



Executive
Perspectives

03

Unlocking Impact from Agentic AI in Customer Service

Customer Service Excellence

September 2025

Introduction

AI remains one of the most pressing topics for customer service leaders today. As contact volumes grow and expectations for efficient, high-quality service increase, companies are recognizing the need to thoughtfully adapt to an AI-powered customer service organization. Opportunities for value creation with GenAI in customer service remain significant, with new value pools continuing to emerge, such as productivity gains and customer experience enhancements.

Advancements such as agentic AI are expanding what's possible, offering new avenues to enhance both customer and agent experiences. As more organizations begin to explore and implement these capabilities, the moment is right for companies to plan strategically and move with purpose to unlock long-term value.

This 2025 edition draws from BCG's vast global implementation experience, in-depth interviews with customer service experts and thought leaders from technology providers, as well as a proprietary survey of approximately 150 customer service leaders.

We address the critical questions on service leaders' minds:

- How does agentic AI create innovation opportunities along the customer service value chain?
- What are the technical implications leaders need to watch for?
- Why are most companies struggling to realize value from AI – and how can they unlock it?

This document is a guide for CEOs, C-suite, and customer service leaders to cut through the noise and learn how to harness the next wave of AI in customer service for true value unlock.

In this BCG Executive Perspective, we explore how agentic AI is transforming customer service and how to unlock full value from AI



Summary | Unlock impact from AI in customer service

A

AI remains a hot topic in customer service

- Expectations of customer service continue to rise, with pressure to improve efficiency while meeting customer demands
- GenAI provides a unique opportunity to not only improve productivity but also enhance customer and agent satisfaction
- Value pools for GenAI remain large, with use cases evolving quickly and agentic AI offering even further opportunities to unlock value
- At the same time, urgency is increasing as pioneers are moving ahead and have a head start on creating a competitive advantage

B

Agentic AI unlocks a step change

- Looking at the market, pioneers have evolved from GenAI to specifically agentic AI use cases and journeys
- With the rise of "agentic," AI can now autonomously achieve outcomes by independently observing, planning, and acting
- Agentic AI reshapes the target operating model – empowering AI agents and humans to team up and innovate how business gets done

C

Most firms leave major value untapped

- While pioneers have successfully integrated GenAI and agentic AI, many other companies are still piloting or exploring
- True value unlock from AI, including agentic AI, not only lies in tech – it is rather fueled by organizational change and enablement
- Still, orchestrating the tech stack is proving difficult – integrating different players requires more than just "plug-and-play"
- Companies are struggling to realize significant value with off-the-shelf tools – real value unlock comes from customizing solutions
- At the same time, there is still an opportunity window for revitalization and course correction as the belief in GenAI's value remains strong

D

Focus on 5 hard-earned lessons to win

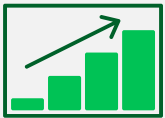
1. **Make it business-led** – this is a transformation effort, not just a tech deployment
2. **Focus on value** – make decisions and prioritize use cases based on associated value potential
3. **Build solid data and intelligence layers** for the tech stack; orchestrating across platforms and tech solution providers is key
4. **Combine own and third-party reusable components** to scale successfully and fast
5. **Reinvent from scratch** for a world of unconstrained AI resources – don't just automate flawed human processes

Chapter A

**AI remains a hot topic
in customer service**

GenAI has already become the table-stakes response to address growing pressure on customer service operations

Well-known challenges are rising



Increasing interaction volumes and complexity of systems and processes are straining customer service

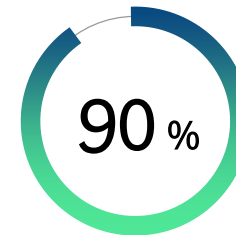


Economic challenges push for cost-to-serve reduction, putting pressure on total and per-interaction costs

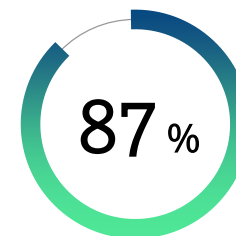


Rising customer expectations demand instant, seamless, and high-quality 24/7 service

C-level survey: GenAI is scaling fast



of organizations are **piloting or scaling GenAI** in customer service channels



will **boost their AI and GenAI investment** over the next 1-2 years

Our clients are starting to realize significant results from deploying AI in customer service – across geographies and industries

Selected case examples

50% AHT reduction – based on AI-focused workflow redesign and AI tooling at global tech company

15+% AHT reduction, **+10%** more handled cases per support agent – based on deployed AI copilot at global tech company

30% reduction in call center cost – based on AI-powered cost transformation at health care player

65% case deflection and **10%** decrease in issue resolution time – based on AI-powered customer service transformation at financial institution

20% AHT reduction – based on AI-driven business transformation at BPO

14% decrease in AHT and **25%** drop in after-call work – based on AI agent assist and agent coaching at telecom

90% automation of consumer loans – based on AI-enabled lending and omni-channel servicing at European bank

50+% workforce reduction in call center within 5 years – based on AI-driven workforce replacement at insurance company

30% increase in automated demand handling and **20%** AHT reduction – based on AI-enabled transformation in customer service at energy retailer

