

# Image: Real-time big data solutions Image: Imag

### Real-Time Personalized Offer Engine

#### **Business Imperatives**

"Customized offer" and targeted marketing is gaining momentum as business is trying to personalize recommendations, and influence specific customers based on their profile and preferences. In today's era the customer behavior, and purchasing pattern is changing very frequently. It makes perfect sense to understand the profile, purchase behavior, and interest area to place personalized offers at the right time. That results in a better offer-conversion and win-win situation for marketers as well as consumers. Based on the survey conducted –

- 77% of marketers find Real-Time Personalization to be highly important, 98% find it moderate to highly important.
- Knowledge about consumer behavior and sentiment improves real-time marketing events. 33% consumers felt positive before Real-Time marketing and 49% consumers felt positive after Real-Time marketing (Survey by : eMarketer)

#### **Solution Overview**

Infosys "Real-Time Personalized Offer Engine" gathers the consumer transactions in Real-Time and provides Real-Time Personalized offers to the consumer. The key tenets of the solution are -

- Allows marketers to view the Consumer transaction data in realtime and perform real-time analytics. Earlier it used to take several hours for offline system to understand the consumer behavior, but with "Real-Time Personalized Offer Engine" the analytics is instantaneous.
- Marketers can personalize the offer placement based on the consumer behavior



- Real-time marketing empowers Marketers in targeting consumers, leading to higher conversion
- It uses open source real-time framework for real-time processing, fault tolerance, and easy horizontal scalability
- A balanced data architecture that aims to provide latency - agile resources that can process any dynamic mixture of data at-rest and in-motion
- A real-time stream computing layer would process data from incoming data streams
- In-memory caching layer allows fast data retrieval for processing



 Rich visualizations for event driven, scalable, and non-blocking I/O model



#### Solution Architecture



#### **Client Benefits**

- Average uplift of 26% in conversion rate attributed to real-time marketing
- Increased cross-sell and up-sell by 15%
- Better customer experience and customer retention
- Better brand perception and greater opportunity for personalization
- Measures effectiveness and strategizes marketing campaigns
- Personalized Offer to customer through clickstream data analysis
- Gains Insight into Consumer behavior and buying pattern for proposing targeted offers

another country, and spend in a special

US Open, Formula One Championship),

The live dashboard provided a geo-heat

map for transaction volume at state and

city level, along with targeted personalized

offer counts, and top five states by average

Real-Time personalized offers were

provided to the customer.

event (like Soccer World Cup, Super-Bowl,

- Compelling low cost alternative with approximately 50 – 60% lower TCO in 3 to 5 years against other providers
- Sub-second latency and high throughput in the range of 900 transactions per second (TPS)

#### **Case Study**

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15 11.22

625

Transactions/s

200 92

#### Leading US-based Cards Company

Customer is a Fortune 500 and a leading Cards company which provides payment, travel, and expense management solutions for individuals and businesses of all sizes. It has a presence in more than 130 countries. Based on Card member's current weekday spending, spend in

Event Standardization Topology

30.83

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Topology Lewi



spend and volume. The customer could get more than 20% increase in conversion owing to real time personalized offers. With some standard topology level optimizations, cluster and environment configuration and integration component modifications, significant performance optimization was observed in tuple processing.



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For more information, contact askus@infosys.com

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