A
Project
Report On

"A study of e commerce analytics"

Submitted to
KCES's COLLEGE OF ENGINEERING AND MANAGEMENT,JALGAON

Affiliated to
KAVAYITRI BAHINABAI CHAUDHARI NORTH MAHARASHTRA UNIVERSITY, JALGAON

In partial fulfillment of the requirement for the degree of
MASTER OF BUSINESS ADMINISTRATION

Submitted By

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Guided By

PROF .Digambar sonawane

DECLARATION

Mr. Mitesh Sanjay Sonawane hereby declare that the project report E –Commerce Analytics Special Reference Tushar patil written and submitted by me to the Kavyitri Bahinabai Chaudhari North Maharashtra University, Jalgaon in partial fulfilment of the requirement for the award of degree of Masters Of Business Administration (MBA) under the guidance of PROF. is my original work except the topics on organizational profile and the conclusion drawn therein are based on the material collected by myself.

Place: Jalgaon

Mitesh Sanjay Sonawane
MBA (Business analytics)

<u>ACKNOWLEDGEMENT</u>

I would like to express deep gratitude to my project guide Prof. Digambar sonawane ourresearch guide, for his patient guidance, enthusiastic encouragement and useful critiques for this research work.

I also like to thank our Head of the Department, Prof. Harsha Deshmukh. Without her valuable guidance the completion of this project would have been an immensely difficult task.

I am thankful to the Tushar patil for permitting us to conduct survey in their extreme organizations.

This project has been a great learning experience for us and we would like express our gratitude towards all the people who have guided us throughout and without that guidance and support this project would not have been completed successfully.

Finally, I wish to thank our family and friends for their support and encouragement throughout my study.

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Thank you.

Mitesh Sanjay Sonawane

</div>

Executive Summary

E-Commerce is one of the growing industries which is under a lot of innovation these days. The e-commerce market has changed the way of doing business. This industry came under a lot of limelight after the emergence of Analytics field in IT world. Huge amount of data is being collected using the customer accounts, online buying behavior, loyalty cards, card transactions, etc. This project talks about the various aspects of E-Commerce Industry. It explains the use of the user's data and analytics in the E-Commerce industry. Also explains how an online retailer uses the data to build a recommender engine that suggest products to its online customers, how customers get real time updates for a newly launched products, customized deals and promotions.

In an online platform, every single piece of data from your search till your final purchase and after sales experience, can easily be captured. Aim of this project is to find all the possible data points that a retailer can easily collect to improve its business and user experiences. This project will focus on the global leader of E-commerce industry, i.e. Amazon, to know how the retailers use the click-stream data and historical purchase data of customers for showing customized results on customized web pages on their platform, in order to provide their customers best experience with their services. Also, the objective of this research is to know the real customers' perception towards online shopping in India which have been done in this research by collecting data from primary source. The report additionally consists recommendations and conclusion in keeping with my point of view, which I assume would improve the business enterprise
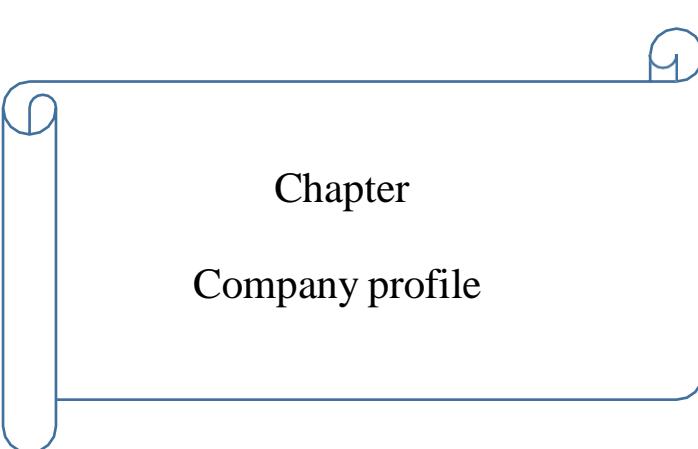
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Chapter

Introduction

Introduction

Most of people today use online websites and portals to shop at times. People prefer to shop online more rather than going out personally to buy products. With the increase in internet users in India, number of people using online portals to buy products is also increasing. With more discounts, lowered price range and increased variety in products, the scope for online shopping has increased vaguely such online shopping site which is based in Seattle. It focuses on E-commerce, Artificial Intelligence, Digital Streaming and Cloud Computing.

E-commerce as industry has a lot of growth and innovation these days. It has changed the look of business. Huge amount of data is collected in e-commerce. An online platform takes in a person's personal data like name, contact details and even card details. They save it further for future purchases. Not only this website, like these also save preferences or viewed products and personalise the whole shopping for an individual. This way the whole shopping process becomes more personalized and catered to each person individually.

The aim behind this research is to find out how satisfied customers are by the services provided to them by the company and what all data driven technologies are used in today's ecommerce industry. We want to know the rate of people who actually prefer shopping online more than real time shopping.

Chapter

Company profile

<u>Company Name:</u> Mudra Solutions .

Vision: "To be the leading innovator in the IT industry, driving transformativesolutions that empower businesses and individuals to thrive in a connected world."

Mission: "Our mission is to deliver cutting-edge technology solutions tailored to the unique needs of our clients, leveraging our expertise in software development, data analytics, and digital transformation to create measurable value and sustainable growth."

Values: "We are committed to integrity, excellence, and collaboration, striving to exceed expectations, inspire innovation, and foster lasting partnerships that drive success for our clients and our team."

Services ;-

1. Web Development is our passion :-

Integration :-

Website development is a multifaceted and complex task. Thanks to professional experience and a broad portfolio of more than 200 completed projects, our webmasters will be able to implement any idea, translate it into structural and adaptive code, and then integrate it into the work. The company's programmershave the

widest skills list and able to manage the most innovative techniques to work in almost all development environments.
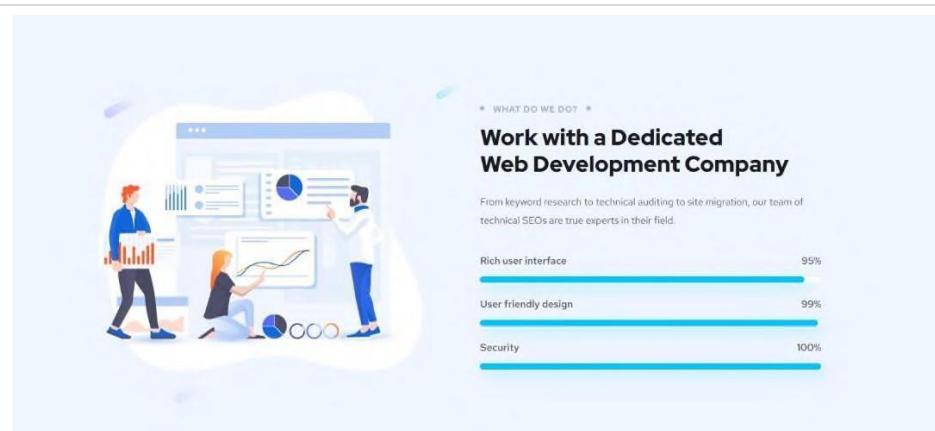

Image no. 1

Web Development is our passion

Development :-

Our projects are true masterpieces and a high-quality guarantee — ones made at the sharp peakof technological progress. Code virtuosos and information presentation wizards will create the

presentation for your business that it truly deserves — bright, colourful and attractive, withclearly placed accents on important details and nuances.
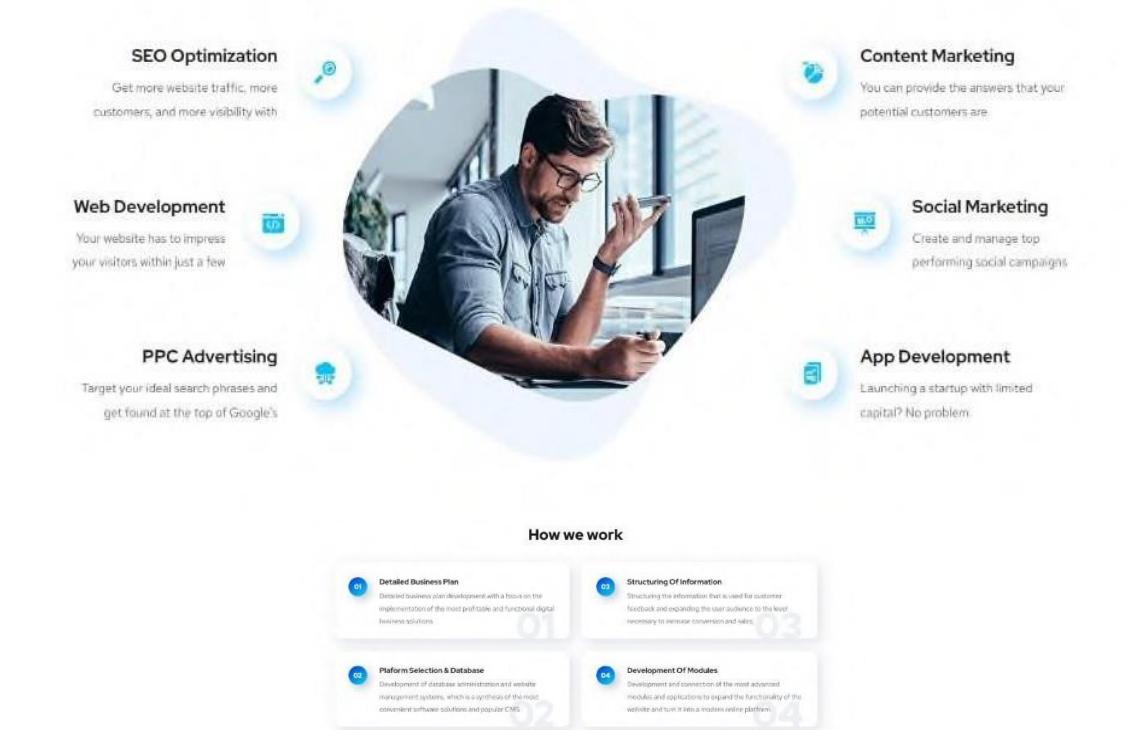
2. Search Engine Optimization :-

