



Fueling customer
engagement
**with always-on
insights**



Introduction

We've entered an unprecedented era of customer engagement; expectations to know customers are sky high. And third party data – the tool that many marketers and customer engagement practitioners have relied on for years to round out that view and connect consumer touch points – is no longer viable. With increased regulation around the use of data, debate around the concept of privacy and consent, and a push from consumers for more consent-based engagement, organizations are now looking at first-party information from owned channels and digital properties, as the way forward.

By leveraging contextual first-party data, organizations can gain a better understanding of their customers and deliver more personalized and relevant experiences. This, in turn, can help to build trust and loyalty, increase customer lifetime value, and ultimately drive business growth. However, to achieve these benefits, organizations must also use an approach that values data privacy and security and ensures they are collecting and using data in a transparent and responsible way.

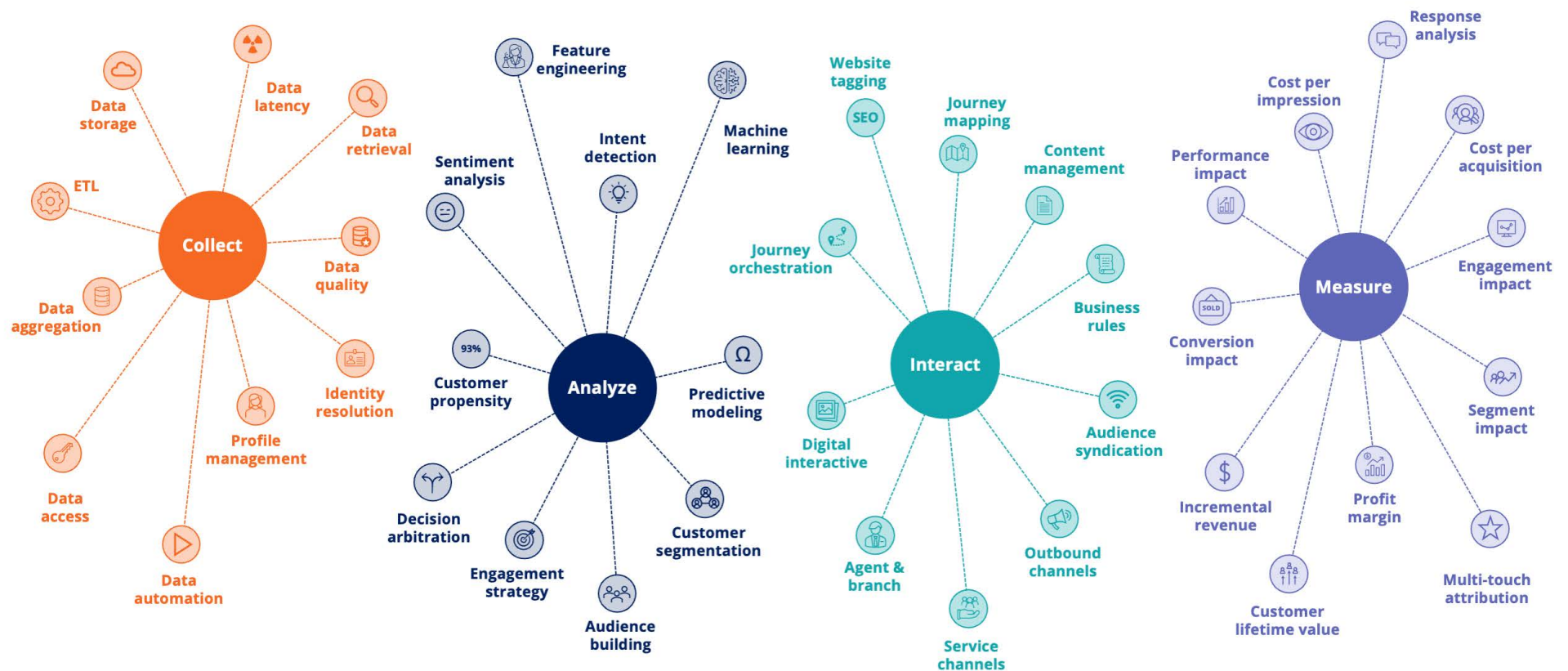
Collecting, storing, transforming, and operationalizing data so it can constantly be fed to the systems that rely on it is a huge challenge for many organizations given the fragmented nature of marketing technology stacks. Aggregating data, creating and managing profiles, and controlling access for all parties who require it is necessary. However, automating this process is complex due to the constantly evolving rules and regulations governing data management, the plethora of technology choices, and the fact that data refinement is complex. It is also crucial to remain mindful of concepts like latency, lag, and stagnation, as they can significantly impact data quality and customer engagement.



