Revolutionizing Personalization with Artificial Intelligence

Navigating a new era of customer engagement.

Building long-term customer relationships is more important than ever before. For customer engagement and marketing practitioners, delivering personalized customer experiences is a critical component of that process. Customers now demand relevance, empathy, and timeliness – all without invading their privacy during their brand interactions.

Customer expectations have evolved. Personalization isn't about a name in an email or a birthday discount – consumers see through that instantly. Today, AI powers the next wave of engagement. Predictive models anticipate needs, generative AI creates dynamic content, and agentic AI orchestrates entire journeys. Paired with privacy-first practices and centralized decisioning, these capabilities enable real-time, proactive experiences that feel human and build lasting relationships – not just transactions.

McKinsey reports that **71% of consumers now expect businesses to deliver personalized experiences** – and when those expectations aren't met, 76% are dissatisfied. Companies that lead in personalization outperform their peers, generating up to 40% more revenue. In today's digital environment, making personalization a priority isn't just a way to stand out – it's essential for long-term success.
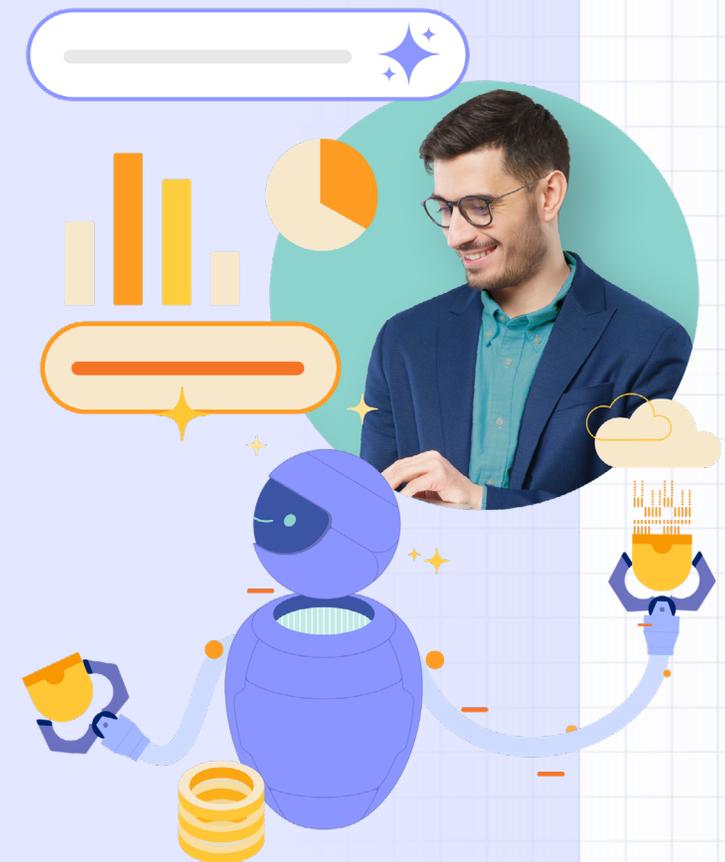
Why you need enhanced personalization now

Most customers encounter hundreds of marketing messages a day. While those programs are sometimes personalized, true personalization demonstrates that your company understands and empathizes with customers' needs. True personalization means tailored content pieces and personalized messaging – but they must also be contextually relevant and respectful of privacy.

While many brands still rely on third-party cookies to personalize experiences, these methods are fading – not only because platforms are deprecating them, but because they were never privacy-friendly or truly accurate. As this foundation erodes, first-party data becomes essential, and zero-party data – information that customers intentionally share – emerges as a powerful way to build trust and deliver relevance.

