

A Study on "Impact on Data Analytics in E-Commerce"

Samita Ramesh Babu and C.V. Suresh Babu

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

October 14, 2021

A study on "Impact on Data Analytics in Ecommerce"

Samita Ramesh Babu B.TECH, Department of Information Technology, Specializing in Cyber Security, Hindustan Institute of Technology and Science, Padur,Tamilnadu 18134001@student.hindustanuniv.ac.in

Abstract— Data analytics is that the science of integrating a spread of knowledge from a spread of sources, drawing conclusions, and making predictions to innovation, to realize competitive business enable profits, and to assist in strategic decision-making. Nowadays everything is available online at ease. Ecommerce is turning one of the booming businesses ever. Using Data Analytics to data drive large amounts of explicit data. Ecommerce is a platform between buyer and seller. It includes the manipulation and calculation of big data, often from a variety of different sources. Management and integration is done at high speed to identify patterns, interactions, and other useful information. Data analytics capabilities found to improve the use of data that can be collected and transmitted through regular purchases.

Keywords— COVID-19, Data Analytics, E-commerc

I. INTRODUCTION

E-commerce companies use the Internet selling products and services, increasing their income and rising Product Awareness.COVID-19 has had an impact on analytics companies can achieve

customers the tendency to buy on many digital platforms. The plague has it affect customer behavior, sales value, and everything a very moving chain. People often feel cheated at times online shopping has led to a dramatic change in the number of orders for various categories of goods such as groceries, health care, luxury, fashion etc. By using e-data improved purchasing pattern analysis, customer service success, predict future performance, focus more on shortterm and simplified payments made online. With the shutdown becoming a new norm, businesses and consumers are increasingly "going digital", providing and purchasing more goods and services online, increasing the e-commerce share of global trade from 14% to 17% in 2020. These and other findings are reflected during a replacement report, in which COVID-19 and E-Commerce: Global Review, developed by UNCTAD and eTrade for all partners, reflecting the dynamic transformation of the global and regional sector recorded in 2020. Pandemics have also proven a significant acceleration in OTT video.

Dr. C.V Suresh Babu Professor, Department of Information Technology, Hindustan Institute of Technology and Science Padur,Tamilnadu pt.cvsuresh@hindustanuniv.ac.in

II. LITERATURE REVIEW

A study has been conducted that Digital platforms have developed interest in more orientation with their skills to develop new technologies, models or methodology effectively and efficiently. Due to COVID -19 crisis, only technology and digital applications are included total loss and changed people's thinking living in their own homes, at the same time working without any the problem. Digital time that has changed the class lessons in classroom private lessons, portable cash in digi wallets, and office meetings at a video conference board room discussions.[Bhavna Galhotra, Ayushi Dewan 2021]. Jannach has said that means the advent of big data and data analysis creates new opportunities and ways to deal with challenges over time building an e-commerce website. It is also analyzed the ecommerce website under big data based on user data analysis, user behavior analysis, recommendation system, advertising, customer loyalty analysis and customer group classification using data analysis. In firms, policymakers should reduce regulatory uncertainty to support the development of new business models, e.g. The growing interdependent relationship between online and offline marketing strategies. Panic buying often leads to many needs as well medical supplies are purchased from retailers, and they severely limit or eliminate availability such as that individuals and vulnerable groups, including the elderly or the poor, are banned access to them as they usually do. As people panic during pandemic prefer to purchase necessary through online. In 2010, businesses and users retained quite 13 Exabyte's of latest data; this is often quite 50,000 data times in Congress Library. The potential value of personal location data is approx it is estimated at \$ 700 billion to eliminate users, and could lead to a 50% reduction in product development and integration costs, according to a recent McKinsey report. 140K-190K employees with "indepth analysis" knowledge will be required in the US; in addition, 1.5 million managers will need to be reading data.

III. CHALLENGES FACED ON E-COMMERECE

Electronic trading platforms face many challenges due to the global COVID-19 epidemic. COVID-19 has affected consumer purchasing trends on many digital platforms. The epidemic has affected customer behavior, sales value, and the most complete sales. Despite it is easy to

but it also has some disadvantage. For example, we pay for the product and it might not be delivered or service might be poor or sometimes it can be damaged too.

IV. DATA ANALYTICS IN ECOMMERCE PLATFORM

Data plays a huge role in online platform. Due different types of customization and many features it has become easy for people to choose what they want.