Operationalizing data into insight

Getting value out of the data now requires using AI and analytics to identify high-value features and attributes, learn from them, and explore things like sentiment, intent, and propensity for customers to interact with your brand. Predictive and adaptive analytics are required to enable real-time decisioning,

so we can automatically pivot with the customer as they change directions – as they do dozens of times per day across many channels to deliver actions and content that are most relevant to their needs in the moment.



To make the most out of their data investments, organizations must implement these strategies on a large scale, across all communication channels. This includes not only digital channels like web and mobile apps but also outbound methods such as email, phone calls, and paid advertising. It also encompasses all touchpoints with customers, not just marketing efforts, but also customer care and service interactions.

However, optimizing data usage is an ongoing process. It requires you to constantly assess how the data is being leveraged and its impact on your response rates, conversion rates, customer acquisition, and engagement. This analysis should also include how your data contributes to your revenue, profit margin, and customer lifetime value. By doing this, you can ensure that you are using your data effectively and adapting to changes in the market.



The rise of the customer data platform

Organizations often rely on several technologies to work together to collect, synthesize, and operationalize data. Customer data platforms (CDPs) are valuable tools for collecting data, identity management, refining customer profiles, and building out strong signals.

Capabilities vary, but most vendors have a core set of standard competences built around the following:

1

Data collection

The extraction, transformation, and loading of customer-level raw event data

2

Data identification

Cleansing the data, and matching each record to an individual customer profile

3

Data curation

Refining the data into actionable signals and segments that provide individual customer insight

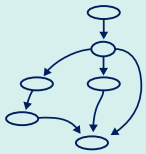
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Data syndication

Making the data available for rapid distribution to avoid stagnation

“A **customer data platform (CDP)** is a software application built to support marketing and CX use cases, by unifying a company's customer data from marketing and other channels. CDP data helps to optimize the timing and targeting of messages, offers, and customer engagement activities, and enable the analysis of individual-level customer behavior over time.”

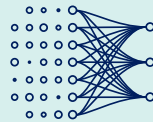
In the context of data analysis, CDPs typically collect raw behavioral data such as web browsing events, mobile activity, and transactional activity, and convert them into a common set of behaviors, needs, sentiments, goals, or intents to help guide customer engagement strategies.



Raw event data

Customer interaction data that has **not been curated**, and requires aggregation/classification before it can provide deep customer insight.

Example: website browsing event, mobile location, credit card transaction



Curated signals

Interaction data that's been **filtered and aggregated** to highlight valuable behaviors and provide directional customer insights.

Example: website visit for category A, transacted in category B, subscribed to category C



Customer audiences

Individuals that are placed into specific **targeting segments**, based on a common set of time-sensitive behaviors, needs, sentiments, goals, or intents.

Example: in-market for mortgage, in-market for phone, shopping for new car

However, these are static and cannot be activated instantly without the help of AI because they often lack three specific capabilities that are essential to real-time customer engagement:

Real-time decisioning: To keep pace with customers, brands need to be able to make decisions about how to engage in milliseconds with hundreds of data models across many channels.

Sales and service channel integration: Many organizations do not have digital channels connected to other critical avenues of the customer lifecycle, like sales, service, and agent channels. This is a blind spot because those interactions are critical to creating robust relationships.

End-to-end CX orchestration: Orchestration capabilities that deliver ROI in real time and are robust enough to encompass every marketing, sales, and service interaction across customers, products, teams, and lines of business.

Better together: CDPs, always-on insights, and centralized decisioning

To deliver the type of experience that today's consumer requires, customer engagement and data activation needs to be "always-on" and accessible to all parts of an organization.

At Pega, we help brands achieve this by connecting customer data platforms and other signal providers directly to the Pega Customer Decision Hub™ to convert signals into fuel to power our decisioning AI. Then calculate the "next best experience" by selecting the best combination of action and treatment for that individual customer, in that specific journey and moment.

Customer Decision Hub does this through a combination of features and capabilities:

Customer data connectors

They're designed to integrate data and decisioning almost instantly – so you can use streaming insights for predictions, rules, and next-best-action decision-making. Deliver the best experience possible, based on what a customer needs right now.

