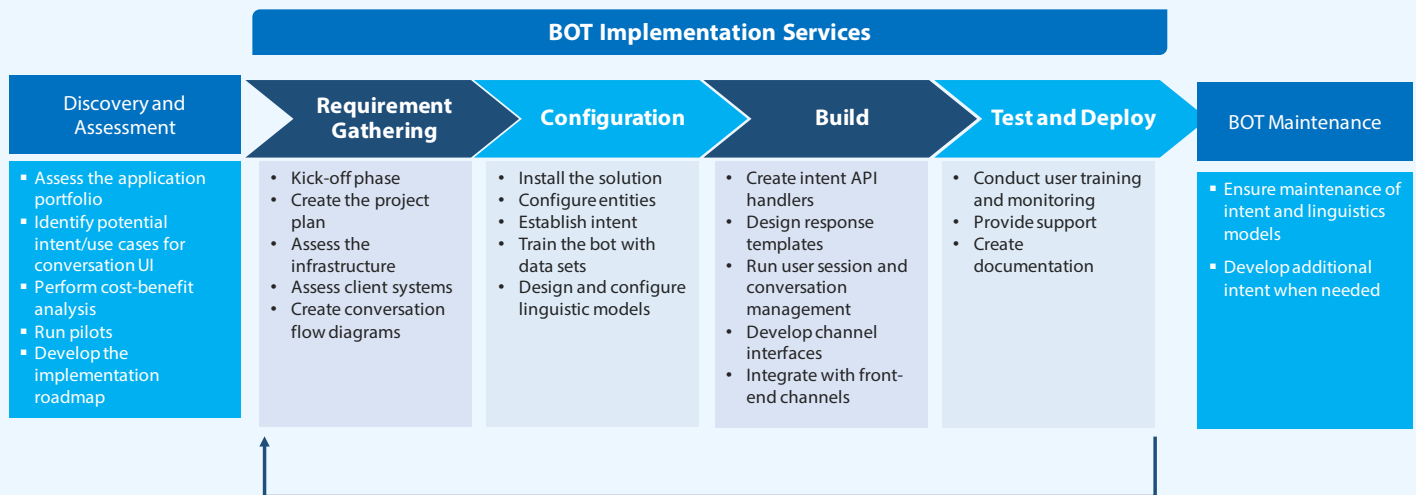
Infosys approach

BOT Implementation Services

Discovery and Assessment	Requirement Gathering	Configuration	Build	Test and Deploy	BOT Maintenance
▪ Assess the application portfolio ▪ Identify potential intent/use cases for conversation UI ▪ Perform cost-benefit analysis ▪ Run pilots ▪ Develop the implementation roadmap	• Kick-off phase • Create the project plan • Assess the infrastructure • Assess client systems • Create conversation flow diagrams	• Install the solution • Configure entities • Establish intent • Train the bot with data sets • Design and configure linguistic models	• Create intent API handlers • Design response templates • Run user session and conversation management • Develop channel interfaces • Integrate with front-end channels	• Conduct user training and monitoring • Provide support • Create documentation	▪ Ensure maintenance of intent and linguistics models ▪ Develop additional intent when needed

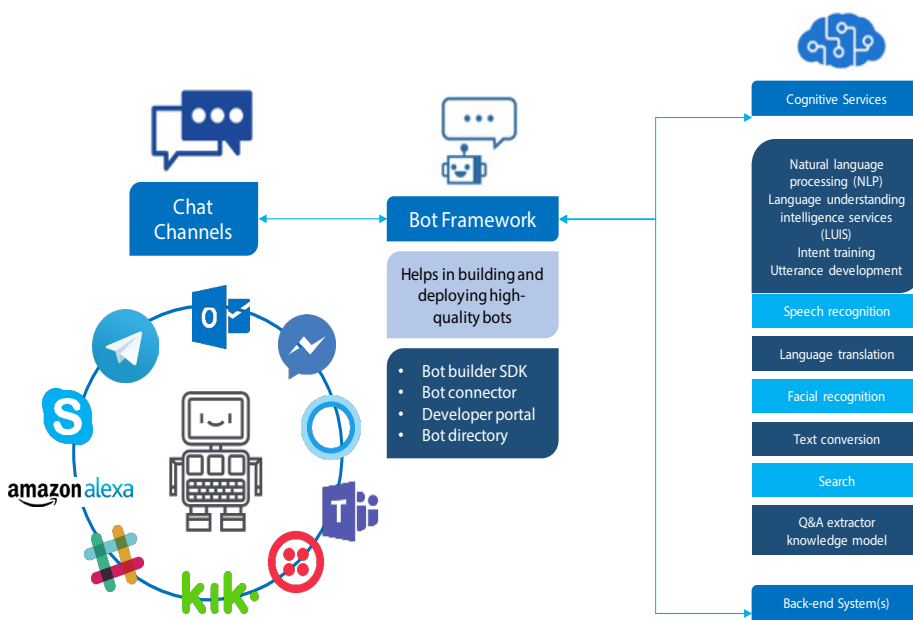Fig. 2 Infosys approach to implementing conversational AI

