Report On,

Importance of Data Annotation in Digital Marketing: Mobile Phone Operators

By

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An internship report submitted to the Brac Business School in partial fulfillment of the requirements for the degree of Bachelor of Business Administration

Bachelor of Business Administration BRAC University August 2022

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Declaration

It is hereby declared that

- 1. The internship report submitted is my/our own original work while completing degree at Brac University.
- 2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
- 3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
- 4. I/We have acknowledged all main sources of help.

Student's Full Name & Signature:

Jahanara Alve Parbonee

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Ms. Raisa Tasneem Zaman

Senior Lecturer, BRAC Business School BRAC University

Letter of Transmittal

Ms. Raisa Tasneem Zaman

Senior Lecturer,

Brac Business School

Brac University

66 Mohakhali, Dhaka-1212

Subject: Internship Report Submission

Dear Ma'am,

I'm happy to submit my internship report, titled " Importance of Data Annotation in Digital Marketing: Mobile Phone Operators" in compliance with the guidelines.

I have given my every best effort so that the report's conclusion contains the required information and recommendations in the most brief and organized manner.

I sincerely hope and pray that this report will meet your expectations.

Sincerely yours,

Jahanara Alve Parbonee

Student ID: 17104207

Brac Business School

Brac University

Date: Month Day, 2022

Non-Disclosure Agreement

This agreement is formed and entered into by and between X-Integrated Marketing Agency and Jahanara Alve Parbonee, a student at Brac Business School, Brac University, to firmly forbid the publication of the specified firm's sensitive information.

Acknowledgement

I want to start by thanking my almighty Allah for allowing me to reach this point of my life. Then I want to thank Ms. Raisa Tasneem Zaman ma'am, a distinguished faculty member, for her continuous support in giving me the necessary guidance and details to complete this internship report.

Second, I want to express my gratitude to Mohammad Obidur Rahman, my team leader and internship supervisor, for all of his assistance, including guiding me and providing me with both official and emotional support throughout my internship. He patiently explained every necessary detail to me and corrected me when I was mistaken. I also want to show my thankfulness to the management of X Integrated Marketing Agency as well as my team and coworkers at X Business Solutions for their enthusiastic help with the preparation of my internship report.

Last but not least, I'd want to thank my parents for raising me in a way that allows me to be the greatest version of myself every day, as well as my little sister and my cats, who have continued to help me become mentally strong during my five years of undergrad study.

Executive Summary

My time as an intern at X- Integrated Marketing Agency is chronicled in this report. I've gained a lot of knowledge about digital marketing and other aspects of marketing during my internship. With the advent of digital marketing, consumer expectations and behavior have been drastically altered, and this report focuses on the importance of data annotation for mobile phone operators in respect of digital marketing. In our digital age, the internet and social media apps are an essential part of our everyday life. In the digital age, there is a change in how media and other channels function. Sales have increased as a result of how much simpler it is for companies to understand and communicate with their customers all thanks to digital marketing. By using data annotations, competitive companies like telecom brands are not only keeping an eye on their customers and competitors, they are also launching different campaign keeping in mind of their customer's needs.

Keywords: Digital marketing; social media; data crawling; analyze, annotation, telecom operator.

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List of Acronyms

Ltd.	Limited
XBS	X- Business Solution
HR	Human Resource
CRM	Customer Relationship Management

Chapter 1

Overview of Internship

1.1 Student Information

Name: Jahanara Alve Parbonee

ID: 17104207

Program: Bachelor of Business Administration

Major: Marketing

Minor: E-Business

1.2 Internship Information

1.2.1 Internship Details

Period: From June 5th, 2022 to August 31, 2022

Company Name: X- Integrated Marketing Agency

Department: X-Business Solution

Address: House 40, Road 20, New DOHS, Mohakhali, Dhaka.

1.2.2 Internship Company Supervisor's Information:

Supervisor's name: Mohammad Obidur Rahman

Position: Group Business Director

Email: obidurr@justanx.com

Phone number: +8801770116699

1.2.3 Job Scope

Job Description

I was hired in X-Integrated Marketing Agency for the position of junior engagement officer as an intern under X-Business Solution (X-BS) team. The company hired me after taking three separate exams and interview. On the first day there was a grammar and a typing speed test both in English and Bangla. On the 2nd day I was interviewed by a business associate and on the final day I was interviewed by our group business director and finally I was placed under annotation team. The annotation team actually works through a platform called "dotkom", developed by our business director. The platform "dotkom" basically crawls data from different social media platforms in order to analyze the engagement and response of common people towards brands. Different brands like Robi, Vuse, Buy Here Now, Bkash, Upay, City Bank, BRAC Microfinance takes the service of "dotcom" in order to understand the customer feedback, response, market value with competitors and takes necessary actions based on these.