Image no.2
Search Engine Optimization

3.Content Marketing

Image no.3
Content Marketing

4 . Pay-Per-Click Advertising Management

Onum is a leading PPC agency that focuses on your success as a whole. Whether you want to increase conversions, traffic to your website, or both, our PPC management services can help you reach your goals. With hundreds of campaigns managed and a client retention rate of 91%, Web FX is the choice for PPC services**.**
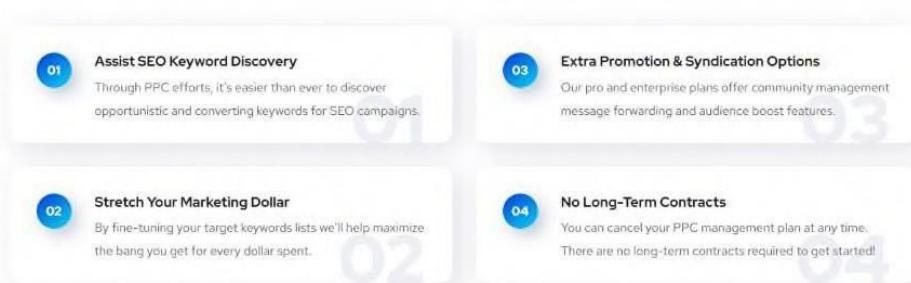

01 Assist SEO Keyword Discovery
Through PPC efforts, it's easier than ever to discover opportunistic and converting keywords for SEO campaigns.

03 Extra Promotion & Syndication Options
Our pro and enterprise plans offer community management message forwarding and audience boost features.

02 Stretch Your Marketing Dollar
By fine-tuning your target keywords lists we'll help maximize the bang you get for every dollar spent.

04 No Long-Term Contracts
You can cancel your PPC management plan at any time. There are no long-term contracts required to get started!

Image no .4
Pay-Per-Click Advertising Management

5. Social Media Marketing & Management Services

01 Improve SEO Rankings with Social
Top ranking sites consistently use social media to encourage and improve upon their search visibility.

02 Our Writers are US Based Professionals
Many affordable social management companies outsource the writing to foreign countries. We don't!

03 Extra Promotion & Syndication Options
Our pro and enterprise plans offer community management message forwarding and audience boost features.

04 No Long-Term Contracts
You can cancel your social marketing plan at any time. There are no long-term contracts required to get started!

Image no.5

Social Media Marketing & Management Services

With a custom social media marketing service plan, your business can start building brand awareness, as well as generating revenue from social media platforms like Facebook, Twitter, LinkedIn, Instagram, and more.
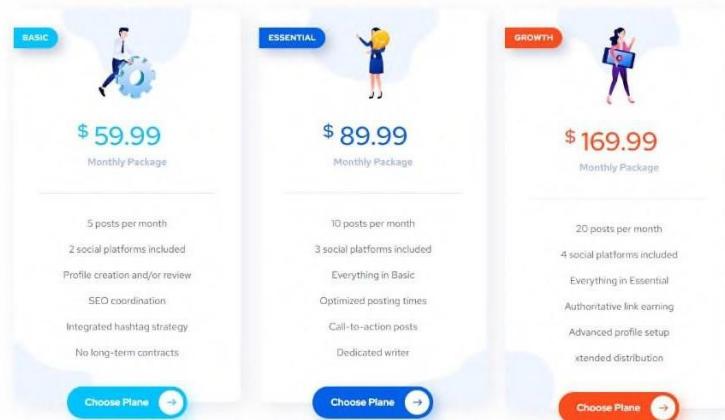

Image no.6
Flexible pricing plans

Chapter

Objective and scope

Objectives

- To study the functions supported by Analytics in E-Commerce Industry

- To know the ways in which Big Data analytics are helping e-commerce companies

- To find out trends prevailing in E-commerce industry in India

- To identify all the possible data points an online retailer can collect and use

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

- To find how Analytics can be used to enhance Business

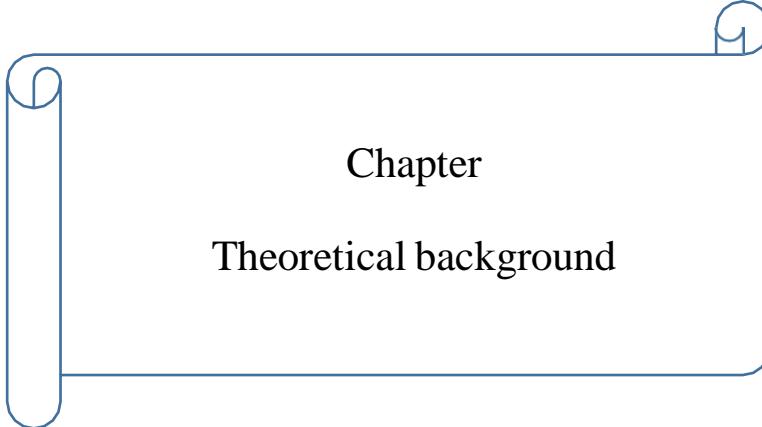- To study the Consumer Perspective towards Online Shopping

Scope:

- This is perhaps the most well-known aspect of e-commerce, where businesses sell products directly to consumers through websites or online marketplaces like Amazon, flipkart.

- E-commerce also includes the sale of digital goods and services such as e-books, software, music, video streaming, online courses, and subscriptions to various online platforms.

- This involves transactions between businesses, such as manufacturers selling to wholesalers or retailers buying from suppliers. B2B e-commerce often involves large volumes of transactions and is facilitated through online platforms or electronic data interchange (EDI) systems.

- This involves transactions between businesses and individual consumers. It includes traditional online retail as well as services like online banking, travel booking, and online ticketing.

- This involves transactions between individual consumers, facilitated by online

platforms such as Craigslist, flipkart, or peer-to-peer lending platforms.

Limitations:

- E-commerce transactions involve the exchange of sensitive information such as credit card details and personal data.

- Unlike traditional brick-and-mortar stores, customers cannot physically inspect or try out products before making a purchase in e-commerce.

- E-commerce relies heavily on technology infrastructure, including websites, servers, payment gateways, and internet connectivity

- Fulfillment and logistics can be complex and costly, especially for businesses dealing with physical goods.

- Selling products or services internationally through e-commerce requires understanding and accommodating diverse cultural preferences, languages, and business practices.

Chapter

Theoretical background

What is e-commerce?

Electronic commerce (e-commerce) refers to companies and individuals that buy and sell goods and services over the internet. E-commerce operates in different types of market segments and can be conducted over computers, tablets, smartphones, and other smart devices. Nearly every imaginable product and service is available through e-commerce transactions, including books, music, plane tickets, and financial services such as stock investing and online banking. As such, it is considered a very disruptive technology.

"The study of big data analysis in E-commerce" is a research paper compiled by Pavithra b, Dr. Niranjanmurhy M, Kamal Shaker J, Martin Sylvester Mani F. The research was carried out in the month of October 2016. Big data here refers to a large amount of data which is being collected by E-commerce companies which can be later on used for evolution of their business. The information that a company receives is in huge amounts the data needs to be processed so that it can be mined out at the time of need. Big data analytics has changed the influence on business, all sectors are benefiting at the most withthe help of the information of the data being collected on daily basis.

Many of the retailers use the same system to predict the customer choices and preferences when a customer searches for the products. This way the whole Process of shopping becomes even more personalized for the customers. The big data usually consists of

Three types of data :

1). Structured data

2). Unstructured   data

3). Semi structured data

Structured data refers to the basic and nominal information like the name, surname and address of a person. Whereas unstructured data refers to other type of data which gets collected through social media through advertisements. It also includes videos. This data helps E-commerce businesses and retailers that operate online a chance to understand the environment of the market and attract more customers.