Customer insights cache

Enables organizations to collect, aggregate, and curate real-time streaming data, cache it for decision-making, and immediately start using it in model predictions and arbitration rules – drastically reducing the time-to-value for new data sources and attributes.

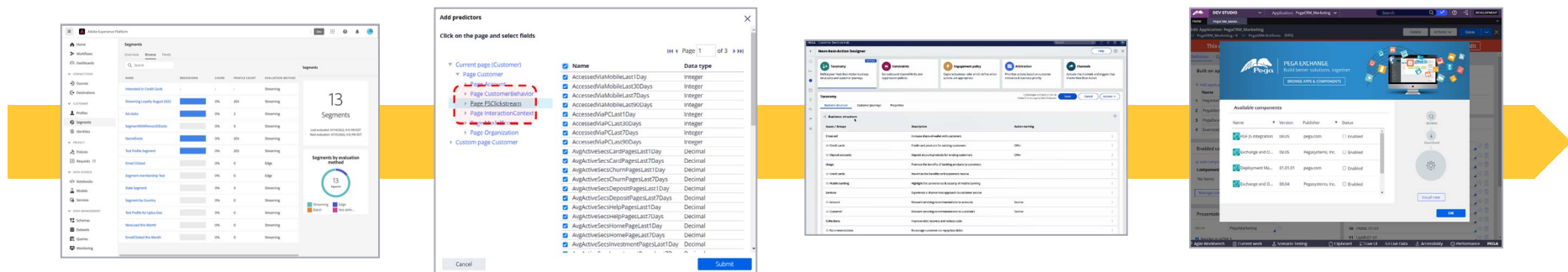
Decision arbitration

Using those insights, Pega's always-on brain gains a real-time view of the customer and their full context. The brain then arbitrates engagement options and recommends a "next best experience" comprised of the best action, treatment, and channel for each individual. These engagements are hyper-personalized and constantly changing, so they're always aligned with the customer's unique current needs.

Once the right action is calculated, you can present that action to a customer on any connected channel – from web and mobile to email, paid advertisements, and even the IVR and contact center. The result? A fully contextual and connected experience that drives better engagement, higher NPS, and increased conversion rates.

Always-on insights

How pega activates data from CDPs and other providers



Customer data connectors

Connect pega to curated real-time signals from CDPs and other providers

CONNECT

Customer Profile Designer

Processes data and signals in real time to prepare for decisioning

PREPARE

Decision arbitration

Calculates next best actions (NBA) in milliseconds using logic, rules, and adaptive learning

DECISION

Channel connectors

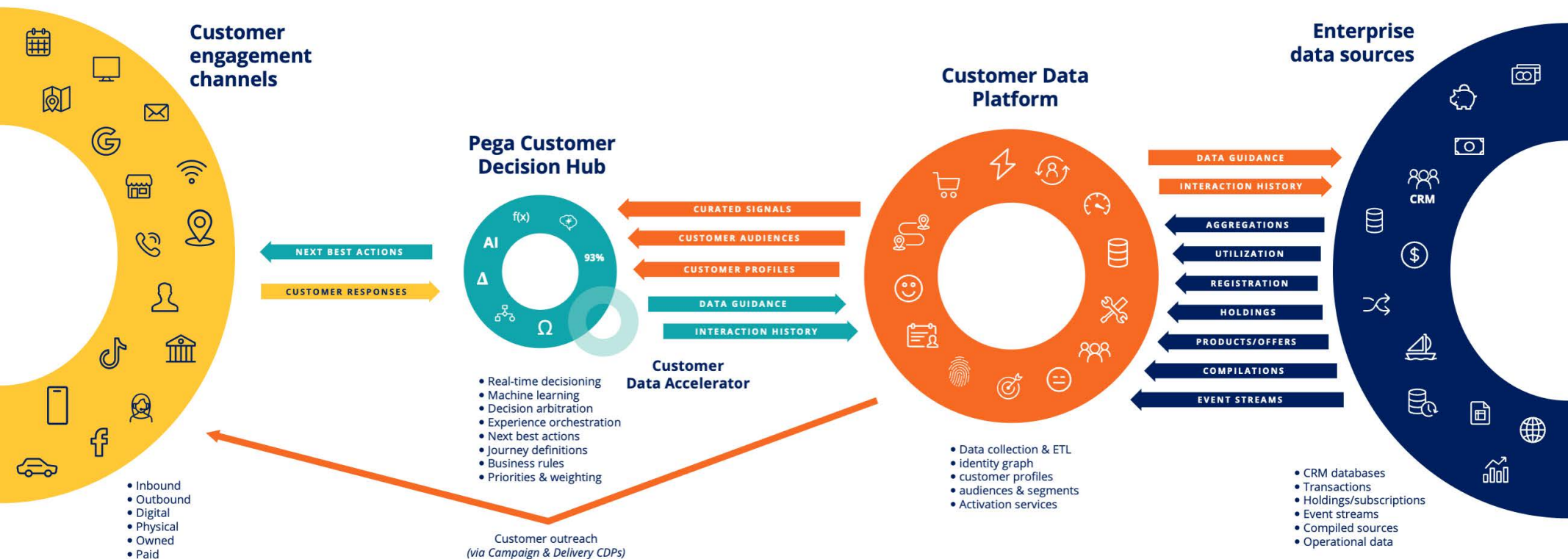
Deliver the NBA to the channel within 200 milliseconds of request, no time lag

