VIEW POINT

REIMAGINING CUSTOMER SERVICE WITH AGENTIC AI INNOVATIONS

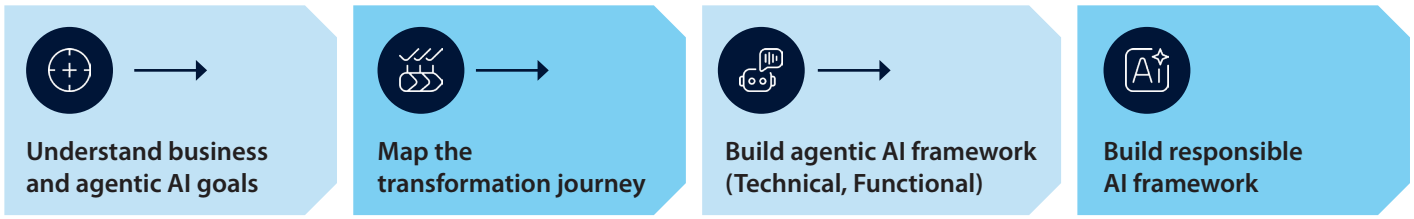
Abstract

Agentic AI is transforming customer service by providing intelligent, autonomous bots that assist customer service agents, empower supervisors, and help resolve customer issues faster. Through micro-agent orchestration and role-based design, these systems enhance productivity, optimize operations, and deliver proactive, context-aware support—ushering in a new era of scalable, efficient, and responsive service delivery. One needs to have a good understanding of how and why to transform with agentic AI.

Infosys®
Navigate your next

Agentic AI systems are redefining customer service centers, gaining popularity across various organizations. While traditional rule-based chatbots provided basic 24/7 support, and NLP-based chatbots enhanced human-like interactions, AI surpasses both in terms of accuracy and problem-solving. In terms of accuracy, rule-based chatbots are limited to programmed responses, causing inaccuracies when queries fall outside of predefined rules. In contrast, agentic AI excels in tracking conversation history, understanding dialogue flow, and ensuring the responses remain contextually appropriate; this significantly boosts customer engagement.

Our approach towards AI transformation



1. Understanding business and agentic AI goals

The scope of agentic AI is huge and can be overwhelming. Broadly speaking, agentic AI systems can be developed based on the role of the user and the business requirements. A business requirement can be anything from cost optimization or customer experience to compliance adherence. The following is a summarized view.

Agentic AI use cases in customer service

1.1. Agent-facing agentic AI – assister

Agentic AI can help reduce agent workload and improve efficiency by acting as a personalized co-pilot, which can help in real-time accent/language neutralization, knowledge article summarization, predicting/scoring user behavior, and highlighting issues that need attention. It can also generate incident and resolution summaries, resolution codes, etc. It can also develop training plans based on customer interactions.

For example, if a customer reports a Citrix application issue, the agent can trigger an agentic AI prompt to connect with the server, analyze the data logs, and identify a potential resolution. With the agent's approval, the AI can then resolve the issue and update the ticket.

1.2. Supervisors facing agentic AI – evaluator

Agentic AI can help supervisors score interactions with full coverage, ensuring higher accuracy than random sampling. A key use case is predicting volume trends and planning optimal rosters, enabling operations to run with the right resource size for better margins.

Imagine monitoring interaction inflow and assigning the right agent every time based on customer intent. Powered by LLMs, agentic AI can assign agents using historical data and quality scores. It also refines knowledge articles with new steps or variations, analyzes thousands of feedback forms to uncover missed opportunities, and quickly generates ad hoc reports and dashboards.

