

Customer experience can make or break a business. In financial services, advances in multiagent AI are automating back-office operations while transforming customer engagements to deepen and secure future engagements.

The New Financial Workforce: Advancing Customer Experience and Operational Efficiencies Through Multiagent AI

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Written by: Tapan Patel, Research Director, Customer Data Platforms, Intelligence and Analytics

Introduction

As customer expectations and competition continue to escalate and intensify, financial services institutions (FSIs) recognize that conventional automation approaches are insufficient to handle the complexity and scale of modern customer service operations. Banks and insurers are no longer simply processing transactions or engaging reactively. They are expected to deliver proactive, positive experiences and contextual interactions that cultivate loyalty and growth. To achieve this, a new paradigm of intelligent automation is emerging, leveraging multiagent AI orchestration platforms to enhance customer experience (CX) while improving back-office efficiency and overall profitability.

The Imperative for a New Approach

The impetus for this shift stems from external market pressures and internal limitations. Customers increasingly expect FSIs to deliver personalized experiences that are the same or better than those they encounter in other aspects of their digital lives. The traditional setup, often featuring siloed operations, manual processes, and reactive service models, is increasingly inadequate, affecting factors such as:

- » **Customer centricity:** Today's consumers demand proactive advice tailored to their financial scenarios and contextual support regardless of the channel. FSIs are leveraging data and multiagent AI to work across systems and with each other to anticipate and fulfill customer needs.
- » **Operational agility:** Manual processes prevalent in many back-office functions, such as underwriting and claims processing, are often slow, error prone, and resource intensive. These inefficiencies not only inflate operational costs but also negatively impact customers through delays and inaccuracies. Collaborative multiagent AI drives intelligent automation to orchestrate these complex workflows, reduce manual handoffs, and utilize resources efficiently.

AT A GLANCE

KEY STAT

34.2% of organizations want to increase operational efficiencies and 21.7% want to improve customer experience by integrating AI agents into their operations, applications, and processes, according to IDC's February 2025 *Future Enterprise Resiliency and Spending Survey, Wave 1*.

- » **Integration dependence:** Financial services firms often rely on systems that are monolithic, lack modern APIs, and are difficult to integrate with new AI technologies. Data often resides in disparate, inconsistent, and low-quality silos, reducing the effectiveness of multiagent AI and requiring extensive data integration efforts. New digital FSI entrants, unencumbered by legacy systems and complex data architectures, place further pressure on incumbent organizations.
- » **Trust and acceptance:** As multiagent AI takes on more visible roles and decisions in customer interactions, transparency about when and how to use AI becomes vital. Firms must manage customer perceptions and privacy, provide clear escalation paths to humans, and implement explainable AI. The inherent probabilistic and variable responses that can emerge from multiagent AI require embedding governance mechanisms directly into the orchestration platform, which allows for obtaining insights and taking corrective actions into agent behavior, reasoning, and decision-making processes.

According to IDC's February 2025 *Future Enterprise Resiliency and Spending Survey, Wave 1*, 34.2% of organizations want to increase operational efficiencies and 21.7% want to improve customer experience by integrating AI agents into their operations, applications, and processes. The combination and convergence of the aforementioned forces and challenges are compelling reasons for FSIs to adopt multiagent AI for customer relevance, competitiveness, and growth.

To address these imperatives, financial institutions need to move beyond task and process automation. They must center intelligent automation on multiagent AI and AI orchestration that rely on high-quality data to deliver operational agility and superior customer experiences. More specifically, multiagent AI systems should include:

- » **Specialized AI agents** to break down processes into discrete tasks (e.g., customer onboarding, verification, and risk scoring), deploy specialized AI agents with expertise in that domain, and integrate them as required (This modular approach optimizes each agent for its specific function.)
- » **A unified orchestration layer** to coordinate the activities of multiple agents, share information and context, and ensure seamless handoffs between them (This platform manages task assignments, monitors agent performance, and dynamically routes work based on requirements and conditions.)
- » **Unified data** platforms or data layers that provide agents with consistent, real-time access to high-quality data from across the organization (Data quality, lineage, and accessibility are critical to enable agents to make accurate, timely decisions.)
- » **Knowledge of interoperability standards** to understand how emerging standards like Model Context Protocol (MCP) and the Agent2Agent protocol can avoid the need for bespoke integrations between new AI technologies, existing core banking systems, and data sources to standardize communication, context sharing, and task delegation among AI agents from different vendors and to enable interagent negotiation
- » **Human-AI collaboration** to design workflows so that AI agents can escalate exceptions, ambiguous cases, or high-risk scenarios to human experts with full context, summaries, and recommendations for shared, informed decision-making (In parallel, continuous monitoring is necessary to resolve multiagent AI conflicts and unpredictable behavior and refine AI models to ensure reliability.)

