IMPACT OF BIG DATA IN BUSINESS

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Abstract: In the globalised era of technology and development people are advanced with vast amount of data which ultimately serve their decision making process. Data plays a very dominant role in understanding the demographic pattern and preferences of customers which can be used by business in fostering their product and services. With everything being available in a single click the behaviour of customers have been shifted from conventional mode to digital mode. The new era consumer is offered with enormous number of choices which ultimately draws their rationality and emotional appeal in buying decision. And this is simply due to the extensive competition due to the large number of business. And here comes the relevance of big data, where business can effectively rely on this new paradigm in customizing their business strategies to gain more customers in serving their need with the power of big data. Hence, this paper throws light in understanding the effectiveness of big data in business and how business can build strong customer base by harnessing big data.

Index Terms: Buying decisions, Business Strategies, Technology, Development.

I. INTRODUCTION

Every day we are bound to create 2.5 quintillion bytes of data, which means about 90 percent of the data we consume today has been generated over the last two years alone. And the data comes from anywhere and everywhere; for instance, sensors are used to collect information, GPS signals of cell phones etc. The massive set of data which has been generated with the help of such sensors and other electric gadgets are helping the pioneers of data in framing innovative solutions to sensible problems. Big data opened a new door to business segments as they capture trillions of information regarding their customers, suppliers and other allied groups. It has also been found that in near years there will be a significant difference between companies which employs big data and the companies which haven't experimented the same. However, the market leaders in banking, retail, wholesale, health, education etc had already been started exploring the advantages of big data in creating a strong customer pool. Hence, it's observed that the power of big data will exhibit a drastic change in business as everything is been part of technological development, where the slow adaptors could really find it difficult if they consciously exclude something like big data.

II. Objectives
- ❖ To study the concept of big data.
- ❖ To identify the opportunities of big data in business.
- ❖ To study the benefits of big data to business.
- ❖ To identify the application of big data in different industry.

III. Methodology

The present study completely depends upon secondary data where information has been gathered through journals, book, magazines, and published articles.

Meaning of Big Data

Big data is a large unstructured massive volume of data. It's a complex huge variety of data which is impossible to process by using conventional methods. Big data therefore denotes the data pool which has been characterized on the basis of huge volume, variety and velocity.

Characteristics of Big Data

1. **Volume:** It represents the quantity of information that is produced or in other words it determines the size of data which explains its value.
2. **Variety:** It determines the category to which big data belongs and it's a vital factor for data pioneers in building solutions.
3. **Velocity:** It refers to the faster pace of production of information or the speed at which billions of data being generated.
4. **Variability:** It refers to the unpredictable behaviour of data, which confuses the users of data in decision making process.
5. **Veracity:** It refers to the quality of data that come from different sources and hence it's a complex task to determine the reliable and unreliable facts.
6. **Complexity:** It states that management of data becomes difficult when it comes from different sources. Therefore, effective data management is a pre-requisite for every business concerns

Business opportunities of Big Data

Big data offers competitive advantage for business, when it is capable of discovering new hidden opportunities which can actually serve the need of consumers. Following points highlights the important opportunities of big data in business.

1. **Automation:** Big data helps in improving the internal capabilities and efficiency of business with the help of data analytics. Huge volume of data can be analysed using seat time basis which ultimately lead to automated decision making process.
2. **In-Depth Insights:** Big data opens the door of extreme opportunities as it helps in discovering the unknown benefits that comes along with complex data set, which was not so visible during olden days. This complex data sets or unstructured data play a prominent role in developing innovative solutions serving customers.
3. **Faster, Better Decision Making:** With the faster pace of information availability and processing, business is now provided with the opportunity to analyse data instantly which helps in their decision making process.

Big Data a New Competitive Advantage

Now a day most of the companies especially those established and marked driven companies' employs data supported strategies to compete, capture and build a strong business background to perform the ever increasing competition. with the help of big data now business can predict the outcome of their practices. The following points highlights the benefit of big data in business.

1. **Dialogue with consumers:**
   Now a day customers have different alternatives before them, and hence before taking a decision they are smart enough in evaluating their alternatives. But unknowingly through their social media behaviour and online trend they are providing hint to business in understanding their preferences and priorities. This is possible only with the help of big data as it helps business to capture the online behaviour of customers on a seat time basis.