- **The utilization of Big data in E-commerce sector is as-**

  - The vital role of big data is to give the customer a better experience while using the website, and by trying to satisfy the users' needs by showing them relevant searches.

  - To predict a user's interest and behaviors, the predictive analytics is used to showcase required products to the user to satisfy the demands by proper advertisement based on the predictive data.

  - It also is used to personalize the user's information like mail id and address in order to increase the rate of conversation.
  - By using real time analytics, the prices of products are changed in order to compete better with other retailers.

The Data which is retracted from different sources, application and devices are emerged together into big data. The data which is retrieved from social media such as Facebook, twitter etc, holds

Data that is posted by millions of users across the world such data is called as social media data. Along with that transportation data, search engine data, stock exchange data are all also retrieved into big data. The data which is collected is of 3 types- structured data, semi structured data and unstructured data.

The author Shahriar Akter and Samuel Fosso Wamba has discussed in the paper about the different types of big data that are used in Ecommerce. The first type is online transactional data which

Deals with goods selling a providing other services such as Amazon, E-Bay, Expedia etc. where these transactions make use of data which is further broadly classified into categories.

Web Mining leads to some issues when it applies to e-commerce. One of the vital parameter which is used for implementation in retailers are automatic

Time outs of user session, they need to be considered as one of the issues because without the time systems the data mining intelligent algorithms can't be applied and the user end applications need to be based the organizations constraints which varies from organization to organization and the type of users. One of the other issues is that the clients lose their shopping carts because of timeouts of the standard time session. Other issue is that there are millions of transactions happening frequently to keep a track of those is a costly exercise. Another issue is designing the user interface form because the form has to be designed user friendly. Mining of data has to be done at the certain level, or else the chances of the result being incorrect is high.

There are many big data analytics tools available like- descriptive analytics, survival analysis, predictive analytics, logistics regression, linear regression, neutral networks and support vector machines are some methods which are already in use. The whole process of marketing can be automated using any one of the digital marketing tools which help in extracting the data for analysis

Online Stores are using big data for better customer relationship and giving out better services. In this way, big data benefits helps e-commerce companies.

By distributing something valuable, having more personalized item, it helps to build more accurate predictions, it decreases the shopping cart rejection rate, and provide customers with a better experience. For example, Amazon,

Its online grocery sales were no.1 with 22% share in 2015 while Wal-Mart is 13%. This helps a company to find out their status and how to work in particular areas for sales growth.

Some of the challenges that big data faces are capturing related information, storage spaces for all data, searching of related information, sharing, transferring, analysis, presentation big data issued widely across the world it can be used to give more accurate analysis and help to give out best decision to compete with other organization. E-commerce can utilize big data to build a better

Customer relationship and gain customer loyalty. To predict analytics of a customer's choice. Personalization using emails to increase conversations and also by taking expertise opinion the pricing can be changed to fit in the market.

Big Data and E-commerce go hand in hand, both are necessary in decision making for businesses. The use of Big Data has grown in e-commerce. All the functions are used to improve individual business. This paper helps in identifying different applications of big data in e-commerce to let people know the importance of big data. It makes better understanding on the usage of big data and its application as well as its components.

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- **Types of E- commerce**

Image no .7

Types of E- commerce

Business-to-business (B2B)

B2B e-commerce refers to the sale of goods or services between businesses via an online sales portal. While sometimes the buyer is the end user, often the buyer resells to the consumer. This type of e-commerce typically applies to the relationship between producers and wholesalers; it may additionally remain applied to the relationship between the producers or the wholesalers and the retailers themselves. However, the same relationship can also occur between service providers and business organizations. B2B typically requires more venture capital and a longer sales cycle, but results in higher order value and more recurring purchases.

Image no.8

Business-to-business

Business-to-consumer (B2C)

Business-to-consumer (B2C), or direct-to-consumer, is the most common e-commerce model. It deals in electronic business relationships between businesses—both producers and service providers—with end consumers. Many people like this method of e-commerce as it allows them to shop around for the best prices, read customer reviews, and often find different products that they would not otherwise be exposed to in the physical retail world. This e- commerce category also enables businesses to develop a more personalized relationship with their customers.

Anything one buys online as a consumer is done as part of a B2C transaction. The decision-making process for a B2C purchase is much shorter than a business-to-business (B2B) purchase, especially for items that have a lower value, thus having a shorter sales cycle.

Businesses therefore typically spend less marketing dollars to make a sale but also have a lower average order value and less recurring orders than their B2B counterparts. B2C innovators have leveraged technology like mobile apps, native advertising and re-marketing to market directlyto their customers and make their lives easier in the process.
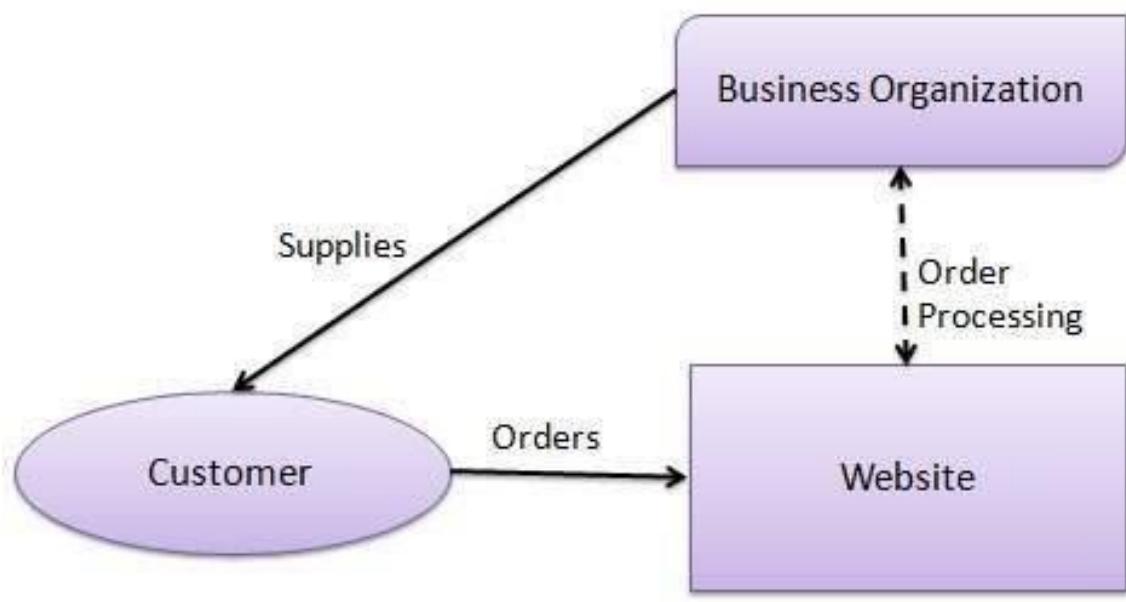
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Image no.9
Business-to-consumer

Consumer-to-business (C2B)

Consumer-to-consumer (C2C), or customer-to-customer, represents a market environment where one customer purchases goods from another customer using a third-party business or platform to facilitate the transaction.

In this case, the third-party platform typically earns their money by charging transaction or listing fees. These businesses benefit from.

Self -propelled growth by motivated buyers and sellers, but face a key challenge in quality control and technology maintenance. Another customers' benefit is the competition for products. Customers may often find items that are difficult to locate elsewhere. Also, marginscan be higher than traditional pricing methods for sellers as there are minimal costs due to theof retailers or wholesalers
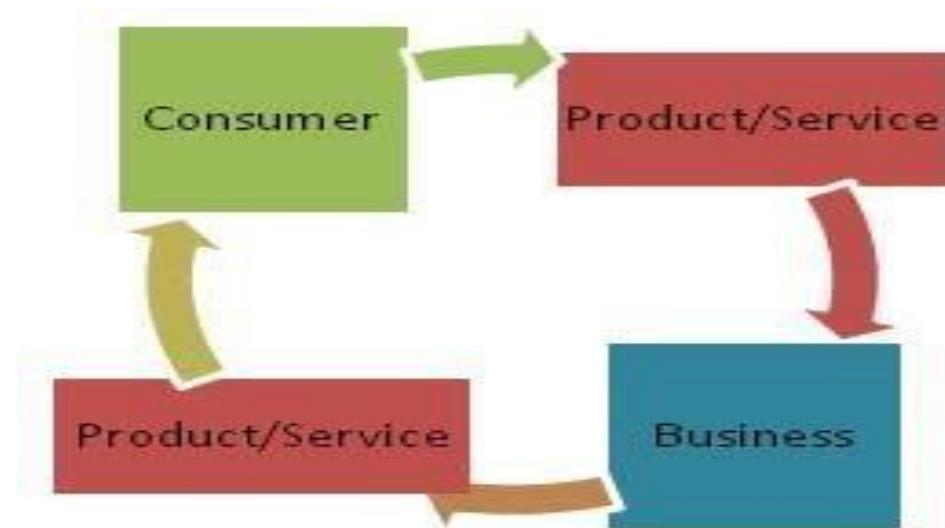

Image no.10
Consumer-to-business

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Consumer to consumer (C2C)

Customer to customer (C2C) is a business model whereby customers can trade with each other, typically in an online environment. Two implementations of C2C markets are auctions and classified advertisements. C2C marketing has soared in popularity with the arrival of the internet and companies such as eBay, Easy, and Craigslist.

