| RESEARCH ARTICLE

Fortune 1000 Companies Big Data Analytics Literature Review

Milankumar Rana
Department of Information Technology, University of the Cumberlands, Williamsburg, KY 40769, USA
Corresponding Author: Milankumar Rana, **E-mail**: mrana02098@ucumberlands.edu

| ABSTRACT

This research analyzes Walmart's significant facts analytics and commercial enterprise intelligence methodologies. The paper highlights both the employer's strengths and issues and makes pointers for adjustments to be made concerning deployment and renovation by conducting a literature overview of associated publications. In every business industry, massive records analytics is becoming increasingly famous worldwide. Walmart places a high precedence on using considerable facts to improve operations, making it feasible to optimize in-shop experience and forecast product trends, amongst other matters. Olaniyi et al. (2023) studies shed light on the significance of contemporary facts analytics techniques, including MapReduce and Apache Spark, for the accomplishment of large information projects. Engagement and sentiment are each encouraged through the content of social media. Using information from social networks can be beneficial in predicting income, but it also offers demanding situations. Combining enterprise intelligence with massive facts analytics enhances overall performance and decision-making accuracy. Even though Walmart's fulfillment in extensive records analytics is based on a data-driven lifestyle, security issues nonetheless want to be addressed. Olaniyi et al. (2023) observed that Fortune 1000 agencies put innovative solutions in force to improve their performance and the excellence of their client interactions; however, this usually requires a total amount of money. When it comes to maintaining a competitive advantage, investing in massive information analytics and business intelligence is necessary. Walmart's fulfillment in massive records analytics may be attributed to the employer's ethos of being statistics-pushed (Olaniyi et al., 2023).

| KEYWORDS

Fact Analysis, Enterprise intelligence, Information Analysis, Fortune 1000, MapReduce, Apache Spark, business intelligence, data-driven, Social Network

| ARTICLE INFORMATION

1. Introduction

Significant facts analytics is gaining popularity worldwide in all business sectors. Analytical solutions for tackling crucial enterprise issues combine business intelligence and extensive statistics for agencies. However, significant facts analytics have made giant investments in money, time, and human assets analytics to improve the subject. Olaniyi et al. (2023) highlighted the significance of the statistics era (IT) in 21st-century retail operations, as conventional strategies no longer suffice for statistics analysis. Research on ample facts analytics is lacking, regardless of the achievement of several groups.

2. What Walmart Does Right

In Bentonville, Arkansas, Walmart's Statistics Café is an analytics facility designed to accumulate, examine, and interpret large quantities of extensive statistics to enhance consumer stories. The agency improves client shopping reviews with massive statistics analytics and business intelligence technologies. Walmart gives apps like a wireless catcher, receipts, and Hadoop mapping software to applicable resources for customers to save and buy. In keeping with Olaniyi et al. (2023), The employer utilizes Mupd8

to acquire social media records for product advertising in shops and online. Walmart has different mechanism to fetch the data, they can use in store shopping data, online buying from customer these data are enough for Walmart to keep track of new and apply analytics. Also Walmart utilizes their customer application where people go to their website or use mobile app to search products and these help Walmart apply different algorithm to keep customer scrolling and shopping through their website (Olaniyi et al., 2023).

3. What Walmart does wrong

According to Reed, Walmart had many incidents in the past that leads to data security. In a recent data leak, there was incident reported in Canadian Walmart website where their data was leaked online widely in January 2021. This kind of security breach can lead to Walmart in legal scrutiny from government and their customers. Sometimes due to these security measures people lose interest in buying from online and so giving advantages to its's competitors (Olaniyi et al., 2023).

4. Suggestions

Author Olaniyi et al., 2023 have given four improvements for data analytics adoption and its usage and implementation. Walmart can hire more Data Scientist experts who can lead them to new height by leveraging existing data and applying big data analytics. Author Olaniyi et al., 2023 also suggest that Walmart should go on finding new tools and technologies to improve their analytics and set a new standard to compete with its competitor in a big way. They should also go heavy on their governance and security to gain trust for their investors and their consumers so that people can values its integrity. Walmart can also create some sort of transparency to their customers so that customers can put a faith on Walmart. Walmart should adopt new cloud technologies to store and use different products without managing it so that they can focus on achieving big data intelligence and perform well overall (Olaniyi et al., 2023). Author also advised that Walmart should put heavy weight on data security so that they can practice more with data without losing trust on data security. To achieve highest accuracy with their machine learning model they should fine tune their models. As author mentioned, Walmart has to improve their security standard to gain more investors and consumers trust, to achieve that they need to comply with government standards and best practice for governance and security (Olaniyi et al., 2023).