Pioneers have successfully transformed and captured benefits

Selected case examples

	Global bank	Large-scale BPO	International telco	Global tech company
Impact	~90% autom. of consumer loans ~70% autom. of mortgage loans	~15-18% AHT reduction ~90% of agents w/efficiency gain	~4K+ agents leveraging new tools 20%+ cost-out cust. ops underway	~1.5K+ agents leveraging AI engine 50% AHT reduction across use cases
Context	~5k FTE in customer service	~40K FTE, >\$3B revenue; previous attempts to scale AI failed	>50M subscribed customers, >\$5B revenues	>80K B2B customers, >\$5B revenues
Approach	Implemented AI-enabled lending and omni-channel servicing	Deployed GenAI tools , including agent assistance and call analytics, in various environments	Deployed GenAI agent support , with call summaries, intent recog., agent assist, automation	Redesigned workflows, built and deployed AI engine based on >2K support docs and >10K cases
Timeline	Within 6 months of implementation, initial headcount reductions realized	3 months to complete implementation , 3 more months for initial benefits realization	9 months for fully scaled agent assist in 1 country, 18 months for international scale and automation	4 months from activation sprint to fully tested and implemented release, rolled out to all agents

Note: AHT = average handling time
Source: BCG project experience; BCG analysis

Realizing the full potential requires transformation of the entire customer service value chain, with support response being the typical starting point



Pre-empt

Leveraging AI to **prevent issues and requests** from arising in the first place



Self-heal

Using AI to **proactively address issues and requests** before the customer notices them



Self-help

Equipping customers with AI-based tools and information to **self-solve their issues and requests**



Support response

Enabling service agents to **efficiently resolve customer issues and requests**

Highest impact achieved upstream

Typical starting point downstream

The value pools are big – with opportunities beyond cost reduction



Efficiency gains

~60+%

**Long-term
productivity uplift**

~10-20%

**Short-term
P&L impact**



Customer experience enhancement

+10-20

**NPS
increase**

+20-30%

**CLTV
increase**

Chapter B

Agentic AI unlocks a step change

The future of autonomous processes is now: agentic AI is observing, planning, and acting like a human

What is agentic AI?

AI agents actively perform tasks on behalf of humans, shifting from a passive to an active role

AI agents can now:

- **Watch, plan, and act on their own** with minimal help
- **Work with other AIs or humans** to use different tools and systems together



“Autonomous agents already transform the game by reasoning, planning, and acting across tools.”

Customer service industry expert

Observe

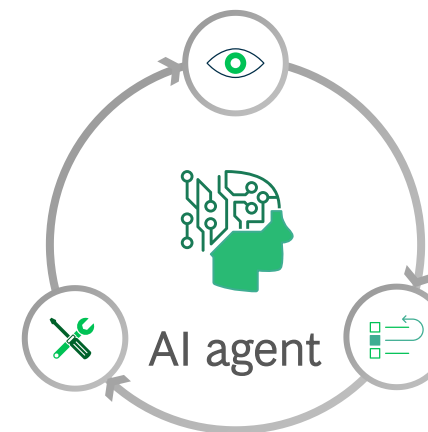
Gather information from the environment through:

- **Interfaces** like APIs, user inputs, metrics, sensor outputs
- **Memory** and context of past interactions

Act

Execute planned tasks by:

- **Leveraging tools** like digital systems, APIs, and GUIs
- **Coordinating** with other agents
- **Prompting** humans for more input



Plan

Analyze observed info and evaluate possible actions to prioritize them based on:

- **Roles** that define type and behavior of agent
- **Reasoning** abilities leveraged via the LLMs
- **Prior knowledge** and context built by agent
- **Goals** that it's working toward

Note: APIs = application programming interfaces; GUIs = graphical user interfaces; LLMs = large language models
Source: BCG project experience; BCG-conducted expert interviews; BCG analysis

With agentic AI, future operations will be run by thousands of AI agents, performing multiple tasks and augmenting humans for higher-level tasks



Traditional GenAI in customer service

- Based on **siloes data**, e.g., specified info from specific tools or processes, such as contract renewals only
- **Limited visibility** across systems, e.g., no collaboration with other AI agents and potentially no access to full customer data and past interactions, product catalogue, etc.



- **Reasons for calls analyzed** with scope depending on data access, e.g., insights across inbound vs. outbound calls or geographies/languages
- **No independent actions**/insights derived from call data



- **Classification and routing of** issues via chatbot
- Handling of **requests** that don't require independent action, e.g., authentication
- **Generation of content**, e.g., call summaries
- **Selective support** offered by copilot, e.g., content of pages and info retrieval, suggesting next-best action