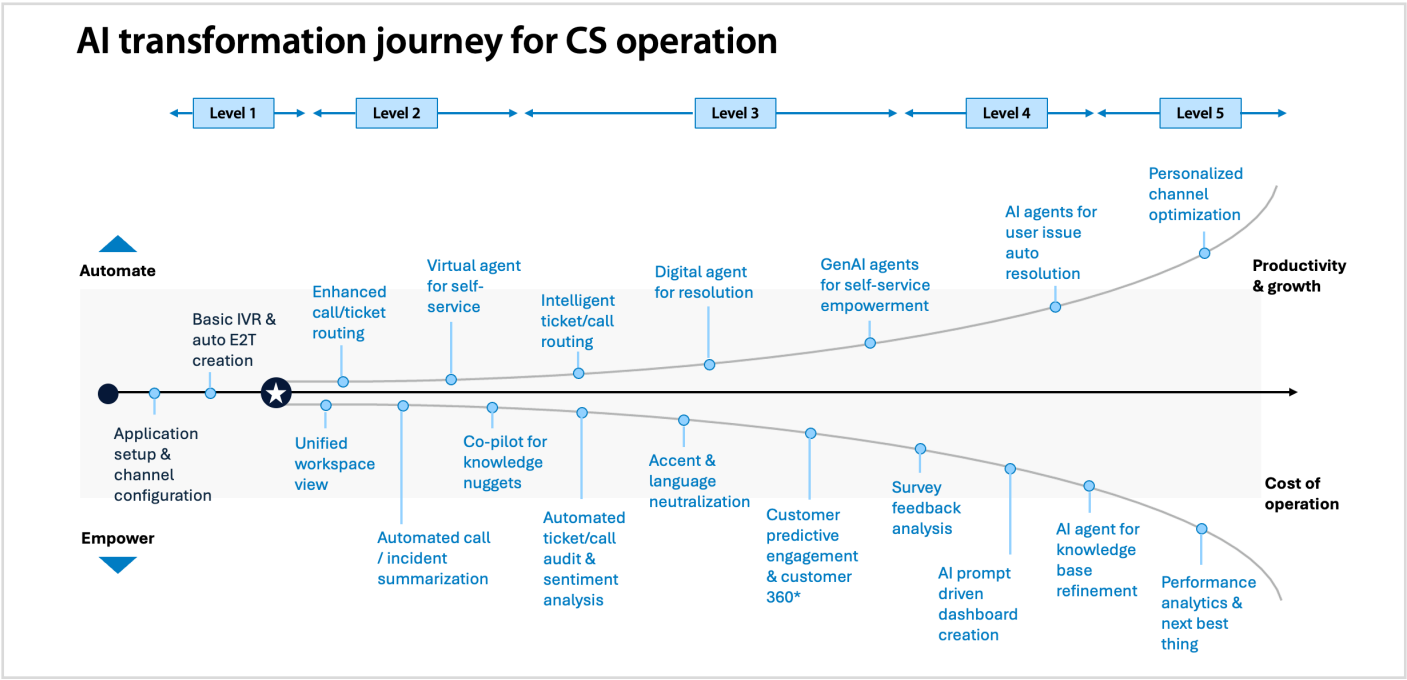
1.3. Customer facing agentic AI – decision maker

Today, customers expect virtual agents to resolve issues, not just provide generic knowledge base responses. AI agents powered by LLMs can understand the full problem and deliver resolutions rather than simple troubleshooting.

For instance, if a user reports an MS Teams issue, the AI agent can fetch application details, analyze logs, and recommend fixes, triggering the self-heal tool on the user's device. Agentic AI thus understands context and integrates with third-party systems to execute resolutions, handling complex queries with accountability. As another example, if a storm grounds a flight, a passenger asking about baggage allowance could receive not only an answer but also suggestions for rebooking, with the AI considering the broader situation.

