ANALYTICAL TOOL FOR E-COMMERCE BUSINESS

AUGPROJECTPHASE-1 REPORT

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<u>CERTIFICATE OFCOMPLETION</u>

<u>UGPROJECTPHASE-1</u>

This is to certify that the UG Project Phase-1 entitled **"ANALYTICAL TOOL FOR E-COMMERCE BUSINESS"**is being submittedby**REPALA PRAVALIKA(H.NO:19UK1A0531) , MAMIDALA KRISHINA SRI(H.NO:19UK1A0529),SYED ABDUL MUJEEB (H.NO:19UK1A0569),CHIDIRALA SAI KIRAN (H.NO:19UK1A0566)**inpartialfulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **ComputerScience and Engineering** to **Jawaharlal Nehru Technological University Hyderabad** during theacademicyear**2022-23**,is arecord ofwork carriedout bythem undertheguidanceand supervision.

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ABSTRACT

The drivers for electronic commerce are both technological (under the tremendous pressure of innovation) and business oriented. This paper will highlight some guidelines for companies who are entering into E-commerce to create an E-commerce strategy or who already have an E-commerce presence to revise their existing strategy. E-Commerce is now seen as a reality for many businesses and a normal part of a business plan. The immediate benefits, in terms of cost savings, efficiencies and enhanced profitability are clear at every stage in the supply chain. Adopting e-business is no longer a competitive advantage, but a normal business process, without which an enterprise is unlikely to survive in the New economy . Year 2000 saw many Dot-com companies built up and many companies going into E-commerce however now it is a different story, more and more companies are failing, and investors are becoming cautious to invest money into Internet ventures. There is more cash needed then was expected. Some of them had to get on the bandwagon as everybody else were and didn't want to be left behind, and now that the bubble has

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1.INTRODUCTION

"Electronic commerce, commonly written as E-Commerce, is the trading in products or services using computer networks, such as the Internet. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle, although it may also use other technologies such as E-Mail.

E-Commerce businesses may employ some or all of the following:

• Online shopping websites for retail sales direct to consumers,

 • Providing or participating in online marketplaces, which process third-party businessto-consumer or consumer-to-consumer sales,

 • Business-to-business buying and selling,

• Gathering and using demographic data through Web contacts and social media,

 • Business-to-business electronic data interchange.

The role of analytics in e-commerce is If you have worked in financial industry, you will probably be aware of analytics playing a crucial role into risk and marketing strategy. However, E-Commerce industry goes beyond these two pillars. The primary job of E-Commerce industry is to make user experience on their website is delightful. Other than that they are simply a platform between sellers and buyers. With such focus on user experience, analytics itself becomes a product instead of just being business enabler. For instance, Recommender Engines you see on Amazon sidebar is a classic product. Now, you can appreciate the much broader role of analytics in E-Commerce industry. In the following section, we will talk more about broad functions where analytics is being actively used.

1.1 E-BUSINESS

"Electronic business, or E-Business, is the application of information and communication technologies (ICT) in support of all the activities of business. Commerce constitutes the exchange of products and services between businesses, groups and individuals and can be seen as one of the essential activities of any business. Electronic commerce focuses on the use of ICT to enable the external activities and relationships of the business with individuals, groups and other businesses or E-Business refers to business with help of Internet i.e. doing business with the help of Internet network. The term was coined by IBM's marketing and Internet team in 1996."

E-Business is a more general term than E-Commerce. However, in this book we will only use the term "E-Commerce", because every business transaction finally is involved in selling or buying of products or services. And the term "E-Commerce" obviously is more widespread than the term "E-Business".

10 Key Benefits Of Ecommerce For Your Business

➢ Low costs. A significant advantage of ecommerce is that launching an online store is much less costly than opening a physical store. ...

➢ Speed & Flexibility. ...

➢ Faster Buying Process ...

➢ Product Catalogue. ...

➢ Wider Customer Base. ...

➢ Customer Data Insights. ...

➢ Scalability. ...

➢ Reviews & Ratings

1.2 OVERVIEW

Ecommerce analytics is the process of gathering data from all areas that have an impact on online stores and using this informaction to understand the trends and the shift in consumer behavior to make datadrive decisions that will drive more online sales.

