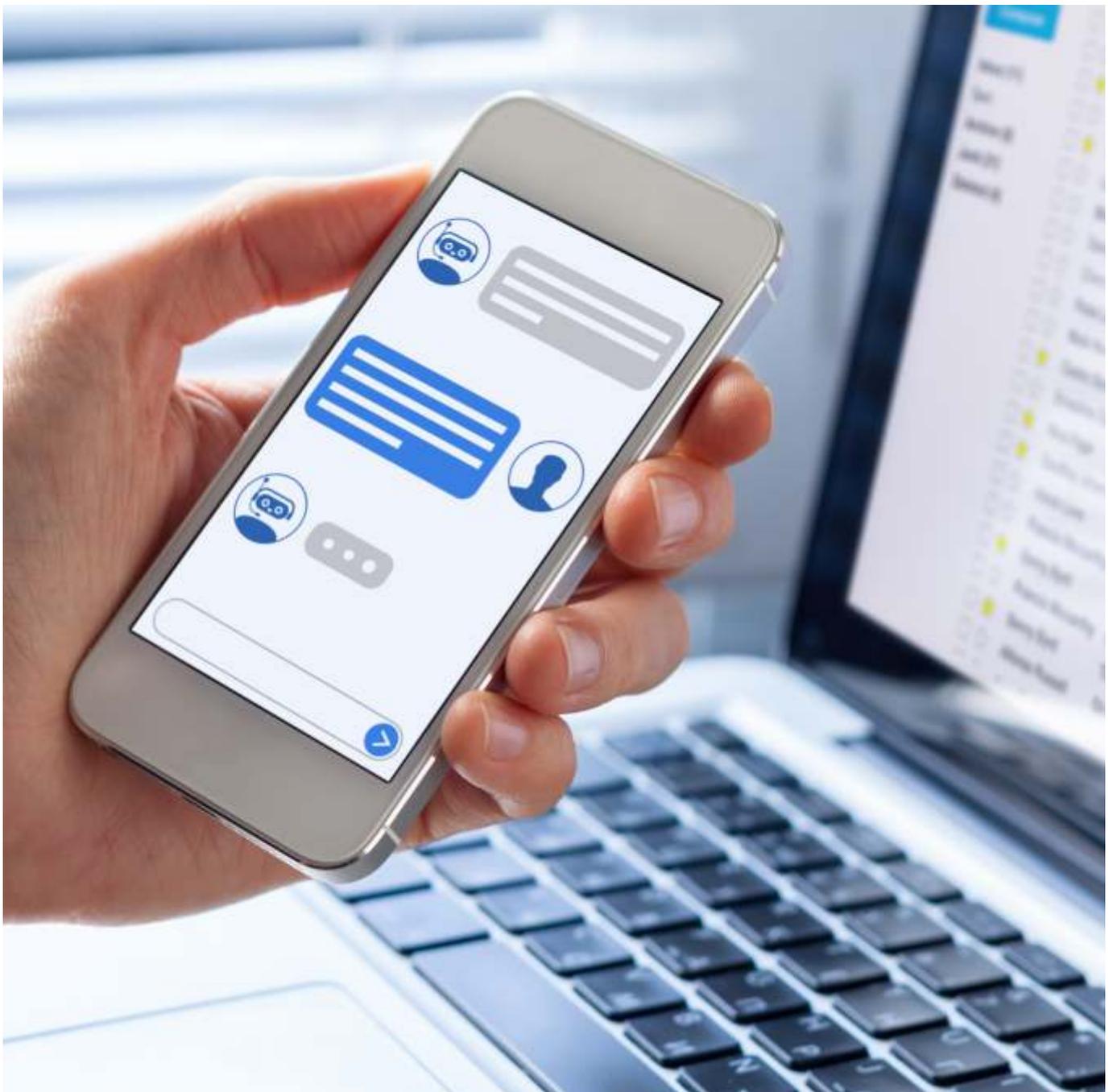


# Cognitive Digital Desk

Cognitive Business Operations



The traditional IT service desk function is undergoing a massive overhaul with the proliferation of self-service solutions, rising customer service costs, and evolving customer expectations. Companies across industries are looking to excel in the experience economy by ensuring faster resolution of customer complaints and service requests. To achieve high speed to value and flexibility, they must adopt a cloud-based, scalable, and pay-as-you-go intelligent IT service desk solution with low CAPEX and high availability.