- » **Multiagent AI summarization** capabilities that use generative AI to synthesize interactions and outputs from multiple agents into concise, actionable explanations (These summaries accelerate human review, maintain context across agent workflows, improve subsequent agent interactions, and support decision-making.)
- » **Data and AI governance** to protect sensitive data, guarantee data is accurate and reliable for AI, and ensure all AI agent actions are compliant, auditable, and explainable to regulators and customers while aligning with brand and business policies
- » **Explainability** mechanisms to provide clear and contextual descriptions of multiagent AI actions (This allows for clear handoffs to bank employees or contact center staff when customers need help or when detailed information is required for effective resolution of customer issues.)
- » **Cloud infrastructure** that can deploy multiagent AI systems on hybrid cloud environments to support variable workloads, ensure high availability, scale to align with changing business demands, and integrate with on-premises and cloud-native applications

Benefits

Multiagent AI-driven automation offers several benefits for enhancing customer experience and driving operational efficiencies. Key benefits include:

- » **Proactive customer engagement:** Multiagent AI enables FSIs to anticipate needs by detecting changes in behavior, issues, or life events; understand intent and context across journeys, channels, and modalities; and focus on capturing different aspects of a customer's profile, preferences, and risks. Working together, these AI agents enable richer personalization, contextual engagement, and depth of service to deliver superior customer experience.
- » **Enhanced new customer acquisition and retention:** Multiagent AI coordinates specialized agents to analyze market data, segment prospects, and deliver personalized marketing campaigns, allowing FSIs to identify and engage new high-potential customers more precisely. For existing clients, these systems combine insights from loyalty, behavior, and risk agents to power intelligent retention programs, predict churn, and proactively deliver tailored incentives.
- » **Risk management:** Through collaboration, multiagent AI systems continuously monitor transactions, assess credit and fraud risks, and track regulatory compliance. Different agents specializing in areas such as anomaly detection and credit scoring share insights to help flag potential threats or breaches before they escalate. This collective approach enables a predictive, preventative risk posture by considering and swiftly acting on relevant risk factors.
- » **Operational efficiency and streamlined workflows:** AI orchestration plays a pivotal role in automating complex business processes by coordinating the work of multiple AI agents, existing systems, and employees. Collaboratively, these agents automate multistep workflows; ensure the efficient, accurate execution of each process stage; and synchronize data validation, exception handling, and decision routing. This reduces manual touch points, minimizes errors, accelerates turnaround times, and ensures the precise deployment of operational resources where needed, resulting in an efficient and effective workforce.
- » **Increased resilience with hybrid cloud deployments:** Multiagent AI systems, when architected for the hybrid cloud, provide FSIs with the flexibility to deploy, scale, and manage intelligent agents across both on-premises and cloud environments. This distributed approach ensures that critical services remain available and responsive even during

disruptions or demand spikes. By supporting failover, rapid scaling, and regulatory compliance for sensitive workloads, the hybrid cloud enables financial institutions to deliver uninterrupted, high-quality service and adapt quickly to evolving business and customer needs.

