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Marketing analytics and its application in e-commerce industry: Amazon

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Abstract:

Global E-commerce Analytics market report provides key statistics on the state of the industry and is a valuable source of guidance and direction for companies and individuals interested in the market. The E-commerce Analytics industry development trends and marketing channels are analyzed. Finally, the feasibility of new investment projects is assessed and overall research conclusions offered.

The report focuses on the E-commerce Analytics market size, segment size (mainly covering product type, application, and geography), competitor landscape, recent status, and development trends. Furthermore, the report provides detailed cost analysis, supply chain.

Technological innovation and advancement will further optimize the performance of the product, making it more widely used in downstream applications. Moreover, Consumer behavior analysis and market dynamics (drivers, restraints, opportunities) provides crucial information for knowing the E-commerce Analytics market.

By analyzing data from multiple sources, ecommerce businesses can gain insights into how their store is performing, identify areas for improvement, and make data-driven decisions to optimize their online sales and marketing efforts.

The mode of shopping has transformed and with the advancement of technology, eCommerce has introduced users to continue shopping from anywhere in the world at any time. Technology has innovated the eCommerce industry and it has changed the trends of shopping and purchasing. Everyone is majorly dependent on mobile shopping and it has moulded customer

experience to change their needs. Data analytics has brought informational data to ensure stock availability, optimize price rates and predict risks, etc.

Key words: E-commerce Analytics- Analytics market size, segment size- **advancement of technology, eCommerce**

Introduction:

In marketing management, one of the most popular topics has been business analytics. The main forces behind business analytics are the growth in data volumes, the complexity and globalisation of businesses, and the accelerated decision-making of marketing managers and executives. To determine corporate decisions and related activities, business analytics use large data sets, statistical and quantitative analysis, explanatory and predictive models. Over the last ten years, business analytics has evolved from a theoretical idea to a practical application in a variety of industries, including retail, financial services, and telecommunication.

This project reviewed the ways in which business analytics in customer-specific predictive algorithms, the use of big data environments to analyse structured and unstructured data, the use of the newest system recommendations and other cutting-edge information technology tools in sales and services, and other factors have affected E-Commerce businesses and the retail industry. Ultimately, it was determined that E-commerce companies could only achieve sustainable success in the data science era if they integrated business analytics into their strategy and developed core capabilities. The benefit for consumers who don't purchase in person is increased.

Recommender systems are typically used to connect with clients online and help them locate the appropriate products at the appropriate time and location. Predictive analytics is used in marketing to predict customer behaviour before it happens. Marketers may be more proactive by using audience profiling data to predict customer preferences. This allows them to upsell items, build enduring relationships with customers, and identify market movements before competitors.

The purpose of the study is to evaluate how well retail analytics are used and used in order to analyse marketing mixes and identify any gaps in order to choose the mix that would produce the best sales. With the use of this framework/model, novice researchers would be able to do additional study across a variety of domains.

One of the expanding sectors that is seeing a lot of innovation these days is e-commerce. The e-commerce industry has transformed how businesses operate. This industry gained a lot of attention following the rise of the analytics field in the IT industry. A vast quantity of information is gathered through client accounts, internet purchasing patterns, loyalty programmes, credit card transactions, and other methods. The several facets of the e-commerce industry are discussed in this study. It describes how user analytics and data are used in the e-commerce sector. discusses how clients receive real-time information for newly announced products, personalised specials and promotions, and how one online retailer uses the data to develop a recommender engine that suggests products to its online customers. Every single bit of information, from your initial search to your ultimate buy and post-purchase experience, can be readily collected on an online platform. The project's goal is to identify every piece of information that a store may readily gather in order to enhance both customer service and business operations.
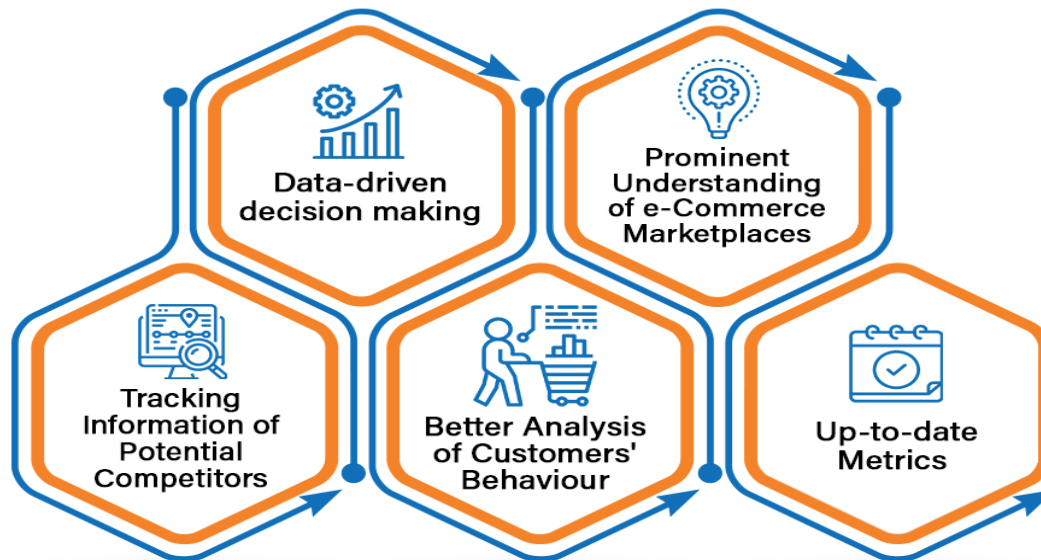
Figure 1.1 E-Commerce Analytics

The goal of this project is to better understand how Amazon, the industry leader in e-commerce worldwide, uses click-stream data and past customer purchase information to display personalised results on personalised web pages on their platform, giving their customers the best possible experience. Additionally, this study aims to understand the true attitudes of Indian consumers about internet purchasing. To this end, primary source data has been gathered. In line with my perspective, the study also includes recommendations and a conclusion that, in my opinion, would help business businesses.

