

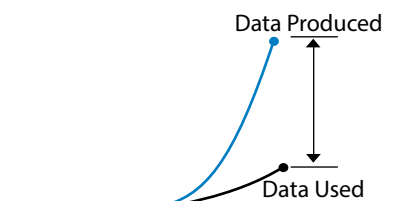
# CUSTOMER BEHAVIOR ANALYTICS BASED ON DEEP PACKET INSPECTIONS DATA

## Business Imperatives

The increase in the number of service providers in the market has made customer acquisition and retention, a key challenge in today's world. Understanding customer behavior, buying patterns, preferences, and sentiments, plays an important role in acquiring and retaining customers. However, with the increasing popularity of the Internet and social media, traditional models of understanding customer preferences, that is, through surveys and CSR calls, are no longer effective.

## Industry Trends

- By the end of 2017, global over-the-top (OTT) messaging traffic will exceed 32 trillion messages annually; while SMS will slow down to 7.89 trillion, resulting in a revenue fall from SMS by almost 20%
- 4G connections account for 3% of mobile connections and generate 30% of all mobile data traffic
- Video dominates worldwide mobile traffic, using up 53% of the traffic share
- Smartphones account for 27% of all global handsets and 95% of all global handset traffic – generating 48 times more mobile data traffic than a basic cell phone
- It is predicted that 52% of mobile-advertisements expenditure will be associated with location-targeted campaigns by 2017, up from 37% in 2012



Executives who feel they understand the impact data will have on their organizations

12%

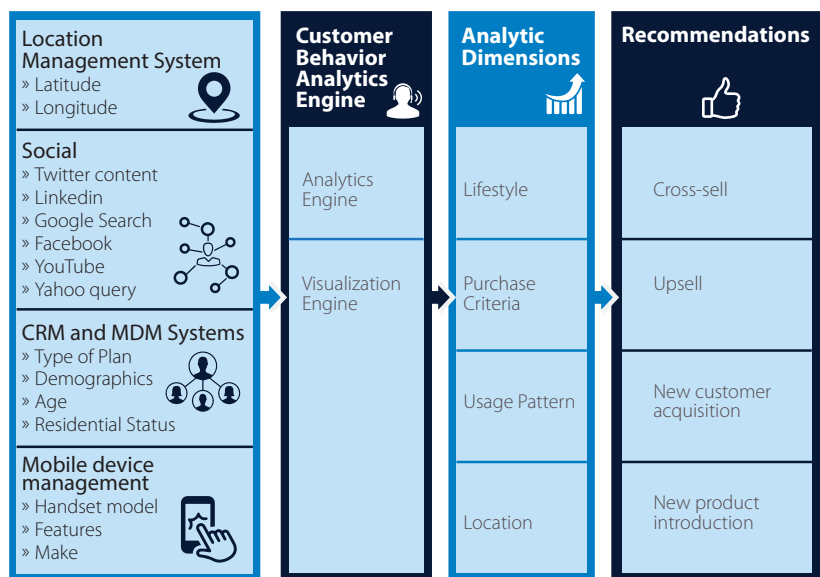
Source: Portio Research, Cisco

## Solution Overview

Infosys Customer Behavior Analytics solution addresses the business challenges around –

- Delivering the **right content** at the right time
- **Avoiding promotional noise** for customer delight
- Making huge **DPI (Deep Packet Inspection)** data more meaningful and sellable, by integrating data from geographic information systems, as well as social and enterprise data sources, to deliver analytics around -
  - Customer lifestyle
  - Purchase criteria
  - Usage patterns
  - Browsing behavior
  - Location and time

## Customer Behavior Analytics (CUBA)



The Infosys Customer Behavior Analytics solution –

- **Correlates unstructured information** like social media, **semi-structured information** like web-logs, and **structured information** like CRM / device details to produce actionable insights
- Generates **automated personalized offers** using a recommendation engine

## Client Benefits

- **Additional revenue streams** through information services
- Increased revenue with **personalized promotions**
- Increased customer satisfaction through **personalized content delivery**

## Case Study

### Client Context

The client is a Singapore-based info-communications company with a customer base of 3.5 million, providing a wide range of services for TV, mobile, internet, and other platforms.

The client was looking to leverage the data generated from mobile devices, to –

- Deliver the right content at the right time
- Make huge DPI data more meaningful and sellable

The key challenges in leveraging the wealth of DPI data involved –

- Processing huge volumes of data to the order of 1 TB per day
- Correlating unstructured information like social media, semi-structured information like web-logs, and structured information like CRM and device details, to produce actionable insights

- Handling large volumes of near-real-time data with 15 GB of DPI feeds sent at 15-minute intervals

### Infosys Solution

Infosys built a scalable platform to collate, store, and process large volumes of DPI data.

We correlated DPI data from the probes, with other customer information sources like CRM, MDM, GIS, and social media, to generate insights into customer browsing patterns, usage patterns, purchase patterns, and lifestyle.

We also enriched the correlated data with URL categorization, created Customer Activity Records (CAR), and micro-segmentations with the enriched customer profiles.

Infosys created predictive insights for –

- Personalized promotions
- Sentiment analysis
- Customer segmentation models
- Personalized content delivery
- Identifying network hot-spots

And generated recommendations for –

- Cross-selling
- Upselling
- New customer acquisition
- New product introduction

We delivered interactive Qlikview dashboards, to help users visualize the insights from the processed data.

### Benefits

Delivered a platform that helps monetize the huge volumes of DPI data.

### Revenue Growth

Micro-segmented customers and delivered personalized promotions, with an improved success rate.

Increased average revenue per user (ARPU) through identification of cross-selling and upselling opportunities.

Reduced customer churn through a better understanding of customer behavior.

### New revenue streams

Identified new avenues for revenue, by selling anonymized data to advertisers and retailers.



For more information, contact [askus@infosys.com](mailto:askus@infosys.com)



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