

Pega Adaptive Decision Manager

Dramatically improve next best actions using contextual information and adaptive learning

A Pega Datasheet

Continuously and Automatically Optimize the Customer Experience in Real-time

Pega Adaptive Decision Manager (ADM) learns on the fly with each interaction what works best. For instance, if you launch a new product with a set of promotions, as soon as customers begin responding ADM uses every interaction as a lesson on what performs well. If your first responder is from California, is a female, and is retired, ADM uses that information to influence how it ranks offers the next time someone matches those attributes. As its fed additional contextual information (perhaps a change of address), and encounters new interactions, ADM gets more and more precise – leading to even higher success rates.

Using highly visual tools, business users are in control, graphically creating, simulating, deploying, measuring and optimizing real-time strategies that employ ADM's learning algorithm - without the need for any coding or data science degrees.

ADM automatically and constantly goes through a learning cycle, and then feeds rankings to Pega's decision hub, which executes the best set of actions aligning with customer preferences and company objectives. With Pega ADM, you can consistently provide customer-centric, high-value engagements that improve customer experience, engagement and loyalty.

- **Instantly adapt to market opportunities or threats** People's preferences, needs, expectations, and tastes change. In order to respond in a timely fashion you need an application that trains itself in real-time. ADM detects changes immediately by continually updating its statistics on acceptance or rejection of a tactic as it happens.
- **Massively scale up the use of feedback and predictive analytics** No longer wait for months for models to be built and put in production. Using adaptive modeling, you can employ and deploy thousands of models instantly - without worrying about budget or resource bandwidth – driving you quickly to successful outcomes.
- **Easily pit challenger against champion actions without the need for complex testing** Since ADM is perpetually learning, any new actions or offers that are introduced simply enter the mix, and participate on a level playing field to identify the winners. Recent entrants can even receive higher rankings randomly to ensure in the early stages they get enough air time to compete.

Challenge

Enterprises need to deliver personalized and relevant next best actions to improve customer experiences. But when touch points use stale customer information, they miss the mark by either not taking into account contextual behavior – critical insights into what the customer is doing at that moment – or by failing to factor in feedback which would have led to better decisions.

Solution

Pega Adaptive Decision Manager (ADM) leverages contextual information and combines it with existing knowledge. Unified with Pega applications, ADM listens to each action, records whether the outcome was acceptable, and then immediately adjusts based on the responder's attributes. It keeps a core set of outcome statistics and attributes, which it then uses to adjust the probability scores for a specific responder for a specific action. Over time, and with enough responders, the model confidently converges on the optimal ranking of each customer's actions. ADM doesn't require arduous data collection, expert model builders, and complex model calibration because it's all done automatically.

Observe Customer Behavior and Know Them in Real-Time

- ADM uses all available customer attributes, and finds the ones that matter. Attributes that contribute to model performance are used, and ones that don't are disregarded.
- Attributes are constantly and automatically being tested for predictive power - ones from contextual session data, or from back-end systems. The key is using contextual data, and making observations about customer characteristics and actions in real-time and instantly factoring that learning into the next actions.

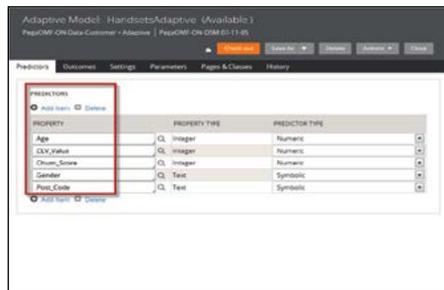
Engage Seamlessly Using Predictive Intelligence

- Operationalize insights by embedding ADM models into Pega Decision Strategy Manager, which then engages with customers across all digital and physical channels, including kiosks, social media and mobile devices.
- Allow business users to make adjustments on how ADM is employed in Decision Strategies via a user friendly canvas, and then deploy directly to production.

Adapt to changing conditions

- Every action with every customer can leverage adaptive learning, meaning literally thousands of models can be operational – persistently adjusting to current conditions. Business users have the tools to monitor the overall system and the performance of each model.

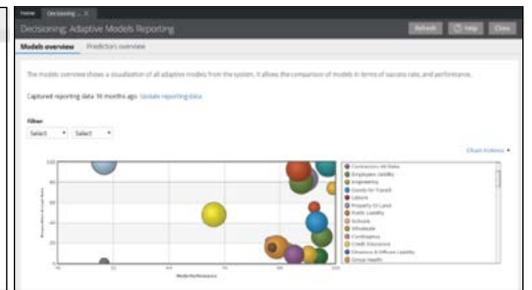
Observe



Engage



Adapt



Pega ADM enables organizations to power their decision strategies with machine learning to automatically optimize their offers and actions, dramatically improving customer experiences and organizational performance.