

IBM PROJECT-GLOBAL DATA SALES **ANALYTICS**

LITERATURE SURVEY

TEAM ID: PNT2022TMID35428

Global Data Sales Analytics

Reference paper: **Walmart's Sales Data Analysis - A Big Data Analytics Perspective**

Abstract and Figures

Information technology in this 21st century is reaching the skies with large-scale data to be processed and studied to make sense of data where the traditional approach is no more effective. Now, retailers need a 360-degree view of their consumers, without which, they can miss the competitive edge of the market. Retailers have to create effective promotions and offers to meet its sales and marketing goals, otherwise they will forgo the major opportunities that the current market offers. Many times it is hard for the retailers to comprehend the market condition since their retail stores are at various geographical locations. Big Data application enables these retail organizations to use prior year's data to better forecast and predict the coming year's sales. It also enables retailers with valuable and analytical insights, especially determining customers with desired products at desired time in a particular store at different geographical locations. In this paper, the data sets of the world's largest retailers, Walmart Store, have been analyzed to determine the business drivers and predict which departments are affected by the different scenarios (such as temperature, fuel price and holidays) and their impact on sales at stores' of different locations. We have made use of Scala and Python API of the Spark framework to gain new insights into the consumer behaviors and comprehend Walmart's marketing efforts and their data-driven strategies through visual representation of the analyzed data.

[https://www.researchgate.net/publication/328246040_Walmart%27s_Sales_Data_Analysis -
A Big Data Analytics Perspective](https://www.researchgate.net/publication/328246040_Walmart%27s_Sales_Data_Analysis_-_A_Big_Data_Analytics_Perspective)

Reference paper: **Six Patterns of Big Data and Analytics
Adoption: The Importance of the Information Architecture**

Abstract

IDC describes lessons learned from interviews and surveys of organizations engaged in Big Data initiatives and the patterns of adoption they have followed to expand existing or initiate new Big Data projects to create value for their organizations. The document highlights the importance of the Big Data architecture to drive improvements and innovation in customer interactions, operational efficiency, and compliance and risk management, among a wide range of business goals and desired outcomes. This white paper utilizes previously published IDC research frameworks such as the IDC Big Data and Analytics Opportunity Matrix and the IDC Big Data and Analytics MaturityScape

<http://audentia-gestion.fr/oracle/o-big-data-idc-256501-2603567.pdf>

Reference Paper: **Fostering B2B sales with customer big data analytics**

<https://www.sciencedirect.com/science/article/pii/S0019850118304656>

This study focuses on the use of big data analytics in managing B2B customer relationships and examines the effects of big data analytics on customer relationship performance and sales growth using a multi-industry dataset from 417 B2B firms. The study also examines whether analytics culture within a firm moderates these effects. The study finds that the use of customer big data significantly fosters sales growth (i.e. monetary performance outcomes) and enhances the customer relationship performance (non-monetary performance outcomes). However, the latter effect is stronger for firms which have an analytics culture which supports marketing analytics, whereas the former effect remains unchanged regardless of the analytics culture. The study empirically confirms that customer big data analytics improves customer relationship performance and sales growth in B2B firms.

Reference paper: **Using Enterprise Systems to Enhance Sales and Services Agility in Manufacturing Firms**

Published in: [2018 5th Asia-Pacific World Congress on Computer Science and Engineering \(APWC on CSE\)](#)

Abstract:

To manage customer ordering and sales services efficiently, sales forecasting and operations planning as well as order intake and return material authorization processes must be responsive and nimble in an enterprise. Organizations have implemented enterprise systems (ESs) to integrate their supply chain operations such as receipt of customer orders, planning of production and shipping of goods. This paper evaluates the management of sales and customer service processes in manufacturing firms using an ES and its information. Three case studies are conducted in manufacturing companies that have implemented ESs to examine how these systems support the management practices and strategies in sales and service operations. Findings suggest that ES tools assist in sales and operations planning, order execution and return material authorization processes. Though firms are sometimes constrained in materials supply with inability to procure parts timely, the underlying ES technology provides the analytical and knowledge-leveraging support in managing their sales and customer service processes efficiently.

