Agentic Al 101 for CX

A Guide for CX Leaders



Introduction

The landscape of artificial intelligence is rapidly evolving, and at the forefront of this evolution is agentic Al. This powerful technology represents a significant leap forward in how Al agents and systems can autonomously operate, make decisions, and execute complex tasks.

While traditional AI and generative AI have made significant strides in automation and content creation, agentic AI addresses the crucial gaps in autonomous decision-making and task execution. It's becoming increasingly clear that this technology will reshape how businesses operate, particularly in areas requiring sophisticated problem-solving and adaptability.

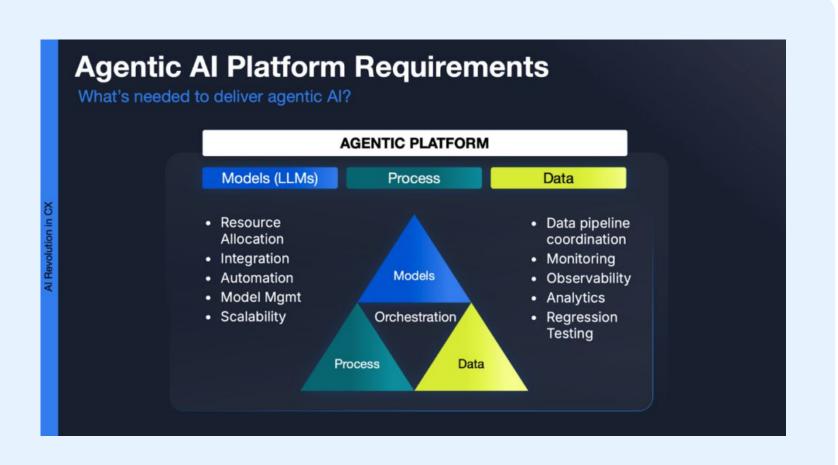
What is agentic AI and how does it work?

What is agentic AI?

Agentic AI refers to artificial intelligence systems that can autonomously execute tasks, make decisions, and adapt to real-time changing conditions. Unlike more passive AI systems, agentic AI demonstrates agency—the ability to act independently and make choices based on understanding the environment and objectives.

Want to take a deep dive into how agentic Al works within the confines of a contact center?

Watch this webinar to see what it takes to make agentic Al successful at a platform level.





How does agentic Al work?

Agentic AI operates through a sophisticated combination of technologies and approaches.

As <u>IBM</u> explains, "Agentic AI systems provide the best of both worlds: using LLMs to handle tasks that benefit from the flexibility and dynamic responses while combining these AI capabilities with traditional programming for strict rules, logic, and performance. This hybrid approach enables the AI to be both intuitive and precise."

The system works by integrating multiple components:

- Language understanding: Processing and comprehending natural language inputs
- **Decision making**: Analyzing situations and determining appropriate actions
- Task execution: Utilizing APIs, IoT devices, and external systems to perform actions
- Learning and adaptation: Improving performance based on outcomes and feedback

For example, in customer service, an agentic AI system can:

- 1. Understand a customer's inquiry about a missing delivery
- 2. Access order tracking systems to verify shipping status
- 3. Identify delivery issues and initiate appropriate actions
- 4. Communicate updates to the customer
- 5. Automatically schedule redelivery if necessary

This customer service example demonstrates several key advancements over previous generations of Al assistants. While <u>traditional chatbots</u> could only follow rigid, pre-programmed decision trees and provide templated responses, agentic Al shows true operational autonomy by orchestrating multiple systems and making contextual decisions.

The ability to seamlessly move between understanding natural language queries, accessing realtime shipping databases, evaluating delivery problems, and initiating concrete actions like rescheduling represents a quantum leap in capability.

Last-gen AI would typically need human handoffs at multiple points in this process — for instance, when moving from customer communication to backend systems access or when making judgment calls about appropriate remedial actions.

The agentic system's ability to maintain context throughout the interaction while independently executing complex tasks showcases how modern AI can function as an independent problem-solver rather than just a conversational interface. This level of end-to-end automation and response was impossible with earlier generations of AI technology.