Nowadays, the majority of individuals occasionally shop online using websites and portals. More people prefer to shop online than to make in-person product purchases. The number of Indians using online portals to make purchases is rising along with the country's internet user base. Online purchasing has become more feasible due to a greater choice of products, reduced price points, and more discounts. One such Seattle-based online retailer is Amazon.com. Cloud computing, digital streaming, artificial intelligence, and e-commerce are its main areas of interest. In February 2012, Amazon started as a retail website in India.

In e-commerce, data analytics is becoming more and more significant. Businesses can improve their inventory management, pricing strategies, marketing efforts, and decision-making by utilising data to obtain insightful knowledge about customer behaviour, preferences, and trends.
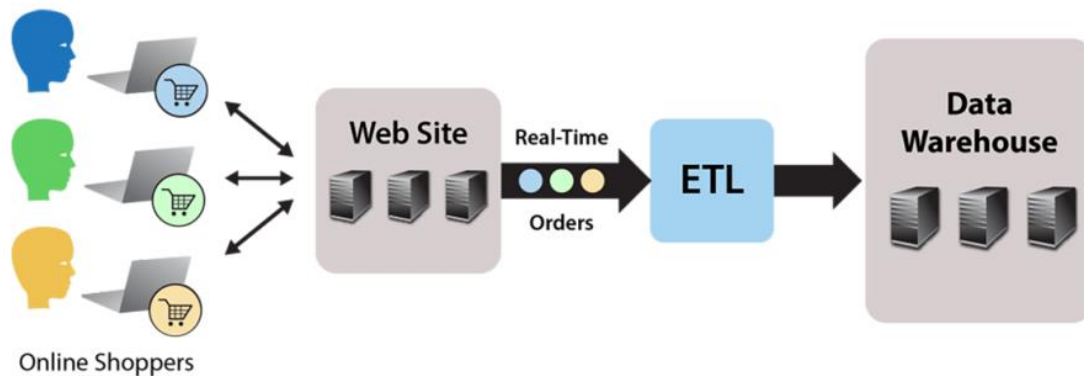

Figure:1.2 Business Analytics process

The e-commerce business is growing and innovating a lot these days. It has altered how business appears. A vast quantity of data is gathered in e-commerce. A person's name, contact information, and even card details are entered into an online platform. They put more money aside for future purchases. Not only does this website tailor a person's entire purchasing experience, but similar ones also store user preferences or previously viewed products. In this approach, the entire purchasing experience is made more unique and tailored to each customer. The purpose of this study is to determine consumer satisfaction levels with the company's services as well as the whole range of data-driven technologies utilised in the modern e-commerce sector. The percentage of people who genuinely favour internet purchasing over in-store shopping is what we are interested in knowing.

Objectives of the study

1. To study the functions supported by Marketing Analytics in E-Commerce Industry
2. To study the ways in which Big Data analytics are helping e-commerce companies
3. To find out trends prevailing in E-commerce industry in India and to identify all the possible data points an online retailer can collect and use

4. To study analytics tools and techniques that can be used to attain the objective of maximizing sales (market basket, recommender system, etc.)

5. To find how Analytics can be used to enhance Business and the Consumer Perspective towards Online Shopping

Hypothesis:

H01: There is no significant impact of Marketing Analytics in E-Commerce Industry business development

Ho2: There is no significant impact of Marketing Analytics in E-Commerce company consumer's satisfaction

Research methodology

A research design is regarded as the framework or study plan that aids in and directs data collecting and analysis. Research Design that is Descriptive A study using descriptive research aims to accurately portray the participants. To put it another way, the main focus of descriptive research is on characterising study participants.

Review of literature

Gupta (2021) in her paper "E-Commerce: Role of ecommerce in today's business", presents a far reaching meaning of internet business while detaching it from business. The paper enrols the different internet business models for example B2B, B2C, B2G and C2C, narratively breaking down the nitty grittiest of each. Rina (2016) also expounds the various utilizations of web based business in "Challenges and Future Scope of E-commerce in India", simultaneously, characterizing how much they are functional in the country.

Pandey and Parmar,(2019) expected To examine the variables influencing shopper's web based shopping behavior, The concentrate on results recommend that consumers 'online shopping conduct is being impacted by a few elements like segment factors, social variables, customer internet shopping experience, information on utilizing web and PC, web architecture, virtual entertainment, situational factors, working with conditions, item qualities, deals limited time plot, instalment choice, conveyance of products and after deals administrations assumes a significant part in internet shopping. Through " Problems and Prospects of ECommerce".

Raghunath & Panga (2013) present an expansive examination of various nuances of online business while featuring that, in present time every business development, be it publicizing, mentioning, portion, etc., can be acted in the mechanized organic framework. The paper moreover enlists different spotlights on the meaning of online business which are responsible for its improvement as the new show. It has engaged the creation and cheating of new business open entryways, all the while extending the say of clients in the progression of new things and organizations. Online business has not recently extended the show of internal business the leaders, yet, has moreover engaged better client associations by propelling a strategy that is essentially established on information sharing. The receptiveness of web accessibility and other electronic devices agent one more surprise.

Awais and Samin(2012) highlights comprehensiveness, low working cost, further created client participation and effective as the exceptional characteristics of e-commerce, but, at the comparable time accentuates upon the requirement for the associations to conform to the changing environment and improve ceaselessly to compose better commitments for clients.

Hand, Chris, (2019), The purpose of this study was to determine the variables that influence consumers' attitudes towards accepting and giving up on online grocery shopping. Determining the role of situational factors in the adoption of online grocery shopping was the aim of this study. A two-phase research design was used. To gain a deeper understanding of consumers' online grocery shopping habits, exploratory qualitative research was conducted first. The results of this research were validated by a large-scale quantitative survey, which expands on the findings of the qualitative research and confirms the significance of situational factors in initiating and stopping online grocery shopping. Based on a substantial category of conditions, cluster analysis is utilised to categorise customers. Both anecdotal and quantitative data show how situational considerations, like having a child or experiencing health problems, have an impact on the decision to start buying groceries online.