Selection

New opportunities with agentic AI in customer service

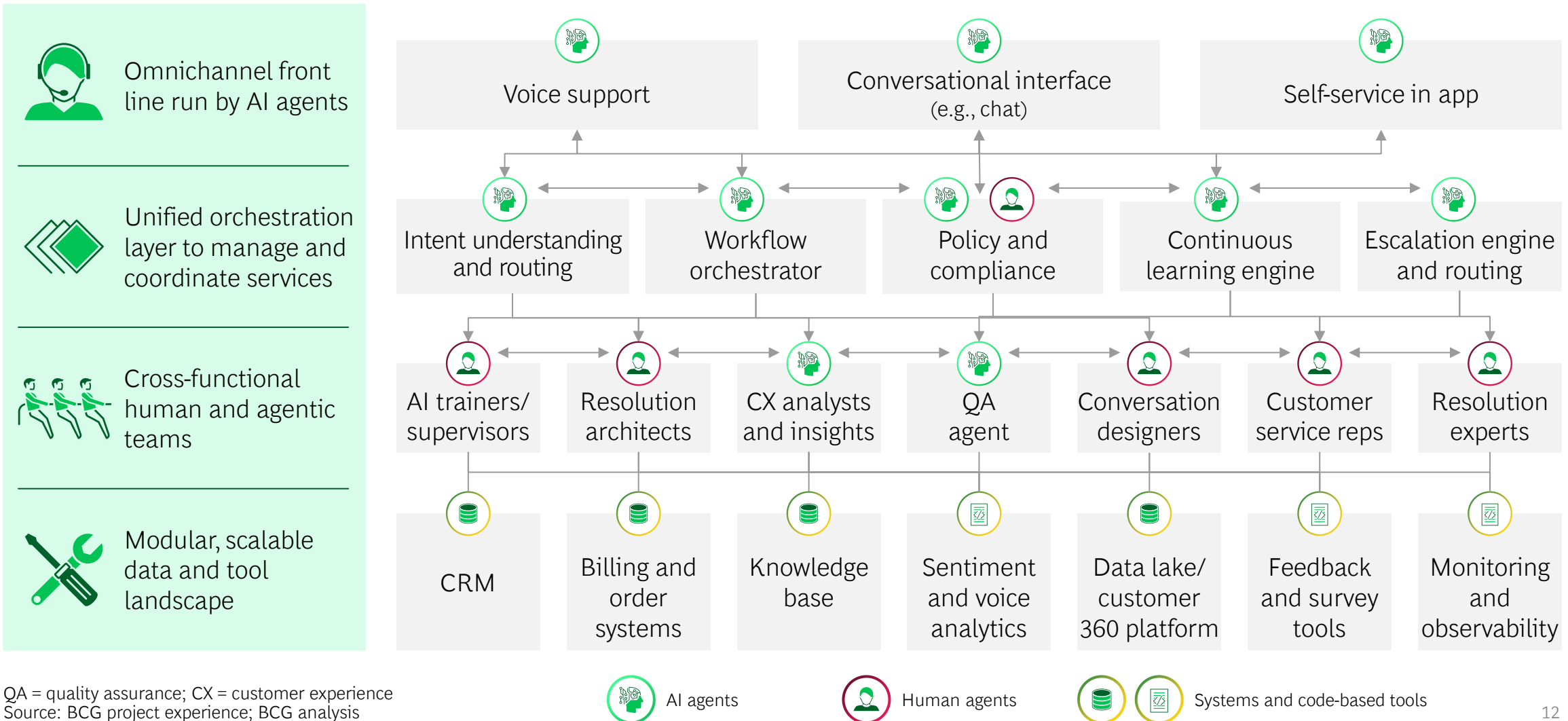
- **Targeted, independent process observation, data collection, and agent interaction**, e.g., customer 360 across systems for hyper-personalization
- **Proactive pattern recognition across journey and channels**, enabled by autonomous action and A2A communication, e.g., looking at customer behavior and preferences E2E, informing product recommendation
- **Holistic assessment to anticipate and self-heal issues**, e.g., automated planning of maintenance needs via network data monitoring
- **Independent generation of recommendations** based on insights from conversations and behavior patterns, e.g., smart agent coaching
- **Autonomous resolution**, i.e., AI agent is given an objective and tools to solve tasks in targeted manner, e.g., E2E AI-executed clarification of bills
- **Agent assistance with real-time action in live context**, e.g., executing extra connection tests based on analyzed problem, adjusting client data
- Coordination of **full support journeys** and orchestration of tools/agents
- **Seamless escalation to humans** during autonomous resolution, if necessary, e.g., assessment of risks and flagging to human agent

NBA = next-best action; A2A = agent-to-agent; E2E = end-to-end

Source: BCG-conducted expert interviews; BCG project experience; BCG research; BCG analysis

To enable value realization, companies need to build a target operating model in which AI agents work alongside human employees

Exemplary – non-exhaustive



QA = quality assurance; CX = customer experience
Source: BCG project experience; BCG analysis

Companies can choose the maturity level of AI agents based on the level of trust established and desired