2. **Re-develop products:**
   Big data serves as a best platform in collecting feedbacks as it helps business in realising how their products and services have been perceived by the consumers. Based on feedback and response collected from consumers', business can re-engineers their products and services accordingly. Thus such a system plays a very important role in creating customized solution for the customers serving their demand.

3. **Perform-risk analyzis**
   There are number of factors affecting the success of a company. Economic and social factors are very important in ensuring the smooth flow of a business. The external background is always beyond the control of business and it is unpredictable in nature. In such an instance, big data helps in sorting out the risk associated with various external factors through the constant interactions of customers through internet.

4. **Data safety**
   Big data allows the business in understanding the need for effective data management. As data comes from different sources, it may always carry the risk of threats. Big data therefore helps the business in segregating information on the basis of their relative importance and utility. And that's the reason why many industries are relying on big data to ensure data safety and protection especially in the case of sensitive information.

5. **Create new revenue streams**
   Big data plays a crucial role in analysing the consumers and the market. However, this data is not only useful for the business alone, but also for other interested parties. There is always the scope of selling the non- personalised set of data to those industries operating under the same segment.

Big data in different industries

1. **Banking, financial services and insurance (BFSI)**
   Financial institution uses big data for getting easier access of data about their targeted and potential customers. On the other hand, banks and retail traders employ big data for sentiment measurement and high frequency trading.

2. **Retail**
   Retail industry also captures large volume of data through POS scanners, customer loyalty programs etc. it also plays a significant role in assessing the fraud associated with inventories.

3. **Manufacturing**
   Manufacturing industry faces constraints due to labour, supply and equipment break-down. But the use of big data helps the manufacturing concerns in levelling their constraints through effective cost management and quality assurance practices.

4. **Logistics media and entertainment**
   In logistics industry, big data helps retailers to manage inventory and its effective distribution through the help of a detailed customer profile which in turn is the outcome of their online habits.

5. **Oil and gas**
   Big data facilitates decision making process. Companies can make prudent decisions regarding the location of wells with the aid of analysis of geometry, agencies also make use of big data to check that safety is in accordance with their benchmark.
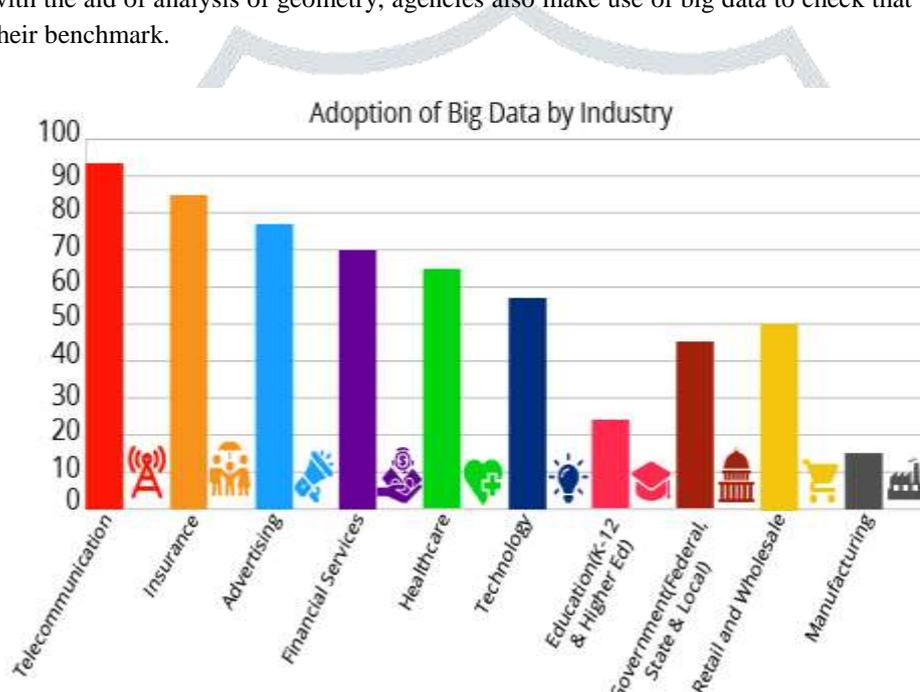
Conclusion

The big data market is witnessing a boom over the past few years due to the paradigm shift from conventional to digital business. In each spheres of business, commendable changes are taking place at the faster pace, where the ultimate goal is the customer creation and retention. With the advent of big data and thereby exploring the opportunity of the same, business is balanced with effective strategies and tactics in building a strong network of customers.

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