Fig. 3 End-to-end integration with various components

Key benefits

• **Break information silos** - Chatbot can be used to retrieve critical information that are stored in siloed systems

• **Improve customer service** - Chatbots can provide real-time service by being always available to answer queries and support any process

• **Enable targeted marketing** - Besides improving customer engagement, chatbots drive targeted marketing by pushing relevant notifications to customers based on their transaction histories

• **Minimize error** - Through continuous self-learning capabilities from large information sets and feedback, chatbots eliminate errors by always providing the right answers

• **Amplify human potential** - Chatbots can automate frequent and repetitive jobs with fewer errors, thereby freeing employees to focus on productive and value-adding tasks

• **Improve FAQ responsiveness** - Chatbots can answer FAQs that do not require live agents, thereby improving the efficiency of FAQ-based queries and reducing effort spent by support personnel

• **Gain real-time feedback** - Chatbots can be leveraged to receive instant feedback from customers and employees

Success Stories

American multinational makes a difference with conversational AI

A leading provider of credit cards, travel and insurance products was struggling to manage over 30,000 payment related queries from vendors annually. Despite the queries being fairly basic, these placed heavy demands on the helpdesk resulting in high response time and poor customer experience.

Since a large number of queries were only 'requests for information', a Chatbot was deployed to automate responses for nearly 40-50% queries.

Key benefits

- Reduced ticket volumes by 40%
- Average handling time brought down to 1 second/query
- Increased helpdesk efficiency
- Improved customer satisfaction
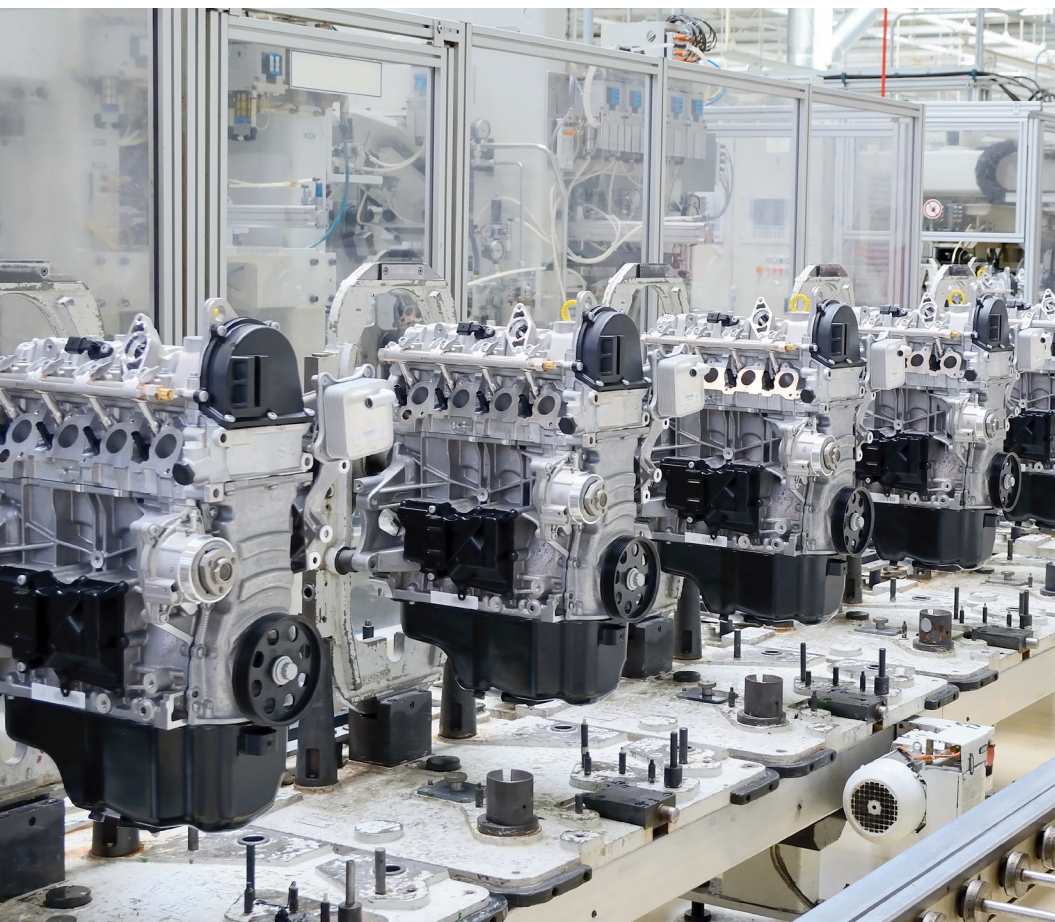
Manufacturer gets digital assistant for IT operations