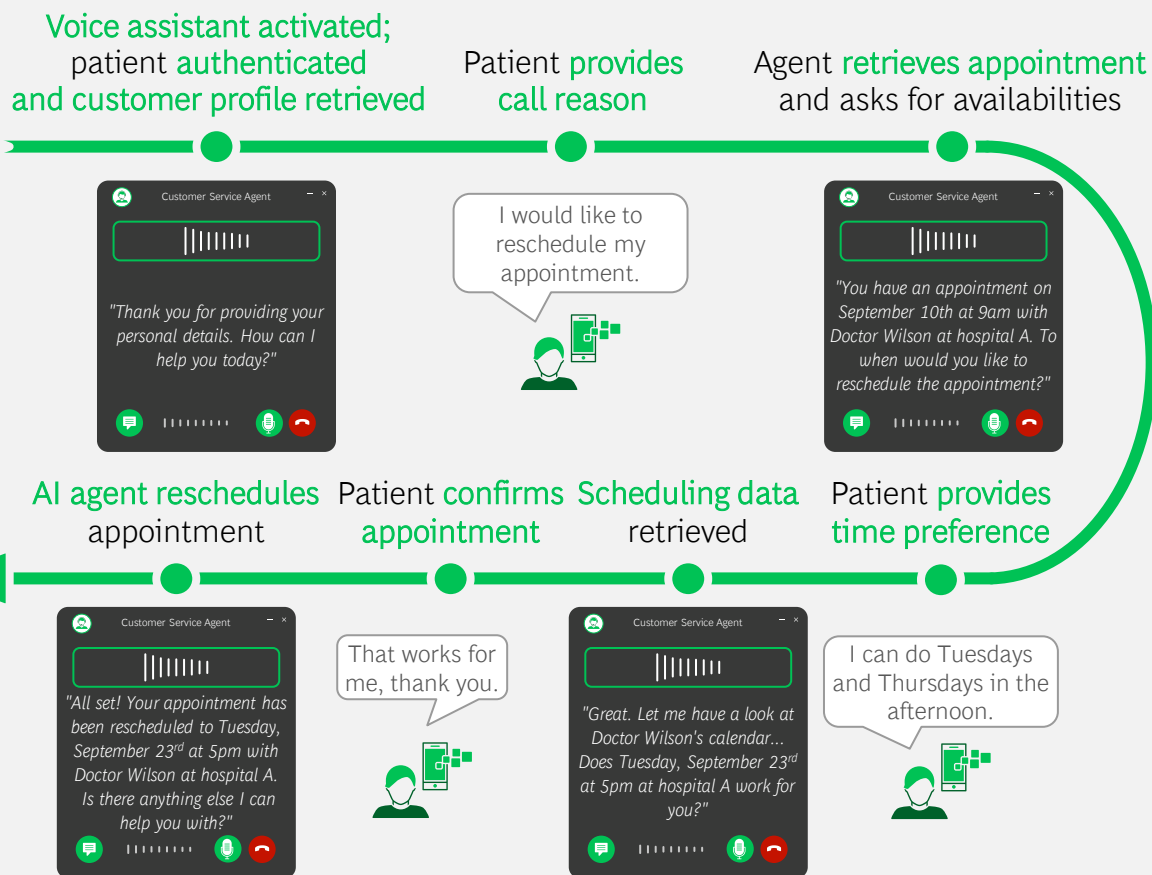
	AI agent options	Agent role	Customer service team implications
Higher maturity, action-taking, impact of AI agents	CONSTRAINED AGENTS <i>Trained to use tools</i>	Automates routine tasks (e.g., password resets or billing questions) using set workflows	<ul style="list-style-type: none">AI handles repetitive Tier 1 queries, reducing human workloadHumans focus on complex issues and exceptions; min. training for adoption
	AUTONOMOUS AGENTS <i>Trained to plan, reason, and take action</i>	Solves more complex issues (e.g., invoice disputes or service outages) by understanding context and taking appropriate actions	<ul style="list-style-type: none">Human agents take on leading roles – review, audit, and override AI decisionsThis frees up capacity and drives workflow/KPI redesign for decision making
	MULTI-AGENT COLLABORATION <i>Trained to collaborate and communicate</i>	Orchestrates multi-step processes (e.g., case resolution or order tracking) across multiple specialized tools or agents	<ul style="list-style-type: none">Humans become “agent supervisors,” managing AI teamsNew workforce planning, training, and performance metrics are required

Example: Already, agentic AI solves E2E processes autonomously – in the short term with second-level implications in agent-to-agent communication



Health care industry example

Agentic as we implemented it today: Agentic solves E2E process of appointment rescheduling, auto covering a major call volume driver