Hanus (2016), This essay's goals were to outline the conditions of online grocery buying and examine consumers' attitudes about making food purchases over the internet. This study made use of secondary data. The study discovered that consumers can purchase from a large selection

of national brands and stores via online grocery merchants, and there are no geographical or work-related limitations. He talked about how the biggest advantages of online shopping are time savings and convenience, but the biggest disadvantages for consumers are the possibility of misjudging some products and worries about choosing and handling perishable foods like meat, eggs, and vegetables.

DATA ANALYSIS AND INTREPRETATION

Question 1 Gender:

Table 4.1 Table showing the Gender of Respondents

Gender	Respondents	Percentage
Male	44	46.32%
Female	51	53.68%
Total	95	100%

Source: Data compiled from field survey

The above Table 4.1 shows that out of the total 95 respondents, 53.68% of the participants were women and 46.32% were male.
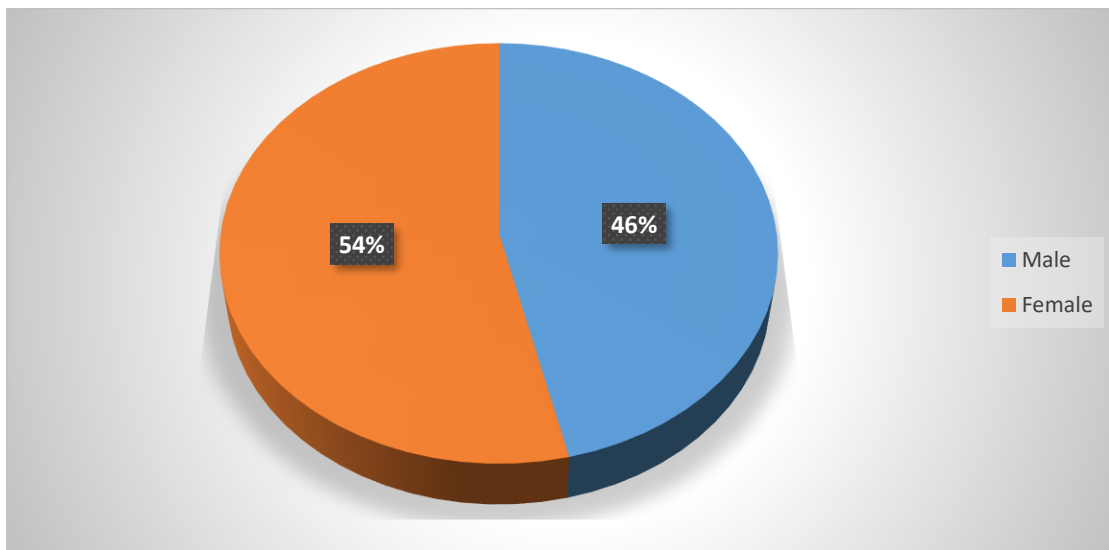

Figure 4.1 Gender details

Question 2 Age:

Table 4.2 Table showing Age of the Respondents

Age	Respondents	Percentage
20-30	86	90.53%
30-40	5	5.26%
40-50	3	3.16%
50 above	1	1.05%
Total	95	100%

Source: Data compiled from field survey

Interpretation:

The above table 4.2 show that out of the total respondents, 90.53% were between 20- 30, and 5.26% were between 5.26%, 3.16% were between 40-50, and only 1.05% were 50 above respondents were participated in the survey. Demographics (age and gender) data is collected along with Interests data which relates to interests that your users express through their online behaviour and purchases. It means that the majority of respondent who were participated in survey between the age group of 20-30.
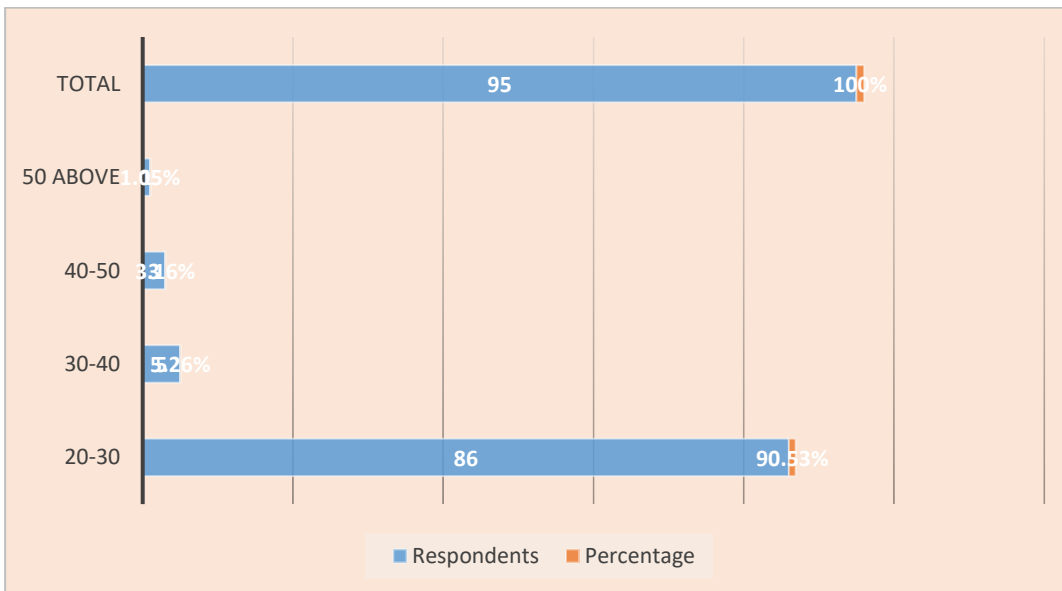

