

As the pace of business picks up across the globe, organizations want to move faster and get leaner. This is particularly true as dynamic market forces such as digitalization, E-commerce, self-service models, and now the COVID-19 pandemic are continuously reshaping the world. While automation is evidently the way forward, implementing it remains a challenge. The reasons for this are many. Some of the top challenges faced by project teams are:

- Significant time and effort involved in developing end-to-end automation use cases from scratch
- Need for a common repository and dashboard to view progress
- Inherent limitations of most automation platforms, restricting the ability to use existing scripts from other technologies

In some cases, automation becomes just another monolith that is only minimally reusable across the enterprise.

Infosys approach

Having built and deployed automation solutions for several leading global enterprises, Infosys understands that the excitement of automation comes with certain concerns. These include the anxiety of stakeholders over loss of jobs, complexity of adding another technology to the stack, security issues, legacy integration, lack of reusability, need for a complete overhaul, and the cost and time spent on learning to use another tool.

Infosys has developed a comprehensive cognitive automation studio that addresses these concerns by providing:

- A repository of reusable components
- A platform-neutral solution that supports existing investments in automation
- A lightweight tool with a low-tech footprint for better usability and flexibility
- Clear insights into automation performance through pre-defined metrics

Infosys Cognitive Automation Studio

Infosys Cognitive Automation Studio accelerates the implementation of

automation programs by supporting faster cycles, reusability and crosstechnology scripts. Since all scripts are managed centrally, it reduces the total cost of ownership.

The solution leverages a unique Microbot approach that allows bots to be turned into Workerbots and Digital Workers in order to perform a range of enterprise tasks and facilitate different levels of automation. This collection of Digital Workers forms the Digital Workforce. All these bots perform routine, non-value adding and repeatable work.

- Microbots These have a reusability score of 90%. They perform highly granular tasks such as login, extraction, publishing, updating, deleting and more
- Workerbots These have a reusability score of 50%. They collectively perform micro tasks to execute end-to-end activities such as ticket management, DB health check, customer KYC, invoice reconciliation, and many more
- Digital Workers These have a reusability score of 30%. They perform a collection of activities typically done by humans such as procurement requests and accounts payable processing. For security and auditing purposes, Digital Workers are given a unique identity



Key features

Infosys Cognitive Automation Studio is the building block of our digital workforce, reimagined as part of the Infosys Live Enterprise Application Platform. Its key features are:

- Microbot architecture Built on a Microbot architecture, it is capable of automating activities across application maintenance and development projects and performing the most granular tasks. Currently, Infosys has an extensive repository of bots available
- Studio orchestrator Multiple
 Microbots can be stitched
 together using the orchestrator.
 The orchestrator brings in unique
 capabilities such as seamless
 integration into the Bot Store,
 integration of cross-technology bots,
 bot upgradability and deployment,
 and much more all with minimal or
 no coding
- Platform neutral Infosys Cognitive Automation Studio is platform neutral and works across all leading automation platforms as well as Java, Python and cognitive technologies
- Diverse bot pool We use a mix of process, application and infrastructure bots to automate a variety of tasks:
 - Process bots enable end-to-end automation across horizontal processes like HR, finance, and payroll as well as vertical-specific processes for industries such as KYC in banking
 - Application bots perform tasks like reading or extracting information from emails, executing Excel functions, listing files, copying folders, health check reporting, and data extraction
 - Infrastructure bots perform infrastructure management tasks such as server start/stop, running files and connecting to databases

Reusability level Examples Workforce **Digital Workers** HR digital workers, finance digital Collection of workers, telecom digital workers digital workers 0% Digital Worker **Defined roles** Home relocation, Collection of accounts payable, activities typically procurement performed by requests +30% humans **Ticket Activities** Workerbots management, DB Collection of micro health check, tasks to perform an customer KYC, end-to-end activity invoice reconciliation Tasks **Microbots** Login, extract, Tasks broken down publish, update, into the smallest delete possible unit

Infosys Cognitive Automation Studio uses a unique 'Microbot' approach where bots are stitched together to form Workerbots and Digital Workers





How Microbots work

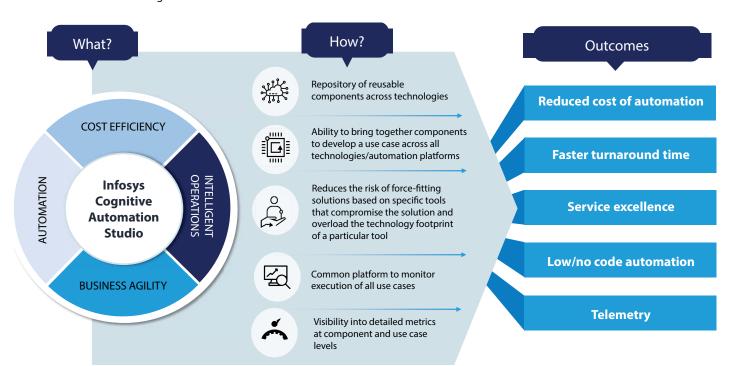
Infosys Cognitive Automation Studio provides an ever-evolving repository of Microbots that can be shared across projects, thereby promoting reusability.

Infosys identifies the most common IT and business activities performed by business users and breaks them into smaller components. These activities range across application maintenance and development. Microbots are created for each of these activities and added to the studio. These Microbots being the smallest

unit of task are reusable across major industry domains and business functions. Microbots can then be sequenced by the orchestrator to automate end-to-end processes. The studio already has a large pool of Microbots required to automate multiple processes. The nomenclature, ease of search functionality, and plug-and-play features of Microbots make it easier even for non-technical people to visualize a work packet and automate use cases, using the existing, pre-validated and tested Microbots available in the Infosys Cognitive Automation Studio.

Microbots can be developed to suit a heterogeneous mix of technologies in a manner that integrates seamlessly on host environments. At an advanced level, Workerbots can be jointly controlled through a common digital identity.

Moreover, individual Microbots are not tightly coupled to the Infosys Cognitive Automation Studio. They can be executed on host environments directly outside of the Infosys Cognitive Automation Studio framework.



Current challenges versus Infosys Cognitive Automation Studio capabilities



Success story

Electric utility transforms business with Infosys Cognitive Automation Studio

Client challenge

As part of their daily operations, the client's home relocation department receives nearly 40,000 requests per quarter. Manual processing involved an employee spending 25 minutes raising and documenting each request, amounting to 1 million minutes per quarter. Request data was typically exchanged between 15 back-end applications and handled differently based on scenarios.

Infosys solution

Infosys reimagined and automated the entire process by creating an end-to-end home relocation process in the Infosys Cognitive Automation Studio. Pre-existing bots from other technologies were reused in addition to new bots that were created with a simple drag-and-drop functionality. The level of automation could be specified for each bot. Infosys also ensured integration so that information flows smoothly between the bots. A single dashboard was provided for overall bot monitoring.

Benefits

- New bots are extendable to other processes, improving reusability and lowering total cost of operations
- Integration with mobile apps, legacy and next-gen systems enable omni-channel experiences
- Chatbots have reduced the help desk call inflow
- The solution can be integrated with any tool (Infosys or non-Infosys)







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