It Takes More than Math and Engineering to Hit the Bullseye with Data

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ABSTRACT

Adopting algorithmic decision-making in a large and complex enterprise such as a Fortune 50 retailer like Target takes much more than clean, reliable data and great data mining capabilities. Yet data practitioners too often start with advanced math and fancy algorithms, rather than working hand-in-hand with business partners to identify and understand the biggest business problems. (Then teams should move onto how algorithms can be applied to those problems.) Another key step for data scientists at large organizations: ensuring that their business partners – the merchants, marketers and supply chain experts – have a baseline understanding of advanced models as well as the proper analytical support tools. Obtaining widespread buy-in and enthusiasm also requires providing a user-friendly interface for business partners with optionality and flexibility that allows the intelligence to be applied to the many varied issues facing a modern retailer, from personalization to supply chain transformation to decisions on assortment and pricing. This talk will explore effective practices and processes — the do's and don'ts — for data scientists to succeed in large, complex organizations like a retailer with 1,800+ stores, major marketing campaigns across multiple channels and a fast growing online business.

Author Keywords

Data science; decision-making; practices and processes; online business; data mining.

BIOGRAPHY

Paritosh Desai is the Chief Data and Analytics Officer at Target. He oversees the work of the Enterprise Data, Analytics & Business Intelligence (EDABI) team, while owning responsibility for enterprise data management and governance. Paritosh and his team are focused on creating value from Target's data assets across all enterprise functions. Under Paritosh's direction, Target has brought in a world-class team of data scientists, engineers and analysts who have created tools and data products that drive decision making across the company. The team's work includes technology that powers personalization capabilities – from product recommendations to ads – as well as IoT applications, fraud detection, supply chain optimization and demand forecasting. The team is also instrumental in creating test-and-measure opportunities for Target experiences, both in stores and online. Paritosh joined Target in 2013, with a background in designing and delivering data science based decision support systems using various advanced data science algorithms and web-scale technologies, primarily for the retail industry. He previously served as Senior Director of Data Science at Gap Inc., where his focus was on applying predictive models for analyzing and affecting customer behavior, inventory planning decisions, and personalization. Before this, he held senior roles at IBM-owned retail analytics firm, DemandTec. Paritosh holds a Ph.D. in Operations Research from Stanford University.