Figure 4.2 Age details

Question 3 Preference for online shopping

Table 4.3 Table showing the preference for online shopping

Preference of E-shopping	Respondents	Percentage
Yes	90	94.74%
No	5	5.26%
Total	100	100%

Source: Data compiled from field survey

Table 4.3 show that out of the total respondents, 94.74% preferred online shopping, or only 5.26% don't prefer it. It means that the majority of respondents preferred online shopping. Analytics plays a major role in streamlining the demand-supply chain. On the basis of parameters like demographics, geographies, festivals etc. analytics help eCommerce players in accurately predicting the demand for products. With this, the companies can effectively plan and manage their inventory to fulfill the customer demand on time and also appropriately coordinate with the merchant network for an effective supply chain management.
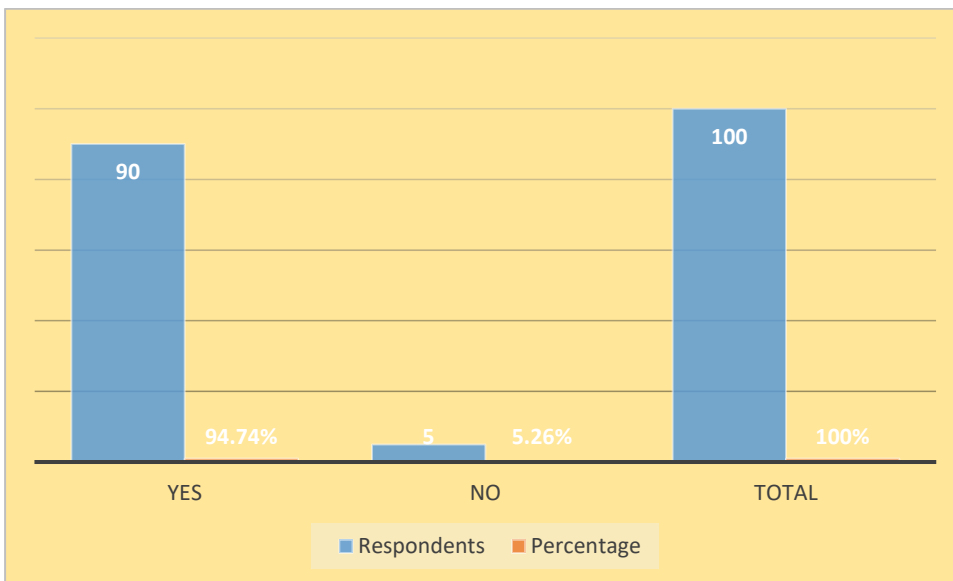

Figure 4.3 preference for online shopping

Question 4 Products Preferred in Online Shopping :(In this question people select more than one checkbox, so % are more than 100 and respondents are more than 95.)

Table 4.4 Table showing products preferred in E-shopping

Products	Respondents	Percentage
Grocery	36	37.9%
Electronic Goods	50	52.6%
Cloths	75	78.9%
Footwear	46	48.4%
Accessories	48	50.5%
Cosmetic Products	32	33.7%
Other (Bags and Furniture	2	2.2%

Source: Data compiled from field survey

The above table 4.4 revealed that the majority of respondents purchase Clothes. Electronic goods, Accessories, and Footwear are the second most preferred Products. It also shows that the majority of women buy Grocery and Cosmetic products. The other items that are sold in e-shopping are bags and furniture's.
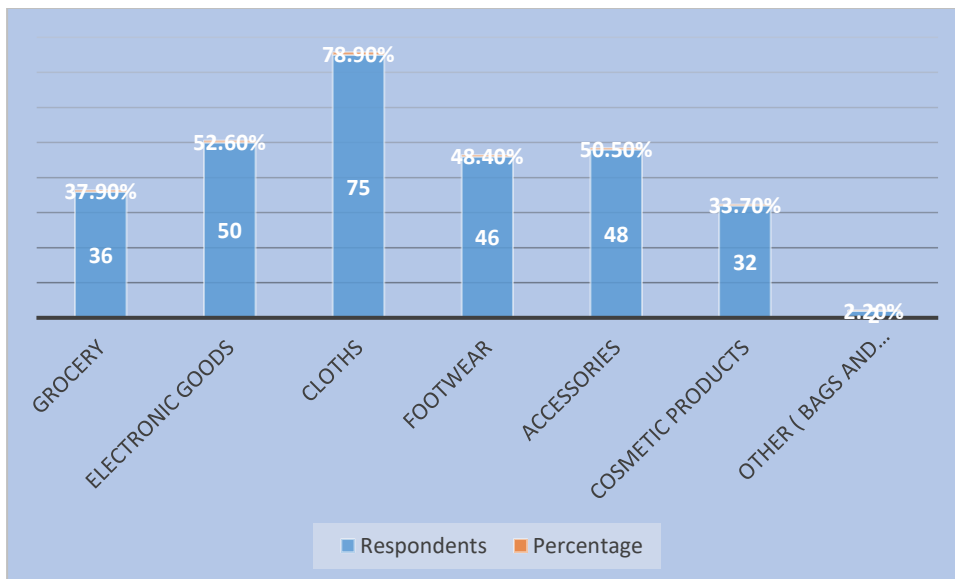

Figure 4.4 products preferred in E-shopping

Question 5 Most preferred E-shopping App and Sites :(In this question respondents select more than one checkbox, that's why % are more than 100 and total respondents more than 95)

Table 4.5 Table showing most preferred E-shopping App and Sites

E-shopping Sites	Respondents	Percentage
Amazon	80	84.2%
Big Bazzar	16	16.8%
Walmart Grocery	5	5.3%
Flipkart	79	83.2%
Big Basket	14	14.7%
Other (Mynta)	14	14.7%
(Nykaa and Purple)	4	4.21%
(Ondoor and Grofer)	3	3.15%
(Ajio)	2	2.2%
(Koovs and Symtten)	2	2.2%

