



# The evolution of conversational self-service:

From brittle bots to  
dynamic workflow agents



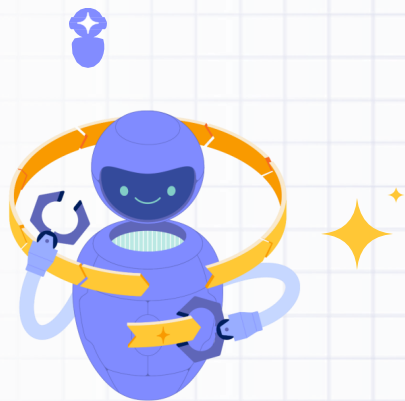
# Executive summary

**Picture this: You're the COO of a major bank, and your customer satisfaction scores are plummeting because your chatbot keeps sending customers down frustrating dead ends. Your teams are drowning in escalations, and your CX leader just told you it will take six months to fix each issue. Sound familiar?**

Remember when customer self-service meant navigating endless phone menus or clicking through rigid web forms? Those days are rapidly fading into history. We're witnessing a seismic shift in how enterprises connect with customers – a transformation from script-driven chatbots to intelligent, conversational workflow agents powered by agentic AI.

But here's the thing: While everyone's talking about agentic AI, not all approaches are created equal. Many organizations are rushing to deploy standalone agents that create new silos and governance nightmares. (And let's be honest – who needs more silos and governance challenges?) **Pega and AWS** take a fundamentally different approach – embedding agentic AI directly into workflows to deliver true enterprise transformation.

This whitepaper explores how Pega's unique workflow-centric approach to agentic self-service delivers what enterprise leaders truly need: governed, secure, and scalable solutions that drive meaningful outcomes. As customer expectations continue to rise and digital interactions grow increasingly complex, understanding this evolution is crucial for Customer Service Directors, Chief Data Officers, Chief Operations Officers, Transformation Directors, and Customer Experience leaders seeking to deliver exceptional experiences while optimizing operational efficiency.



# The end of traditional self-service

Let's be honest – traditional self-service bots have been a disappointment. Despite years of investment and promises, they've remained frustratingly limited. Why?

Because they were built on fundamentally flawed foundations:

## NLP dependency

Early systems relied heavily on natural language processing (NLP) to match user queries with predetermined responses. Despite continuous improvements, these systems struggled with linguistic nuance and contextual meaning. It's like trying to have a conversation with someone who only knows 100 phrases – eventually, you hit a wall.

## The data burden

Traditional bots demanded extensive training data to function across various scenarios. Organizations faced the daunting task of anticipating and programming responses for countless potential inputs – a never-ending game of whack-a-mole that left both IT teams and customers exhausted.

## Rigid architecture

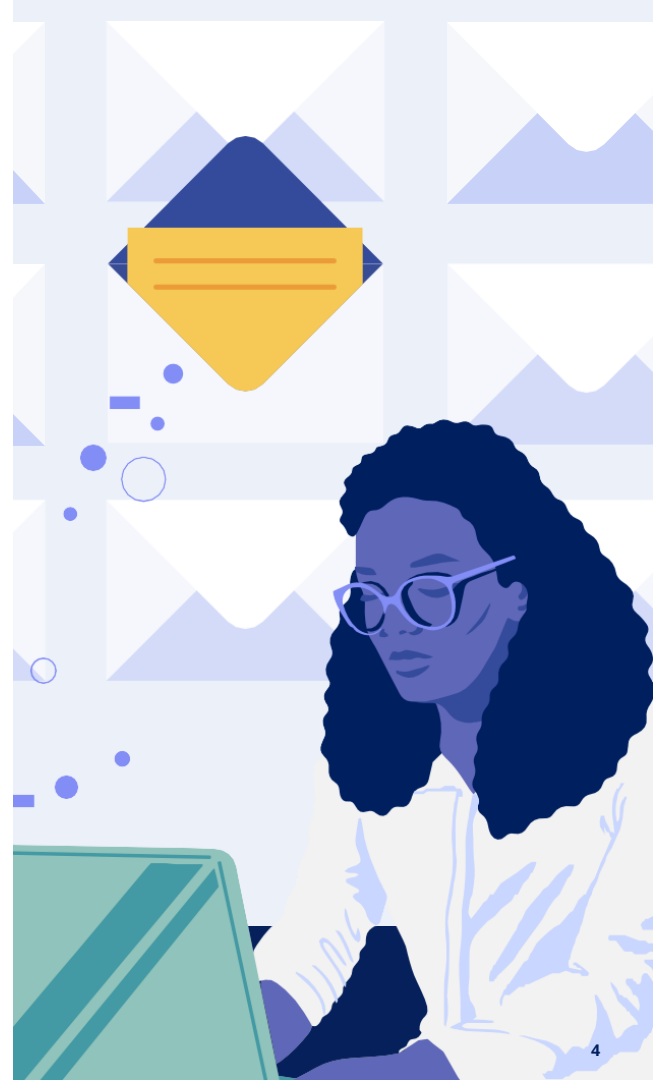
Perhaps most limiting was their reliance on hardcoded conversation flows. Users were forced down specific paths with little room for deviation. When customers inevitably went "off-script," these systems crumbled like a house of cards in a hurricane.