What is the difference between agentic AI and generative AI?

While both agentic AI and generative AI represent significant advances in artificial intelligence, they serve distinctly different purposes. Generative AI excels at creating content—text, images, code, or other media—based on patterns learned from training data. Agentic AI, however, goes beyond generation to actively make decisions and execute tasks.

	Generative AI	Agentic Al
Purpose	Creates content based on prompts	Takes autonomous actions to achieve specific goals
Capability	Limited to content creation and suggestion	Can execute complex workflows and make real-time decisions
Integration	Typically operates as a standalone system	Integrates with multiple systems and data sources
Adaptability	Responds to specific prompts	Adapts to changing conditions and learns from outcomes

These technologies can <u>work together</u> synergistically, with generative AI providing content creation capabilities within agentic AI's broader decision-making framework.



Benefits of agentic Al

1. Autonomous operation

By eliminating the constraints of human-dependent processes, agentic AI creates a new paradigm of continuous, reliable service delivery that scales effortlessly with business demands. The result is:

- **Reduced human intervention**: Al agents handle complex tasks independently, freeing human workers to focus on high-value activities requiring emotional intelligence and strategic thinking.
- **Consistent performance**: The system maintains uniform quality standards regardless of workload, time of day, or complexity of tasks, eliminating human variability and fatigue-related errors.
- 24/7 availability: Unlike human operators, Al agents operate continuously without fatigue, ensuring consistent service availability across all time zones.

2. Improved human-Al agent collaboration

Agentic AI changes the relationship between <u>human agents and technology</u>, creating a symbiotic partnership that enhances overall service delivery and job satisfaction. Here's how:

- **Ensures consistency**: Al agents establish and maintain standard operating procedures across teams, ensuring every customer interaction meets quality benchmarks regardless of which human agent is involved. This standardization helps eliminate variations in service quality, while still allowing for personal touch where needed.
- **Accelerates learning**: New agents benefit from AI-powered guidance that provides suggestions and best practices, significantly reducing the time needed to achieve proficiency. The system learns from top performers and shares these insights across the entire team.
- **Reduces training time:** By providing contextual assistance, agentic Al helps new agents become productive more quickly. Training modules adapt to individual learning patterns, focusing on areas where each agent needs the most support.
- Improves agent performance with insights: The system continuously analyzes agent interactions, providing actionable feedback and performance metrics that help identify areas for improvement. These insights enable targeted coaching and development opportunities.
- Improves job satisfaction and reduces agent turnover: By handling routine tasks and providing intelligent support, agentic AI allows agents to focus on more engaging, complex work that requires human empathy and problem-solving skills. This role enhancement leads to higher job satisfaction and lower turnover rates.



3. Enhanced efficiency

Through intelligent automation and rapid processing capabilities, agentic AI significantly improves operational performance across organizations, resulting in:

- Faster task completion: Al agents process and execute tasks at machine speed, dramatically reducing resolution times compared to manual processes.
- **Reduced error rates:** Systematic processing and built-in validation reduce mistakes common in human-operated systems.
- Streamlined workflows: Intelligent routing and automated handoffs eliminate bottlenecks and optimize process flows.

4. Real-time adaptability

The system's ability to learn and adjust in real time ensures optimal performance in dynamic business environments. It shows this via:

- **Dynamic response to changing conditions:** All agents automatically adjust their approach based on current conditions and new information.
- Continuous learning and improvement: The system learns from each interaction, continuously refining its responses and decision-making processes.
- **Personalized solutions:** Advanced analytics enable tailored responses that account for individual user preferences and historical interactions.

5. Integration capabilities

Agentic AI integrates with existing business systems to create a unified operational environment. Main ways include:

- More seamless connection: The technology easily integrates with current business tools and platforms, maximizing existing investments.
- **Unified data utilization:** Al agents can access and analyze data from multiple sources to make informed decisions.
- Comprehensive solution delivery: The system coordinates across different platforms and departments to deliver complete solutions.