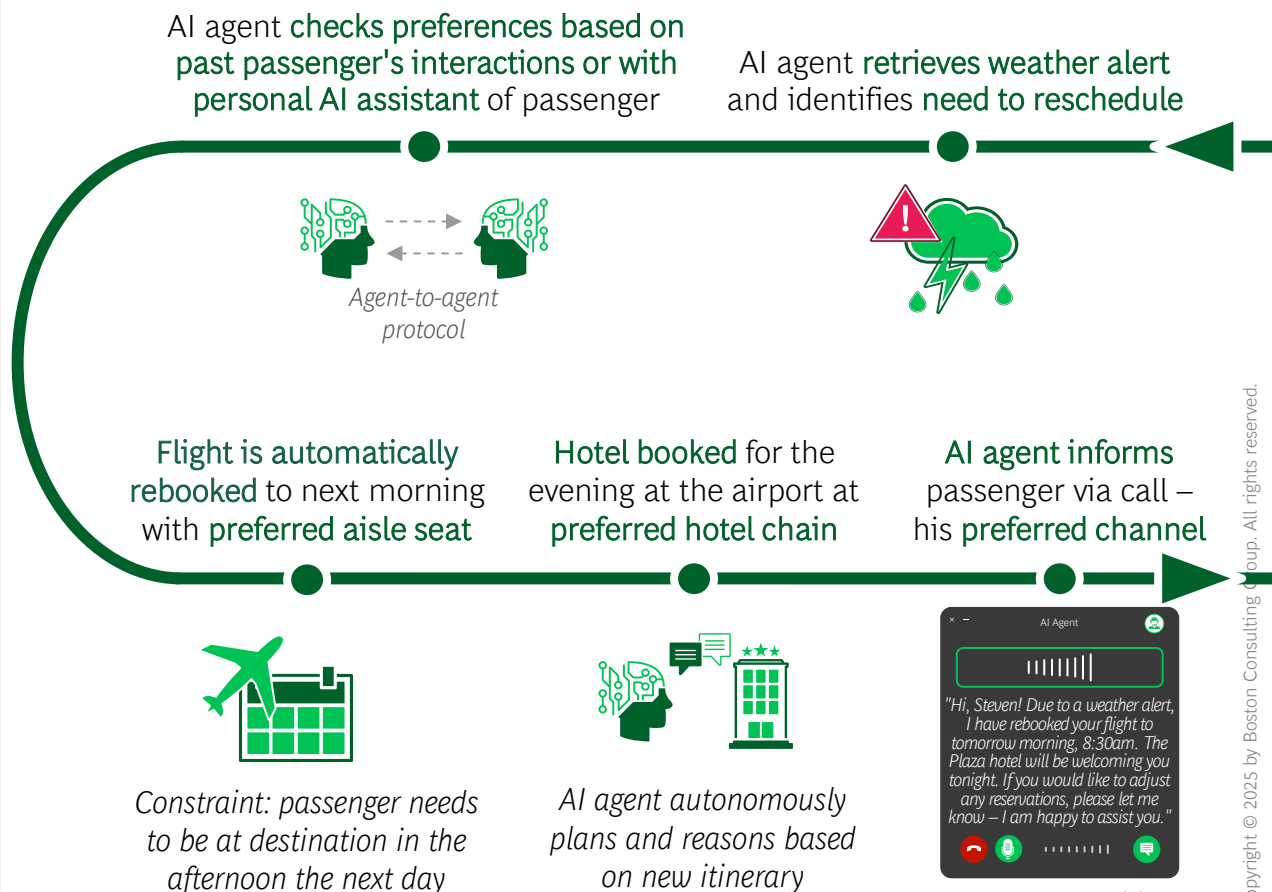


Source: BCG project experience



Airline industry example

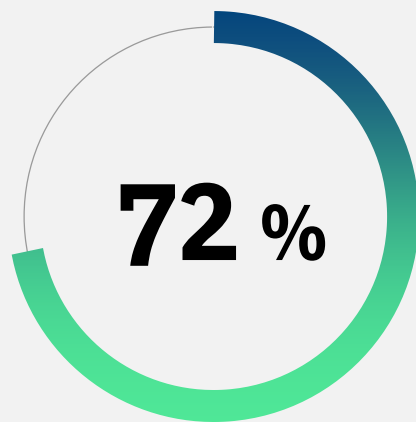
Agentic expected in the near future: Agentic autonomously solves issues – flight rescheduling auto triggered by weather alert



Chapter C

Most firms leave major value untapped

Most companies are struggling to realize value from AI – barriers form around both org transformation and tech orchestration



of surveyed companies report **no measurable impact on P&L yet**



“Many companies have gone live with GenAI pilots, but it is still more about potential than realized value – the big, measurable wins have not materialized yet.”

AI expert in customer service @ US hyperscaler

Key barriers to successful AI implementation *in the order observed in our survey*

1

Poor technology integration and orchestration

2

Lack of focused strategy and leadership for GenAI initiatives

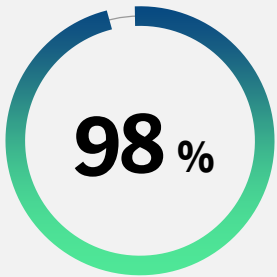
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Focus on tech instead of business impact

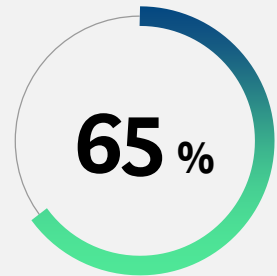
Note: Key barriers and relative importance of barriers according to BCG survey on GenAI in customer service

Source: BCG-conducted expert interviews; BCG survey of ~150 C-level executives and senior leaders/managers on GenAI in customer service; BCG project experience; BCG analysis

Change management is one of the biggest obstacles and the essential enabler for GenAI success



of surveyed customer service leaders consider **robust change mgmt. critical** for successful GenAI initiatives



of leaders see **change mgmt.** as one of the top three **main barriers to successful GenAI implementation**

Customer service leaders' advice for transforming the function



Involve frontline employees in GenAI design and testing to ensure relevance and adoption



Equip teams with **targeted GenAI training** to build skills and confidence



Clearly communicate GenAI's role and value to drive understanding and buy-in



Rethink overall operating model to integrate GenAI across processes and the organization



Adapt incentives and KPIs to promote meaningful GenAI usage

At the same time, navigating the evolving tech ecosystem remains challenging, and often-promised "plug-and-play" lags expectations

Tech ecosystem becoming more and more complex

Selection

Conversational AI solutions



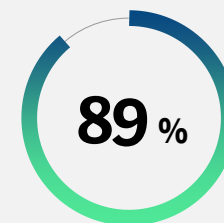
CCaaS platforms



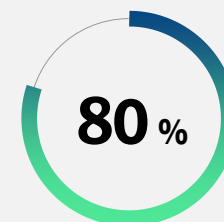
WFO/WEM



CRM



of leaders mentioned **difficulties in selecting vendors and SIs**



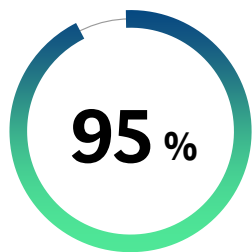
need to manage more than one SI to ensure end-to-end delivery



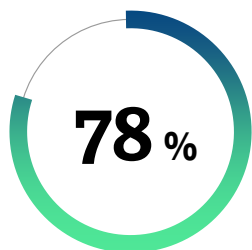
“Orchestration across platforms and agents is critical to unlock performance and reliability at scale.”