Consumer privacy concerns and regulatory changes are reshaping how brands identify, target, and engage customers. Privacy-preserving AI technologies like federated learning enable personalization without compromising individual data, while transparent data practices build the trust necessary for customers to share information willingly. This approach respects consumer expectations for transparency while enabling hyper-relevant experiences. In an era of tightening regulations and growing privacy awareness, trust isn't optional – it's a competitive advantage.
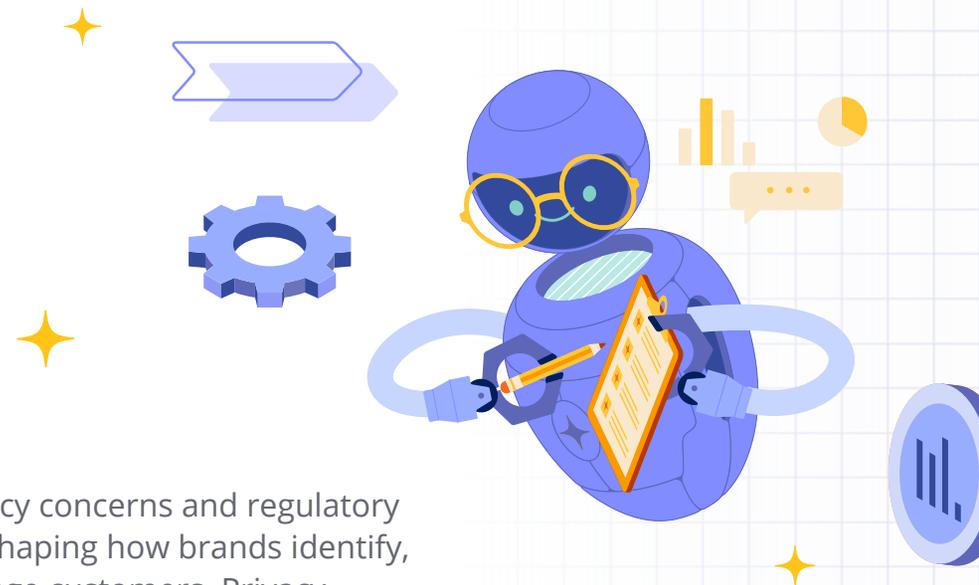
The future of personalization is AI-driven

The future will be fueled by technologies that can better interpret customer data, faster. By combining volumes of customer data and advanced technologies, companies can unleash an unprecedented capacity for customized engagements. As AI matures, personalization is evolving from recommendations to agentic orchestration, where intelligent agents plan and execute customer interactions within brand-defined guardrails.

The future isn't just real-time – it's predictive and proactive. AI doesn't wait for signals; it anticipates needs before customers express them, using behavioral patterns, contextual data, peer patterns, and lifecycle insights. Combined with generative AI for dynamic content and agentic AI for autonomous orchestration, brands can deliver hyper-personalized experiences that feel effortless and empathetic. This shift moves personalization from reactive campaigns to proactive engagement – building trust, loyalty, and long-term value.

HARNESS GENERATIVE AI FOR PERSONALIZATION

WHAT'S GENERATIVE AI?

Generative AI refers to advanced models that create original content – text, images, and even video – based on patterns learned from data. In marketing, this means producing personalized emails, product recommendations, and creative assets at scale, tailored to each customer's context.

WHY DOES IT MATTER FOR PERSONALIZATION?

Traditional AI decides what to show; generative AI creates how it looks and feels. Instead of static templates, brands can deliver dynamic, individualized experiences – adjusting tone, imagery, and offers in real time to match customer preferences and behaviors.

HOW ARE BRANDS USING IT TODAY?

Leading companies pair generative AI with centralized decisioning to continuously test and optimize messaging. For example, an email campaign might generate multiple subject lines and images, then adapt instantly based on engagement signals – ensuring every interaction feels timely, relevant, and human.
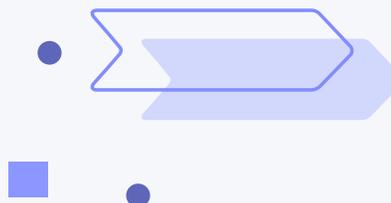
Although brands understand the crucial role AI/ML plays in enhancing the marketing function's ability to deliver personalization in real-time, they are slow to adopt AI-backed technologies. In fact according to Gartner, a staggering **27% of CMOs report that their marketing organizations still have limited or no GenAI adoption in campaigns**. The consequences of relying on traditional methods are clear: 87% of CMOs experienced campaign performance issues in the past year, and 45% had to terminate campaigns early due to poor performance. This isn't just a missed opportunity; it's a competitive risk. Customers expect relevance, transparency, and immediacy, and AI is the only way to deliver at scale. Now is the time to move beyond experimentation and embed AI-driven personalization into your core strategy – because the brands that act first will set the standard for customer experience.