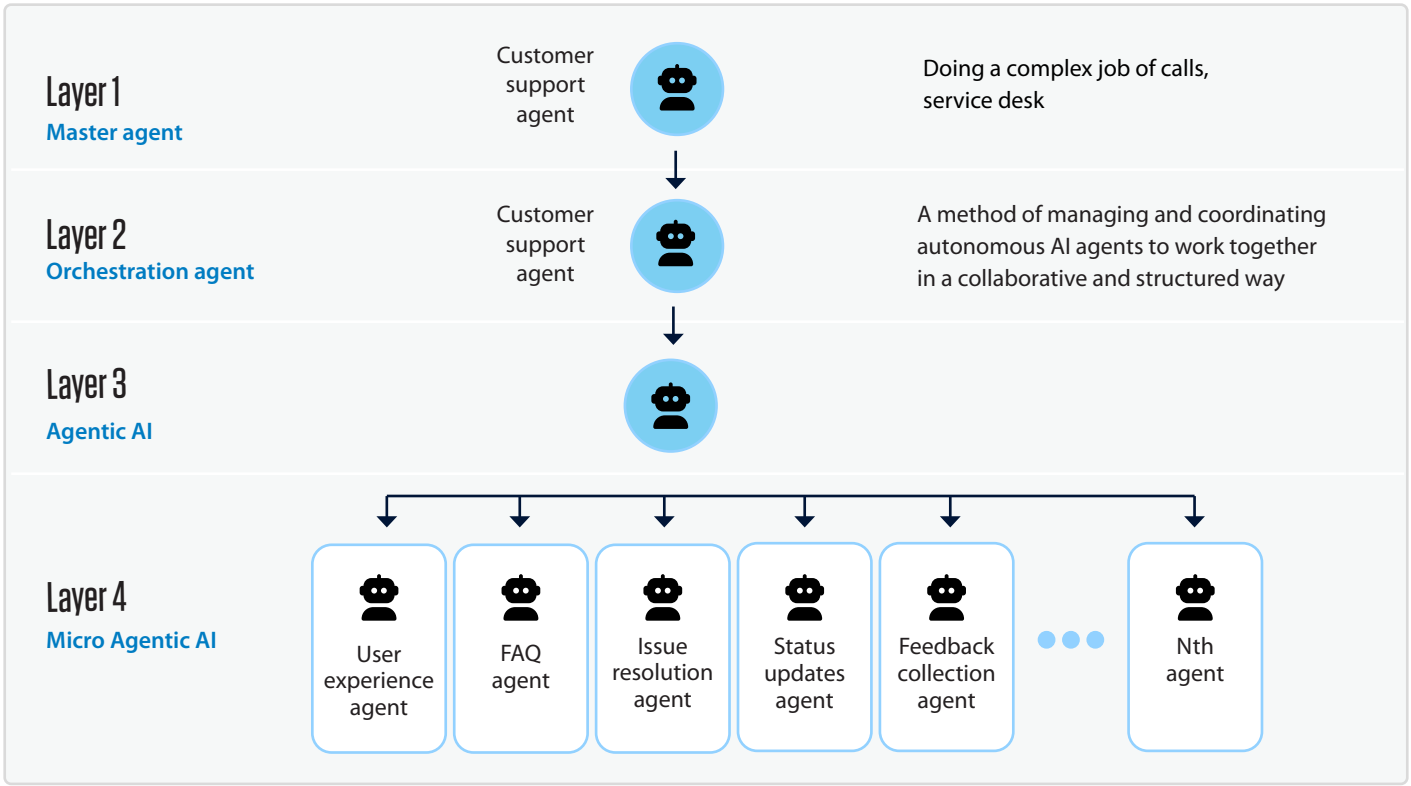
2. Mapping a transformation journey

Once we have a good understanding of why we want to go with agentic AI, we can lay out the transformation roadmap with the help of the following.