DELIVERY

Real-life application: unlocking the power of always-on insights

Without always-on insights in place, a customer could navigate through a brand's various web pages and browse specific content, but the brand wouldn't have insight into what she's looking for, making it difficult to engage with her effectively. With the right data strategy in place, however, sensors capture the customer's behavior and stream refined signals in real time to the Customer Decision Hub. Raw data such as page URLs, IDs, timestamps, and

other unrefined pieces of information are captured by CDPs and other data and insights producers, matched to the customer, merged into her profile, and refined into signals. Customer Decision Hub takes these signals, uses its connectors and further aggregates, filters, as well as prepares them as needed, and stores them in the customer insights cache.

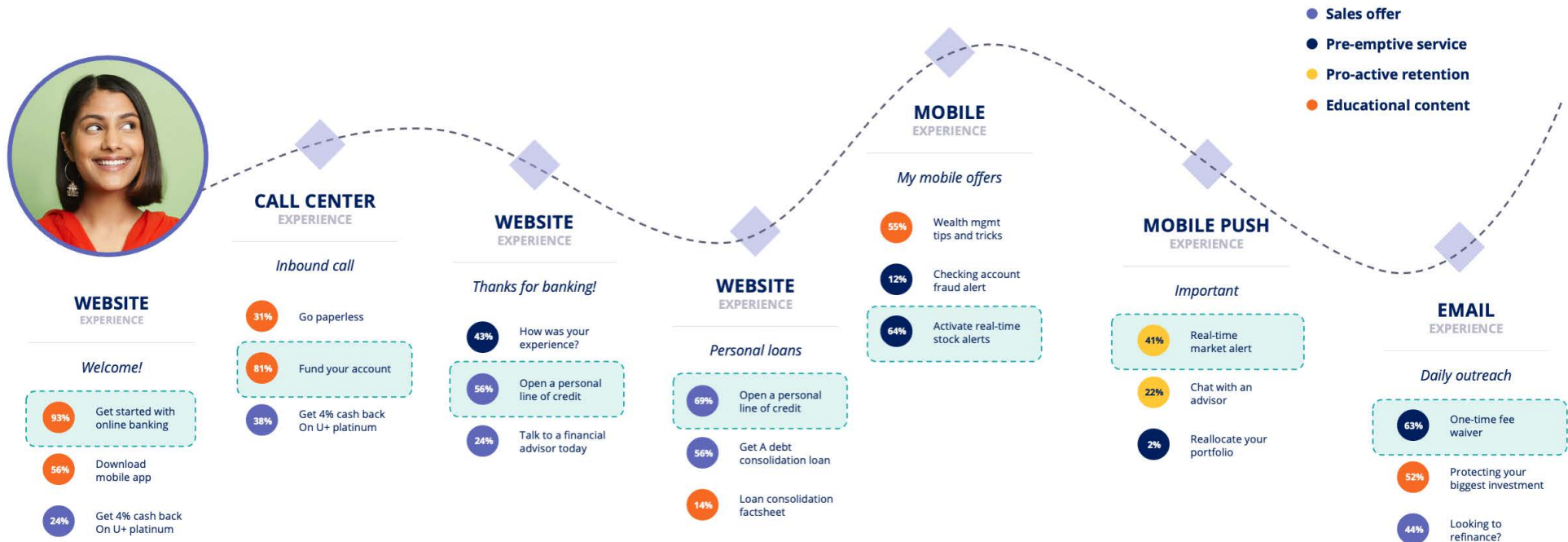


The next time the brand needs to provide their customer with a next best action, which could be as she moves from one page to another, the Customer Decision Hub recalculates a decision based on her latest browsing context. The brand then delivers the actions back to the page the customer is currently on, which personalizes the content specifically for her.