Duties and Responsibilities

As I was working under annotation team, my one of the major duty was to analyze all the crawled data thoroughly on "dotkom". At first I used to log in to my account on "dotkom", go for I had to read the crawled data, understand different thing like what's the gender of the person who's data has been gathered, what's the occupation of that person, what type of comment or post he have been shared, what's the sentiment and emotion behind those comment/post, what is the location of the commenter etc. and annotate them accordingly. Things I've been assigned after few days are

- Maintain the accuracy rate of my work.
- Attend team meetings.
- Give short training to new comers about the "dotKom" platform.

- Monitoring different social media content and update the excel file.
- Learn different types of product's name and its functionality.
- Sorting CVs for the HR Department's recruitment staff.

1.3 Internship Outcome

1.3.1 Contribution to the Company

Before entering as an intern at x integrated marketing agency, I had no prior corporate experience. After I joined, I made every effort to learn and perform at the necessary standard. All employees in the data annotation Section, one of x Integrated Marketing Agency's most crucial sectors, works under pressure. While there was a ton of work to be done, as an intern, I helped them in reducing their pressure. I proofread their instructions, collaborated with them, and made an effort to complete my task by the deadline given so that it could help and support me to successfully complete their critical work under time limitations. During this time of internship, I was able annotate around 32,814 data from different brands. Following chart shows my overall working output towards the company:

Total Annotated Data	32814
Total Working Time	327
Highest annotation rate within an hour	752
Overall annotation rate per hour	106.19
Number of group monitored	245

Table 1

1.3.2 Benefit of this internship

I'm glad I chose to work with X-Integrated Marketing Agency given the situation and job market at the moment. Working here has increased my knowledge of different brand's image, digital marketing, importance CRM, customer's mindset and the market. I now have a good understanding of and respect for the mission leader's duties, as well as awareness of advertising and its potential towards a brand's image. If I had worked for another company, I might not have understood many of these things. The perks of this internship have been described in more detail below.

- i. I was able to experience a lot of new stuffs.
- ii. I improved my typing speed.
- iii. I learned many things about customer relationship management.
- iv. Got a chance to explore the digital marketing concept in depth.
- v. I became more aware of the importance of competitors, how to value them, and what to watch out for.
- vi. After completing an internship with this organization, I can now manage my time and perform under pressure.
- vii. Gained the capacity to fit in with a group of people who had real strategy and mentality by being more idealistic, skilled, and dedicated.
- viii. Acquired new knowledge about new tools, culture, digital marketing, data annotation and customer relations as well as emotions.

1.3.3 Problems Faced

I had a few issues to deal with while I was an intern. Starting at the beginning, as I am not a full-timer, I had no fixed seating arrangement which caused some social gaping between me and my co-workers. This problem got fixed when after one month, I was assigned to a particular area to sit and work on. Due to work pressure, sometimes I had to work for a very long time like 11-12 hours continuously in front of the laptop, which effected my health and caused migraine pain sometimes. Furthermore, I also felt boredom sometimes while annotating data as there as very less versatile work and only data annotation. My performance also got hampered sometimes as I was a little exhausted by doing the same thing over and over again. But this problem also got solved, when I shared this with my supervisor and he gave me more different kinds of work like monitoring and giving training to others.

1.3.4 Recommendations

I had a really positive overall experience working with X - Integrated Marketing Agency. They are working hard to support interns like us and assist them get experience from this training. The following are some suggestions I would like to provide them:

- i. The work schedule needs to be more targeted and effective.
- ii. Everyone should communicate more throughout the workplace and the atmosphere should be friendlier towards the interns.
- iii. There should be more work option so that no one can get bored with their work.
- iv. To help us better understand corporate work, internship activities may be more directly related to it.
- v. It's important for trainings to conduct in the scheduled time.

Chapter 2: Organization Part

2.1 Introduction

Marketing plays a significant part in the world of business. The X-Integrated Marketing Agency has been conducting business in regard to Digital marketing and other areas of marketing with this in mind as well as the current situation. X-Integrated Marketing Agency is currently ranked among the leading marketing firms in the country with its consistence performance and top rated brand as their clients.