# The agentic revolution

**The emergence of agentic AI has fundamentally changed what's possible. We're not just witnessing an incremental improvement – we're experiencing a paradigm shift in how machines understand and respond to human needs.**

This shift isn't just changing technology – it's reshaping customer expectations. Today's customers demand interactions that are natural, personalized, and effective. They expect systems that understand their intent, not just their words, and can take meaningful action on their behalf.

For enterprises, this shift creates both tremendous opportunity and significant risk. The opportunity: to deliver transformative customer experiences while dramatically reducing operational costs. The risk: implementing agentic AI in ways that create new silos, governance challenges, and technical debt that will haunt your organization for years to come.



# When conversations become effortless

**Imagine a world where your customers can engage with your organization through natural, conversational interfaces that truly understand their needs and take meaningful action to address them.**

**Where complex requests don't mean frustrating transfers between departments or systems. Where your most valuable employees are freed from repetitive tasks to focus on high-value work.**

This is the promised land of agentic self-service – a world where:

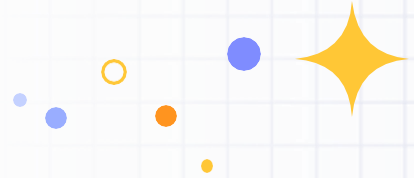
- Customers receive immediate, personalized assistance 24/7
- Complex, multi-step processes are handled seamlessly
- Systems learn and improve with every interaction
- Operational costs decrease while customer satisfaction soars
- Employees are empowered to deliver exceptional value

But reaching this promised land requires more than just deploying the latest AI agents. It demands a fundamentally different approach – one that connects agents to your enterprise's workflows, knowledge, and systems.



# Why agentic implementations fall short

Despite the promise of agentic AI, many organizations are struggling to realize its full potential. Their implementations face significant obstacles:



## The siloed agent problem

Many organizations are rushing to deploy standalone agents for specific use cases. While these agents may be impressive in isolation, they create a new generation of silos – disconnected from core business processes and each other. The result? Fragmented customer experiences, inconsistent outcomes, and governance nightmares.

If traditional bots were employees, they'd be the ones who need to check with their manager before offering you a glass of water. Agentic workflows are the empowered team members who not only get you water but remember you prefer it with lemon and make sure the conference room is set to your preferred temperature.

## The governance gap

As organizations deploy more agents, they face growing challenges around governance, security, and compliance. Without a unified framework for managing these agents, enterprises risk inconsistent experiences, security vulnerabilities, and compliance violations.

In the age of agentic AI, getting your approach wrong isn't just a missed opportunity – it's a competitive liability that could take years to overcome.

## The integration challenge

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For agents to deliver real value, they must connect seamlessly with enterprise systems and workflows. Yet many organizations struggle to integrate their agents with existing processes, creating friction points that limit effectiveness and scalability.