AI POWERED PERSONALIZATION

Go from static campaigns to scalable conversions

Traditional Campaign Personalization			Dynamic One-to-One Engagements	
Product-First	Starts by selecting an offer to communicate about.	→	**Customer-First**	Starts by selecting a customer to communicate with.
Offer	Uses messages designed to sell products and services to customers.	→	**Actions**	Uses messages designed to solve problems; like sales, retention, and service.
Static	Delivers an offer to a group of customers, when the business is ready.	→	**Real-Time**	Delivers an action to a single individual, when that person is ready.
Segment	Personalize around the needs of a large group of people.	→	**One-To-One**	Personalizes around the needs of a single individual.
Targeting	Uses rules and logic to eliminate targets from the campaign audience.	→	**Arbitration**	Uses predictive models to pick the most relevant actions and treatments.
Optimization	Optimizes campaign performance based on what already happened.	→	**Simulation**	Optimizes next best action strategies based on what is likely to happen.
Multi-Channel	Independent conversations in-channels, optimized around campaign KPIs.	→	**Centralization**	One voice across entire CX, optimized for high-level corporate objectives.

Unify data and centralize decisioning

Marketers have access to a multitude of channels that include inbound, outbound, paid, in-store, and more. Data generated by these applications is siloed, painting an incomplete picture of your customer journey.

Pega Customer Decision Hub™ (CDH) acts as one centralized decisioning authority, or "brain," to power all client engagements. Customer Decision Hub sits at the center of all channels and applications, collecting data and delivering the best message based on context from a library of content. Our artificial intelligence powers adaptive models, which means that as the customer puts out data signals, the technology senses what the client needs in the moment.

Once data is unified, generative AI can leverage these insights to create dynamic, personalized content across channels – turning decisioning into execution at scale. With a centralized brain in place, you'll break down traditional silos between channel owners to deliver relevant messages at the right time.

That action could be a personalized sales offer, a retention plan, service task, nurture effort, or even no action at all. But whatever it is, it's determined in real time using AI, adaptive models, and machine learning, then delivered back out across any channel – inbound, outbound, owned, paid, or even agent-assisted. And all of this happens in less than 200 milliseconds.

Infuse empathy into every customer journey

To engage each customer as an individual requires you to go beyond your traditional product-first mindset. Most businesses prioritize the product, service, or conversation they want to have with the prospect or customer. They do this with traditional campaign frameworks and mindsets. In a traditional campaign framework, the activation of data into marketing materials is preset and static. Once it's in motion, there is no ability to pivot or make changes based on what the customer requires in the moment.

We advocate for businesses to use AI to pivot to things like service or retention in the moment, as their customers' needs change. This is called a next-best-action framework. **Next best action** allows brands to interpret data signals and really engage with a customer empathetically, in the way that customers need at that exact moment in time. Predictive AI takes empathy further by anticipating needs before customers express them (and as you'll see next, agentic AI takes this **even further** by acting on those predictions autonomously). By analyzing behavioral patterns, lifecycle stages, and contextual signals, AI identifies moments

when customers are likely to need support, upgrades, or new solutions. This enables proactive outreach that feels helpful rather than intrusive – reaching out with solutions before customers realize they need them.

What's key about engaging with empathy is that every time a new piece of data becomes available, the brain re-decisions the customer again and calculates a new next best action. The best brands are doing this five, 10, 20, even 50 times within a single interaction, driving **a five-fold increase in relevance**. This demonstrates to the customer that you are paying attention, that you care about their needs, and that you are prioritizing them – not just business outcomes. Empathy is about balancing both.

Moving from reactive to proactive isn't just a technical shift; it's a mindset change. Brands that anticipate and act early show customers that they're paying attention, turning everyday interactions into trust-building moments. Over time, this approach transforms relationships from transactional exchanges into genuine partnerships.
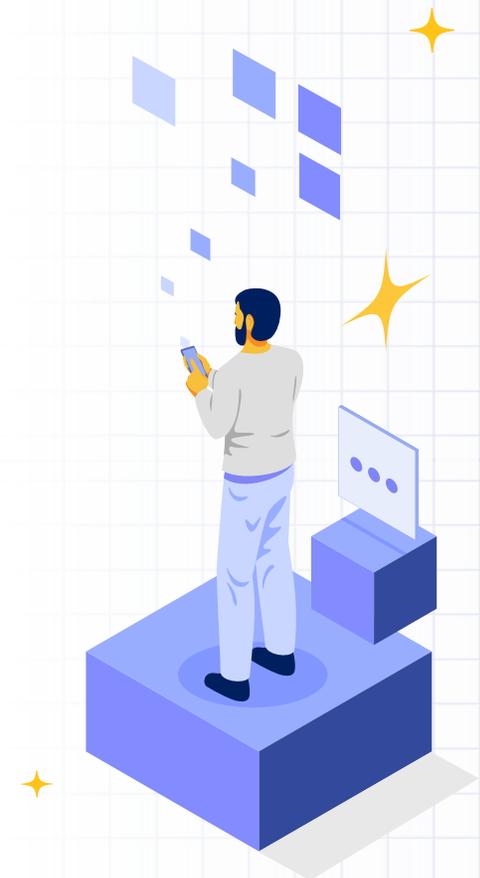
Advance personalization with agentic AI