Built using Tata Consultancy Services' (TCS') Machine First Delivery Model™ (MFD™), Cognitive Digital Desk is a digital IT service desk agent that can be deployed to automate IT service desk use cases, including SLA-based IT infrastructure issue resolution, service request fulfilment, and change management. The virtual IT service desk chatbot delivers round-the-clock availability and leverages artificial intelligence and machine learning to bolster end user support, boosting engagement and the overall customer experience.

## Overview

Routine tasks such as resetting passwords, responding to queries, creating, updating and tracking tickets, installing software, granting access requests, and facilitating workstation management are time-consuming, and add significantly to operating cost. Companies with traditional IT service desks continue to face longer ticket resolution times, burgeoning personnel costs, and underwhelming customer experience. While organizations are exploring the application of cognitive technologies across functions, IT service desks are still to see the widespread adoption of smart automation that delivers high accuracy, efficiency, and cost-effectiveness. Certainly, IT service management has the potential to reap the benefits of cognitive bots, streamlining customer support, improving knowledge management, and enhancing interactivity with the end user.

TCS' Cognitive Digital Desk transforms the IT service desk function with a virtual and interactive offering, automating incident management, service request processing, and access and knowledge management, as shown in Figure 1. The digital service desk supports multiple tenants and is hosted on Microsoft Azure to benefit from the scalability and cost efficiency offered by cloud infrastructure. The highly configurable Cognitive Digital Desk employs natural language processing (NLP), artificial intelligence and machine learning to deliver advanced cognitive capabilities and automation for providing self-service based guidance and automated resolution. Moreover, it comes with use cases designed specifically for digital desk support and allows organizations to develop new use cases based on specific business requirements.

## Our Solution

TCS' Cognitive Digital Desk has a fully configurable customer onboarding process and is equipped with multiple use cases covering incident and service request management, process automation and access management. The following are salient features of the intelligent platform:

- **Cognitive capabilities:** encompasses a collection of high-performance bots, powered by Azure cognitive services, performing various tasks, reducing the number of IT service desk personnel. Learns continuously through feedback, thereby augmenting its conversation handling capabilities
- **Multi-channel engagement:** uses NLP to understand and respond to end user queries across channels such as Microsoft teams, Skype for business, web, mobile, and voice, apart from chat
- **Interoperability:** comes with out-of-the-box integration features for IT service management tools, knowledge management tools and Azure Active Directory (AD). The platform can also be integrated with automation tools such as ignio™ and other robotic process automation (RPA) solutions and orchestrators

