Built for the Future

Why licensing an RTIM engine beats building one.

Powering Personalization

In today's fast-paced digital landscape, marketers are 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. 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 powers personalized customer experiences by processing data in real time and making decisions that drive engagement. These engines, often referred to as decisioning platforms or customer engagement engines, are no longer optional; they are foundational to modern customer-centric strategies. However, the critical question for enterprises remains: should they build their own RTIM engine, patch together a composable solution, or license an off-the-shelf product? **Here's why the smartest choice is to license a pre-built RTIM engine.**

# The Reality of Today's Martech Landscape

For many organizations, the martech stack remains a mix of legacy systems and fragmented tools, designed for simpler times. These complex ecosystems often lack the interoperability and real-time capabilities required to meet modern demands. Brands operating within such constraints struggle to unify customer data and orchestrate seamless, personalized interactions across channels.

Consumers today expect more. They demand timely, relevant experiences—not generic outreaches that fail to add value to their lives and journeys.

It seems straightforward, but it's a complex puzzle that *many* brands still haven't solved. According to Forrester, **41% of B2C marketing decision-makers** cited personalization as one of their biggest marketing challenges. The problem isn't just collecting customer data—it's figuring out how to best turn that data into real-time, hyper-personalized experiences that meet customers where they are in their journey.

To thrive in the current dynamic business environment, organizations need technology that not only keeps up but anticipates and adapts to customer behavior in real time.

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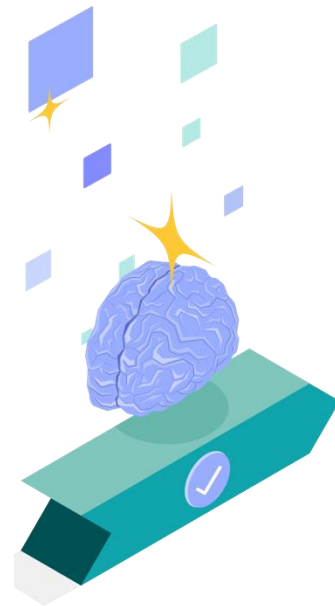
Real-Time Interaction Engine

(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 Build vs. Buy Debate
What's at stake?

- Building an RTIM engine in-house might sound appealing, especially for enterprises with robust IT resources. However, the reality is far more challenging and costly than it appears. Developing an RTIM engine from scratch often results in:

- **Exorbitant Costs:** Building a solution requires significant investment in specialized talent, infrastructure, and ongoing maintenance.

- **Lengthy Development Timelines:** Custom solutions can take years to bring to market, leaving businesses lagging behind competitors.

- **Integration Challenges:** Tying a bespoke engine into existing systems often proves complex and resource-intensive.

- **Opportunity Costs:** Resources spent on building software could be better allocated to strategic initiatives.

- **Scalability Issues:** Custom systems frequently struggle to grow alongside the business, requiring costly rework over time.

The Build vs. Buy Debate
Frequent oversights and unexpected concerns

- Hidden costs of building your own RTIM engine are frequently *very* underestimated in the initial Total-cost-of-ownership (TCO) calculations. This is why organizations should look carefully at what they're getting into:

- **Completeness of features:** 48% of respondents cite [better features](#) as the top reason why homegrown martech solutions are replaced with commercial software. Rarely does an in-house solution provide additional competitive or cost advantages.

- **Intricacies of AI development:** Keeping pace with rapid changes in AI requires continuous investments in research, development, and deployment where [hidden costs](#) are usually missed or miscalculated...and so is the rate of AI obsolescence.

- **Knowledge Transfer:** IT resource turnover risks can critically affect the knowledge base behind the in-house solution. Commercial RTIM engines have dedicated IT teams that can withstand resource changes with minimal disruption to ongoing maintenance and support.

- **Business user adoption:** A significant component of value resides in the end-user applications at the higher layers of the RTIM engine. These embedded business agility, control, and user experience mechanisms represent a large part of the solution's adoption. The core functions (I.e., data management, machine learning) alone do not make for a complete and useful solution.
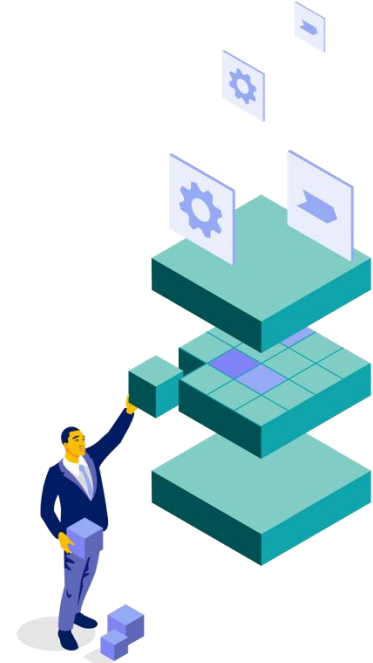
The Smarter Alternative
Off-the-shelf RTIM Solutions

Licensing a pre-built RTIM engine offers a host of advantages that make it the clear winner for enterprises seeking efficiency, reliability, scalability, and innovation. Here are the key benefits:

- **Speed of Implementation:** Off-the-shelf engines are designed for rapid deployment, enabling businesses to address market demands quickly.