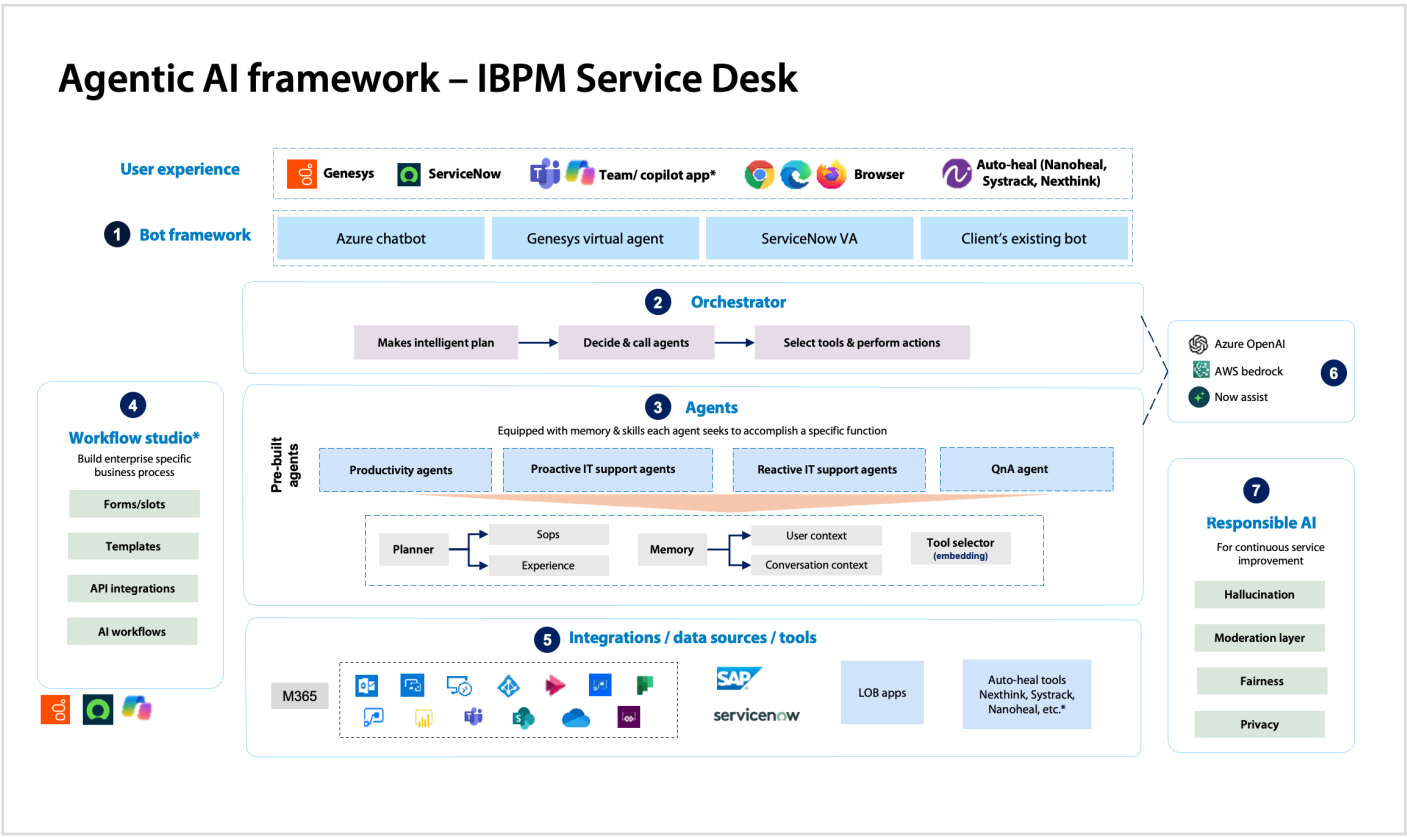


3. Building an agentic AI framework

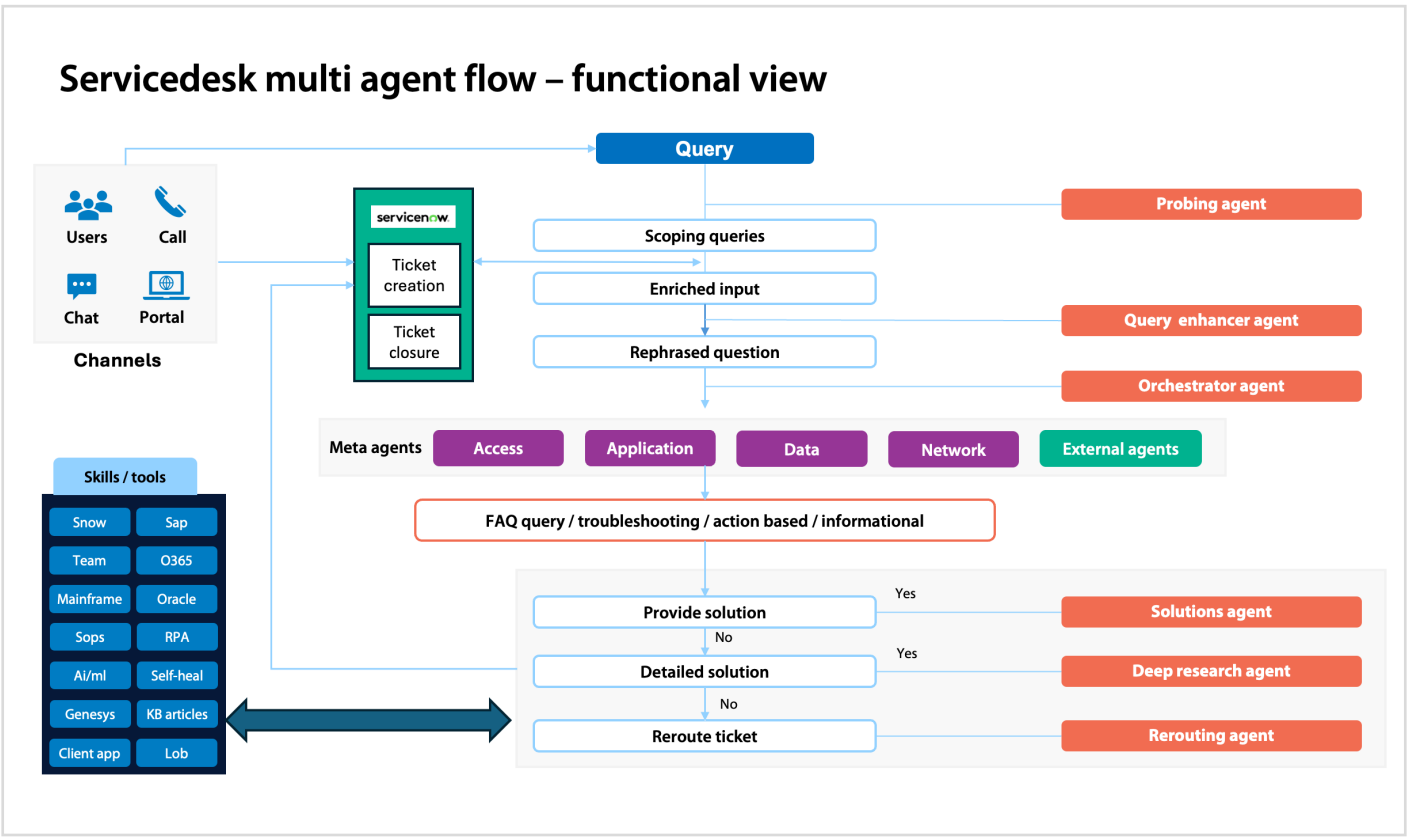
Once business goals are understood, we can define the technological framework. While automated self-service conversations are a common agentic AI use case, they aren't the only way it enhances customer service. Agentic AI leverages micro-agents—specialized components built for specific tasks—which can work independently or be combined for more complex resolutions. Agentic AI implementation follows a layered model: Agentic AI bots may operate alone or in coordination with others through an orchestrator. A master agent can manage one or more orchestration agents, each invoking multiple AI bots. These bots, in turn, can call on several micro-bots to complete tasks. Here is a representation of the approach.



3.1. Technical representation



3.2. Functional Representation



4. Build a responsible AI framework

Responsible AI is another linchpin for successful AI implementation. It is key for continuous improvement, avoiding hallucination, ensuring fairness and privacy, and commitment in its approach. To execute AI responsibly, every organization should have an AI policy or a responsible AI framework. Responsible AI is the practice of developing and deploying artificial intelligence systems in a way that is safe, ethical, trustworthy, and adherent to human values. This policy should cover all ethical and regulatory considerations (ethical design, fairness, accountability, transparency, privacy, security, IP infringement, etc.) into AI systems throughout their lifecycle.

Conclusion

The promise of agentic AI is immense but implementing it requires a thoughtful approach. One needs to understand Business requirements, Business goals, technical framework and technical implementation for a successful transformation.

About the author

Laxmi Gollapudi
Portfolio Head – Business Transformation

Laxmi heads digital transformation for the customer service practice at Infosys BPM. With over 29 years of experience in the industry, she is responsible for transforming business with digital levers. She was awarded NASSCOM Women in Technology for her pivotal role in technology. A firm believer in advocating and maintaining a high quotient of both head and heart at work, Laxmi navigates her career with empathy and intelligence. Laxmi holds a master's in engineering from IIT Madras and bachelor's from JNTU Hyderabad.

For more information, contact infosysbpm@infosys.com

Infosys®
Navigate your next