# INCREASE IN BIG DATA WITH DIGITIZATION: PROVIDING CONSUMER INSIGHTS AND PREDICTIVE ANALYSIS IN DIGITAL MARKETING

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#### **ABSTRACT:**

"Big Data" is one of those massive megatrends that continue to gain attention along with the growing number of internet users and companies trying to convert this information into profits for their customers and themselves. In 2014, our PM Narendra Modi showed us the dream of a digitized India, where everyone has access to the internet. A part of this dream was fulfilled in 2016 by another visionary, Mukesh Ambani, through his ambitious project Jio. What Jio has done was unthinkable a couple of years back; it has provided millions of Indians with access to the internet. From big towns to small villages, Jio has its presence everywhere.

What one needs to observe in between all of this is how Jio has single-handedly led to the dynamic change in the number of internet users in India, thus leading to a more digitized and internet savvy populace, which is now connected to the world around it. Reliance Jio boasts a customer base of over 100 million from all over the country; now imagine the amount of data being generated? It's an incredibly complex undertaking that's only getting harder and harder to manage as the speed of business continues to accelerate, and the amount of data (hence, the Big in Big Data) gets bigger and bigger, plus gaps or undetected flaws can quickly weaken confidence and lead to poor results. It can be frustrating, challenging, and incredibly overwhelming. But if you understand how to collect and analyze Big Data, you'll be in a position to learn more about your prospects and customers and ultimately improve how you go to market. The main purpose of this research paper is that to make aware the readers of the current scenario and status of data generation and its usefulness in providing consumer insights and predictive analysis in the field of digital marketing.

Keywords: Digital Marketing, Big Data, Consumer Insights, Analysis

#### **INTRODUCTION**

Big Data is the biggest game-changing opportunity for marketing and sales since the Internet went main-stream almost 20 years ago. The data big bang has unleashed torrents of terabytes about everything from customer behaviors to weather patterns to demographic consumer shifts in emerging markets. The companies who are successful in turning data into above-market growth will excel at three things:

- a) Using analytics to identify valuable business opportunities from the data to drive decisions and improve marketing return on investment (MROI)
- b) Turning those insights into welldesigned products and offers that delight customers
- c) Delivering those products and offers effectively to the marketplace.

## BIGDATA AND DIGITAL MARKETING

The Internet is a major source of Big Data. Everything from website analytics to social media mentions to click-through ad rates can be easily aggregated, analyzed, and interpreted. It has also led to the creation of many new forms of online or digital marketing. A complete exploration of them is beyond the scope of this post, but they include (and are not limited to):

- Banner advertising: acquiring digital ad space on third-party websites that drives traffic to one of your digital assets
- Search engine marketing: using a combination of digital advertising, content marketing, SEO, and other strategies to increase a particular brand's visibility in search engine rankings
- Content marketing: brand,

- product, or search engine marketing through text, audio, photo, and video
- Brand storytelling: a form of digital marketing which emphasizes the brand promise through text, audio, photo, and video (e.g. photos of customers happily using the product
- Search engine optimization: ensuring that your digital assets are properly coded to rank high in search engine results
- Retargeting advertising: cookiebased advertising strategy that displays a firm's ads to its site visitors on third-party websites
- Social media marketing: brand or product marketing using social networks and social media tools
- Mobile advertising: advertising on mobile devices such as smartphones and tablets
- Native advertising: advertising that appears similar to organic

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content on the website on which it appears (e.g. Face book ads that appear like status updates)

Digital marketing various subdisciplines all collect and aggregate data which can be analyzed for patterns and insights. Further, these insights can be rapidly in digital marketing strategy

In total, 2.7 Zettabytes of data exists in our digital universe. So, how much is this? "A terabyte is equal to 1,024 gigabytes. A petabyte is equal to 1,024 terabytes. An exabyte is equal to 1,024 petabytes. A zettabyte is equal to 1,024 exabytes."