Traditional chatbots are like GPS systems that only know five streets in your city – they'll confidently send you down the wrong road and have no idea they've done it. But agentic workflows are like having a local expert who not only knows every shortcut but can also call ahead to make sure your destination is ready for your arrival.

## The scalability ceiling

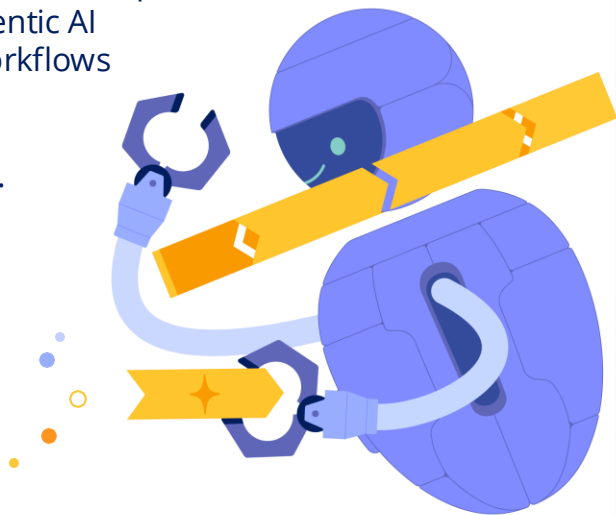
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Point solutions may work for specific use cases, but they don't scale effectively across the enterprise. Organizations need a platform approach that enables consistent deployment, management, and optimization of agents across multiple domains.



# Agentic workflows, not just agents

This is where Pega's approach stands apart. While others focus on building standalone agents, we've taken a fundamentally different path – embedding agentic AI directly into workflows to create true enterprise transformation.



## Workflow as foundation

Instead of creating new ways to process work for every request, Pega empowers agents with proven workflows. This workflow-centric approach ensures that agents operate within governed, secure, auditable, and transparent frameworks – delivering the confidence enterprises need to deploy agents at scale.

With **Pega and AWS**, you don't just get agents – you get agentic workflows that:

- Turn trusted workflows into agents instantly
- Deliver end-to-end outcomes, not just answers
- Provide enterprise-grade governance and security
- Scale seamlessly across your organization

For COOs, this means finally breaking down the operational silos that have plagued transformation efforts for decades. For CX leaders, it means delivering the seamless experiences customers demand without building an unsustainable technical debt.



## End-to-end orchestration

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By connecting agents to the right people and systems, Pega ensures that work gets done while unlocking business transforming outcomes that are repeatable and reliable. This orchestration capability allows you to:

- Build custom agentic automations to offload manual work
- Drive seamless handoffs across agents, automations, people, and AI decisions
- Connect, govern, and manage workflows and agents from multiple systems

Agentic workflows don't just answer questions – they orchestrate experiences. Connecting all the dots behind the scenes while making the complex feel effortless. It's the difference between having a concierge who hands you a map versus one who arranges your entire journey.

## Experience transformation

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Having the right agent for the right job changes everything. Pega's approach uplevels every experience with fast answers, personalized guidance, and always-on automated assistance. This enables you to:

- Quickly find answers scattered across knowledge bases
- Give customers the help they need to self-solve, 24/7

Think of traditional bots as vending machines – they can only dispense what's been pre-loaded. Agentic workflows are more like skilled chefs who can work with whatever ingredients are available to create exactly what you need.

## Insight acceleration

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Experiencing data overload? Pega puts agents to work, cutting through the noise and extracting meaning from your operations and service data. With agents searching, synthesizing, and aggregating your data, you unlock true insights at enterprise scale:

- Power any search with GenAI to pinpoint data across your operation
- Augment integrations with GenAI insights to summarize data and fill gaps
- Synthesize enterprise knowledge and real-time data into a unified view

Organizations implementing workflow-centric agentic AI have seen 40% reductions in average handle time – while simultaneously increasing CSAT scores by 25%.

