



Built for the Future

Why licensing an RTIM engine beats building one.



Powering Personalization

Marketers today are facing an accelerating digital landscape while tasked with an ever-expanding list of responsibilities. Consumer expectations are at an all-time high, compliance requirements grow more complex by the day, and rapid technological advancements demand a shift in strategies — all while driving sustainable growth. And all of this translates into a competitive conundrum for enterprises trying to deliver hyper-personalized customer experiences at scale. To meet these challenges, businesses must embrace tools that enhance their capabilities without overextending resources. Enter the Real-Time Interaction Management (RTIM) engine.

At its core, an RTIM engine exists to solve exactly these challenges. It powers personalized customer experiences by processing data in real time and making decisions that drive engagement. These engines, often referred to as decisioning or customer engagement engines, are no longer optional; they are foundational to modern customer-centric marketing.

"Decisioning" is a term worth unpacking. This isn't simple rules-based offer selection. It's enterprise-scale optimization and arbitration which simultaneously evaluates hundreds of competing actions, channels, constraints, and policies against live customer context, in real time, to determine the single best action for every individual customer. An "Action" is the actual engagement; it can be a sales offer, an incentive, a piece of information, a call, and so on. Which one the RTIM engine generates depends on the customer, their behavior, their data, their propensity for said action, and many other factors.

Meanwhile, as AI tools continue to evolve in the agentic era, so does the question every enterprise eventually faces: should they build their own, piece together a composable stack, or license a proven RTIM solution? **Here's why the smartest choice is to license.**



Real-Time Interaction Engine

(per Forrester Research)

- Technology that determines the best **action, offer, or message**.

- Technology that enables **contextually relevant** experiences.

- Technology that engages customers via **preferred channels**.

- Technology that delivers **utility and value** to the recipient.

The Reality of Today's Martech Landscape

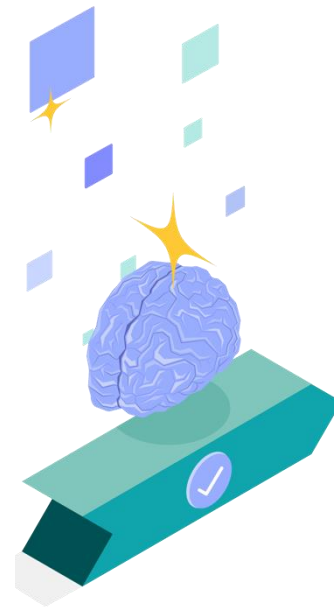
Consumers today expect more, but the gap between what customers expect and what most MarTech stacks can actually deliver keeps widening. Brands operating across legacy systems and fragmented tools struggle to unify customer data and orchestrate seamless, personalized interactions across channels. According to [McKinsey](#), "71 percent of consumers expected companies to deliver personalized interactions, and 76 percent got frustrated when it didn't happen."

Remember that "[personalization, done right, is decisioning \(chiefmartech\)](#)." A shortage of data isn't the problem.

Instead, the challenge is turning that data into real-time, hyper-personalized experiences that meet customers where they are.

And that challenge is now compounded by a new layer of complexity. As agentic AI enters the MarTech stack, organizations need a decisioning foundation that can support intelligent orchestration. Decisioning is not just workflow orchestration, segmentation, or content management. It requires a governed optimization layer capable of operating continuously at enterprise scale. Without that foundation, even the most sophisticated AI tools are building on unstable ground.

41% of B2C marketing decision-makers cite personalization as one of their biggest marketing challenges.

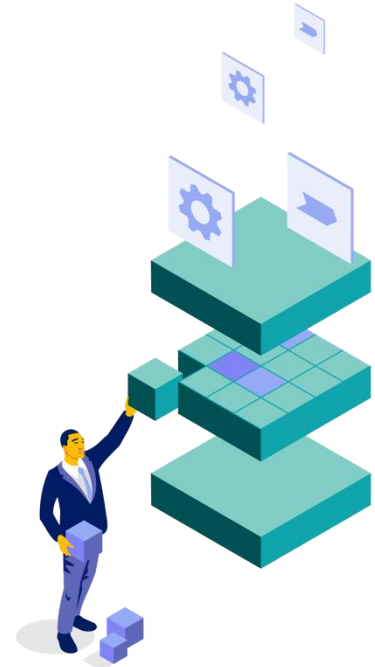


The Build vs. Buy Debate

What's at stake?

