



Solution Sheet

Real-Time, Explainable Recommendations Using Knowledge Graph

Recommendation engines are increasingly becoming an inherent part of customer interactions with businesses across all channels with a direct impact on revenue. Product recommendations based on just similarities may look accurate, but are they able to convert prospects? Traditional recommendation systems that analyze a customer’s purchase history and send out weekly recommendation emails are outdated and ineffective. To improve the likelihood of conversion, recommendation engines need real-time capabilities such as in-app and push notifications to deliver personalized recommendations to customers at the right time on the right channel.

While all product companies aspire to achieve this, the larger problem for them is integrating data in from customers, suppliers, and partners to deliver real-time recommendations. While the products need data in a predefined format governed by APIs or data models, the actual data provided is in a multitude of varying formats. They are left with the mammoth task of mapping the customer data in raw file formats or streams to standard data models that can be used to derive recommendations — a manual, error-prone and slow process.

Identifying similar users and products to make recommendations becomes impractical as customers scale.

Batch-processed recommendations that take minutes or even hours to reach the customer tend to be ineffective.

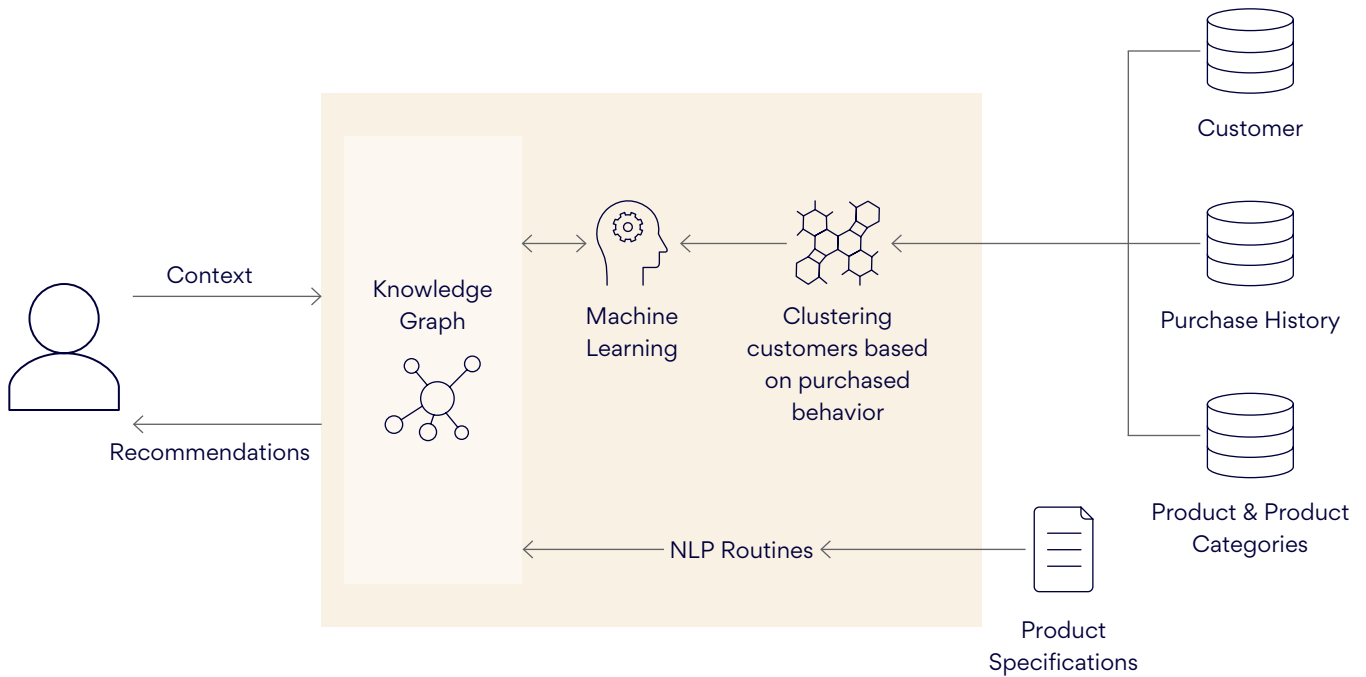
Integrating data from multiple sources and transforming it into a format that can be analyzed is a manual, slow, error-prone process.





Real-Time, Explainable Recommendations Solution Using Knowledge Graph

Persistent’s real-time recommendation solution convert browsers into buyers with well-timed recommendations that mirror customer preferences. The solution finds items of interest based on past purchases, similar users, and related products while weaving in business-centric factors like profit margins, promotional prices, and overstock clearance.

The solution uses graph technology to integrate and connect data from all systems, scales effortlessly, and delivers lightning fast recommendations with an explanation to help businesses interpret the factors behind the recommendation.

How It Works



 <p>Collaborative filtering</p> <p>Recommend based on similar users or products</p>	 <p>Content filtering</p> <p>Recommend based on user history and profile</p>	 <p>Rules-based filtering</p> <p>Recommend using rules</p>	 <p>Business strategy</p> <p>Recommend based on business strategy (promotions, margin, inventory)</p>
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Maximize conversions and revenue with real-time, explainable recommendations.

Request Demo

About Persistent

With 12,000+ employees around the world, Persistent Systems (BSE & NSE: PERSISTENT) is a global solutions leader delivering digital business acceleration, enterprise modernization, and next-generation product engineering across industries and geographies. Our next-level capabilities and solutions that support continuous innovation help enterprises boost efficiency, resiliency, and agility with a solid core IT modernization strategy.

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