6. Cost-effectiveness

Implementation of agentic Al leads to significant cost savings and improved resource utilization. Top areas for savings include:

- **Reduced operational costs:** Automation of routine tasks and improved efficiency lead to lower operational expenses.
- Intelligent workload distribution: Ensures optimal use of both human and technological resources.

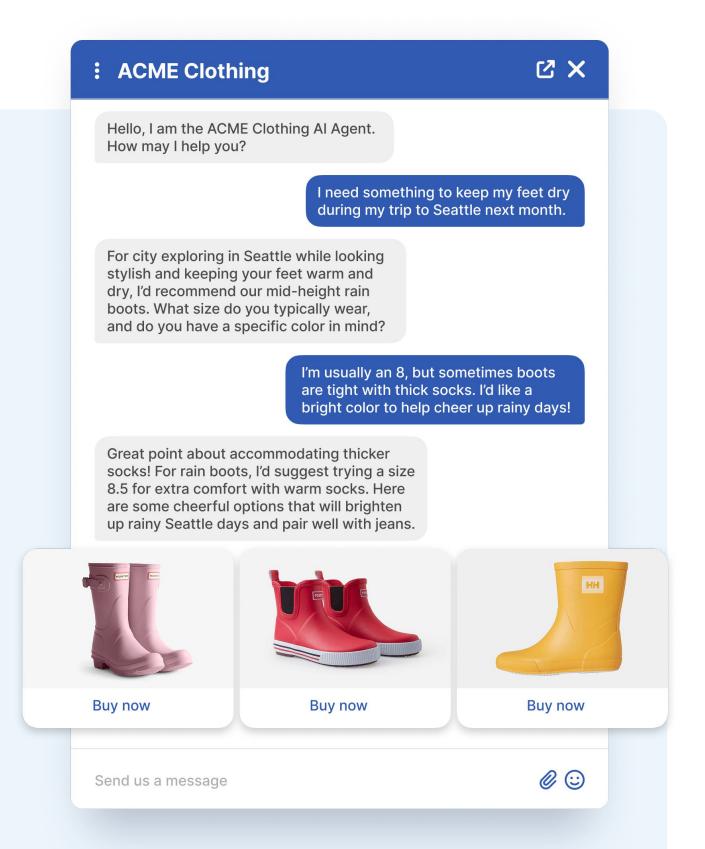


Use cases for agentic Al

Retail and eCommerce

In <u>retail and eCommerce</u>, agentic Al revolutionizes the retail experience by creating seamless, personalized shopping journeys while optimizing backend operations for maximum efficiency and profitability. Best use cases include:

- Inventory management
- Personalized shopping recommendations
- Order processing
- Up-/cross-selling



Real Results: Major Furniture Retailer

A leading US furniture retailer knew an AI agent was the answer to efficiently scaling to meet the needs of its growing order volume and customer service demands. But with such a wide range of inquiries, large tech stack, and notoriously high customer experience standards, not just any old chatbot would do. The team wanted an agentic AI agent that could handle conversational experiences in both pre- and post-sales contexts across channels, as well as intelligently determine when to use one integrated system versus another.