5. Literature Review

5.1 To achieve business success, it is important to understand and satisfy customers.

Walmart stores battle to gather and control relevant information for customer pride and inventory management, mainly to achieve a 360-degree holistic view of customers to compete and generate profits. The employer used Hadoop MapReduce, Apache Spark, and different tools for records evaluation and visualization to research ancient information and improve performance.

At several touchpoints, enterprise projections for destiny years offer widespread insights into customer alternatives. According to Olaniyi et al. (2023), The study's objective is now not mentioned. However, However, the approach quantitatively evaluates a 3–12-month dataset from forty-five retailers across various places, including weekly sales information and variables such as temperature, fuel charge, unemployment charge, and holidays that affect income. Apache Spark and its libraries were used to analyze the dataset and identify correlations between income and exact standards. The Spark square framework's Scala and Python APIs furnished insights into customer behavior and Walmart's information-pushed advertising activities. To create robust massive statistics plans, consider aspects like temperature, unemployment prices, gas expenses, and holidays (Olaniyi et al., 2023).

5.2 Big Data and Business Intelligence Techniques Impact on Social Media Marketing

Chun et al. observed that different feedback from customers for Toyota on their Facebook page helps them to improve direct interaction with customer as well as their services. The enterprise struggles with changing social media leads to sales and is investigating suitable enterprise intelligence techniques for social media advertising and engagement, in addition to comparing the load of social media advertising. Olaniyi et al. (2023) mentioned activity posted on online social media can help reach their customer individually about their concerns and resolve any issue they may have encountered to achieve better experience. No study questions have been created. Through searching the ideas provided by customers on their feedback sometimes help them directly to perform some extensive analysis to improve their products. Social media these days plays an important role for organization to get feedback easily and collect the data and market the company value in a different way to achieve more success (Olaniyi et al., 2023).

5.3 Using Big Data for Accurate Sales Forecasting

Boldt et al. in their research calculated the accuracy of Nike income using social media and Nike found a hard way with uninformed sales forecasts. Nike employs the AIDA income framework to improve income and profitability by using digital systems for knowledgeable choice-making, maximizing advertising efforts, and growing customer engagement. Nike had come up with alternative five methods that helped them to fine tune their models and achieve great accuracy with sales forecasting using online social media campaign. Using quantitative data from Nike's Facebook pages—daily likes, comments, and posts—as well as quarterly income data—reviewed prior economic reviews—the study Simple regression and a handful of regression styles were used using Social Set Visualizer (SoSeVi) to evaluate quantitative and historical secondary records. The research indicates that social community records can enhance sales projections (Olaniyi et al., 2023).

6. Research Questions

1) How can one variable on social media can decide about Nike Sales?

2) Nikes sales forecast was based on single social media post only, how could that be extended with different methods?

3) How trustworthy social media pages are that one can trust their data and run models to achieve accuracy?

4) How could query improve the accuracy?

5) in a cutting-edge technology, how good or bad is it to have rely on social media posts to rely on their accuracy?