Building a decisioning engine in-house has always been a significant undertaking, and the traditional realities of doing that haven't gone away. These efforts still entail significant costs, long development timelines, integration complexity, and systems that struggle to scale. But the debate has shifted. The reality is that AI coding tools are genuinely changing the economics of building software in areas such as audience management, segmentation, BI, and even portions of the customer data platform and content ecosystem. These tools have made the build path feel more accessible, and some organizations are taking a fresh look.

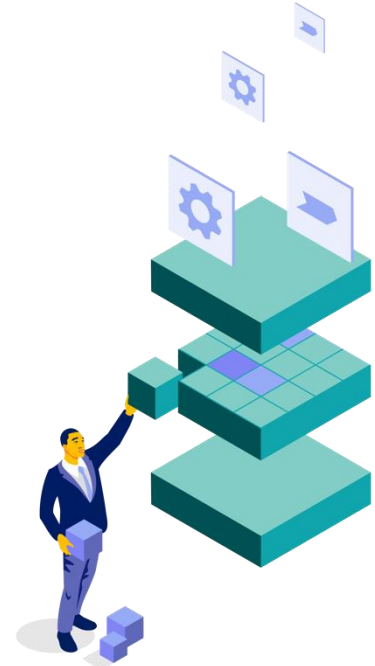
- **Compliance, explainability, and operational intelligence:** Compliance is the floor, not the ceiling. Regulatory requirements like GDPR, CCPA and HIPAA demand time-stamped, auditable records of every decision made. Leading enterprises use explainability every day to understand not just what happened, but why that matters. A custom build may provide an audit trail, but it rarely delivers the diagnostic insight needed to satisfy regulators, refine strategy, and drive continuous improvement.
- **Change governance:** Updating a strategy in a regulated environment isn't just a technical event. It requires compliance review, legal sign-off, model validation, and staged rollout. This is a multi-stakeholder workflow that standard MLOps pipelines don't deliver out of the box.
- **Enterprise-scale optimization and arbitration:** Journey orchestration is achievable with custom builds. That's a fundamentally different capability from decision orchestration, and it's where the long-term value actually lies. It demands infrastructure designed for it, not retrofitted.
- **Always-on adaptive learning at scale:** Closing the feedback loop automatically across every channel, continuously, at enterprise scale is a prolonged operational build, and one that is significantly difficult and expensive to replicate as complexity grows.



The Build vs. Buy Debate

The Debate Has Evolved

- AI coding tools have genuinely changed the conversation. Platforms like GitHub Copilot, Claude, and other agentic coding assistants have compressed what once took months into sprints, making a build-your-own decisioning platform feel more attainable than ever. That's real and should be acknowledged.
- But faster code generation doesn't solve the harder problems that show up when a custom build moves from prototype to production. Regulatory explainability, change governance, enterprise-scale arbitration and optimization, adaptive learning, and operational intelligence aren't features you add later. They're the foundation. And each one represents years of engineering work and compliance certification that no new build gets for free on day one.
- The risk is real and it's growing. [Gartner](#) predicts more than 40% of agentic AI projects will be canceled by the end of 2027, pointing to escalating costs, unclear business value, and inadequate risk controls. The organizations that avoid that outcome will be the ones that know the difference between what AI tools can accelerate and what still needs a proven, governed foundation underneath. Agentic systems actually increase the importance of RTIM rather than replace it. Agentic AI supercharges the enterprise's ability to generate content, data, and journeys, and automate execution. RTIM is what determines which of those actions should actually happen for a customer in a given moment.



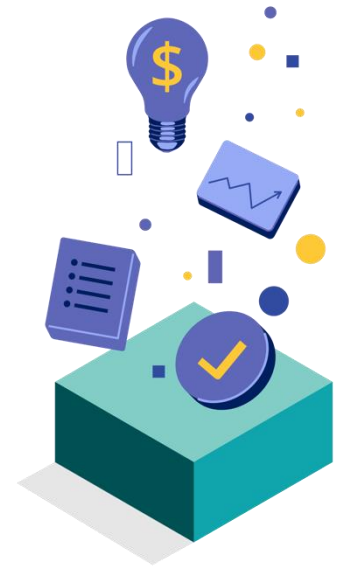
The Smarter Alternative

Off-the-shelf RTIM Solutions

Licensing a proven RTIM engine doesn't just sidestep the risks of building. It gives organizations a head start that no custom build can replicate out the gate. Here's what comes with a mature, enterprise-grade decisioning platform