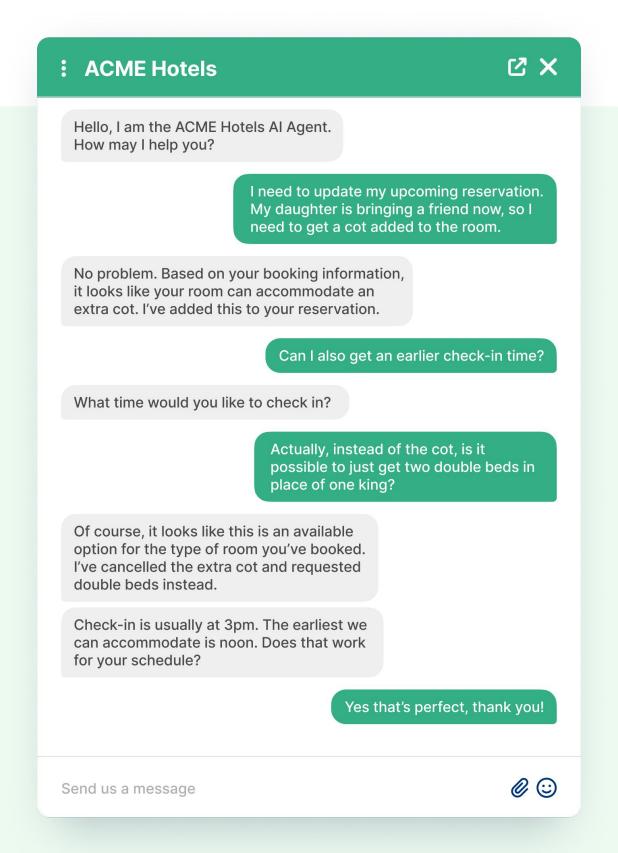
Thanks to Quiq, the retailer's Al agent is able to automatically classify conversation intent to provide personalized, contextual product recommendations and escalate customers to the right internal sales team for follow up. On the post-sales side, the Al agent can help customers look up their order status, answer account-related questions, and schedule deliveries. It also engages each of the brand's multiple underlying order and delivery management platforms at exactly the right moments to successfully coordinate and process even the most complex delivery rescheduling requests.



Travel & Hospitality

In <u>travel & hospitality</u>, agentic AI has the power to provide first-class, personalized support at scale to elevate both the employee and customer experience to new heights. Leading use cases include:

- Booking confirmation
- Travel coordination
- Accommodation changes
- Flight rescheduling



Real Results: Leading North American Airline

A major airline wanted to improve its customer experience by enabling its AI agent to solve a wider variety of more complex inquiries and take action across a larger number of systems — without requiring rigid, predefined conversation flows. It was also important for the AI agent to provide a truly seamless omnichannel experience with a consistent brand voice and quality support across multiple touchpoints, including SMS, Voice, and Apple Messages for Business.

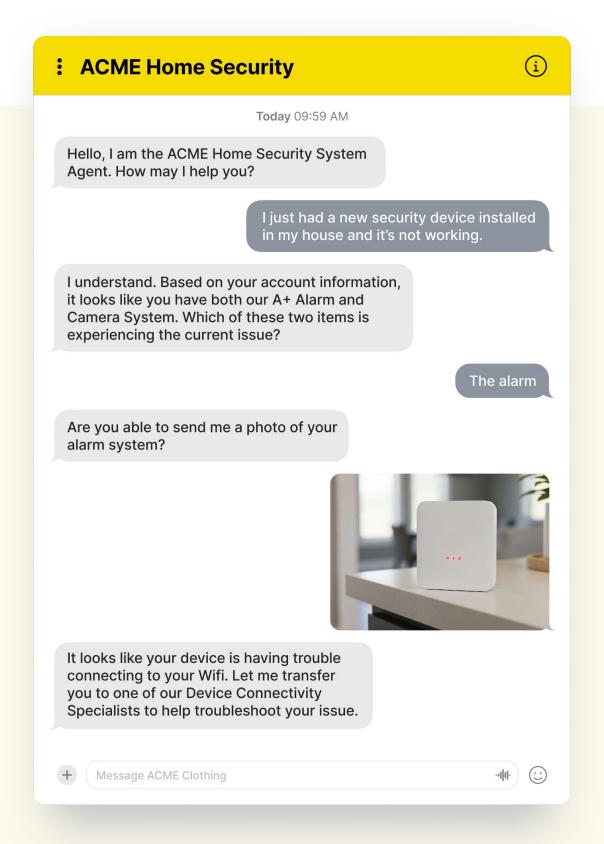
With Quiq's agentic AI platform, the airline successfully launched a cohesive omnichannel self-serve experience that spans voice, web, and messaging touchpoints. The AI agent provides consistently accurate, on-brand assistance for a variety of complex requests including updating reservations, checking bags, and changing flights, resulting in a 40%+ automated resolution rate. This enhanced efficiency translates into a 16% reduction in average conversation times, and a 20% reduction in conversation times for inquiries that are escalated to human agents, freeing the team to focus on more complex issues.



