



Data Analytics in Consumer Finance Industry

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Use of Data Analytics in Consumer Finance Companies

What is Data Analytics? Broadly speaking, data analytics can be described as the process of collecting, analyzing and using data (related to demographic information, past behavior trends etc.) to better understand and predict behavior of existing and prospective customers for business decision making.

The common tools used to conduct data analytics range from simple cross tabulations and segmentation analysis to more sophisticated statistical methods like multivariate & logistic regression, discriminant analysis and cluster analysis. In the last few years optimization tools and machine learning algorithms like neural networks and genetic algorithms have also been used to perform advanced data analysis.

The recent years have seen increased use of data analytics in driving business strategies across various industries. While the data analytics methods have been extensively used in FMCG, Pharma and Telecom companies, their mainstay has been the consumer finance industry.

The wide scale applications of predictive Data Analytics started almost four decades ago in the form of credit scoring. These credit scoring models or scorecards were used to predict customer defaults. Today the FICO Risk score is the benchmark for credit decisioning process in the U.S, so much so that the 'Prime' and 'Sub Prime' markets are defined on the basis of this score. With the exponential increase in computing power and application of information technology in business processes, more and more data analytics techniques and statistical tools are now being applied for Marketing, Risk Management, Pricing & NPI functions in the consumer finance industry.

In India, its common for major banks and financial services companies to use Data Analytics to better manage their Credit Card, Housing, Personal & Auto loan and Insurance portfolios.

So why are businesses increasingly adopting the use of data analytics in their day to day working? Clearly because Data Analytics allows these firms to predict the behavior of existing and potential customers. Empowered with this information, the firms are able to devise suitable strategies to better manage their respective businesses.

On the Risk Management front, Data Analytics techniques can help a bank develop an approval strategy for its mortgage and auto loan applicants and also help to determine the optimal lending rate. The same techniques can help an insurance firm decide the premium for its policyholders. The data analytics techniques have been extensively used in the credit card businesses to decide on credit and cash line assignments and ongoing authorization and fraud detection activities. Data analytics is also effectively used in managing the collections functions of the consumer finance companies. Using statistical modeling, the companies are able to predict the likelihood of contacting a customer and chances of receiving a payment from him. This information is helpful in choosing the right collections strategies that optimize collection efficiency and effectiveness.

On the marketing side of things, the use of data analytics in the form of response models helps companies design and execute suitable cross sell, up sell, deep sell and retention strategies. In the long run, creative use of past customer data through predictive modeling helps companies in building powerful and effective analytical CRM platforms. These analytical CRM platforms allow firms to make suitable offers to its customers and optimize campaigns through email, direct mail, telemarketing and inbound call channels. Consumer finance companies in the United States, where the credit bureaus are fairly developed, use data analytics to evaluate the quality of consumer loan and insurance portfolios during mergers, acquisitions and securitization deals.

Now that we know what the benefits from data analytics are, the next question is what do companies need to do to effectively use data analytics. Experts in this field believe that to reap

the maximum benefits from data analytics, firms have to invest in the right technology, hire the right people and last but not the least develop standardized and robust processes of data collection, data retrieval, data analysis and strategy implementation. For example a company may invest in a separate analytics datamart to capture the relevant customer data. This data is mainly of three types: demographic, behavioral and contact information. While demographic data refers to information about customer characteristics like age, income etc., behavioral data includes information of customer's prior performance like response to past campaigns, transaction history and delinquency behavior. Contact information includes history of prior offers and contacts made to the customer.

Once the data mart is ready, the company needs to build efficient and robust systems for extracting and analyzing data from the data mart. After the required data analysis is completed and a suitable strategy using data analytics has been devised, it is important to ensure that strategies are implemented efficiently and accurately. The implementation of analytically driven strategies has been rather 'painful' process for most companies. However if the right IT infrastructure exists and process planning is rigorous then implementation can be accomplished with minimal disruption of business processes and with limited impact on the company's existing systems and resources. To facilitate easier and faster implementation, softwares that integrate with a company's work flow and account receivable systems to implement the risk and marketing strategies are now available. Campaign management packages, systems that enable easy execution and tracking of analytically driven targeted marketing campaigns are also being increasingly used by consumer finance companies.

After a particular business strategy (a new risk policy or marketing campaign) has been implemented, the companies need to measure the performance of the business strategy and make sure that the results can be tracked effectively for future use. The process of continuous designing, executing, and tracking allows companies to 'test and learn' about consumer behavior and optimal offer selections and thereby helps them gain a competitive edge.

The above process requires firms to make investments in technology- Database packages, Statistical Software, implementation platforms and reporting & analysis tools. Most of the major software companies have developed data mining and analytics softwares, however the use of specialized statistical software for predictive modeling and of reporting and analysis tools is common. In addition to the IT infrastructure, the companies need to hire the right people. A team of systems specialists and data analysts is required to develop and maintain efficient datamarts and robust implementation & analysis systems. To conduct data analytics, teams of econometric & statistical modelers and business analysts that can effectively perform strategic analysis and build predictive models need to be developed.

Major financial services firms in India have built internal data analytics and business intelligence teams of data analysts and statistical modelers that support marketing and risk management activities. A few independent third party data analytics companies that provide end to end data analytics solutions supporting consumer finance companies in India have also grown to a significant size in the last few years.

The market for consumer finance products is growing at a rapid rate in India. To seize this opportunity, new financial services firms are entering the industry and the existing banks are increasingly focussing on retail portfolios. The pressures to make high profits remain high in the face of increasing competition. For consumer finance companies, use of data analytics is no more a luxury but a necessity. Firms that invest in data analytics now will reap in the benefits for a long time to come.