- 149,513 emails are sent every minute.
- 3.3 million (Undoubtedly extremely insightful) Face book posts are created every minute.
- 3.8 Google million searches are performed each minute.
- Each minute, 65,972 Instagram photos are uploaded.
- 448,800 Tweets are constructed every minute.
- 500 hours of YouTube videos are uploaded every minute.

## THE BENEFITS OF USING BIG DATA IN MARKETING

Following are the benefits of using Big Data in Marketing:

- Create a more accurate profile of your target consumer(s);
- Predict consumer reaction to marketing messages and product offerings;
- Personalize those marketing messages and product offerings;
- Optimize your production and distribution strategy;
- Create and use more accurate assessment measures;
- Perfect digital marketing and campaign-based strategies;
- Retain more customers less expensively; and
- Obtain product insights, among other tactic

## MARKETING PLANNING USING BIG DATA

Assuming a marketer has the appropriate IT hardware/software infrastructure in place and personnel to manage it (whether in-house or outsourced), they will want to begin to work with the data analysts to explore the data itself. They will need to know what they should be gathering, and which tools they are going to use. These are critical questions to begin to handle the avalanche of data available. They also need to determine in which areas they will be gathering and linking datasets in order to determine what questions they should be asking. They should start in areas that will give them a distinct competitive advantage, and actionable insights.

The use of Big Data has implications for every aspect of marketing. Marketing is often described in terms of the four Ps: PROMOTION, PRODUCT, PLACE, AND PRICE. Some marketers / marketing professors add a fifth P: packaging.

#### **BUILDING BRAND LOYALTY**

By collecting and aggregating so much information about consumers, marketers are now able to respond to individual consumers in a very personal fashion. By employing tactics that appeal to one's fundamental motivations, preferences, experiences, and emotions, marketers can enable them to create a strong and lasting connection between customer and brand. In order to deliver on the promise of personalized services, marketers need as much information as possible about consumers and customers. This is where Big Data comes in – providing targeted customers with information important to them. Industry pundits predict that Big Data will assume an ever-more central role in marketing as machine learning evolves and allows data scientists to analyze disparate data types ever quicker. Others predict deeper customization of product and

personalization of services; others see the increasing rapidity with which marketing messages are developed becoming increasingly important revenue drivers. Ethics are, and will increase in, importance the more data is gathered. The more firms gather large datasets, the more government regulation will likely grow, especially in certain areas like privacy and security. However, many believe that while the tools are increasing in refinement and sophistication, the basic definition remains the same: "creating, communicating, delivering, exchanging offerings that have value for customers, clients, partners, and society at large." As one marketing expert, Bob Borchers, the chief marketing officer of Dolby Laboratories, said in a recent interview with Fortune.

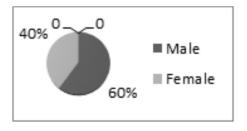
"Big data really isn't the end unto itself," he said. "It's actually big insights from big data. It's throwing away 99.999% of that data to find things that are actionable."

Marketers have been chasing those insights since the pre-computer days. With Big Data, they have reams and reams of data with which to do it.

#### RESEARCH METHODOLOGY

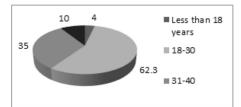
This study attempts to explain aspects related to digitization in Indian economy. It is based on secondary as well as primary data. Secondary data that is collected through different sources like internet, government websites, journals etc and primary data is collected by questionnaire.

1. Gender of Respondent filled the questionnaire



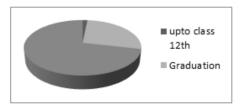
63 respondents were taken into consideration for the study. The graph representation shows the percentage of male and female. It shows 60% of males and 40% of females took participation in the survey.

2. Different age groups turned for research



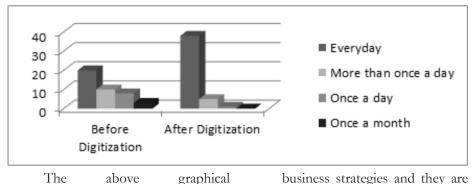
The above graphical representation shows the age category of respondent who participated in the survey. Majority of respondents belong to the 18-30 years with 63.5% and 33.3% respondent belonged to 31-40 years. It means that the majority of participants of the survey represented the youth.