- **Compliance, explainability, and operational intelligence:** A decade of multi-jurisdiction regulatory certification can't be fast-tracked with AI coding tools. Mature RTIM platforms turn explainability into a live operational asset, such as providing daily visibility into why actions win or lose, where policies limit engagement, and whether outcomes are improving. That diagnostic insight is hard to replicate in a custom build, and it's how high-performing organizations refine their customer engagement strategies.
- **Enterprise-scale optimization and arbitration:** Mature RTIM platforms go beyond journey orchestration, simultaneously optimizing every interaction across hundreds of competing actions, live customer context, business constraints, channel suitability, and ethical guardrails. This is fundamentally different from workflow coordination or simple offer selection and is also the capability that [compounds in value](#) the longer it runs.
- **Always-on adaptive learning:** Every customer interaction automatically updates the model estate across every channel, continuously, without manual retraining cycles. That compounding learning advantage widens over time in ways a custom build cannot easily duplicate.
- **Agentic-ready architecture:** As AI agents become central to marketing operations, a licensed platform provides the governed decisioning control plane those agents need to operate safely and at scale. Rebuilding that foundation from scratch is unlikely to yield the competitive advantage enterprises need right now.
- **Focus on what matters:** With the technical foundation handled, teams can concentrate on strategy, creativity, and customer experience — the work that actually drives competitive differentiation.

These benefits are not just theoretical. Enterprises that have adopted licensed RTIM engines consistently "[cite sustainable profitability aligned with customer lifetime value \(Forrester\)](#)." These enterprises are constantly innovating and improving rather than focusing on endless re-engineering.



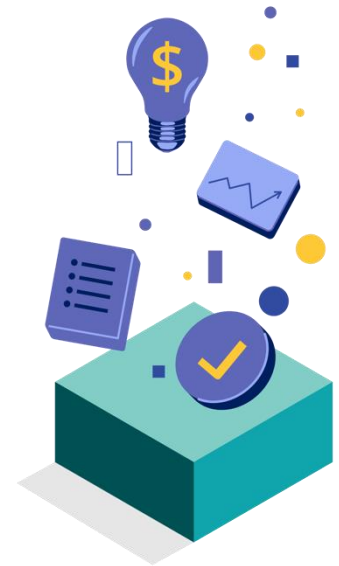
Innovation at the Core

Legacy systems often rely on static predictive models that can't keep pace with how customers actually behave. Purpose-built RTIM engines change that equation by integrating adaptive AI that responds dynamically to customer signals in real time. Imagine guiding a new customer seamlessly through onboarding, adjusting product and service recommendations mid-journey, or knowing when to step back entirely because it's the right thing to do. RTIM engines empower businesses to turn customer data into actionable insights, delivering hyper-personalized experiences at scale.

That adaptability is what makes a single decisioning platform the "brain" of a modern MarTech stack. It becomes the decisioning authority at the center of all customer experiences. But in the agentic era, the brain needs to do more than decide — it needs to orchestrate consistently, intelligently, and safely. AI agents are increasingly handling the execution layer of marketing: generating content, managing campaign workflows, optimizing performance, and coordinating across systems that once required teams of people to keep in sync. A governed decisioning platform is what makes that orchestration trustworthy at scale. It ensures that as agents move faster, the decisions they act on remain accurate, compliant, and explainable.

Agentic systems will massively expand the supply side of both data and content. That makes optimization, arbitration, explainability, and prioritization even more important because the problem shifts from “can we create enough experiences” to “how do we continuously determine the best action across an exploding set of possibilities.”

Ultimately, the goal of any customer engagement strategy is to build loyalty, drive retention, and grow revenue. A licensed RTIM engine not only supports these objectives but also advances them by continually learning and optimizing. This approach enables marketing efforts to become smarter with every customer interaction, while avoiding the challenges associated with custom development and technical debt.

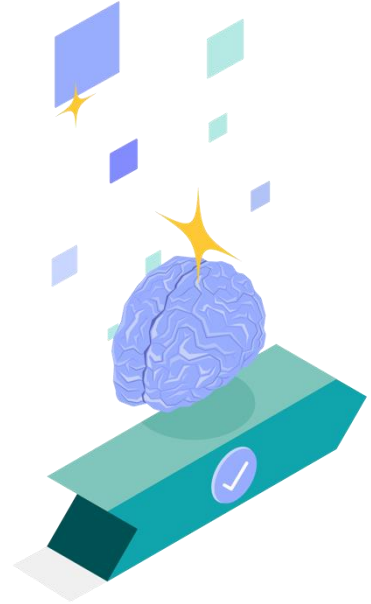


The Future is Now

The question enterprises face today isn't whether to embrace agentic AI. Instead, it's whether they have the foundation to do it safely and at scale. AI tools are moving fast, and the organizations that adopt them while maintaining governed, explainable, and adaptive decisioning at the center will be the ones that define customer engagement for the next decade.

