Customer Analytics:
Deep Dive Into Customer Data

Shivinder Nijjer

https://orcid.org/0000-0002-0245-4263

Chitkara University, India

Devesh Bathla

https://orcid.org/0000-0003-3990-5934

Chitkara University, India

Sandhir Sharma

https://orcid.org/0000-0002-3940-8236

Chitkara University, India

Sahil Raj

Punjabi University, India

INTRODUCTION

Customer analytics is defined as "the use of data to understand the composition, needs and satisfaction of the customer. Also, the enabling technology used to segment buyers into groupings based on behavior, to determine general trends, or to develop targeted marketing and sales activities" (Gartner, 2021). The leading analytics firm across the globe, SAS, defines customer analytics as "the processes and technologies that give organizations the customer insight necessary to deliver offers that are anticipated, relevant and timely" (Gray, 2021). As per the figures of a report by Mordor Intelligence (January, 2021), the customer analytics market, currently valued at USD 3.74 billion, is expected to grow three times in a period of five years (by 2026), to a value of approximately USD 10.2 billion. The compounded annual growth rate will amount to 18.2% over the forecast period 2021 – 2026, as per this report. Proliferation and advancement of cloud-based tools will enable integration of customer related intelligence such as data storage, analytical models, applications, in addition to added computing power. This integration will in turn enable generation of better and unprecedented insights about customers, and that too in real time.

The report also says that currently the leading provider of customer analytics solutions is North America; while the leading players in the field are giants like Adobe Systems Inc., IBM Corporation, Oracle Corporation, and so on, who have made substantial investments in R&D and expanded their innovative capacities through mergers and acquisitions. It is interesting to note that Asia Pacific market is the region identified with fastest growth rate. The scope of customer analytics is huge as it has diverse applications in all industries irrespective of their sizes, or region of geographical operation. The firms which leverage on Big data and customer data are seen to grow massively and sustain their business (Palmatier and Martin, 2019). Further, the companies that have developed business models centralized on customer data have been one of the most successful and promising firms.

C

Loyalty of customers is highly questionable, and firms are debating globally whether there is a need to purse this aspect anymore (Deloitte, 2020). Irrespective of the industry of operation, dwindling customer loyalty is hurting profits of the companies. Primarily, globalization, more information accessibility, higher interactions among consumers, global reach are a few factors which leave a daunting impact on consumer's mind and ultimately make them fickle and less loyal. The only alternative available to the firms is to develop ways to understand their customers intimately, evolve their needs, and through this understanding help them grow thereby retaining them for company's growth. The basic point of emphasis is that for this intimate understanding, companies need to tap into all probable sources of customer data by leveraging on customer analytics.

It is also important to understand that there are many channels and sources generating data about customers which firms can tap into to gain insights about customer's mindset through the application of analytics. For example (Zaki, 2019), Zara uses big data to detect current fashion trends and dynamically adapt its supply chain to stay in tune with changing customer's fashion preferences. Similarly, the leading newspaper 'The Times' offered free content to its readers through its website. The Times tapped into the weblogs and clickstream data generated by online readers to develop unique reader profiles through application of descriptive analytics. This enabled them to better target advertisement and premium content based on preferences suggested by the digital profile. There are many such examples where analytics applied on unconventional customer data sources has provided competitive advantage to the firms. Every interaction with customers leaves a trail of data. Customer analytics drills into this trail to draw a wider and clearer picture of customer interaction enlisting everything from their product choices, preferences, reasons for purchase and need for interaction with the firm. They can be understood by analyzing and interviewing customer-facing employees. Social networks, weblogs, transactional data, journals, feedback and reviews, purchase history, demographic details, sensor data such as tracking eye movement, customer pathways, needs and preferences, channel preferences, payment preferences, and so on. All of these are diverse data sources from which information about a customer can be extracted. Advances in machine learning enables embedding analytics using multiple data points garnered throughout the consumer journey (Zaki, 2019), which provides a real time picture of consumer experience, compared with traditional methods like Net Promoter score or satisfaction surveys.

Customer analytics also comes in handy by catering to real time information needs of the customer (Mordor Intelligence, 2021). For example, recommendations generated by online shopping websites and tailored offers being displayed dynamically during product searches build loyalty of the customer. The emerging technological trends like Artificial Intelligence and Machine learning, Marketing 5.0 and digital transformation are also significantly changing the way of interaction and understanding a customer. Use of machine learning enables the firms to build a holistic picture of the customer. Cloud technologies enable integration of customer data, models and simulations at one platform, and thereby, reforming the reach to customers.

BACKGROUND

Definition, Concept of Customer data

When customers interact with the companies, they generate different data in varying quantities (Ahmed, 2020). For example, their interests, behavior, demographics, social media profiles are all tapped by the companies. Firms can leverage on these data to generate lots of customer insights and gain competi-

Related Content

Downside Risk Premium: A Comparative Analysis
Kanellos Stylianou Toudas (2021). *Machine Learning Applications for Accounting Disclosure and Fraud Detection (pp. 138-147).*
www.irma-international.org/chapter/downside-risk-premium/269139

Comparative Analysis of Various Soft Computing Technique-Based Automatic Licence Plate Recognition Systems
Nitin Sharma, Pawan Kumar Dahiyaand B. R. Marwah (2021). *Handbook of Research on Machine Learning Techniques for Pattern Recognition and Information Security (pp. 18-37).*
www.irma-international.org/chapter/comparative-analysis-of-various-soft-computing-technique-based-automatic-licence-plate-recognition-systems/279902

Power Consumption Prediction of IoT Application Protocols Based on Linear Regression
Sidna Jeddou, Amine Baina, Najid Abdallahand Hassan El Alami (2021). *International Journal of Artificial Intelligence and Machine Learning (pp. 1-16).*
www.irma-international.org/article/power-consumption-prediction-of-iot-application-protocols-based-on-linear-regression/287585

Predicting Daily Confirmed COVID-19 Cases in India: Time Series Analysis (ARIMA)
Sudip Singh (2021). *Machine Learning and Data Analytics for Predicting, Managing, and Monitoring Disease (pp. 34-51).*
www.irma-international.org/chapter/predicting-daily-confirmed-covid-19-cases-in-india/286241

Analysis and Implications of Adopting AI and Machine Learning in Marketing, Servicing, and Communications Technology
Priyal J. Borole (2024). *International Journal of Artificial Intelligence and Machine Learning (pp. 1-11).*
www.irma-international.org/article/analysis-and-implications-of-adopting-ai-and-machine-learning-in-marketing-servicing-and-communications-technology/338379