There are different categories through which data analytics has made E-commerce platform easier

- 1. Personlized Recommendation Engine- This gives recommendations on products or movies that we see. Based on the recent activities, interests through deep learning and natural processing language it provides recommendations, offers and makes our search easy.
- 2. Market Demand- Currently checks for the trends. Using Data insights, providing current demand. Based on Machine Learning it checks which products are bought and interests of people.
- 3. Generalized Recommendation Engine- It is recommended generally to all based on demand or any sort of clearance sale. For example products that are newly arrived or demanding or if the product is not moving. Similarly, in OTT platform where new movies are recommended to watch and also based on our recent activity it suggests movies or series to watch.
- 4. Customized Price- Fixing a price is an important factor. It is done using various models. Based on sales, demand, rates, forecast and seasonality. After foreseeing all these factors the price is fixed.

V. ANALYSIS OF DIFFERENT E-COMMERCE PLATFORMS

Amazon: It is one of the apps used by most people. Due to change in the COVID-19 outbreak has increased Amazon's global business in e-commerce, with Amazon reporting record \$ 75.5 billion sales in the first quarter of 2020. of products from the online food industry to entertainment products such as e-books, video, and games. As a result of rising forecasts and sales jumps, Amazon's prices have risen sharply. Now it risen over 1\$ trillion.

Flipkart : It is one of the widely used apps sales were hit due to Covid-19-related closures in India as in India as Flipkart sales declined in the second quarter ending June, 2020.Complete sales of Flipkart or GMV exceeded pre-Covid-19 during the quarter under review, Walmart's Sales globalization almost fell by 7% over 25 billion. Markets in Africa, the United States are also affected which have an impact on overseas business. Later in the year it has improved sales over 120% during pandemic.

OTT platform analysis. There are many OTT platforms for example Hotstar, ZEE5, Amazon prime, Netflix etc. More than 80% of the people use phones. COVID-19 Pandemic has caused a lot of panic, mental stress and many more. For entertainment movies, series are release through OTT platform. Many people watch through online platform and using data analytics it recommends based on the interest of the user. It is been at given at an affordable price. It also gives generalized opinion. It provides services and can watch anything anywhere. The account can be purchased just like mobile recharge it has many plans. It can be purchased online and it also gives remainder for every next payment.

VI. FUTURE SCOPE

Overall, Data analytics gives high performance as it handles a large amount of data. It provides significant growth and all transactions are made digital.

VII. ACKNOWLEDGMENT

Thanking all our Faculty members of our Department and our classmates and other anonymous reviewers for their valuable comments on our draft paper.

VIII. DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors and other reviewers.

IX. CONCLUSION

As the world is shifting to digital one. However traditional methods of services are safe and secure. Data Analytics helps is many ways such identify fraud payments, services, our interests etc. During COVID-19 it has helped a lot. E-commerce has proven to efficient and in future it has its scope.

X.REFERENCES

- A survey on impact of data analytics techniques in Ecommerce, K. Moorthi a , Gaurav Dhiman b,↑ , P. Arulprakash c , C. Suresh d , K. Srihari e, 28 October 2020
- Impact of COVID-19 own digital platforms and change in E-commerce shopping trends, Bhavna Galhotra, Ayushi Dewan,2020
- 3. Managing the effectiveness of e-commerce platforms in a pandemic, 2020 Sep 7.Lobel Trong Thuy Tran
- 4. E-commerce in the time of COVID-19,7 October 2020
- 5. Use of Data and Analytics to Drive E-commerce Growth in CPG Post-COVID, Jayant Pandit, 11/06/2021
- Predicting consumer product demands via Big Data: the roles of online promotional marketing and online reviews, <u>Alain Yee Loong Chong</u>, <u>Eugene Ch'ng</u>, <u>Martin J. Liu & Boying Li</u> 2015.
- T. Hameed, Impact of big data analytics on individuals and the South Korean big data analytics market, J. Inform. Technol. Case Appl. Res. 18 (3) (2016) 130– 140, https://doi.org/10.1080/15228053.2016.1220201.
- 8. The role of positive and negative valence factors on the impact of bigness of data on big data analytics usage Author links open overlay panel Maryam Ghasemaghaei
- 9. Flipkart sales exceed pre-Covid-19 level,says,Walmart, Digbijay Mishra 19, 2020

- 10. The Impact of the COVID-19 Pandemic on Amazon's Business, January 2021
- 11. Consumer Behaviour during Crises: Preliminary Research on How Coronavirus Has Manifested Consumer Panic Buying, Herd Mentality, Changing Discretionary Spending and the Role of the Media in Influencing Behaviour Mary Loxton 1, Robert Truskett 1, Brigitte Scarf 1, Laura Sindone 1, George Baldry 1 and Yinong Zhao 2,*,July 2020
- 12. Consumption of OTT Media Streaming in COVID-19 Lockdown: Insights from PLS Analysis , Garima Gupta, Komal Singharia 2021
- 13. Data Analytics in E-Commerce Retail, AshishTomar 2020