1.3 PURPOSE

Ecommerce analytics is the process of discovering ,interpreting,and communicating data pattern related to online business.ecommerce analytics helps measure user behavior, performance trends. Ecommerce analytics helps centralize and mange data.

The focus of analytics is on issues that matter most to the business,and the performance metrics are helpful in identifying and solving problems in real time.

Because technology evolves rapidly and shopping trends shift on a daily basis, ecommerce is in a constant state of adaptation that can leave brands fumbling in the dark. To keep up, ecommerce businesses must anticipate changes in the market using reliable data insights. In short, they need effective ecommerce analytics.Ecommerce analytics simply refers to any tool or strategy designed to analyse large amounts of data in order to produce actionable insights. Because it exists in an almost entirely virtual space, ecommerce generates complex, comprehensive datasets — particularly those related to client behaviour. More data was created in 2017 than was created during the previous 5,000 years combined. That is a lot of data to measure, parse, and analyse. Finding the right ecommerce analytics tools for the job, however, can offer your brand an immeasurable advantage over the competition.

2.LITERATURE SURVEY

Electronic commerce (i.e., e-commerce) has been referred to as a popular business mode that firms can sell products, information and/or services through online channels and consumers can visit these Internet shops at any place at any time . E-commerce enterprises can build their online channels and review their marketing processes to provide more competitive products/services, thereby attracting more consumers . With the rapid development of the Internet and information technology, global e-commerce transactions have grown rapidly and witnessed a fast expanding trend in recent decades.

Systematically examines the use and value of business analytics in e-commerce through quantitative analysis. The research papers relevant to consumer-to-consumer e-commerce research collaboration and pinpoint the research trend by using a content analysis approach.

Data analysis plays a crucial role as an intermediate step in an e-commerce platform. For example, business data analysis of e-commerce data can not only improve decision-making on external sales, customer profiles, and satisfaction, but also enhance internal product development, technical, and organizational workflows (Li, 2021b). Nowadays, the rapid development of block chain technology, artificial intelligence and machine learning not only helps enterprises to create and capture value, but also significantly affects the online shopping environment of consumers