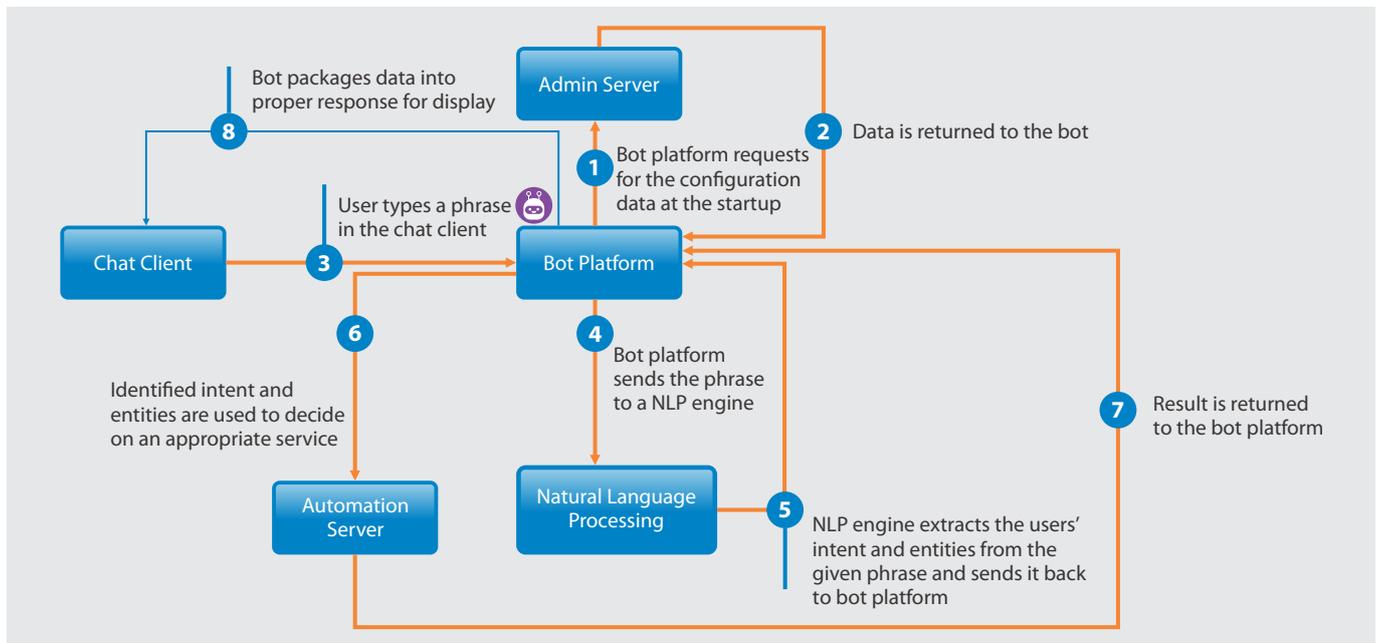


Figure 1 – Workflow of TCS Cognitive Digital Desk Platform

## Benefits

TCS' Cognitive Digital Desk can help you achieve the following objectives:

- **Deliver superior customer experience:** ensure faster resolution of users' complaints, queries and requests through AI that conducts contextual, engaging conversations with customers
- **Get anywhere, anytime support:** ensure round-the-clock availability in over 30+ languages with seamless access across multiple channels, including mobile apps
- **Implement Machine First™ strategy:** gain a competitive edge with digital desk support, establishing yourself as a digital-first brand. Adopt a robust cognitive service desk solution developed in an agile environment, following the scrum methodology
- **Build contextual knowledge:** harness the power of AI and machine learning with an intelligent platform that continuously learns about the customer environment to deliver superior support to end users based on usage patterns
- **Reduce total cost of ownership:** move from a CAPEX-based model to an OPEX-based, flexible charge model with cost directly proportional to the number of users onboarded. Reap the cost benefits associated with cloud infrastructure, where availability and capacity are auto-scalable
- **Boost operational productivity:** enable headcount rationalization and free up the bandwidth of IT service desk personnel for resolving highly complex tickets and performing more value-adding tasks

## The TCS Advantage

By partnering with TCS, you can leverage the following differentiators:

- **MFDM:** helps future-ready organizations implement the Machine First™ strategy and create sustainable competitive advantage. The TCS MFDM framework is driven by three key components: the enterprise intelligence platform, the enterprise response engine, and the collaboration platform. Cognitive Digital Desk is a product of the same Machine First philosophy that enables the platform to assimilate and interpret disparate data, understand it, take rational decision on the next course of action, and execute the determined action
- **Contextual knowledge:** combining the experience gained from 500+ engagements, TCS brings years of contextual knowledge to build targeted, high-ROI solutions for its clients
- **Full stakeholder play:** TCS' Cognitive Digital Desk comes within-built use cases that can support both IT service desk needs as well as requirements from different business functions such as admin, HR, travel and expense
- **Digital ecosystem:** our next-generation cognitive service desk solutions helps organizations create a customer-centric digital ecosystem for IT service desk support with different interfaces, facilitating smooth and convenient customer experience.

## Awards & Recognition



### To know more

Visit the [Cognitive Business Operations](#) page on [tcs.com](#)

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

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