Source: Data compiled from field survey

Table 4.5 depicts that the majority of respondents purchase product and services from Amazon and Flipkart. It means that Amazon and Flipkart are the most trustable brands. The increasing use of smartphones is creating a benchmark for brands to spend in mobile app Optimisation and build a target marketing strategy to enhance mobile shopper engagement, which leads to increased sales. Big Bazaar, Big Basket, Myntra are the second-most usable sites and app.
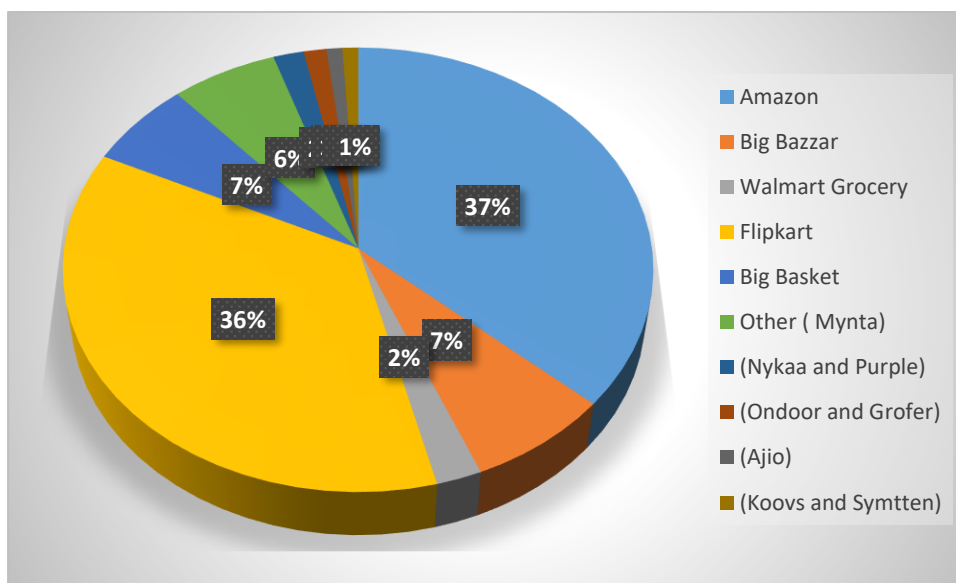

Figure 4.5 preferred E-shopping App and Sites

Question 6 How often respondents buy grocery products online?

Table 4.6 Table showing the frequency of e- grocery purchase

Options	Respondents	Percentage
Always	7	7.37%
Often	15	15.79%
Sometime	39	41.05%
Rarely	19	20.00%
Never	15	15.79%
Total	95	100%

Source: Data compiled from field survey

Table 4.6 depict that out of total respondents, 41.05% sometimes bought e- grocery, and only 7.37% of respondents were always buying e-grocery. It means that out of the total respondents, the majority of respondents sometimes buy online grocery. analytics help eCommerce players in accurately predicting the demand for products. With this, the companies can effectively plan and manage their inventory to fulfill the customer demand on time and also appropriately coordinate with the merchant network for an effective supply chain management. Business Analytics has been one of the most popular subjects in Marketing Management. The primary drivers of business analytics are the increase volumes of data, increased globalization & business complexity and increased speed of decision making for marketing managers & executives. Business analytics uses extensive data, statistical and quantitative analysis, explanatory and predictive models to derive business decisions and corresponding actions.
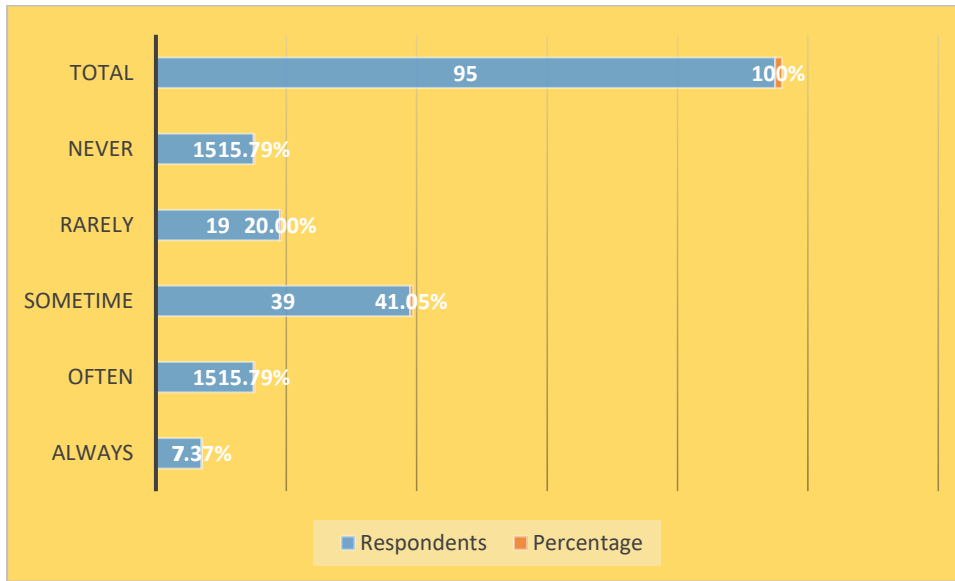
Figure 4.6 frequency of e- grocery purchase

Question 7 Buying grocery online is beneficial or not?