Agentic AI is redefining personalization – moving beyond recommendations and into autonomous execution. These intelligent agents operate seamlessly across channels – anticipating needs, negotiating, orchestrating complex journeys – all while operating within clear guardrails set by brands and asking for human guidance when needed. They can even act on behalf of customers if that's what the situation calls for.

Proactive Engagement

Autonomous agents don't wait for customers to signal needs – they anticipate them using behavioral patterns, contextual signals, and predictive models. For example, an agent might proactively reschedule a delivery based on weather, adjust subscription preferences as usage changes, or resolve service issues before customers even notice.

Negotiation & Decision-Making

Agents can negotiate offers, select products, and make decisions across channels, creating hyper-personalized experiences that feel genuinely helpful rather than transactional.

Automating Complex Journeys

Autonomous agents handle routine decisions and escalate nuanced situations to human teams, enabling seamless, context-aware engagement at scale.

The power of agentic AI lies in its ability to **balance autonomy with empathy**. These agents learn from every interaction, refining their understanding of each customer's preferences, constraints, and goals. When integrated with next-best-action frameworks, agentic AI transforms personalization from reactive to proactive, delivering experiences that build trust and loyalty.
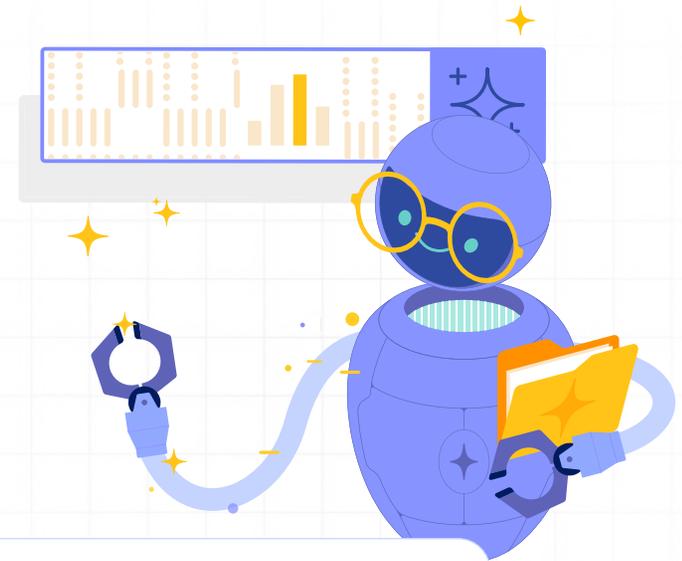
Deliver in the moment using AI

Engagements happen in seconds when they are backed by artificial intelligence – a necessity in an era where customers move fluidly across devices and platforms. They might start researching a product on a laptop during lunch, continue on a smartphone during their commute, ask a voice assistant for details at home, and complete the purchase on a tablet. Each touchpoint generates signals that inform the next interaction, creating a persistent conversation rather than disconnected moments. In this environment, personalization isn't about optimizing for a single channel; it's about orchestrating experiences across all of them. Over-investing in one channel while neglecting others risks breaking that continuity – and missing the moments that matter.

Platforms like voice assistants, IoT devices, and augmented reality (AR) expand personalization beyond traditional screens. Imagine a connected home device suggests reordering supplies based on usage patterns, or an AR app visualizing products in a customer's space with recommendations tailored to their style and purchase history.

Channel-based solutions remain the execution vehicles for your next-best-action decisions, but true orchestration requires a single brain behind the scenes. By using one centralized decisioning engine to power every interaction, brands can unify signals from all devices and deliver consistent, personalized experiences – regardless of channel or platform. This approach ensures that every touchpoint feels like part of one continuous conversation, not a series of disconnected moments.