7. Methodology

Olaniyi et al. (2023) investigated the combination of big records analytics with commercial enterprise intelligence and used many information analytics techniques; similarly, they used several approaches in the studies accomplished by using different lecturers. Examining the effect of variables, which include temperature, gasoline fee, unemployment price, and vacations, on sales, Singh et al. used a quantitative evaluation approach aggregating a 3–12-month dataset from forty-five shops. Rodrigues et al. extensively utilized a quantitative methods using multiplication and lexicon-based techniques to cause a good influence in industry. Among different gadgets for gaining knowledge of strategies, Naïve Bayes, SVM, and KNN have been carried out for emotional analysis. Chun et al. focused on verifying their idea via a quantitative examination of Facebook social media facts obtained. Said et al. conducted quantitative analysis of CEOs' 2019 sustainability outcome with quantitative responses are collected from question forums. Boldt et al. have performed the big data analytics from Nike's Facebook like, post and comments. Bogdan and Borza performed extensive research from the data collected from 2010 till 2019 and found an interesting statistic with the facts. SWOT and PESTLE are tools used to carry out qualitative research and, Maddodi and Krishna used these tools to find that customer involvement increases when social media posts are made. Sen et al. found that Microsoft has some good services that can be used for optimizing the resources and overall workload to improve efficiency. Ultimately, I carefully reviewed scholarly papers with an eye fixed on one-of-a-kind methods of studying commercial enterprise intelligence and extensive records (Olaniyi et al., 2023).

8. Data Analysis

The authors Olaniyi et al. (2023) implemented several strategies for information analysis. Apache Spark modules help in finding major variables in relations between data analysis and revenue forecasting. Apache sparks, Scala and python API have helped author to understand more about customer expectations and behaves and based on these data how Walmart can drive their marketing spendings and utilize it accordingly. Formerly knows Social Media Twitter, now X was used to monitor many aspects of real time data and actual behavior on this platform to perform different analytical and machine learning models. R and SAS Programming are used in analytical methods to analyze the customer and fans posts on different topics based on social media campaign, After performing binomial regression on their replies , it is observed that this post are useful for their social media campaign and increase customer traffic to buy products.

Moreover, the empirical information analysis of the 37 academic papers on meta-analysis found that Structural equation modeling and DICTION tools evolved using Hart 2000; stated et al. tested CEO claims for 2019 environmental audits. Furthermore, the Social Set Visualizer (SoSeVi) kept the employer's quantitative and archaic secondary information analysis safe inside the inspection. In this research paper different many research papers, social media and articles used to collect data and apply analytics tools to visualize the real time data to identify gap and find more insight related to customer behavior and usages.

9. Conclusion

Given that complex data analytics tools like MapReduce Apa, Spark, and many more allow collecting pertinent insights from vast amounts of data, they are essential. The outcomes of various scholarly articles spotlight numerous factors that should not be forgotten while developing compelling strategies for massive facts and maintaining a competitive edge. Similarly, content topics, mindset, social media interaction, and remarks are encouraged greatly via postings. In spite of the fact that it may provide fascinating data for sales estimations, particularly when looking at events associated to corporations like Nike, social network data presents challenges in relation to a few regressions and ideal multicollinearity. An organization's overall performance, customer tales, and subscriber numbers may all be improved with the utilization of business intelligence and substantial data analytics. Research emphasizes the relevance of its role in the development, insights, and informed decision-making processes of an organization. Walmart is a firm that makes significant investments in the utilization of large amounts of data in order to increase the efficiency of its operations. This includes the anticipation of product breakthroughs and the enhancement of in-store experiences. Walmart can achieve considerable statistical analytics with the assistance of an information-driven culture and the Records Café, which is part of the advanced infrastructure (Marr, 2021). The information leaks that occurred at Walmart (Reed, 2023) demonstrate how difficult it is to maintain both the preservation of facts and privacy. It is possible for inadequate security systems to have an impact on the accuracy of analytics, which can lead to disastrous outcomes such as legislative motions and damage to personal reputation. In the corporate world, success and innovation are defined by mass data analytics and enterprise intelligence. As a result, the combination of massive data analytics and enterprise intelligence has revolutionized decision-making for a number of companies. Keeping an aggressive side requires this properly. Many Fortune thousand businesses have used authentic processes and structures to cope with their big statistics troubles by adopting excellent practices and investigating innovative ideas; therefore, businesses can enhance overall performance, beautify patron stories, and recognize sustainable improvement. Massive data offers various problems, especially while storing and reading unstructured statistics, and keeping these considerable volumes of complicated statistics is challenging and calls for many attempts to dig through the statistics. Agencies must trade with the times to gain from huge statistics. However, the technique will eat extensive resources, especially for larger agencies like Fortune Thousand companies; if they are equipped to keep the marketplace management they experience, embracing massive records analytics with commercial enterprise intelligence remains an appealing investment.

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