Customers benefit from the competition for products and often find items that are difficult to locate elsewhere. Also, margins can be higher than traditional pricing methods for sellers because there are minimal costs due to the absence of retailers or wholesalers. C2C sites are convenient because there is no need to visit

Image no.11
Consumer to consumer

Business to administration (B2A)

Business-to-administration (B2A), also known as business-to-government (B2G), refers to all transactions between companies and public administrations or government agencies. Government agencies use central websites to trade and exchange information with various business organizations. This is an area that involves many services, particularly in areas such as social security, employment, and legal documents.

Businesses that are accustomed to interacting with other businesses or directly with consumers often encounter unexpected hurdles when working with government agencies. Layers of regulation

Can harm the overall efficiency of the contracting process, and thus, governments tend to take more time than private companies to approve and begin work on a given project

Consumer-to-administration (C2A)

E-commerce encompasses all electronic transactions between individuals and public administration. The C2A e-commerce model helps the consumer post their queries and request information regarding the public sector directly from their local governments/authorities. It provides an easy way to establish communication between the consumers and the government

Consumer-to-administration (C2A)

- Swot analysis

  - **Strengths:**

1. Data-driven Decision Making: E-commerce analytics allows businesses to make informed decisions based on data rather than intuition, leading to more effective strategies.

2. Customer Insights: Analytics tools provide deep insights into customer behavior, preferences, and demographics, enabling personalized marketing and targeted campaigns.

3. Performance Tracking: E-commerce analytics enable businesses to monitor and evaluate the performance of their online channels, including website traffic, conversion rates, and sales metrics.

4. Competitive Advantage: Effective use of analytics can provide a competitive edge by identifying trends, opportunities, and areas for improvement before competitors do.

  - **Weaknesses:**

1. Complexity: E-commerce analytics can be complex and require expertise in data analysis, interpretation, and implementation, which may pose challenges for businesses lacking in-house capabilities or resources.

2. Data Quality Issues: Poor data quality or incomplete data sets can lead to inaccurate analysis and flawed decision-making, highlighting the importance of data integrity and quality assurance processes.

3. Privacy Concerns: As e-commerce analytics often involve tracking and analysis customer data, businesses must navigate privacy regulations and address concerns about data security and user privacy.

- **Opportunities:**

1. Predictive Analytics: Leveraging advanced analytics techniques such as predictive modeling and machine learning presents opportunities to forecast customer behavior, optimize pricing strategies, and anticipate market trends.

2. Cross-channel Integration: Integrating e-commerce analytics with other business systems and data sources, such as CRM platforms and social media channels, can provide a holistic view of the customer journey and enhance marketing effectiveness.

3. Real-time Insights: Real-time analytics capabilities enable businesses to react promptly to changing market conditions, optimize marketing campaigns on the fly, and capitalize on emerging opportunities.

- **Threats:**

1. Data Security Risks: E-commerce analytics data may be vulnerable to security breaches, hacking attempts, or unauthorized access, posing risks to customer privacy and business reputation.

2. Rapid Technological Changes: The evolving landscape of analytics tools, technologies, and methodologies requires businesses to continually invest in skills development and stay abreast of industry trends to remain competitive.

3. Competitive Pressures: As e-commerce continues to grow, competition intensifies, and businesses must continuously innovate and refine their analytics strategies to differentiate themselves and stay ahead of competitors.

By understanding these factors, businesses can develop strategies to capitalize on strengths, address weaknesses, seize opportunities, and mitigate threats in the realm of e-commerce analytics.

- **This is a simple E Commerce SWOT analysis example:**

Image no 13
SWOT analysis

- **Important** :

E-commerce analytics plays a crucial role in the success of online businesses by providing valuable insights that drive strategic decision-making and optimize performance across various aspects of e-commerce operations. Here are several key reasons why e-commerce analytics are important:

1. Understanding Customer Behavior: E-commerce analytics allow businesses to gain a deep understanding of customer behavior, preferences, and purchasing patterns. By analysis data such as browsing history, purchase history, and demographic information, businesses can tailor their marketing efforts, product offerings, and user experience to meet the needs and preferences of their target audience.

2. Improving Marketing Effectiveness: Analytics enable businesses to measure the performance of their marketing campaigns, including website traffic, conversion rates, and return on investment (ROI). By tracking key metrics and analyzing campaign data, businesses can identify which marketing channels and strategies are most effective in driving sales and customer engagement, allowing them to allocate resources more efficiently and optimize their marketing efforts for better results.

3. Optimizing Product Assortment: E-commerce analytics provide insights into which products are performing well and which are underperforming, allowing businesses to optimize their product assortment and inventory management strategies. By analyzing sales data, product popularity, and customer feedback, businesses can identify trends, assess demand, and make informed decisions about which products to stock, promote, or discontinue.
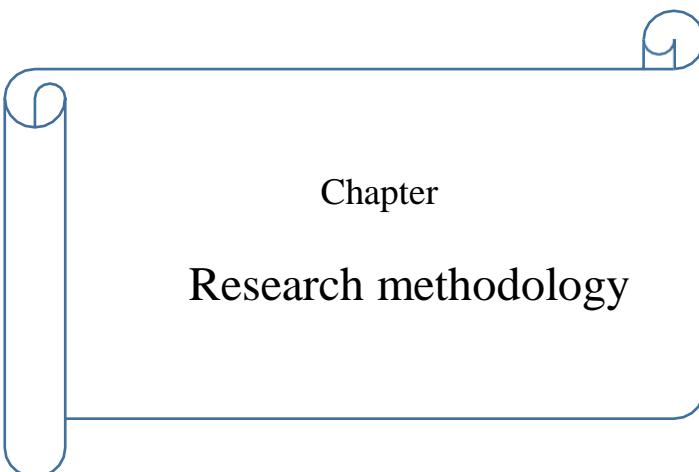
4. Enhancing User Experience: Analytics help businesses identify areas for improvement in the user experience (UX) of their e-commerce platforms. By tracking user behavior, navigation patterns, and conversion funnels, businesses can identify pain points, optimize website design and functionality, and create a more seamless and enjoyable shopping experience for customers, ultimately leading to higher conversion rates and customer satisfaction.

5. Forecasting and Planning: E-commerce analytics enable businesses to forecast sales, anticipate demand, and plan inventory levels more accurately. By analyzing historical sales data, seasonal trends, and market dynamics, businesses can make informed decisions about pricing, promotions, and inventory management, minimizing stock outs, reducing excess inventory, and maximizing profitability.

6. Detecting Fraud and Security Threats: Analytics tools can help businesses identify and mitigate fraud and security threats in real-time by monitoring transactional data, detecting suspicious behavior patterns, and flagging potentially fraudulent activities. By implementing fraud detection algorithms and security measures, businesses can protect themselves and their customers from financial losses and reputational damage.

7. Measuring Customer Satisfaction and Loyalty: E-commerce analytics allow businesses to measure customer satisfaction and loyalty by tracking metrics such as customer reviews, ratings, and repeat purchase rates. By analyzing customer feedback and sentiment data, businesses can identify areas for improvement, address customer concerns, and foster long-term relationships with their customers, ultimately leading to higher retention rates and lifetime customer value.

Overall, e-commerce analytics are essential for driving growth, optimizing performance, and staying competitive in today's digital marketplace. By leveraging data-driven insights, businesses can make smarter decisions, improve operational efficiency, and deliver a superior customer experience that drives sales and fosters customer loyalty.

Chapter

Research methodology

- Research methodology:

1) Determine the specific aspect or area of e-commerce you intend to study. This could range from consumer behavior in online shopping to the impact of digital marketing strategies on e-commerce sales.

2) Conduct a thorough review of existing literature related to your chosen research area. Identify key theories, concepts, and research findings that will inform your study and help you formulate research questions or hypotheses.

3) Based on your review of literature and research objectives, develop clear and focused research questions or hypotheses that you aim to investigate in your study. These should be aligned with the gaps identified in the literature and contribute to advancing knowledge in the field of e-commerce.

4) Choose appropriate research methods that align with your research questions, objectives, and the nature of data you intend to collect. Common research methods used in e-commerce research include:

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5) Determine the appropriate sampling strategy for your study, considering factors such as the target population, sample size, sampling technique, and sampling frame. Ensure that your sample is representative and allows for generalization of findings to the broader population of interest.

6) Collect data using the selected research methods and instruments. Ensure that data collection procedures are systematic, reliable, and ethical. Obtain informed consent from participants and adhere to relevant privacy and data protection regulations.