IT expert for AI customer service solutions

Despite limited value realized to date, there are pathways to recover



believe **GenAI will transform** customer service



expect to scale GenAI within the next 24 months

GenAI recovery blueprint in 5 steps

Acknowledge and reset

i

Take stock, acknowledge gaps, refocus on business value

Set a revised strategy and ambition

ii

Review tactical focus, revise strategic ambition with value in mind

Relaunch with cross-functional teams

iii

Run initiatives with multi-functional teams (business and tech)

Redesign before automating

iv

Fix broken processes before scaling

Enable people

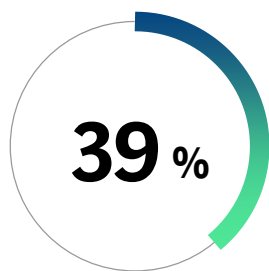
v

Upskill and engage – because GenAI impact hinges on people

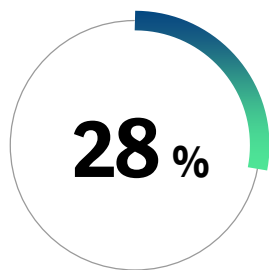
Chapter D

Focus on 5 hard-earned lessons to win

Successful GenAI transformations in customer service provide 5 key lessons on value and business focus, tech orchestration, and reusability



reported that GenAI has **met or exceeded expectations**



have **already realized P&L impact** with GenAI

Insights from 180+ experts show key lessons learned:

- 1 **Make it business-led** – it's a transformation effort, not just a tech deployment
- 2 **Focus on value** – make decisions and prioritize use cases and journeys based on business case and associated value potential
- 3 For the tech stack, **well-executed data and intelligence layers are needed** for orchestration across platforms and vendors
- 4 A winning tech strategy combines **smart buy-vs.-build decisions, tailored solutions, and scalable reusable components**
- 5 **Reinvent from scratch for a world of unconstrained AI resources** – don't just automate flawed human processes

1 Make it business-led – it's a transformation effort, not just a tech deployment

Relative GenAI impact

10%
Algorithms

- Be aware: LLMs are interchangeable; **differentiation stems from execution, not the model**
- Ensure that **agentic AI acts within end-to-end processes**, doesn't just suggest next steps

20%
Technology
and data

- **Adapt data layer for structured data access** – CRM, desktop logic, orchestration layer¹
- Use **clean transcripts, intent tags, and metadata**² – they are essential for performance
- **Orchestrate across systems for value realization**, not standalone AI

70%
People,
process,
change

- Build **future-ready skillset and teaming** – upskill agents and leaders and drive adoption
- **Fill new roles to build, shape, and govern** AI tools by up-/re-skilling and hiring talent externally
- Leverage AI for **enhanced training, quality assurance, and knowledge management**
- **Transform first-line interactions**, leverage humans for complex requests and shaping AI
- **Establish cross-functional workforce mgmt. and engagement**, incl. analytics, dynamic routing, etc.
- **Manage demand** with upstream **contact prevention** (pre-empt, self-heal, self-help)
- Leverage AI-powered, **cross-functional customer experience insights** for contact reduction
- Rethink the **role of outsourcing/BPOs** in light of higher automation

CRM = customer relationship management. 1. E.g., to enable natural-language-driven intent recognition and routing across channels; 2. E.g., effort scores, resolution triggers; Source: BCG-conducted expert interviews; BCG project experience; BCG analysis