Table 4.7 Table showing buying grocery online is beneficial or not

Options	Respondents	Percentage
Yes	64	67.37%
No	31	32.63%
Total	95	100%

Source: Data compiled from field survey

Table 4.7 revealed that out of the total respondents, 67.37% agree with the statement that buying grocery online is beneficial, and 32.63% did not agree. It means that the majority of respondents think that buying grocery online is beneficial. The remaining respondent thinks buying grocery online is not beneficial because of factors like high price, wrong delivery, inability to touch and feel products. Business Analytics has been one of the most popular subjects in Marketing Management. The primary drivers of business analytics are the increase volumes of data, increased globalization & business complexity and increased speed of decision making for marketing managers & executives. Business analytics uses extensive data, statistical and quantitative analysis, explanatory and predictive models to derive business decisions and corresponding actions.
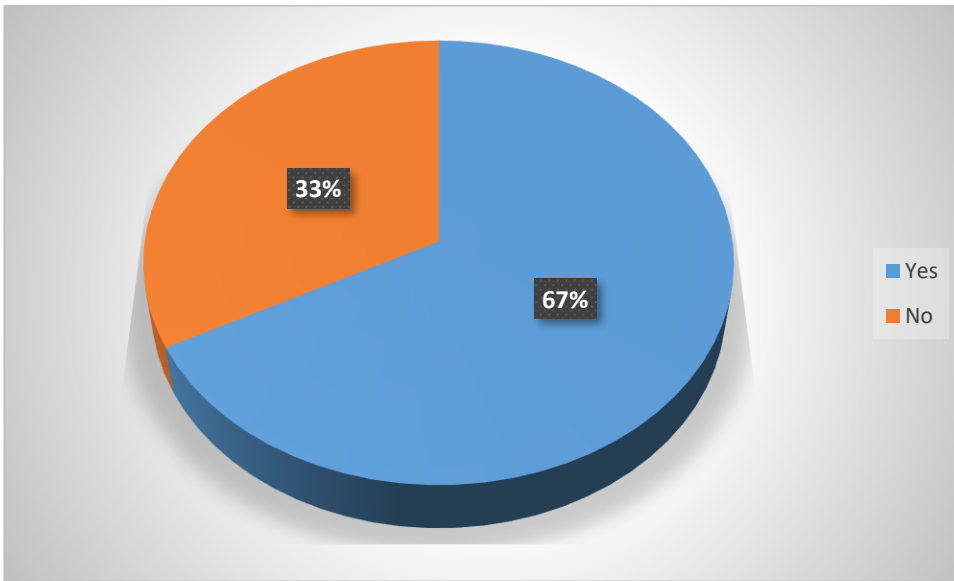
Figure 4.7 buying grocery online is beneficial or not

Question 8 Which factors are most important to consumers while buying grocery online: In this question respondent, select more than one checkbox, that's why % are more than 100 and respondents are more than 95.

Table 4.8 Table showing which factors important to customers while buying e-grocery

Factors	Respondent	Percentage
Price	63	66.3%
Delivery Time	54	56.8%
Customer Service	36	37.9%
Speed	24	25.3%
Freshness	61	64.2%
Time saving and quality	2	2.2%

Source: Data compiled from field survey

Table 4.8 show that freshness and price are the most significant factors for customers while making an e-grocery purchase decision. Delivery time is the second important factor after customer service and speed. It means that all the above factors are important while making an e-grocery purchase decision. Customer now a days are always in a search of innovative

products. Innovation can be either in product, place, promotion and even price. Now it's easier to enter to a new market and one can evaluate his/her product and company's performance. According to the research findings, the largest obstacles to business analytics are inadequate staffed and trained professionals, followed by data size quality challenges including market competitiveness.
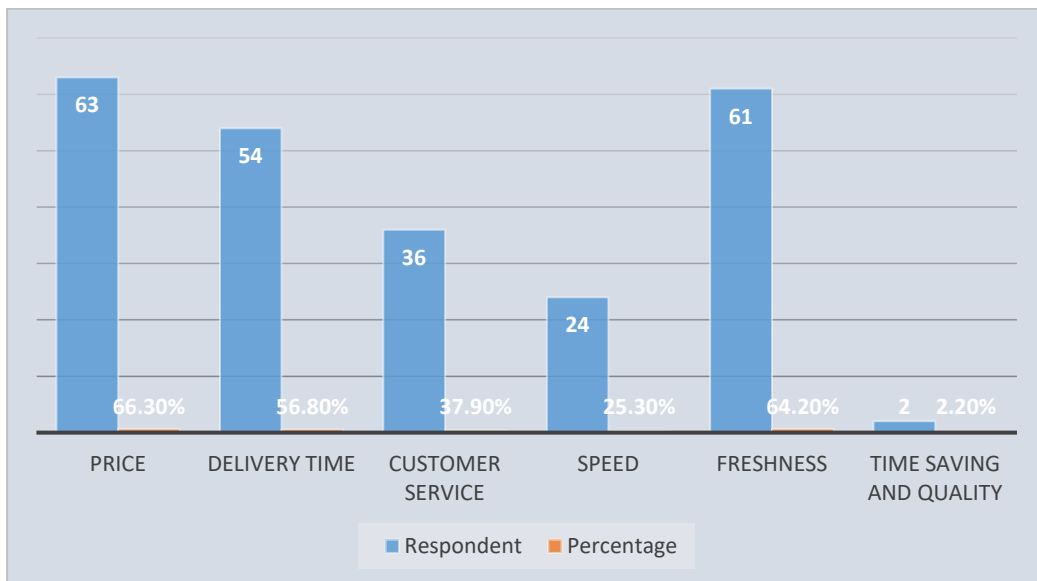

Figure 4.8 factors important to customers while buying e-grocery

Question 9 How likely would you be to buy e-groceries and have delivered if there were annual membership fee but not delivery charges?

Table 4.9 Table showing how likely consumers buy e-grocery if there were annual membership fee but not delivery charges.