Re-evaluate and define complex KPIs to understand personalization

Many brands still prioritize short-term KPIs like click-through rate, which fail to capture the full picture of a customer's personalized experience. Personalization is about building authentic relationships through relevant interactions, not chasing clicks that may or may not lead to meaningful outcomes.

Traditional measurement methods, often reliant on third-party cookies, lack accuracy and empathy in today's multi-device world. Shared devices, fragmented journeys, and privacy restrictions make it difficult to attribute activity to an individual user. As these outdated approaches fade, marketers need smarter ways to understand impact.

AI-driven multi-touch attribution models now track customer journeys across channels and touchpoints, measuring incremental impact rather than simple correlation. These models account for the complex interplay between marketing touches, identifying which interactions genuinely influence outcomes versus those that merely coincide.
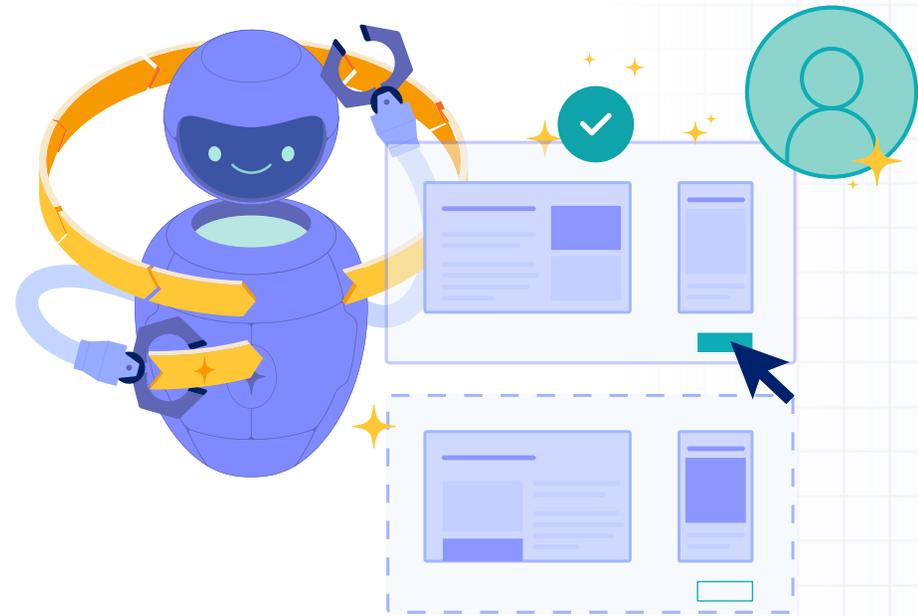
Modern measurement also shifts focus from immediate conversions to long-term outcomes like retention, advocacy, and customer lifetime value. AI quantifies how personalization investments translate into sustained relationships, enabling marketers to optimize for strategic value rather than tactical metrics.

Forget click-through rates and other short-term metrics

Click-through rates and similar vanity metrics belong to an era of surface-level personalization. They measure activity, not impact. Modern marketers understand that success isn't about generating clicks – it's about creating meaningful, lasting relationships.

AI-powered measurement reframes the conversation. Instead of chasing short-term indicators, brands now optimize for outcomes that matter: retention, advocacy, and customer lifetime value. Advanced attribution models reveal which interactions truly drive these results, enabling marketers to invest in strategies that deliver sustainable growth rather than fleeting engagement.

This shift moves personalization from a campaign tactic to a business strategy – one that prioritizes trust, relevance, and long-term value over quick wins.