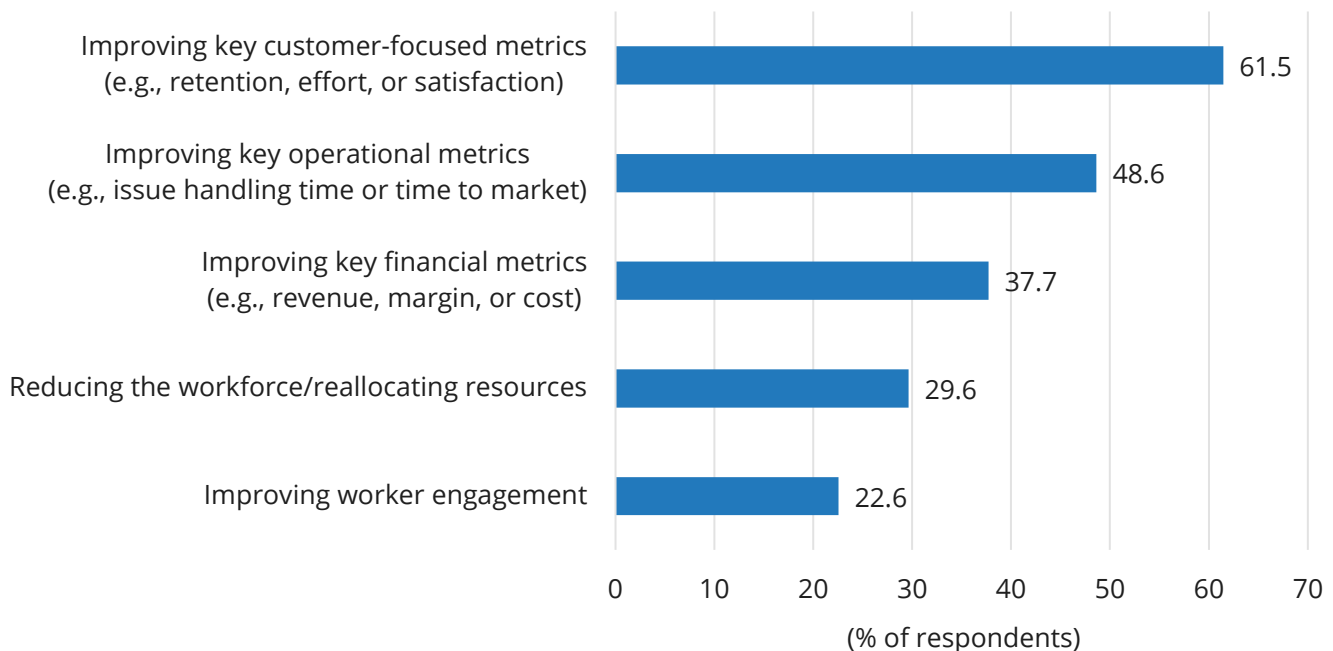
Multiagent AI Use Cases

Meeting the dual demands of customer engagements and operational efficiency requires FSIs to deploy multiagent AI for use cases that work collaboratively across front- and back-office functions in different industries. In IDC's February 2025 *Future Enterprise Resiliency and Spending Survey, Wave 1*, FSI organizations said that improving key customer-focused metrics (e.g., retention, effort, and satisfaction) and operational metrics (e.g., issue handling) were the top 2 most common goals at 61.5% and 48.6%, respectively (see Figure 1).

Figure 1 survey results clearly indicate that when organizations look to deploy agentic AI in customer service applications, they expect to improve customer-facing goals (e.g., reduced customer effort, fewer repeat inquiries) and internal operational efficiencies (e.g., reduced issue handling time by human agents). Over time, these gains should translate into stronger financial performance through increased customer loyalty, higher revenue potential, and more cost-effective service delivery. Improvements in customer experience and operations provide the foundation for key multiagent AI use cases across banking and insurance (see Table 1).

FIGURE 1: **Top Goals of Agentic AI**

Q What is the top goal you want to achieve by integrating agentic AI into customer service apps and processes? What is the second top goal?



n = 56

Source: IDC's *Future Enterprise Resiliency and Spending Survey, Wave 1, February 2025*

TABLE 1: *Multiagent AI Use Cases*

Sector	Multiagent AI System	Key Agent Roles and Capabilities	Primary Impact
Retail banking	Loan origination and servicing	» Document collection and verification agent » Credit scoring and default risk agent » Fraud detection and compliance check agent » Loan servicing/disbursement agent	» Reduction in loan processing time and better convenience experience for borrowers » Routing to the loan officer only for complex cases requiring human judgment
	Financial advisory	» Engagement agent to capture customer interaction » Analytics agent to evaluate income, spending, and saving patterns » Risk agent to evaluate profile and tolerance » Market agent for investment insights	» Incremental improvement in financial well-being » Relevant opportunities for cross-selling and upselling (e.g., debt consolidation)
Corporate banking	Intelligent payment orchestration	» Document scrutiny and compliance screening agent » Risk assessment agent for counterparty risk » Payment and settlement agent	» Accelerated processing with better customer transparency » Reduced risk of errors and fraud
	Business client due diligence	» Entity data collection agent from public registries and data providers » Analysis agent to process legal and financial documents » Adverse media screening agent for negative information » Risk-scoring agent to assign anti-money laundering and other risk ratings	» Faster, more efficient corporate onboarding » Reduced compliance risk
Insurance	Underwriting and dynamic pricing	» Data agent from telematics and property data » Risk identification agent » Predictive agent for claim likelihood and severity » Dynamic-pricing agent for premium amount determination	» More accurate risk assessment and pricing for customers » Reduced manual steps and errors, leading to better profitability for the insurer