Options	Respondents	Percentage
Very likely	12	12.63%
Likely	41	43.16%
Neither likely nor Unlikely	23	24.21%
Unlikely	16	16.84%
Very Unlikely	3	3.16%
Total	95	100%

Source: Data compiled from field survey

Table 4.9 show that the majority of consumers likely to purchase grocery if there were annual membership but not delivery charges. Consumer data protection is one of the major challenges as consumers are concerned about how their personal information is being used in the external world. To analyze data by collecting data from multiple sources is also a big challenge. Fraud detection during hawking ecommerce website is a major challenge again.
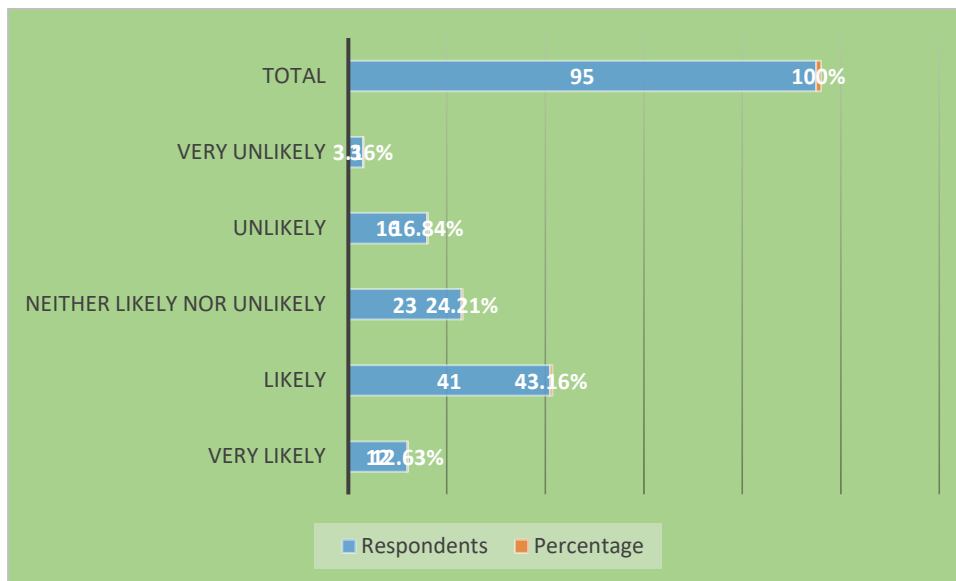

Figure 4.9 Consumers likely to purchase grocery

Question 10 Is online grocery shopping is costly than offline shopping?

Table 4.10 Table showing e-grocery shopping costly than offline shopping or not

Options	Respondents	Percentage
Yes	35	36.84%
No	60	63.16%
Total	95	100%

Source: Data compiled from field survey

Table 4.10 depict that the majority of the respondents agree that buying grocery is not costly. It means that out of the total respondents the most of the respondents believe that buying grocery online is cheaper than offline grocery shopping. Since the emergence of Business

Analytics, a lot of E- commerce firms begin to expand their business to analytics. Some famous E-commerce businesses such as Amazon, Flipkart, e-Bay have involved in analytics in their long-term strategies. Google Analytics is a web analytics service offered by Google that tracks and reports website traffic, currently as a platform inside the Google Marketing Platform brand. Question 11 Online shopping offers great discount and rewards.

Table 4.11 Table showing online shopping offers great discount and rewards

Options	Respondents	Percentage
Strongly Disagree	1	1.1%
Disagree	3	3.1%
Neutral	36	37.9%
Strongly Agree	8	8.4%
Agree	47	49.5%
Total	95	100%

Source: Data compiled from field survey

Table 4.11 depict that the majority of the respondents agree with the statement that E-shopping offers discount and reward. Out of the total respondents, 37.90% neither agreed with the statement nor disagree. And, only 1.10% and 3.10% did not agree with the statement. E-business has grown dramatically during the last two decades. The Internet has provided companies with access to new markets and customers. And customers have found e-business an effective way of researching and purchasing products/services. Things have constantly changed since e-business emerged and will keep changing in the future.

Table 4.18 The Customer satisfaction: Purchase process of the E-Commerce companies

Factors	Mean	SD	CV (%)
Product quality	4.52	0.65	14.4
Attractive offers	4.42	0.68	15.4
Pricing	4.36	0.65	14.9
Financial options	4.67	0.62	13.3
Quick & Efficient booking process	4.52	0.78	17.3

Delivery of the product or service	4.54	0.72	15.9
Satisfaction	4.65	0.70	15.1

Source: Data compiled from the field study   CV (%) : Coefficient of variation (%)

The descriptive statistics for variable purchase process in respect of the Product quality, different offers, pricing, financial options, booking process effectiveness, Delivery of the product or service and satisfaction. The customer satisfaction towards the purchase process through E-commerce in Amazon and Flipkart companies has proved to be good for retaining more number of customers. The coefficient of variation (%) indicated that it ranged from a minimum of 13.3% for the different financial options to a maximum of 17.3% for the quick and efficient booking process factor.

Customers today have numerous options to buy what they desire. Even a single unpleasant experience for them can trigger a negative mind for the company and they might never come back. For companies to sustain, they have to ensure an effective customer care service is in place. Analytics can help companies with intelligent data on complaints, chat requests, on-call support services to make their service desk more competent and user-friendly.

Ho2: There is no significant impact of Analytics in E-Commerce company consumer's satisfaction

Table: 4.19 The Customer Satisfaction: Loyalty of E-Commerce firms

Factors	Mean	SD	CV (%)
Preference for online purchases	3.95	1.06	26.8
Price and discount offers	3.86	0.85	22.0
Product Choice	4.21	0.92	21.9
Brand Image	4.22	0.87	20.6
After sale service	4.42	0.84	19.0
Performance	4.52	0.86	19.0
Responsiveness	4.62	0.81	17.5
Reliability	4.62	0.96	20.8

Source: Data compiled from the field study   CV (%) : Coefficient of variation (%)

The mean, standard deviation and coefficient of variation (%) values of different factors for deriving the customer satisfaction viz., preference for online purchases, product choice, brand image, after sale service, performance, responsiveness and reliability. The customer satisfaction towards the loyalty aspects in the E-commerce companies indicated that the preference for online purchases is a highly improved source for the E-commerce companies, followed by price discounts wide choice, brand image, after sale service, reliability etc. were also found to be significantly influencing the performance of the E-commerce companies. The coefficient of variation (%) which is derived as a ratio of standard deviation and mean for each factor ranged from 17.5% for responsiveness to a maximum of 26.8% for the preference for the online purchases made by the customers.