Manual on-boarding processes for new users left a manufacturing conglomerate with little time to address existing queries, resulting in frustrated customers.

Infosys automated the IT operations and introduced a digital assistant or a chatbot that could deliver personalized responses.

Key benefits

- Enabled personalization through digitalization
- Streamlined operations
- Improved efficiency of support operations
- Enhanced customer experience by reducing resolution time

Success Stories

NLP helps South-Asian telecom provider automate customer query resolution

A major provider of telecom services wanted to automate call-based customer service requests and enquiries to optimize their agents' productivity and improve customer satisfaction.

Infosys discovered that that 70% of the calls were made only for 5 use cases. A chatbot was deployed to automate customer service and process queries using NLP on the basis of a predefined set of actions.

Key benefits

- Automated customer service
- Achieved relevant NLP-based query resolution
- Plotting of calls was done with just 5 use cases
- Enhanced the customer experience

Auto manufacturer gets chatbot-on-wheels for live and automated customer service

A leading automotive manufacturer wanted to automate the 'live agent assist' system in its high-end cars as slow response time by human agents was resulting in a poor customer experience.

Infosys deployed a chatbot that seamlessly used NLP and Google speech engine to provide assistance in real-time. The live speech-to-text conversion and processing enabled quick recognition of user intent so that relevant information is provided on-time to customers.

Key benefits

- Quick and relevant live support
- Real-time user-intent recognition
- Redesigned live assistance for an improved customer experience
- Live query resolution with speech-to-text conversion

Why Infosys?

With proven use-cases, packaged solutions and pre-built components that have been deployed successfully for clients across the globe, Infosys possesses a complete suite of differentiators to streamline your enterprise's automation journey. These include:

- A dedicated service line for AI and automation with an in-house enterprise AI platform and strong expertise in managing and implementing third-party AI and automation products

- Scale and depth of expertise from over 35 years of industry experience in handling maintenance, support and development projects, reusable artifacts, and prebuilt components along with a mature training academy and learning culture

- Strong alliances with AI product partners that empower us to implement chatbot solutions across any vertical through high-end platforms like Infosys Nia Chatbot, Microsoft Bot Framework, Google Dialogflow, Amazon Lex, IBM Watson, etc.

- Ability to leverage cutting-edge technologies such as natural language processing (NLP), optical character recognition (OCR), machine learning, RPA, etc.

- Flexible service offerings that are tailored to suit your organization's maturity and preference through certified domain and technical consultants, dedicated development consultants and support personnel who ensure that unique requirements and continuity are met

- Optimal service delivery through a shared services model that processes exceptions, handles increases in volumes, ensures SLA management, conducts back-office checks and audits, etc.

For more information, contact askus@infosys.com

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