2 Focus on value – make decisions and prioritize value pools based on business case and associated potential

Prioritize what matters



Use structured evaluation frameworks



Prioritize use cases by value and complexity



Track ROI throughout development

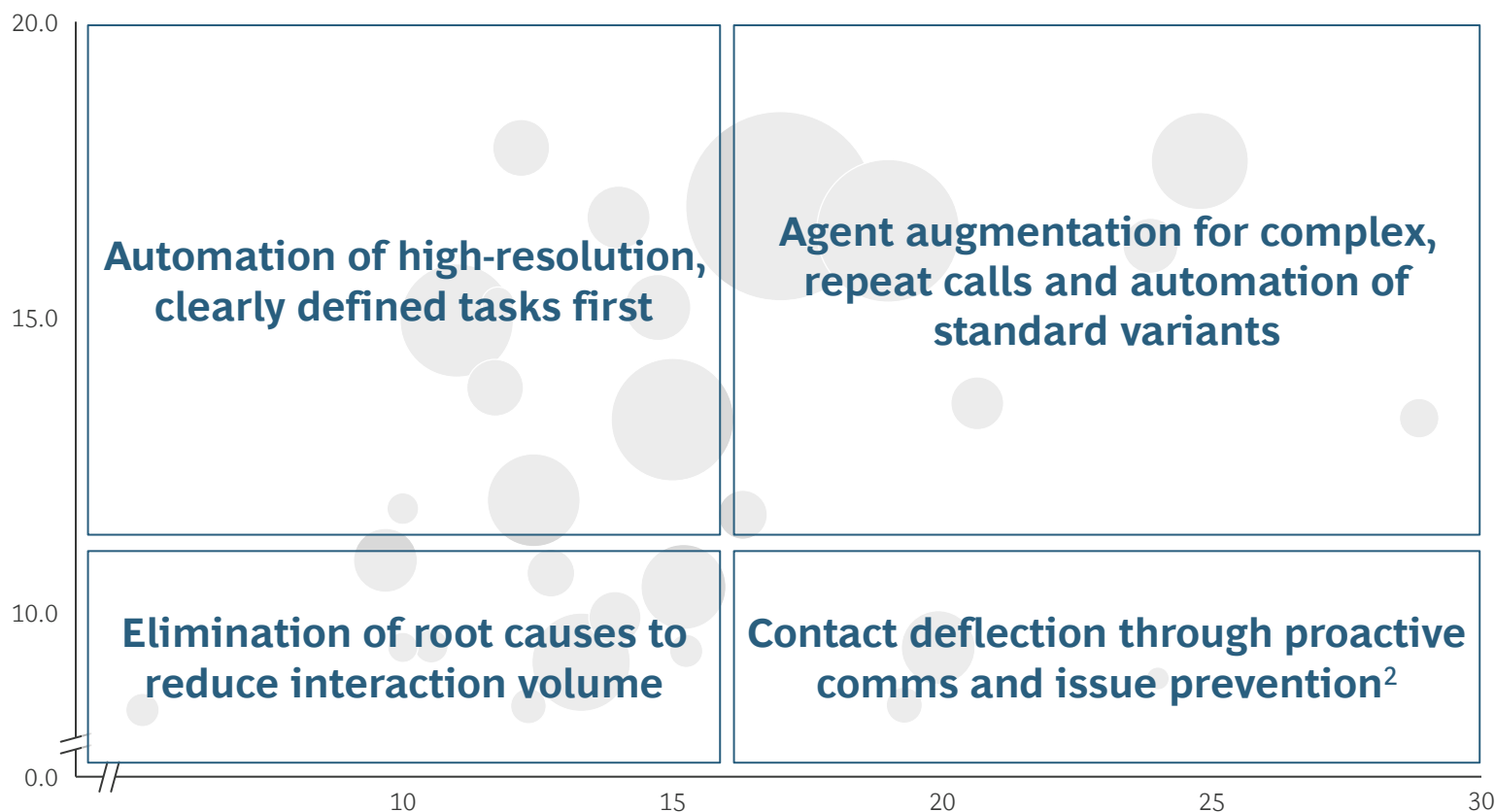


Regularly adapt priorities based on results

1. Repeat rate calculated as % of calls with re-calls in the following 24 hrs. (i.e., 1-FCR); 2. E.g., proactive order status update; FTR = first-time-right; AHT = average handling time; prio. = prioritization; Source: BCG project experience; BCG analysis

Exemplary selection and prioritization of value pools

AHT (minutes)

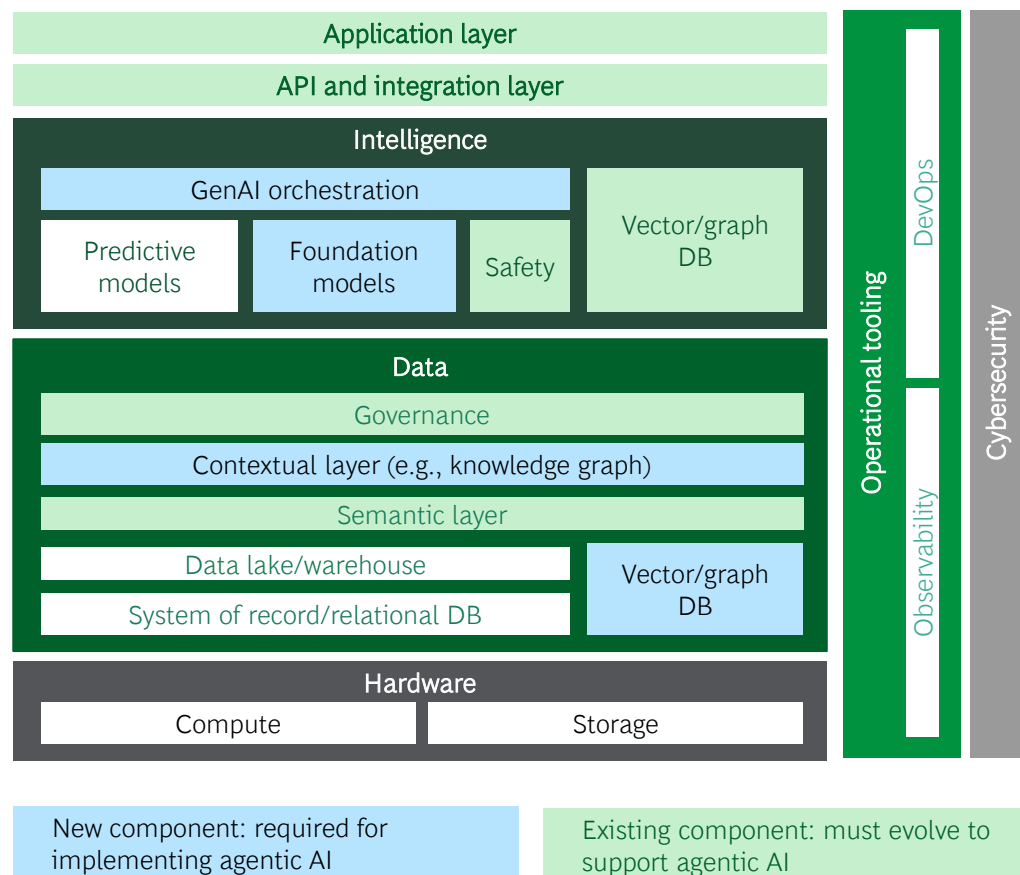


Bubble size = expected impact

Repeat rate¹

3 For the tech stack, a solid data layer and a well-executed intelligence layer are needed, allowing for GenAI orchestration across platforms