7) Analyze the collected data using appropriate statistical or qualitative analysis techniques. This may involve descriptive statistics, inferential statistics, content analysis, thematic analysis, or other methods depending on the nature of your data and research questions.

8) Prepare a research report or manuscript summarizing your research methodology, findings, conclusions, and recommendations. Present your findings at academic conferences, publish them in peer-reviewed journals, or share them with relevant stakeholders in the e-commerce industry.

2 .**Method of Collecting Data:**

The data were collected from both the primary and secondary data sources. The primary data is collected by using the technique of digital questionnaire. The secondary data were collected from different sources given below:

• Annual Report

 • Research Papers

• Journals • Business Magazines

 • Company's official website
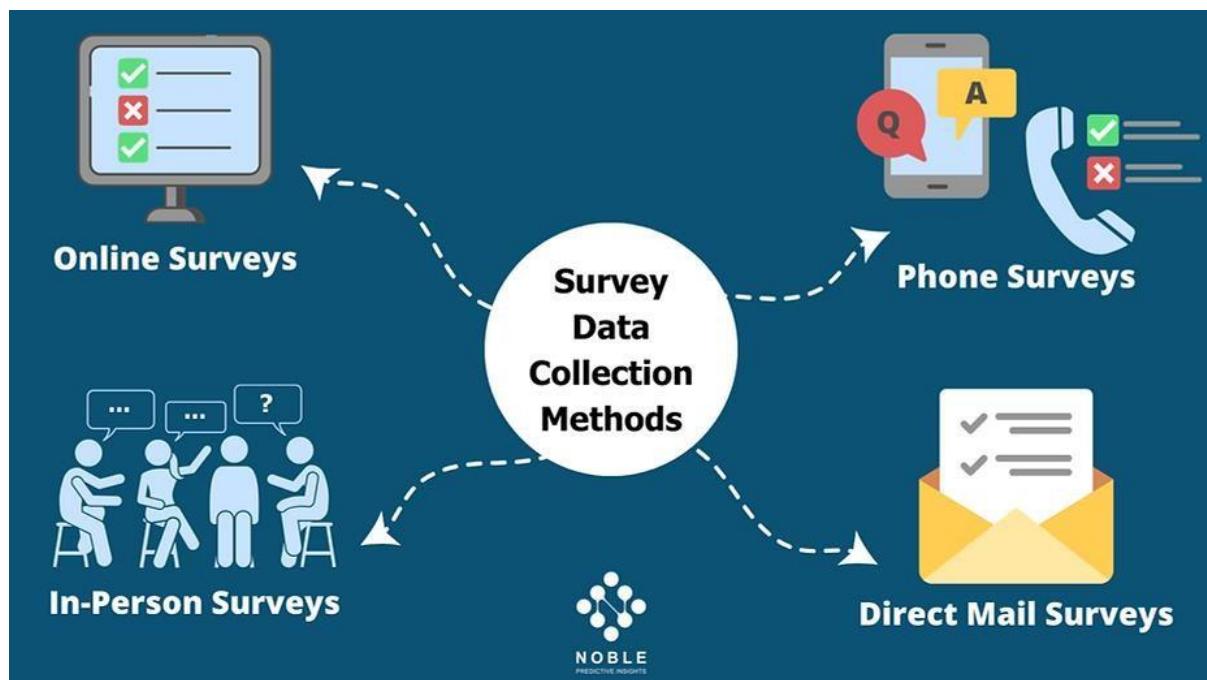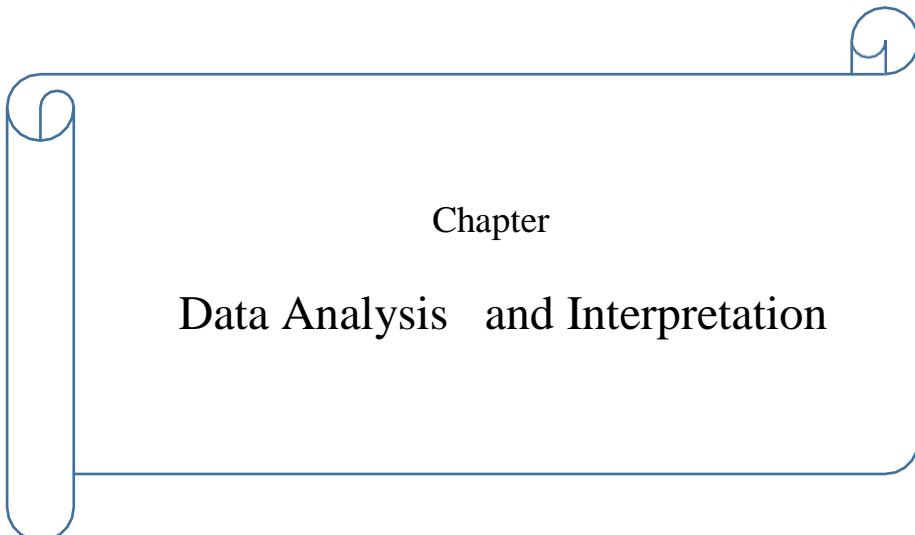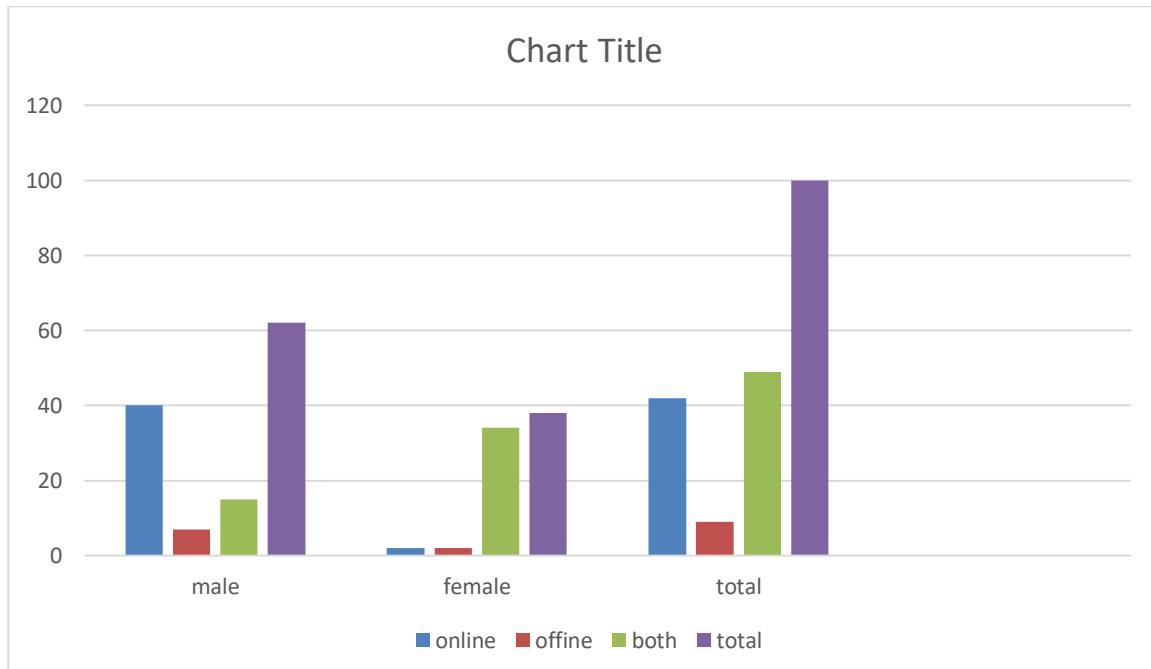
 • Data from open source websites

Image no.12

Chapter

Data Analysis   and Interpretation

Q1) Who is the best online shopper?