Results of Test of Hypothesis:

H01: There is no significant impact of Marketing Analytics in E-Commerce Industry business development	Null Hypothesis Rejected
Ho2: There is no significant impact of Marketing in E-Commerce company consumer's satisfaction	Null Hypothesis Rejected

Findings, suggestions and conclusions

Using analytics, eCommerce players can study and evaluate the buying patterns of their customers and leverage this business intelligence to fine-tune their marketing strategy. Armed with the customer information, they can curate offers that suit their target audience. This can help tremendously in the up-sell or cross-sell of products. Companies also integrate analytics with their CRM and send very personalized and specific offers to the customers that trigger a buying need in the customer's mind.

Key Findings:

This study has conducted in Hyderabad City among 95 respondents. The above-collected data, in this study, observes that young people falling between the age group of 20-30 years are more likely to purchase online.

This study finds that the majority of respondents prefer Amazon and Flipkart as a primary platform for online shopping.

This study also finds that the majority of respondent think buying groceries online is

beneficial than buying groceries from the offline store, and it is also cheaper than offline shopping.

The above-collected data also revealed that price, delivery time, freshness, quality of products, speed, time-saving, etcetera are the most significant factors for consumers while making an online grocery purchase decision.

In the above-collected data, one condition is given to the respondent (if there were annual membership fee but not delivery charges, how likely would you be to buy groceries online) majority of respondents likely to accept the situation.

Conclusion:

The Indian electronic commerce market has experienced significant growth over the last two decades. The two key causes of this are increased use of internet access and cell phone penetration. Furthermore, the increase in acceptance of internet purchases, as well as favourable demographics, have altered how businesses connect, engage, and conduct business with consumers. It has changed the way India's e-commerce industry operates. As the Internet continues to play a significant role in connecting information and individuals, the demand on markets that have already adopted online services, especially markets where selling goods online is new, has increased.

This study mainly focused on understanding what factors influence consumers buying behaviour to shop groceries online. This study also tried to determine the most preferred e-commerce app and sites. It also studies the impact of e-commerce on consumer buying behaviour. This study also determines online grocery shopping is beneficial or not. The last objective of this study is to identify which model of payment prefers more for online shopping.

In this study, to collect primary data, a questionnaire method was, employed in Hyderabad City among 95 respondents. The findings of this study found that factors like time-saving, quality, speed, customer services, variety of products are the factors that influence consumers to shop grocery online. It also revealed that the majority of respondent think that buying grocery online is beneficial. This study found that Amazon and Flipkart are the most

preferred e-shopping sites. The above-collected data depict that majority of respondents preferred cash on delivery as a mode of payment for online shopping, most of the consumers think e-commerce platform provides payment security. This study also finds that inability to touch products, poor return policy, wrong delivery of products, etcetera are the prime disadvantages of online shopping, may this are the reasons that most of the consumers hesitate to shop online.

Consumer buying behaviour should continuously be studied because with the change in technology consumers behaviour also changes. It also helps the firm to understand consumers behaviour in a better way.

E-commerce is a sector which has been growing over the years. It is also one such industry which infect is going to grow immensely over the years. Surprisingly, the industry has also flourished in India and has spread the roots all over the country. This research has brought front many aspects which will help the company's grow their business. The very first being, Brand name has a lot of importance in this country. If the brand is well established and has a lot of network the trust people have in the brand increases automatically.

The second thing that was discovered was maintaining customer relationships becomes equally important while building the brand. Even though people prefer to shop from a physical store, they equally perhaps enjoy the discounts more that the e-commerce sites have to offer. Along with the discounts, people also enjoy the wide range of products, they like that they don't have to travel anywhere to shop, personalized emails, offers and easy payment. These are some reasons which incline people more towards online shopping.

Social media advertisement also plays a vital role in attracting the youth towards the sites. Majority of the people who were a part of the audience agreed to have clicked an advertisement. Many have agreed that they have purchased an item from and advertisement, or even a system recommended product. These methods help to convert potential customers into consumers.

One more thing that came up in the analysis of the research was that people also prefer to shop online due to easy payment, but yet they fear or have doubts while doing online

transactions. Many people are aware that their card details do get saved and can be later be pulled up by the companies. Some of the other fears/ doubts/ issues that the consumers have is that they fear buying online because they could get something different than what they ordered, return of refund policy, high shipping costs, additional chargers etc. This proves that there are some aspects which need to be changed other than which E-commerce is still at height, but by gaining more customer trust they can acquire more customers.

Online shopping in India has changed drastically. The number of people that love to shop online have increased over the past few years and the number is still increasing. More and more people are shifting their preference from traditional shopping methods to online shopping, but still there are lots of people who prefer both the methods. In this research, it has been found that there is a relation existing between gender and mode of their shopping preference (online, offline and both equally). Most of the male participants prefer to shop online but female still like both the methods of shopping.

During the research, we also identified the major source of customer data and how easy it is for online merchants to collect customer data. We have seen the importance of mining correct information from the available data for better decision making for business growth.

Around 33% of people prefer to pay using their card and 42% have saved their card details in their online shopping account or website. Online retailers use customer's card details and transaction data to learn more about their customers. Information about their purchase behaviour, lifestyle of the card holder, and what services and goods he / she likes can be easily obtained which can be used for clustering the customer base or target individually.

In this study, it has been observed that 75% of the people usually prefer to buy accessories from online stores, followed by electronics items which is 66% of the people. Popularity for electronics items has increased over the years, since online retailers began selling exclusive items on their online stores like mobile phones, Health bands, etc. Using the same strategy for clothing's and other items may attract customers to purchase exclusive items online.

In a country like India, where people are less confident in making digital payments; there is always a high expectation among the customers for good quality products at very low prices, brand name matters the most. This study has also seen that people are more loyal towards selected ecommerce brands i.e. Amazon, Flipkart and Myntra. And less towards Club Factory and E-bay due to negative feedback about fake product delivery.

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