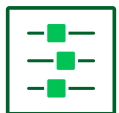
New elements emerging alongside the tech stack



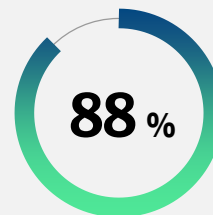
5 rules to build your tech stack right

- I Fix the data layer**
Ensure real-time access to high-quality, cross-silo data with API readiness; silos and legacy systems block GenAI
- II Streamline the orchestration layer**
Centralize AI flow control; avoid fragmented tools and vendor lock-in; build event-driven cross-system coordination
- III Include real-world intelligence layer**
Evaluate LLMs on real data, not vendor-claimed impact – focus on robustness
- IV Align across layers**
Connect business needs with tech delivery via cross-functional teams; achieve clear interfaces between layers
- V Customize where it counts**
Standardize components, but adapt layers for industry-specific needs

For winning the tech game, a hybrid strategy is proven by P&L impact



It requires a carefully balanced strategic choice between **buy vs. build** – **purchasing some components while developing others** in-house



of companies that see positive P&L impact use a **mix of 3rd-party and in-house solutions**



"Winners" always customize – integration, model readiness, modularity and reusability of components, and risk management are critical



“Delivering GenAI value at scale needs both expertise and customization of solutions.”

Customer service AI and GenAI expert



Evaluating SIs and vendors is complex – it requires a **case-by-case approach** across business value, tech fit, and execution strength



“Whether internal or external, a dedicated team or COE is crucial. Choosing the right model is strategic.”

Senior tech advisor and GenAI expert



GenAI success demands **end-to-end ownership and deep operational integration** – vendor-led approaches often fall short



“Owning the value chain and operational expertise are key to turning GenAI assets into real impact.”

Senior tech advisor and GenAI expert

5 Reinvent from scratch for a world of unconstrained AI resources – to maximize impact, don't just automate flawed human processes

Before:

Broken processes
are automated



“Using AI agents instead of human agents in broken processes is **more cost effective** ...”

Senior customer service leader

After:

Agentic AI designs
for outcome



“... however, **true value unlocks when processes, services, experiences, and even business models, are redesigned** to leverage the full power of agentic.”

CPO of large US software provider for contact centers

Non-exhaustive

Example: Claims management in insurance

- **Predefined workflows cannot adapt** to real-world complexity
 - If claim does **not fit predefined logic**, it stalls and **human intervention** is needed
 - Adding AI on top of flawed process **accelerates poor outcome at scale**
-
- **AI agent is given a mission**, e.g., “resolve the claim”
 - **No rigid paths exist** – dynamic, outcome-driven resolution
 - AI agent **manages process E2E and redesigns** workflows where necessary

Note: E2E = end-to-end

Source: BCG-conducted expert interviews; BCG project experience; BCG analysis

Path forward to a value-focused GenAI transformation of customer service



AI ambition, prioritization, and roadmap

- **Baselining status quo** (incl. as-is, narrative, tech foundation, etc.)
- **Define AI ambition** aligned to goals and stakeholder priorities
- **Identify AI opportunities** (use cases, journeys) across workflows
- Lead by **business and value**: prioritize according to impact
- Set up **roadmap** for transformation and tech rollout



Proving and planning for scale

- **Redesign flawed processes** to scale and enable automation
- Form cross-functional teams to build and launch **MVPs**; capture learning
- **Assess** tech architect., buy vs. build, and SIs; ensure **tech readiness**¹
- Create detailed impact assessment and **test future value potential**
- Build out **operational transformation plans** for further scale-up



Transformation and change management

- Drive **tech rollout**; select and **onboard further tech partners** as needed
- Build **reusable components** and frameworks to ensure long-term scalability
- Scale **operational transformation**² and enable people/drive change mgmt.³
- Establish **agent lifecycle governance** (monitor/audit, feedback loops)
- Capture learning and improve; realize and **materialize benefits**

1. Including design orchestration logic and cross-system agent interfaces; 2. Including integration of AI into key processes, establishing op. model; 3. Including change agent and customer adoption; Source: BCG project experience, BCG analysis

BCG experts: Key contacts for customer service AI transformation

EMESA



Marcus Wittig



Alfonso Abella



Ignacio Hafner



Yasmine Hamri



Max Reimpell



Juan Martin Maglione



Hrvoje Jenkač



Alexander Noßmann



Karl Werner



Sebastian Schmöger



Nicholas Clark



Jürgen Eckel



Henri De Belsunce



Guillem Borrell



Stuart McCann



Robin Anders



Sukand Ramachandran

NAMR



Simon Bamberger



Kirti Choudhary



Luke Purcell



Haytham Yassine



Uche Monu



Angad Grewal



Samir Kapur



Bryan Belmont



Shervin Khodabandeh



Tarandeep Singh



Julian King

APAC



BCG