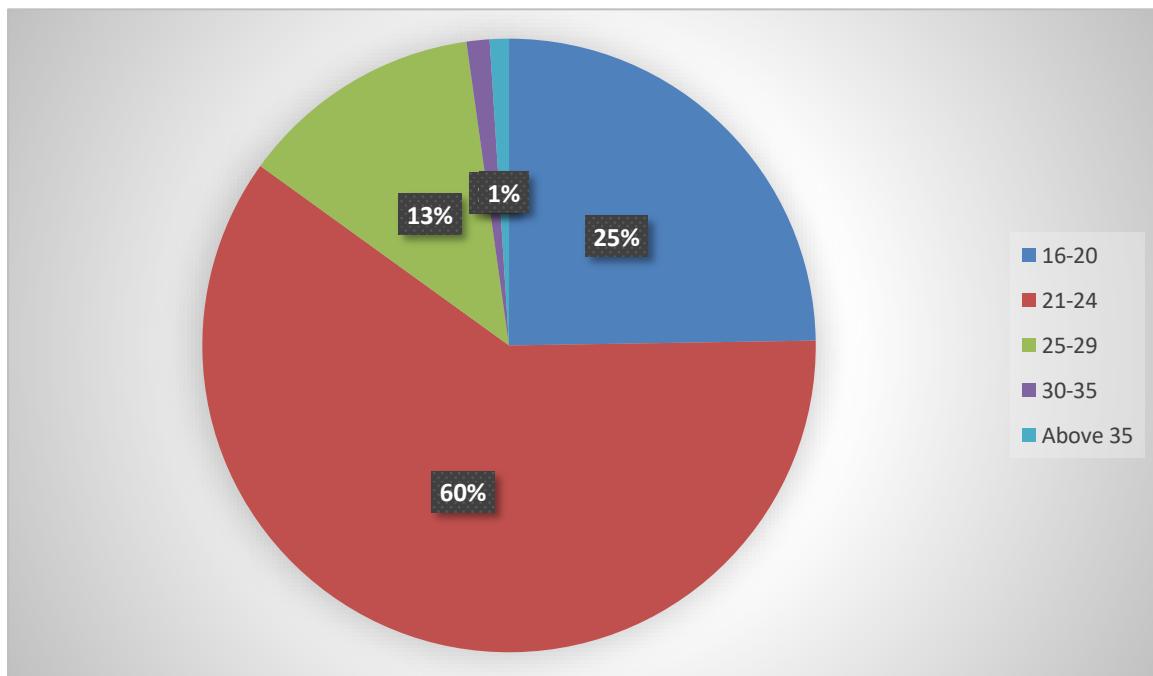| Gender	online	offline	both	total
male	40	7	15	62
female	2	2	34	38
total	42	9	49	100

Interpretation:

Here, we observed that the calculated P-Value 0.00001 is less than the significance level of 0.05. So, we reject the null hypothesis. Therefore, we conclude that there is a relationship between Gender and shopping mode preference

Q2) What is your age group?

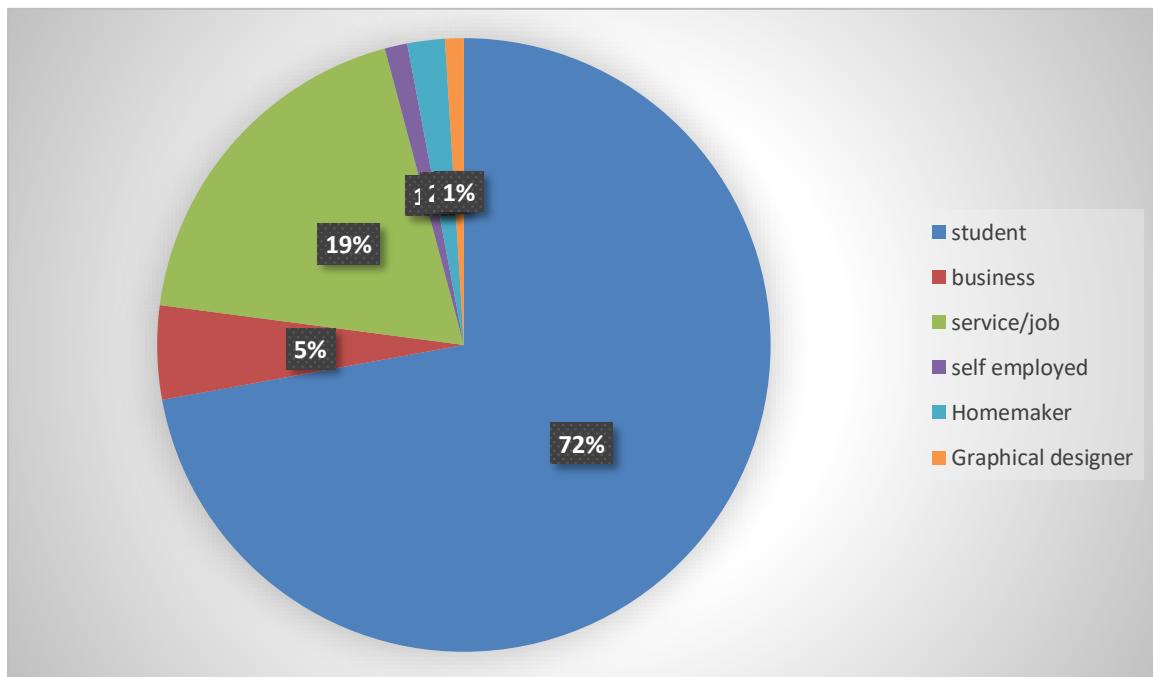|	
bellow 16	1
16-20	25
21-24	60
25-29	13
30-35	1
Above 35	1

Interpretation:

The population for the research were people between the age group 16 to 30. The reason behind choosing this age group was as they have internet and are also independent enough to shop on their own. Which increases the scope of knowing what the preferences of the people are. Out of the responses received, the majority of the answers were from the age group 21 to 24 years- 60%. People from age group 16 to 20 also responded, up to 25% people fall in this category. The rest of the responses were from 25 to 29 years- 13% and up to 1% people were above 35 years. About 1% people were from below 16 years of age group and above 35 years.

Q3) What is your occupation?

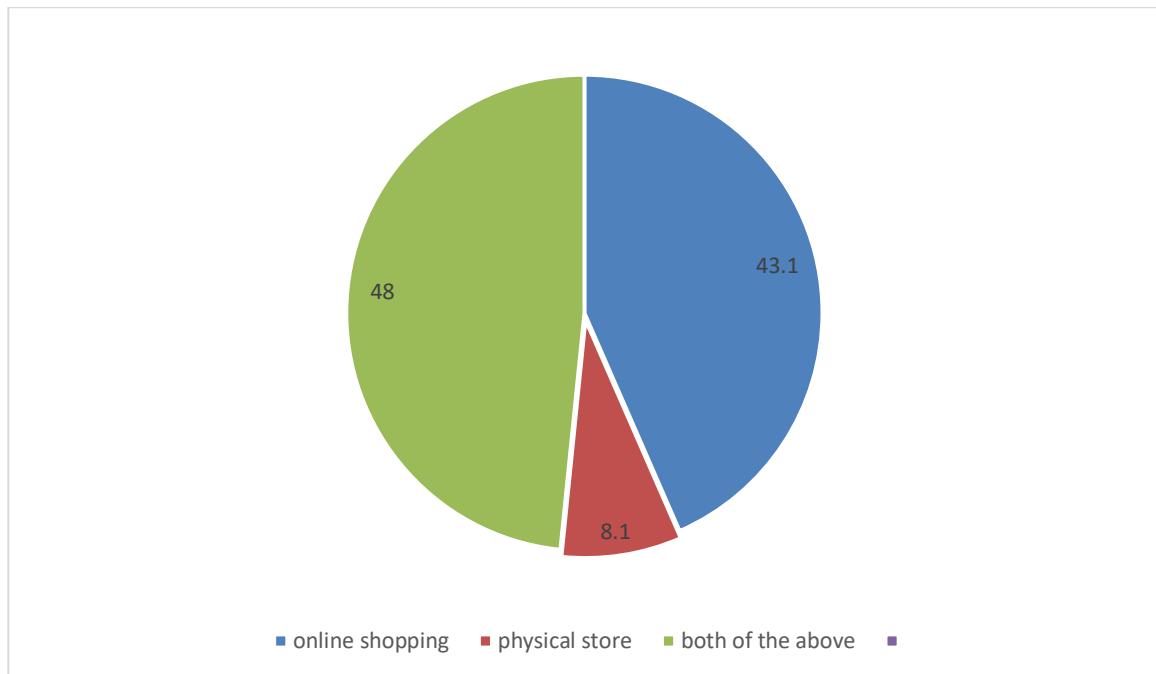|	
student	72
business	5
service/job	19
self employed	1
Homemaker	2
Graphical designer	1

Interpretation:

As the age group of the samples were from 16 to 30 years old, majority of these people are still studying. More than half of the people who responded were students – 72%. the rest of the 19% were working in a service or were doing job. The rest of the responses were from people who were self-employed, had businesses, were home makers, and also graphic designers.

Q4) What is your preferred modes shopping ?

