## TECHGIG.com

## Big Data Analytics Driving Robotic Yet Personalized Digital Experiences

## **Nupur Patel**

Organizations today have differentiated their digital brands by reaching customers and prospects through different channels yet delivering tailored, relevant messages that speak to the requirements & aspirations of their target audiences. With Big Data, organizations can get a single view of their customers/prospects, which can later be micro-segmented, targeted and proposed with personalized messages, ads, products or services.

You must have felt exceptionally well personalized digital experience on expedia.com. It offers exclusive travel offers to users in real time by using their online interaction data, tracking search history and comparisons across its site.

Big Data and Predictive analytics is also enabling healthcare and medicine to be personalized for each individual by looking at genomics and genetic profile, data from digital health portals and fitness apps, wearable devices, biological information, telemedicine and at-home testing kits to identify the risk of disease in each individual, instead of solely considering things like age, blood pressure, and cholesterol levels. Helix, a genetic app store company is creating the first 'app store' for genetic information. Their idea is to collect a saliva sample from each person who buys the company's app, analyze the genes, and post the findings online so that other consumer apps can use this information to gain insights about personal health risks.thms to extract near to real-time insights on prospects, customers, products / services and competitors.

Let us get a detailed overview on how Big Data Analytics is automating personalization:

**Collect** - Keeping everything you know in a single platform: Big Data technologies can collect & store any type of data, no matter what it looks like or from which channel it is coming from, and converts it into single, scalable and secure data lake or warehouse.

**Segment** - Profile the information based on interests, demography, sentiments, buying patterns or any other context: Big Data solutions can parse huge amount of data available in various formats to make correlations, remove duplication or information silos and profile the entire data into actionable segments for data-driven decision making.

**Target** - Define highly impactful segments or use cases: Big Data solutions generate behavioural score, contextual information and predictive intelligence by processing entire data using semantic associations or Natural Language Processing based algorithms. This in turn helps decision makers to segment data based on analysis of behavioural and demographic profiles, historical communications, and preferences which results in identifying the quality segments that are likely to be targeted.

**Position** – Personalized solutions/services for each individual by applying personalization rules/ algorithms on individual profile: Companies today know their customers better than before but the key is to put all elements together and propose something that is more actionable, rather than just interesting. Marketing metrics and business rules embedded in to Big Data solutions enables sales and marketing professionals to predict outcome for each action and based on that they can define the distinct strategy for each segment or individual.

**Automate** - Execute robotic yet personalized engagements: With the use of machine learning algorithms and predictive analytics, Big Data based personalization engines now automate the process of making communications personalized across all digital channels. The results of personalization are then fed into algorithms to updates the personalization process and make it more effective.

## Summary

Big Data solutions empower enterprises to create compelling experiences for millions of customers online by combining data generated from out-of-the box enterprise portal, social, devices, web analytics and marketing automation solutions with defined or automated personalization rules to make real time and automated engagements at lower operational cost and higher accuracy.

The article is authored by Nupur Patel, Digital Marketing Manager & Technical Writer, CIGNEX Datamatics