# Customer spotlight: DCU streamlined customer interactions at scale



As Digital Federal Credit Union (DCU) ramped up member enrollment, they began to face the challenges that come with high volumes of service work through limited, contact-center-based channels. They realized that they would need a digital service infrastructure that could enable scaling with efficiency.

Fortunately, alongside Pega and AWS, DCU was able to transform service with improved operational efficiencies and member experiences through system integration and consolidation. By streamlining and digitizing loan origination, DCU has saved 275,000 work hours and retired 50% of former IT systems.



**"Great service starts with knowing your member. Pega helped us get there—at scale"**

**– Matt Lawler**, Director of Engineering, Digital Federal Credit Union



# Transformative outcomes in action

Organizations implementing Pega's agentic workflow approach are already realizing significant benefits:

## Accelerated time-to-value

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Unlike traditional approaches that require extensive configuration and training, Pega's workflow-centric approach enables faster deployment and quicker resolution of customer needs. Organizations report:

- 50–70% reduction in implementation time
- 30–40% improvement in first-contact resolution
- Significantly faster iteration cycles for continuous improvement

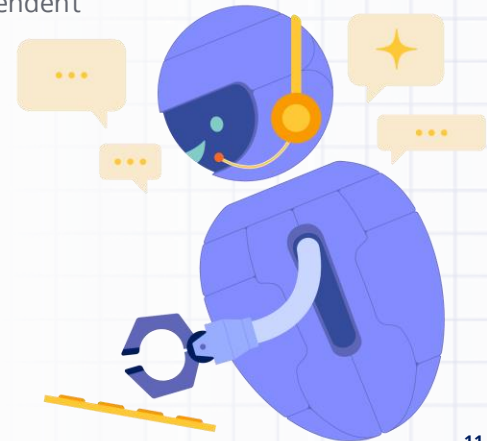


## Scalability without compromise

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The architecture of Pega's agentic workflow platform offers significant operational advantages:

- Effortless scaling across growing user volumes and expanding use cases
- Modular enhancements that allow for independent updates to specific capabilities
- Reduced technical overhead through less reliance on hardcoded flows



## Enhanced experiences through intelligence

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The intelligent, adaptive nature of Pega's approach translates directly to improved experiences:

- Personalized interactions based on user history and preferences
- Context-aware assistance that eliminates the need to repeat information
- Natural conversation flow that creates more engaging and satisfying experiences

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While others are rushing to bolt AI capabilities onto existing platforms, Pega's approach integrates agentic AI directly into the workflow foundation – a fundamental difference that determines whether AI becomes another silo or a transformative force.

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## Enterprise-grade governance

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Perhaps most importantly, Pega's approach delivers the governance and security that enterprises demand:

- Consistent policy enforcement across all agent interactions
- Comprehensive audit trails for compliance and optimization
- Centralized management of agent capabilities and permissions



# In the future, work simply flows

As we look toward the future of customer service and self-service engagement, the continued advancement of agentic workflows promises to further revolutionize how businesses and customers interact in the digital age.

Organizations that embrace Pega's workflow-centric approach to agentic AI stand to realize significant benefits in terms of enhanced customer experience, operational efficiency, and competitive advantage. By moving beyond standalone agents to truly agentic workflows, these organizations will create experiences where work simply flows – for customers, employees, and the enterprise as a whole.

The question isn't whether agentic AI will transform your business – it's whether you'll transform it intentionally, with a platform designed for enterprise success, or reactively, with point solutions that create new challenges even as they solve old ones.

With Pega's agentic workflows, the choice is clear. The future of work isn't just about agents – it's about agentic workflows that deliver true enterprise transformation. The future of agentic workflows is cloud-native, secure, and scalable – made possible by the ongoing partnership between **Pega and AWS**. Our process begins by combining Pega and AWS insights with client-sourced information as input into Pega Blueprint™. This enables organizations to quickly visualize new customer service models, co-create prototypes, and validate solutions with business users – delivering transformation at speed and scale.