Consumer Services

In <u>consumer services</u>, agentic Al enables organizations to offer customers 24/7 personalized assistance at every touchpoint along the customer journey, including seamlessly passing conversations to human agents as needed. Top use cases include:

- Device troubleshooting
- Appointment scheduling
- Proactive maintenance alerts
- Cross-channel service orchestration



Real Results: Global Intelligent Access Solutions Leader

A top smart access and monitoring solutions service provider sought to keep pace with customers' expectations for more robust self-service and increasingly technical support inquiries. Due to the company's diverse brand portfolio of complex products and global customer base, it needed an agentic AI solution to autonomously handle multi-turn, complex troubleshooting for both residential and commercial customers, without requiring static, prebuilt conversation flows.

Partnering with Quiq enabled the company to successfully deploy two specialized Al agents that serve both residential and commercial customers across multiple brands. These Al agents effectively automate a significant portion of international inquiries across chat and voice channels, addressing common questions and troubleshooting complex issues related to the company's extensive product group. This has resulted in fewer escalated conversations and happier customers, allowing human agents to be more efficient and focus on more strategic work.



Agentic Al challenges

Let's take a look at the biggest challenges with agentic Al right now.

1. Ethical considerations

The autonomous nature of agentic AI raises ethical concerns that require careful attention. These systems, designed to make independent decisions and take action, must operate within established ethical frameworks to ensure responsible deployment.

Key ethical challenges include:

- Accountability for AI decisions and actions
- Transparency in decision-making processes
- Potential bias
- Impact on human autonomy and agency

Ethics and hallucinations

Quiq SVP of Engineering Bill O'Neill recently talked to VUX World's Kane Simms about this very issue.



2. Data security

Data security represents a critical challenge in agentic AI implementation, as these systems often require access to sensitive information to function effectively. (If you're curious, you can learn about Quiq's approach to security here).

Primary security concerns include:

- Protection of training data and model parameters
- Secure communication channels for Al agents
- Prevention of adversarial attacks
- Data privacy compliance (GDPR, CCPA, etc.)
- Access control and authentication mechanisms



3. Integration challenges

Incorporating agentic AI into both customer integrations and your own company integrations can mean significant hurdles, like:

- Legacy system compatibility
- API standardization and communication protocols
- Performance optimization
- Scalability concerns
- Resource allocation and management

4. Regulatory compliance

The evolving regulatory landscape surrounding AI technology presents potential issues, including:

- Adherence to emerging Al regulations
- Cross-border compliance requirements
- Documentation and audit trails
- Risk assessment and mitigation
- Regular compliance monitoring and updates

5. Performance monitoring

Maintaining and optimizing <u>agentic Al system</u> performance requires continuous monitoring and adjustment:

- Real-time performance metrics
- Quality assurance processes
- System reliability and availability
- Error detection and correction
- Performance optimization strategies

These challenges highlight the complexity of implementing agentic AI systems and underscore the importance of careful planning and robust risk management strategies. Success in deploying these systems requires a comprehensive approach that addresses technical, ethical, and operational concerns, while maintaining focus on business value and user needs.

Importantly, when you <u>partner with agentic Al vendor Quiq</u>, our Al platform and team neutralize these challenges for you.



The future of agentic Al

As we stand at the intersection of technological innovation and business transformation, agentic Al emerges as a cornerstone of future enterprise operations. But what'll follow? Here are our top predictions:

Technical evolution and integration

The future of agentic AI lies in its ability to <u>integrate with existing enterprise systems</u> while pushing the boundaries of what's possible. Advanced API ecosystems and sophisticated middleware solutions are already enabling AI agents to coordinate across <u>previously siloed systems</u>, creating unified workflows that span entire organizations.