- **Expertise and Support:** Vendors bring industry expertise, ongoing updates, and support services that keep the software secure and compliant with evolving regulations.

- **Cost-Effectiveness:** Licensing eliminates the need for significant upfront investments in development and infrastructure.

- **Scalability and Flexibility:** Modern RTIM solutions use modular architectures and APIs, making integration seamless and customization straightforward.

- **Focus on Core Activities:** By outsourcing the technical heavy lifting, businesses can concentrate on crafting impactful customer strategies.

These benefits are not just theoretical. Enterprises that adopt licensed RTIM engines consistently report faster time to value and more effective customer engagement outcomes. By leveraging proven technology, they can meet customers where they are with personalized, contextually relevant interactions.
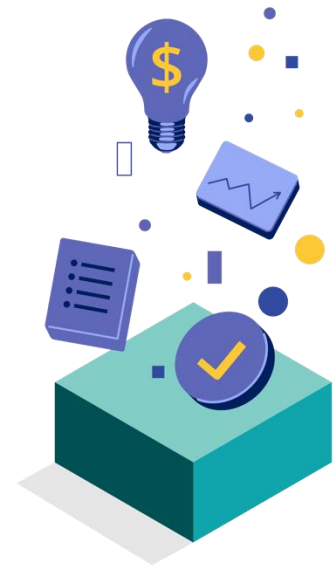
Innovation at the Core

Legacy systems often rely on static predictive models, which offer limited personalization. By contrast, licensed RTIM engines integrate adaptive AI to respond dynamically to customer signals in real time. Imagine an onboarding journey for a new customer: the engine can guide them seamlessly through signing documents, setting up accounts, and activating their product, all while adjusting recommendations based on their behavior.

This adaptability is key to staying competitive and cost-effective. RTIM engines empower businesses to turn customer data into actionable insights, delivering hyper-personalized experiences at scale. They act as the "brain" of the martech stack, orchestrating interactions across every touchpoint and ensuring consistent, meaningful engagements.

Ultimately, the goal of any customer engagement strategy is to build loyalty, drive retention, and increase revenue. By licensing an off-the-shelf RTIM engine, enterprises free themselves from the burdens of custom development and technical debt. Instead, they can channel their energy into what truly matters: creating empathetic, impactful customer experiences.

The Future is Now

As customer expectations continue to evolve, so too must the technologies that support engagement. Businesses that delay modernizing their approach risk being left behind. Licensing an off-the-shelf RTIM engine is not just a practical choice—it's a strategic imperative. With faster implementation, reduced costs, and unparalleled adaptability, these solutions position enterprises for success in an increasingly dynamic marketplace.

The time to act is now. Why spend years building your own solution when you can leverage one that's already built, tested, and optimized? The smarter choice is clear—license an RTIM engine and focus on what you do best: delivering value to your customers.

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
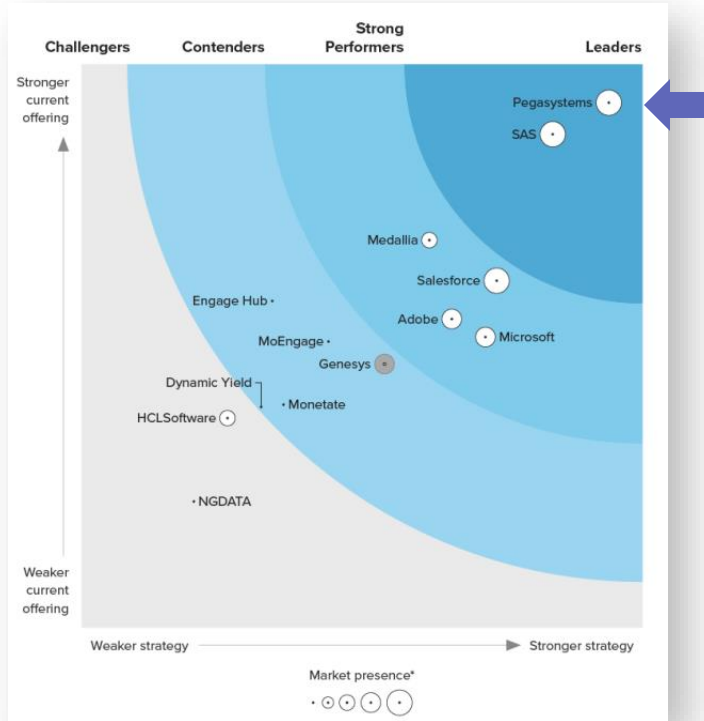
2025 Forrester Total Economic Impact Study Of Pega Customer Decision Hub

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

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