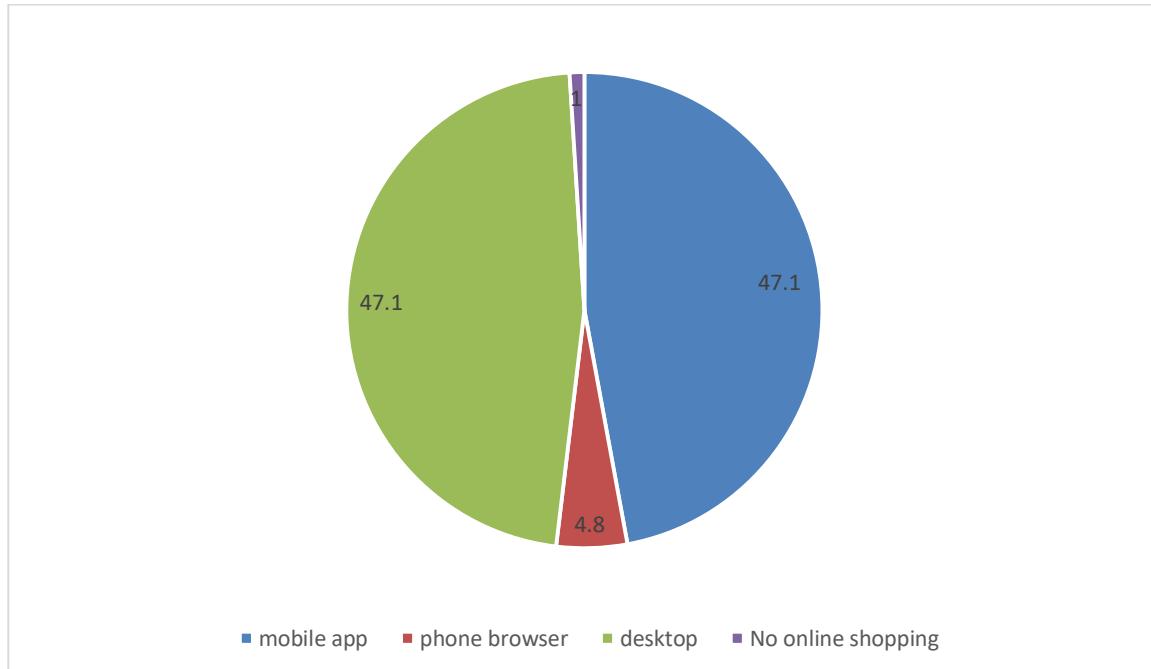| preferred	percentage
online	43.1
physical	48.8
Both the above	48

Interpretation:

According to the findings, it was known that around 43.1% people prefer preferred shopping online. Whereas 8.1% people preferred to shop in a physical store. But almost half of the people preferred both shopping online as well as shopping in a physical store the percentage of the people were 48%

Q5) Which platform do you preferred for online shopping ?

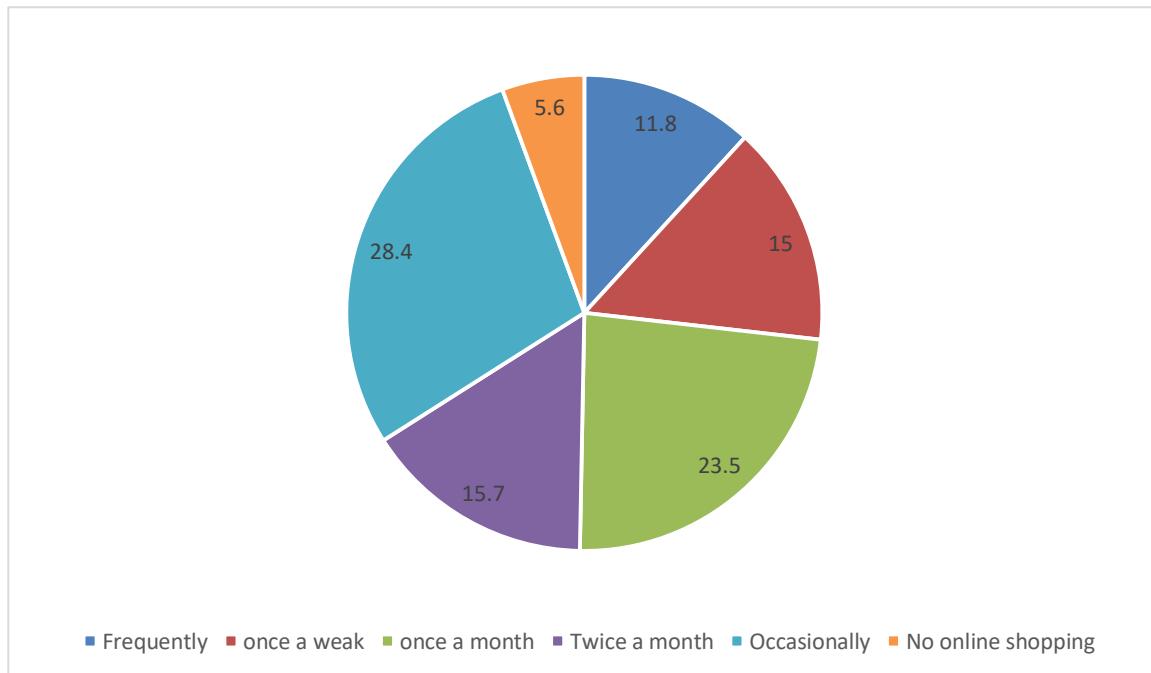| mobile app	47.1
phone browser	4.8
Desktop	47.1
No online shopping	1

Interpretation:

This is to know which platform do they preferred to shop online. 47.1% people said they preferred to shop using mobile app. Whereas 47.1% people stated to prefer desktop or laptop. The remaining 4.8% people stated to prefer to use phones browser.

Q 6) How often do you shop online ?

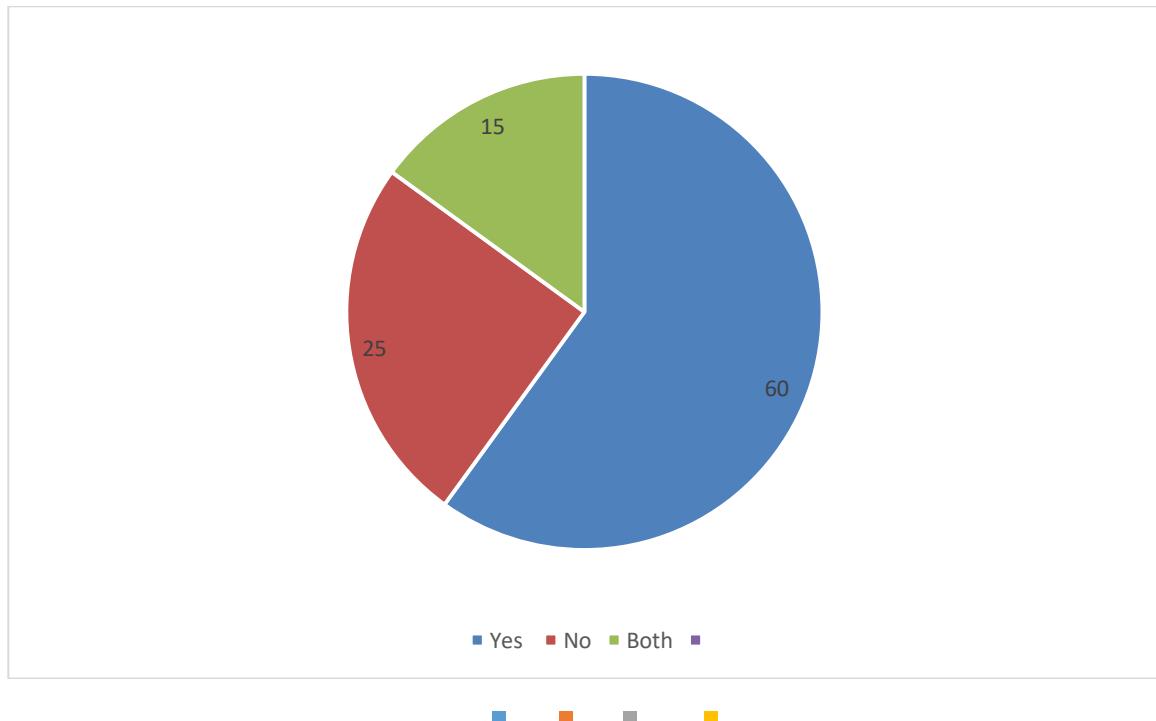|	
Frequently	11.8
once a weak	15
once a month	23.5
Twice a month	15.7
Occasionally	28.4
No online shopping	5.6

Interpretation:

According to analysis of the response, 11.8% people stated that they shopped frequently.

23.5% people stated they shopped once a month. 15.7% stated they shopped Twice a month

from online sites. 28.4 % people stated they shopped Occasionally. And the remaining stated that they shopped once a week
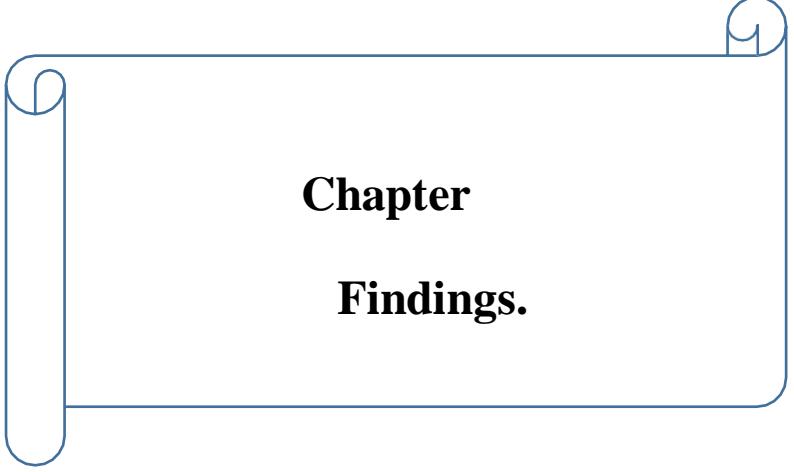
Q 7) Do you save your card details in your personal shopping account ?