The next generation of agentic AI systems will feature enhanced natural language processing capabilities, enabling a more nuanced understanding of context and intent. This advancement will allow AI agents to handle increasingly complex tasks while maintaining high accuracy levels. We're moving toward systems that can execute predefined workflows and design and optimize them in real time based on changing business conditions.

Enhancing enterprise workflows

1. Predictive process optimization

Al agents will move beyond reactive process management to predictive optimization. By analyzing patterns across millions of workflow executions, these systems will automatically identify potential bottlenecks before they occur and implement preventive measures. This capability will enable organizations to maintain peak operational efficiency while minimizing disruptions.

2. Dynamic resource allocation

The future workplace will see AI agents dynamically managing both human and technological resources. These systems will understand the strengths and limitations of different resource types, automatically routing work to optimize for efficiency, cost, and quality. This intelligent orchestration will create more flexible, resilient organizations capable of adapting to changing market conditions in real time.

3. Autonomous decision networks

As agentic Al evolves, we'll see the emergence of decision networks where multiple Al agents collaborate to solve complex business challenges. These networks will coordinate across departments and functions, making decisions that optimize for overall business outcomes rather than departmental metrics.



Enhanced learning and adaptation

The future of agentic Al lies in its ability to learn and adapt at faster paces. Next-generation systems will feature:

1. Collective learning

All agents will learn not just from their own experiences but from the collective experiences of all instances across an organization or industry.

2. Contextual understanding

Future systems will demonstrate deeper understanding of business context, enabling them to make more nuanced decisions that account for both explicit and implicit factors.

3. Personalization at scale

As Al agents become more sophisticated, they can deliver highly personalized experiences while maintaining operational efficiency.

Creating more resilient organizations

The evolution of agentic AI will contribute to building more resilient organizations through:

1. Adaptive workflows

Future systems will automatically adjust workflows based on changing conditions, ensuring business continuity even during unprecedented events.

2. Proactive risk management

Al agents will continuously monitor operations for potential risks, implementing preventive measures before issues arise.

3. Sustainable scaling

The future of agentic AI will enable organizations to scale operations more sustainably, automatically adjusting processes to maintain efficiency as the organization grows.



Looking ahead

While challenges around data quality, system integration, and ethical considerations persist, the trajectory of agentic Al points toward increasingly sophisticated systems. Organizations that embrace this technology and prepare for its evolution will be better positioned to:

- Create more efficient workflows that respond to changing business needs
- Deliver personalized experiences at scale
- Build more resilient organizations capable of thriving in uncertain conditions
- Drive innovation through intelligent process optimization

As we move forward, the key to success will lie not just in implementing agentic AI, but in creating organizational cultures that can effectively leverage its capabilities while maintaining human oversight and strategic direction. The future belongs to organizations that can strike this balance, using agentic AI to enhance human capabilities, rather than replace them.

We're only beginning to scratch the surface of what's possible. As the technology continues to evolve, it will enable new forms of business operation that are more resilient than ever before.

The long term vision for agentic Al

Hear Kane Simms of VUX World and Bill O'Neill, Co-founder and SVP of Engineering at Quiq, discuss the long-term vision for agentic Al and its potential impact on our society and industries.





Final thoughts on agentic Al and how to get started

Agentic AI represents a significant advancement in artificial intelligence, offering businesses the ability to automate complicated tasks while maintaining intelligence in decision-making. As organizations seek to improve efficiency and customer experience, agentic AI provides a powerful solution that goes beyond traditional automation and generative AI capabilities.

Quiq stands at the forefront of this technology, offering <u>agentic Al solutions</u> that help businesses improve their operations and customer interactions. With a deep understanding of both the technology and business needs, Quiq provides sophisticated <u>Al agents</u> that can handle complex tasks and drive the outcomes your business cares about.

Ready to experience the power of agentic Al for your business?

Request a demo today to see how Quiq's solutions can transform your operations and customer experience. <u>Let's talk</u>.





Architecting the Future of CX with Al.

quiq.com