	Automated claims management	» First notice of loss agent to capture claim details » Evidence-processing agent to extract data from forms, reports, photos and videos » Damage assessment agent » Fraud detection agent » Settlement agent for noncomplex claims	» Faster, more accurate claims processing, which improves satisfaction during critical interactions » Reduced operational costs and lower fraud losses, which improve profitability
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Source: IDC, 2025

Trends

AI is moving beyond task-specific algorithms to more autonomous and adaptive AI agents capable of complex reasoning, planning, and decision-making. This trend involves multiagent AI that can not only process information but also learn from experience, manage ambiguity, collaborate with other agents, and even explain its reasoning. These AI agents will handle more intricate financial tasks (e.g., complex issue resolution and dynamic risk management) with significantly less human intervention for FSIs. Other trends to watch include:

- » **Dynamic agent orchestration:** The focus is shifting from simple workflow automation to the dynamic orchestration of multiple AI agents and systems across the front and back office. This involves intelligently coordinating agents to achieve simple or complex goals, dynamically assigning tasks, managing dependencies, and resolving conflicts. It requires communication between agents, interoperability with external agents and applications, and integration with enterprise systems and data.
- » **A unified data infrastructure:** The success of multiagent AI and orchestration hinges on the availability of high-quality, trustworthy, and unified data. There is a growing recognition of the need for unified data layers that break down data silos and provide a comprehensive, real-time view of the customer and the business. This involves implementing unified data integration, governance, and quality technologies to empower AI agents with contextual understanding and awareness to make informed decisions.
- » **The convergence of AI and human intelligence:** The future of FSIs involves a close collaboration between AI agents and human employees, impacting skills, roles, talent, and jobs. Orchestration platforms will facilitate handoffs, escalations, and collaboration, enabling humans and AI to work together effectively. AI systems drive inference, actions, and insights, while humans contribute expertise, judgment, emotional intelligence, exception handling, and relationship management skills to drive optimal outcomes.
- » **AI-driven personalization:** This means using AI to optimize how and when AI agents determine the most effective communication channels, optimal timing for interactions, and most compelling ways to present offers or content. Continuous learning loops power this dynamic optimization, with AI agents analyzing the results of their actions and refining their personalization strategies to maximize engagement and conversion.

- » **A dynamic AI governance framework:** Governance will transform from static to dynamic monitoring, enforcement, compliance, and risk control of AI agents. AI agents will not only be subject to governance but will also become tools for regulatory intelligence, risk identification across multiagent AI systems, automated controls, and explainability mechanisms. The focus will shift from demonstrating post-event governance to embedding governance into the fabric of multiagent AI systems beforehand.
- » **Security and data-access controls:** As AI agents request, process, and exchange sensitive data, the risks grow exponentially in multiagent AI systems without a common security model. MCP points the way toward standardized, zero trust interactions, but it requires deeper encryption, policy-based access, and audit hooks to meet regulatory requirements. Contributions from the open source community, combined with investments by vendors developing agentic solutions, are crucial to embedding consent management, role-based authentication, and observability directly into the multi-AI agent orchestration layer.

Considering Red Hat and TCS

Tata Consultancy Services (TCS) offers Customer Intelligence and Insights (CI&I) to help financial institutions leverage high-quality unified customer data, intelligent loyalty management, and advanced AI for augmenting customer experience. CI&I utilizes generative AI, multiagent AI orchestration, machine learning (ML), and knowledge bases to build purposive agents for FSIs. It orchestrates collaborative operations between agents, such as AI assistants for relationship managers who coordinate with back-office agents, including claim evaluators or recommender agents. CI&I also provides prebuilt, industry-specific use cases for FSIs that are designed to improve collaboration and orchestration across customer journeys, addressing data silos and manual handoffs to enhance support and efficiency for front- and back-office teams.

Red Hat provides OpenShift AI, a scalable MLOps platform for building, deploying, and managing AI-enabled applications. Built on the open hybrid cloud foundation of Red Hat OpenShift, it offers a consistent environment for developing the specialized AI agents discussed in this paper, from initial experimentation to production deployment across on-premises, public cloud, and edge environments. OpenShift AI accelerates the AI/ML life cycle by providing data scientists and developers with a suite of integrated open source tools, including Jupyter Notebooks and popular frameworks like PyTorch and TensorFlow. For multiagent AI systems, its model-serving capabilities allow for the scalable deployment and management of individual agents. This foundation, combined with an event-driven architecture, enables the real-time data processing and communication necessary for the dynamic orchestration of complex agent workflows, from fraud detection to proactive customer engagement. By providing a standardized platform, Red Hat OpenShift AI helps financial services institutions build and operate scalable AI solutions while meeting stringent security and compliance requirements.