3. TYPES OF E-COMMERCE
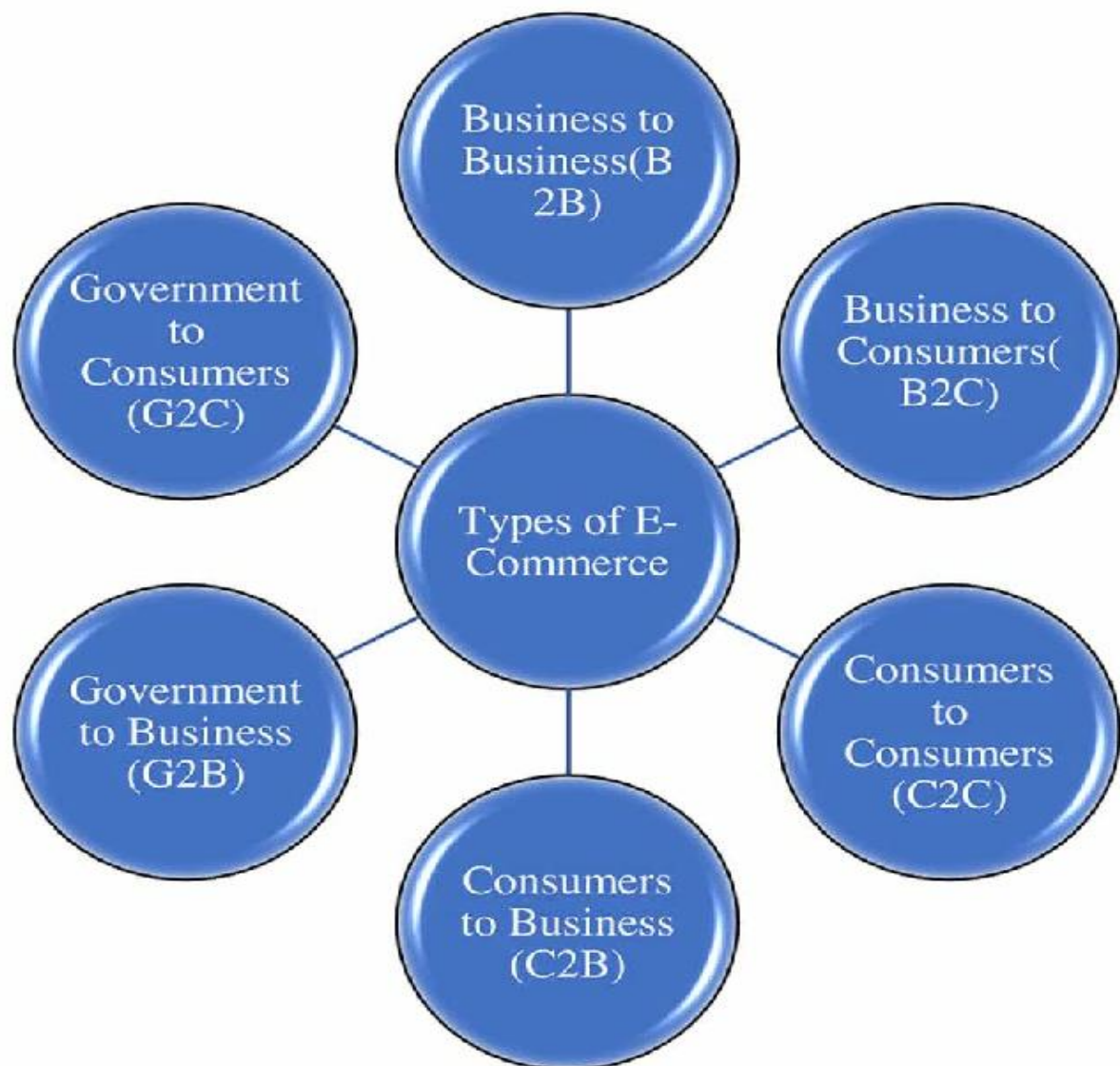
4.THEORITICAL ANALYSIS

4.1 BLOCK DIAGRAM
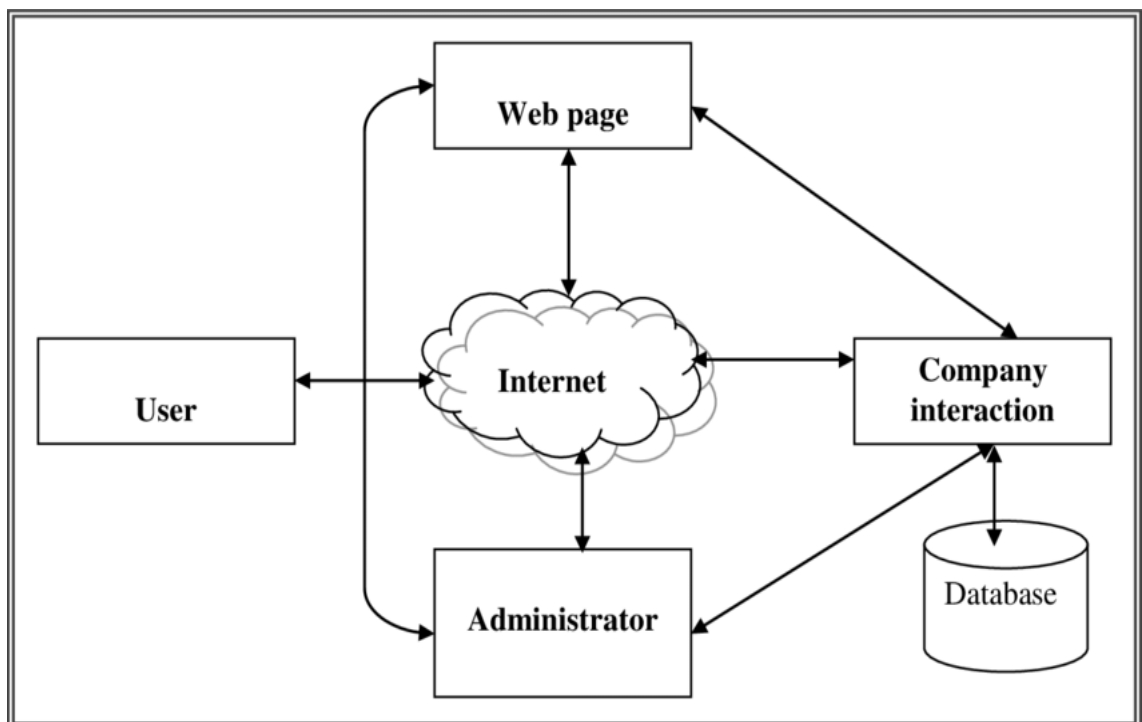
4.2 SOFTWARE AND HARDWARE REQUIREMENTS

Hardware Requirement for E-commerce - Pentium II/III based Intel server running Linux can serve hundreds of unique customers each day. Low traffic sites can be easily served from a single machine depending on the needs of the business. High traffic sites require a backup of servers which automatically takes over operations in case of failure of primary ones.

Software Requirements for E-commerce – Several software are available free on the internet that can be used to build e-commerce exchanges. Ex:- Linux OS, mySQL database ,Apache web server etc.,

E-commerce software

Catalogue display

A catalogue is an organized list of goods & services being sold. An e-catalogue is a simple list of goods and services in HTML form that appears on a webpage on the website of an ecommerce company.

Two types

(i)static catalogue -providing simple list of goods and services on offer.

(ii) dynamic catalogue -providing a detailed feature about items on sale in a database, detaileddescriptions, shipment time etc.,

5.FLOWCHART

1. Seller details like name and mobile number

2. Create account of seller

3. Update store details

4. Add product details

5. Update product details

6. Submit the information

7. Store and product list on site

6.ADVANTAGES AND DISADVANTAGES

Advantages	
...for the customer	**...for the provider**
• Flexible shopping hours (7·24h) • No waiting queues (if net is available and software appropriately designed) • Shopping at home (we don't have to leave our apartment, refuel our car or buy a subway ticket, look for a parking place, etc.) • Individual needs can be covered (if customization is offered) • Global offers, more competition, pressure on prices	• Better customer service can be offered • Fast communication with customer • New customer potential through global visibility • No (traditional) intermediaries, who take away margins

Disadvantages	
...for the customer	**... for the provider**

• Security risks:
  o Data theft (e.g. stealing account or credit card numbers)
  o Identity theft (acting under our name or user identity)
  o Abuse (e.g. third person orders goods with our identity, gets them delivered and we have to pay for it)
 	
• Crime:
  o Bogus firm (firm does not really exist)