3. Educational Qualification of respondent



The above pictorial representation shows qualification of the respondent, and the maximum qualification postgraduate people reflects which consists around 71.4%, 27% of the respondents are Graduates. shows the maximum numbers respondents for the survey are postgraduates.

Data consumption before and after digitization

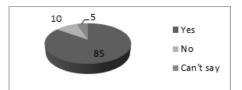


The graphical above representation shows the use of internet by the respondent before and after implementation Digitalization. of After Digitalization, the respondents who were the frequent users of internet have increased as they are using internet in order to carry out their day today activities.

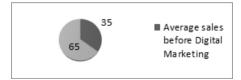
6. Personalized Increase in

now more customer oriented.

Targeting by E-commerce



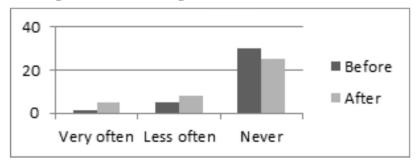
**SALES** 5.



above graphical representation shows that the average sales of companies before digitization was 35% which has increased now to 65%, that is almost double. Therefore, companies have now started using big data for making their

above graphical The representation shows the increase in personalized targeting by E-commercee. According the survey 85% people agree that there is an increase in personalized targeting by the companies. This means companies are now more aware about the customer requirements therefore by a little variation in their original product, both companies and customer are getting benefitted.

Clicking ads Before/after Digitization



The above graphical representation the shows tendency of a human to click adds on the website before and

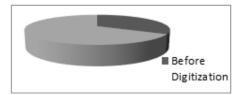
after digitization. As you can see before digitization people used to visit websites less hence clicking on ads was very rare, but after digitization people click on ads more that means there is a significant increase in the big data for the companies and hence decisions are better.

#### 8. Online shopping trends



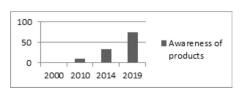
The above graphical representation shows the online shopping behavior of a consumer.80% people think that there is an increase in the online shopping behavior of human. This clearly shows how digitization has helped companies to increase their sales.

#### 9. Customer Satisfaction



The above graphical representation shows the use of internet by the respondent before and after implementation of Digitalization. After Digitalization, the respondents who were the frequent users of internet have increased as they are using internet in order to carry out their day today activities.

## 10. Awareness of product increased recent years



The above graphical

representation shows that how the awareness of product has increased in years. People are now more aware about the products and brands. They have multiple options to select the most appropriate decision from the wide variety of options available to them.

## 11. Increase in variety of products due to digitization



The above graphical representation shows the increase in variety of products.62% people think that there is an increase in variety of product because of greater exposure to International markets also.

#### **CONCLUSION**

In such a competitive environment, company needs to be proactive, predicting consumer needs, scope of changes or improvement in their product lines, future short comings and many more aspects effects decision making. Therefore, it becomes necessary to study consumer behavior to earn a competitive edge.

The Digitization has made Digital Marketing excellent tool for companies because of two reasons. First, it has become a tool for companies to interact with customers. Second, the Internet's increasing importance to companies in its unmatched role as a gold mine of customer intelligence. Consumers spend hours every day on the Internet and leave behind large amounts of information about who they are and what they seek. Their daily Internet journeys reveal their online interests, the people they contact, the content of their communications, the purchases they make, and so on. While

these consumer actions are similar to what goes on in the "real" world, on the Internet this information can be collected, recorded, and analyzed, which opens the door to the use of "big data" and advanced analytics

Hence, from the above research we concluded that we can study consumer behavior from the data that is being generated by consumer every day, the major reason behind the increase in data is digitization which is helping companies to target their potential customer through timely Digital Marketing, as a response companies are able to grow their revenues extensively.

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