Every time the customer performs any of the above actions, Pega receives, prepares, and processes the insights, updates hundreds of predictive models, and within 200 milliseconds decides on the next best action for her. The decisioning occurs across various channels, such as digital, call-center, email, or anywhere the brand interacts with the customer.

Real-time decisioning and orchestration

Across channels and lines of business



Conclusion

Leveraging the power of CDPs and other data sources to drive personalized customer experiences is critical for modern businesses. By combining data from various sources and using decisioning and orchestration capabilities, businesses can create a seamless customer journey that starts with building awareness and ends with proactive retention, service, and long-term loyalty. Such a comprehensive approach can result in reducing the cost

of acquisition, increasing customer spending and upselling, minimizing discounts, and ultimately driving revenue growth. The key is to focus on the entire customer lifecycle, not just individual interactions, and use data-driven insights to inform your decisions. With the right tools and strategies, businesses can achieve true customer-centricity and differentiate themselves in a crowded marketplace.

Full customer lifecycle

Orchestrated with pega customer decision hub



Client success with always-on insights



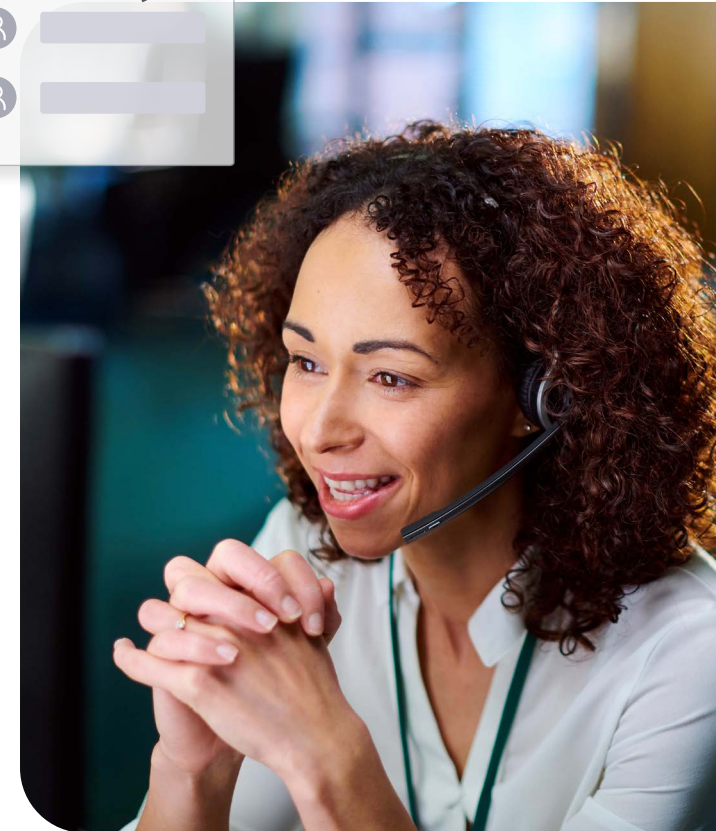
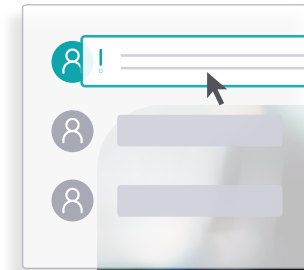
Prioritized cross-sell

Prioritized routing of mortgage applications based on likelihood, value, and agent availability



Personalized retention

Detect customers that are trying to cancel and optimize retention strategy based on CLV



To find out more about the Achmea and HSBC bank stories, visit pega.com/customers



About Pegasystems

Pega is a powerful low-code platform that builds agility into the world's leading organizations so they can adapt to change. Clients use our AI-powered decisioning and workflow automation to solve their most pressing business challenges – from personalizing engagement to automating service to streamlining operations. Since 1983, we've built our scalable and flexible architecture to help people focus on what matters most, so they can meet today's customer demands while continuously transforming for tomorrow.

For more information, please visit us at [pega.com](https://www.pega.com)

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