  o Fraud (e.g. order is confirmed, invoice has to be paid, but goods are never delivered)
 	
• Uncertain legal status (if something goes wrong, can we accuse the provider?)
	• Higher logistics cost (goods have to be sent to the customer's location)
	• Anonymity of customers (how to make targeted advertisements?)

7.APPLICATIONS

- Data analytical is used in tracking customer's behavior towards product or service. You can use it to identify why sales are low,what product people buy,why they are buying them,how much they are spending on these products,how you can sell your product better,and many other queries.

- **HELPS TO BUILD A REBUST SUPPLY CHAIN**

Customers shop online for two reasons – convenience and better prices. This is why your supply chain needs to be robust. Are the products being advertised on your site available in adequate quantities in your inventory? If not, it will result in slower delivery and the level of customer satisfaction is bound to drop and the customer lifetime value will be negatively affected. On the flip side, having too many units in stock will take up space in your inventory and increase your costs. Striking this balance, between supply and demand is tricky, and this is why using analytics to forecast future sales is vital.

- Analyze information to detect fraud.

- Predict what's in store for you.

- Measure your marketing

- Personalize the customer's shopping experience

8.FUTURE SCOPE

- Business analytics has a wide range of application from customer relationship management, financial management, and marketing, supply-chain management, human-resource management, pricing and even in sports through team game strategies.
- Customization for improved customer experience.
- Drones for delivery.
- M-commerce.
- Voice search.
- Attribution modeling for e-commerce.
- Artificial intelligence

9.CONCLUSION

Ecommerce analytics is the process of gathering data from all areas that have an impact on online stores and using this informaction to understand the trends and the shift in consumer behavior to make datadrive decisions that will drive more online sales.

E-Commerce industry goes beyond these two pillars. The primary job of E-Commerce industry is to make user experience on their website is delightful. Other than that they are simply a platform between sellers and buyers.

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