Challenges

Implementing multiagent AI systems introduces operational and technical hurdles that impact solution providers and their FSI clients. FSIs commonly operate with complex, aging, and siloed IT systems, making the integration of advanced AI agent platforms and orchestration layers technically intricate, time-consuming, and costly. Although Red Hat's open hybrid cloud approach aims to bridge this gap, and CI&I offers integration capabilities, achieving deep interoperability remains resource and time intensive. Managing the complexity and coordination of multiagent systems themselves is also a persistent challenge, as issues such as AI agent malfunctions or coordination failures can impact system

effectiveness. This requires providers such as TCS and Red Hat to invest in services and change management support to help clients navigate these complexities and ensure the successful deployment of their multiagent AI initiatives.

Furthermore, the rapid pace of technological evolution in agentic AI requires continuous investment in research and development to ensure platforms remain current with the latest advancements. The cautious nature of the financial services industry often hinders the successful adoption of TCS' and Red Hat's multiagent AI technologies, particularly in autonomous decision-making. This caution stems from concerns about AI explainability, potential AI model bias, and the necessity for rigorous regulatory approvals for AI-driven processes, leading to slower decision-making and extended sales cycles for even basic sets of offerings.

Conclusion

The adoption of multiagent AI systems represents a critical next step in the evolving use of AI by FSIs to improve customer engagements and operational efficiencies. These systems coordinate multiple specialized AI agents to automate complex processes, reduce manual effort, and deliver personalized experiences at scale. As FSIs strive for greater AI maturity over the next four to five years, generative AI and multiagent AI can transition from opportunistic to transformed levels of AI implementations while maintaining the trust and governance that customers demand.

IDC believes that successfully implementing multiagent AI systems requires a multidimensional approach that includes unifying data across silos, properly designing and selecting AI architecture and infrastructure, and establishing a governance framework to ensure responsible AI use. Success also depends on clear AI road map development, workforce and change management, and investments in the skills, talent, and people aspects of AI. FSIs that effectively integrate multiagent AI into CX operating and business models while continuously measuring performance against tangible business outcomes will be best positioned to capture significant value and drive competitive advantages.

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About the Analyst



Tapan Patel, Research Director, Customer Data Platform, Intelligence and Analytics

Tapan Patel is research director for the Customer Data Platform (CDP), Artificial Intelligence, and Analytics Software market segments and a member of the Customer Experience Research team at IDC. Tapan's core research coverage includes market trends, end-user requirements, use cases, market sizing, and business models for these critical segments. He is lead analyst for the CDP and Customer Analytics markets, used by brands to improve customer engagements, journeys, and personalization across all touch points.

MESSAGE FROM THE SPONSORS

TCS Customer Intelligence & Insights (CI&I) amplifies the ability of financial institutions to hyper-personalize customer experience and loyalty with its new multi-agent orchestration capabilities, integrating GenAI, machine learning, and both domain and enterprise-specific knowledge bases. Organizations can maximize their CLTV by enabling seamless collaboration between front- and back-office agents, thus enhancing customer journeys, operational efficiency, and fault tolerance. CI&I empowers real-time customer interactions, proactive engagement, and rapid processing, while ensuring secure data management. Its patented orchestration framework drives strategic growth, scalability, and resilience—delivering up to 40% faster responses and 30-minute time savings per interaction.

Red Hat's multi-agent orchestration leverages open-source technologies, AI, and event-driven architecture to deliver scalable, real-time customer experiences. With OpenShift AI and Ansible Automation, it boosts deployment speed by 40%, operational efficiency by 30%, and security response by 20%. Red Hat enables flexible integration with legacy systems for continuous innovation.

TCS Customer Intelligence & Insights and Red Hat redefine multi-agent orchestration, blending AI-driven precision with open-source agility—empowering financial institutions to scale, innovate, and deliver seamless, secure, and intelligent customer experiences.

For more information on multi-agent orchestration, visit: <https://www.tcs.com/what-we-do/products-platforms/tcs-customer-intelligence-insights>.



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IDC Research, Inc.
140 Kendrick Street
Building B
Needham, MA 02494, USA
T 508.872.8200
F 508.935.4015
blogs.idc.com
www.idc.com

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