Licensing a proven RTIM engine is how you build that foundation without starting from zero. It's not just a practical choice but also a strategic imperative. You get the governed decisioning control plane that agentic tools need to operate on, the adaptive learning infrastructure that improves with every interaction, and the compliance framework that keeps pace with an increasingly complex regulatory environment. All without the compounding cost and technical debt of rebuilding it yourself every time your business grows.

The smarter choice is clear. License the foundation, unleash the agents, and focus on what you do best: delivering value to your customers.



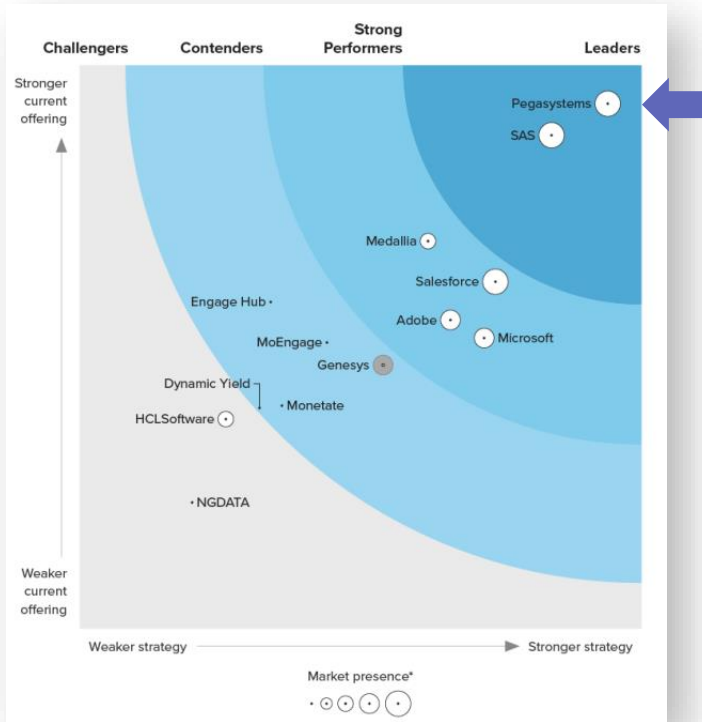
APPLY AI-DECISIONING IN REAL TIME FOR
PERSONALIZED, PROACTIVE ENGAGEMENT

Real-Time Interaction Management Forrester

According to Forrester, leading RTIM solutions must provide **Next Best Experience (NBX)** capabilities to help clients develop a more evolved focus on customer value – with Pega receiving perfect scores (5.0) in categories such as:

- Customer Profiles & Preferences
- Real-Time Decisioning
- Predictive AI & Generative AI
- Digital Intelligence
- Channel Orchestration
- Business Performance Optimization
- Customer Operations Usability
- Vision, Innovation, & Roadmap
- Pricing Flexibility, & Transparency
- Community

- The Forrester Wave™: Real-Time Interaction Management, Q1 2024



2025 Forrester Total Economic Impact Study Of Pega Customer Decision Hub

DOWNLOAD THE STUDY TO UNDERSTAND
THE END-TO-END VALUE



Pegasystems commissioned Forrester Research to conduct a [Total Economic Impact™ \(TEI\) Study](#) to examine the typical return enterprises realize from the Pega Customer Decision Hub.

Results include:

- \$217M Incremental Revenue (Yearly/10M)
- \$385M Retained Revenue (Yearly/10M)
- 15% Reduction In Customer Churn Rate
- Project Payback within 6 Months



Pega is the leading Enterprise Transformation Company™ that helps organizations Build for Change® with enterprise AI decisioning and workflow automation. Many of the world's most influential businesses rely on our platform to solve their most pressing challenges, from personalizing engagement to automating service to streamlining operations. Since 1983, we've built our scalable and flexible architecture to help enterprises meet today's customer demands while continuously transforming for tomorrow. For more information on Pega (NASDAQ: PEGA), visit <http://www.pega.com>