MEASURE WHAT MATTERS IN THE AGE OF AI

AI-driven attribution models track the entire customer journey, revealing which interactions truly influence outcomes. By focusing on incremental impact and long-term value, marketers can optimize personalization strategies for retention, advocacy, and lifetime growth – not just clicks.
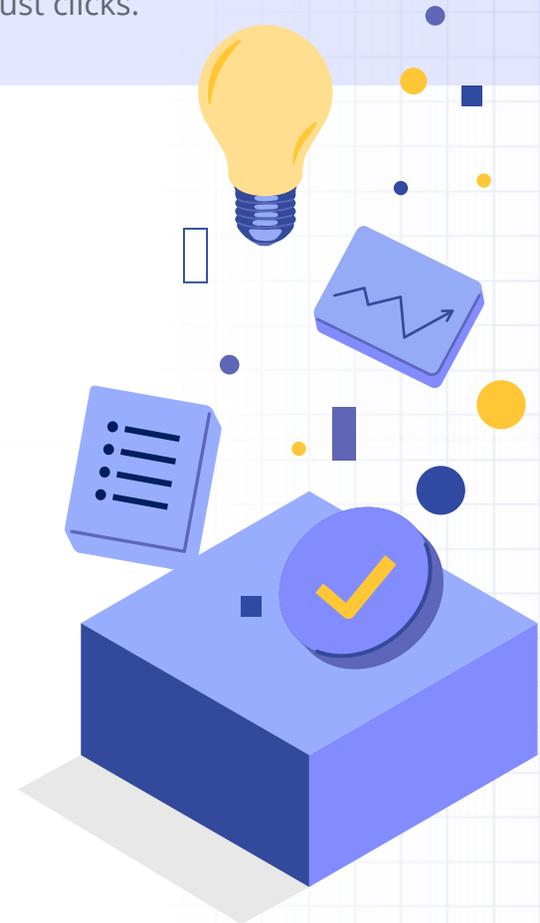
Conclusion

True personalization is only possible with AI-powered technologies that deliver relevant, appropriate, and perfectly-timed messages – regardless of channel. Continued proliferation of channels, data deprecation, siloed technology stacks, and increasing customer expectations will be a challenge for companies looking to paint an accurate picture of customer engagement.

The future belongs to organizations that combine centralized decisioning with capabilities like generative AI for content creation, agentic AI for autonomous orchestration, and privacy-preserving technologies that build trust. These innovations enable proactive engagement, seamless cross-device experiences, and personalization that feels human – not intrusive.

Measurement must evolve too. AI-powered attribution models reveal which interactions truly drive long-term outcomes like retention, advocacy, and customer lifetime value – shifting the focus from clicks to relationships.

Personalization at scale isn't just a marketing tactic; it's a competitive advantage. By linking all channels with a central AI "brain," respecting privacy, and leveraging predictive and generative technologies, brands can transform customer engagement from reactive transactions into strategic partnerships that last.

Ready to transform your personalization strategy? Discover how the *Customer Engagement Blueprint* can help you design, visualize, and operationalize customer-centric experiences at scale.
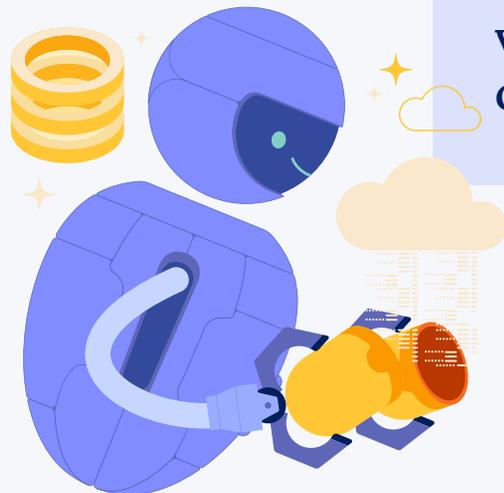
Leading brands deliver personalization at scale

WELLS FARGO

By unifying data and activating Pega's AI-driven decisioning, Wells Fargo made personalization real-time for their 70 million customers. They further streamlined execution with Pega's customer engagement engine and Ops Manager – moving to a model where a single owner can stand up a new conversation in just three days.

1,000
decisions per second delivered

ACHMEA

Achmea shifted to real-time, omni-channel personalization with Pega Customer Decision Hub – delivering unique recommendations and having dynamic dialogues with their 10 million customers across 11 channels. Their goal: add value during every interaction with personalized insights, advice, and offers.

85%
Save rate when using next-best-action

NATIONWIDE

Nationwide Building Society moved from manual, batch-based decisioning to real-time personalization with Pega Customer Decision Hub – ingesting signals in milliseconds (like a customer looking for a loan) to deliver next-best outcomes for members.

100%
Increase in engagement

About Pegasystems

Pega provides the leading AI-powered platform for enterprise transformation. The world's most influential organizations trust our technology to reimagine how work gets done by automating workflows, personalizing customer experiences, and modernizing legacy systems. Since 1983, our scalable, flexible architecture has fueled continuous innovation, helping clients accelerate their path to the autonomous enterprise. **pega.com**