Que.	Per%
yes	60%
No	25%
May be	15%

Interpretation:

The next question was to know if people saved their card details in their personal shopping accounts. According to my analysis of the response received was that 60% people had saved their card details. Whereas 25% people said they hadn't saved their card details. Around 16.7%15people said they weren't sure of it.
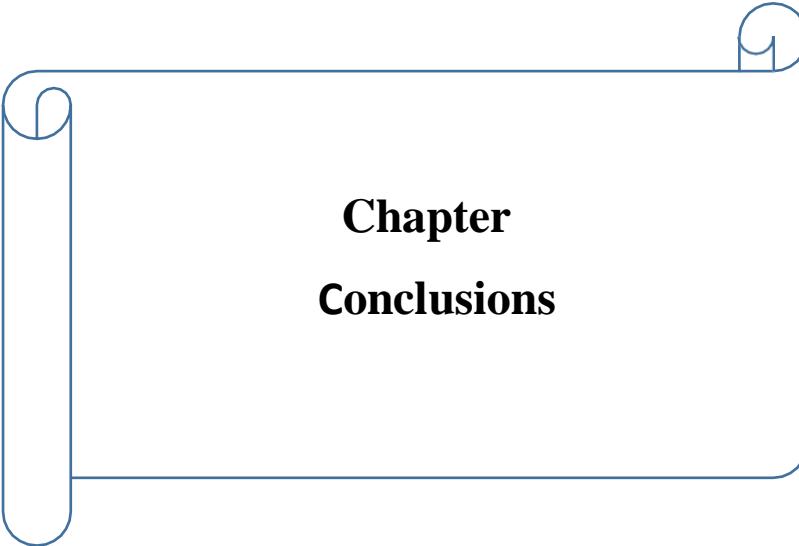
Chapter

Findings.

1) 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.

2) 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.

3). Online retailers use customer's card details andtransaction data to learn more about their customers. Information about their purchase behavior, 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.

4). In this study, it has been observed that 75% of the people usually prefer to buy accessories from online stores. 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 thesame strategy for clothing's and other items may attract customers to purchase exclusive items online.

5). 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.

6). Most of the people buy online products occasionally. Then there is another set of people who buy at least once in a month. Still the good news for the e-companies is that most of the people buy two or more products in a single purchase. Until now E-commerce companies 66

were engaged in building their brand and customer base by working at low profit margin but soon, they will start making profit from their customers.

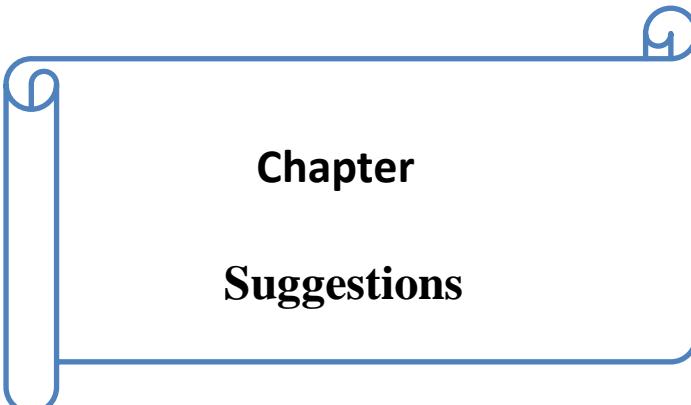7). E-commerce companies need to frame their marketing strategies to attract to more people to buy online.

8). 84% of the online shoppers aware about their personal data is being collected at online sites but most of them are less confident that their data is secure. Low confidence among the customers about data safety could be a threat to the e-commerce companies.

9). Companies need to make different set of marketing strategies for different groups of customers. Using customer segmentation, retailers can target their customers to sell specific product to the target audience based of the customers' interest.
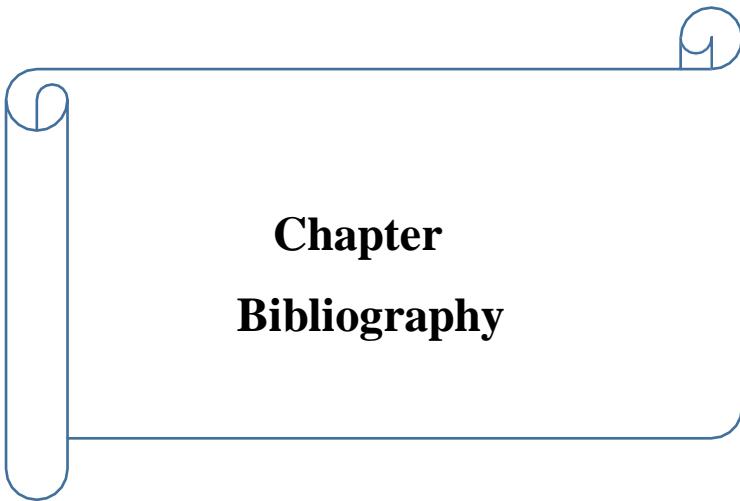
Chapter

Conclusions

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.
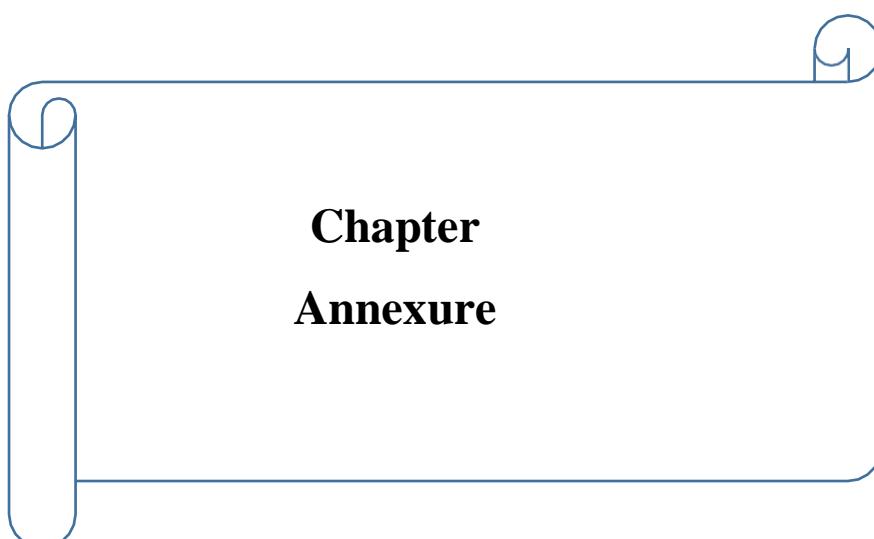
Chapter

Suggestions

- Create an online store focusing on a specific niche within the fashion industry, such as sustainable clothing, vintage accessories wear

- Offer a selection of natural and organic health and wellness products, including supplements, skincare, aromatherapy, and fitness equipment.

- Create subscription boxes tailored to various interests, such as beauty products, gourmet food items, or pet supplies, delivering curated selections to customers' doorsteps monthly or quarterly.

- Sell the latest gadgets and tech accessories, including smartphones, smart watches, headphones, and charging devices.

- Offer a wide range of home and kitchen products, from cookware and appliances to home decor and organization solutions.

- Provide a platform for customers to create and order personalized gifts, such as custom-made jewelry, engraved items, or photo albums.

- Offer a range of educational toys, games, and activities for children of all ages, focusing on learning and development.

Chapter

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Chapter

Annexure

Q.1 What is your preferred mode OF SHOPPING ?

   1) ONLINE

   2) OFFLINE

   3) BOTH

Q.2 what is your education?

   1) High school

   2) Under graduate

   3) Graduate

   4) Post graduate

Q3) what is your occupation?

   1) Students
   2) Service/job
   3) Business
   4) Self employed

Q4) What motivated you to shop online ?

   1) Wide range of product
   2) Easy to payment
   3) No travel to shop

4) Exclusive offer

Q5) Which platform do you preferred for online shopping?

1) Mobile app
2) Phone browser
3) Desktop /laptop
4) No online shopping

Q6) how often do you shop online?

1) Frequently
2) Once a weak
3) Once a month
4) occasionally

Q7) How many product do you buy in one time from online store?

1) Only one product
2) Two product
3) Two or more

Q8) Do you find recommended product in an online store attractive/

1)Always

2) Never

3)Sometime

Q9) how confident are you that your personal information kept confident when you shop online ?

1) Extremely
2) Very
3) Moderately

Q10) how is overall online shopping experience so far ?

1) Extremely/ satisfied
2) Very satisfied

4) Moderately

Q10) how is overall online shopping experience so far ?

3) Extremely/ satisfied
4) Very satisfied