2.1.1 Scope

The organization's overview, that would include the mission, vision, overview, management, marketing, accounting, and financial factors, as well as a SWOT analysis, is the main topic of this chapter. This report includes the fundamental facts and the primary functional activities of XBS, as well as a simple but powerful idea.

2.1.2 Objectives

- To recognize each aspect of X Integrated Marketing Agency's activity.
- To connect academic understanding with real-world experience.
- To analyze marketing strategies and level of competition in order to use SWOT analysis to evaluate management strategies and financial results.

2.1.3 Methodology

To finish this research, I combined two different forms of data which are primary data and secondary data like following

• What I have noticed.

- Interrogating my boss and other personnel in the X-BS with insightful questions.
- Official tools like "dotKom"
- Different social media platforms
- Official website of the company.
- Research paper and other website related to these topics.

2.1.4 Limitations

Everyone was friendly and supportive in the workplace environment. Given my entry-level job, there was a reasonable amount of material available, but not enough additional data could be discovered from the company's official website to support my task.

2.2 Overview

The X-Integrated Marketing Agency began its journey in 2017. This was accomplished through a collaboration between the two organizations MADLY and Strategeek Digital. By offering online planning, advertising, and content development, X-Integrated Marketing Agency assists their clients in managing social and digital marketing. The business provides its customers with the best solutions in a variety of digital aspects.

Despite the fact that the organization is new to the business, the independent workplaces MADLY and Stategreek Digital have a long history of success. They both wanted to make sure that their client's brand is engaged with customers, which was essentially their shared objective and main goal. They had to develop a lasting and significant bond through this. Recently, they began to present plans that would drastically change the direction of company. A variety of commercial advertisements, promotional videos, training videos, etc. have been produced by X-Integrated Marketing Agency. Leading customers of the business include Brac Microfinance, BKash, Vuse, City Bank, Airtel, Robi, and others. They also specialize in

offering business solutions that use augmented reality, mobile apps, etc. Following is a list of some of the organization's main services:

- Social Media Marketing
- Data Analytics
- Social Media Query Management
- Digital Marketing Campaigns
- Digital Marketing Analytics
- Advertising

2.3 Management Practices

2.3.1 Top Management

• **Tahsin Saeed** is the CEO and MD.

With more than 20 years of experience in a variety of businesses, Mr. Tahsin Saeed is the driving force behind the accomplishments of a team of more than 100 individuals.

• **Drabir Alam** is the COO of the agency

He is a pioneer in Bangladesh's modern advertising sector due to his experience in the field. He is constantly working to recruit creative individuals for the company and put them to productive use.

• **Obidur Rahman** is the group business director.

He oversees a team of more than 60 people that work tirelessly to provide service every day. He has been working with customer relationships and insights for more than 9 years.

2.3.2 Leadership Style

The X-Integrated Marketing Agency is currently among the most prosperous businesses. Because of its leadership and leaders, this has been possible. The business practices participative leadership. All employees are able to work freely and express their opinions on various issues pertaining to the company and projects as a result. As a result, there is less hierarchy and easy communication between all parties. Additionally, it encourages the expression of original thought and promotes a more welcoming workplace environment.

2.3.3 Management Responsibility

In addition to Mr. Porag Obayed, the Group Business Director, the top organization and other administrative group members, including Ms. Mumtahina Chowdhury Priyanka, Mr. Fahim Uddin Tofa and MR. Nazmul Hassan from X-BS are very specific in managing the entire movement, including the client and the chiefs, expert planning and advancement, and as well as providing quality certification. When it's necessary to give the staff members direction or training, they frequently lead the agents and set up meetings. We occasionally had to have meetings with the agents and other colleagues even after midnight due to a client's urgent request. These sessions were held to enhance performance, develop expertise, and build a good teamwork.

In every case, the board successfully serves the client with the assistance of all from the team. The management and administrative group is made up of highly qualified professionals who have worked in their professions for a long time. They can thus handle any circumstance. X-Integrated Marketing Agency is therefore considered as one of the best places to work. They work with companies including Samsung, Bkash, British American Tobacco, Robi Axiata and other. All of their important data is kept up to date as a result the logical management strategy is operating effectively.

2.4 Marketing Practice

2.4.1 4Ps of X-Integrated Marketing Agency

Product: My department uses a modified software called dotKom to provide service to clients like Robi, Bkash, BAT, Brac Microfinance and others. This collected information from a various Facebook posts and included the option to annotate the information based on the customer's age, location, the types of emotions evident in their comments, the style of comment, etc. This software is useful and makes our job much simpler. This software is unique in our Bangladeshi digital marketing platform.

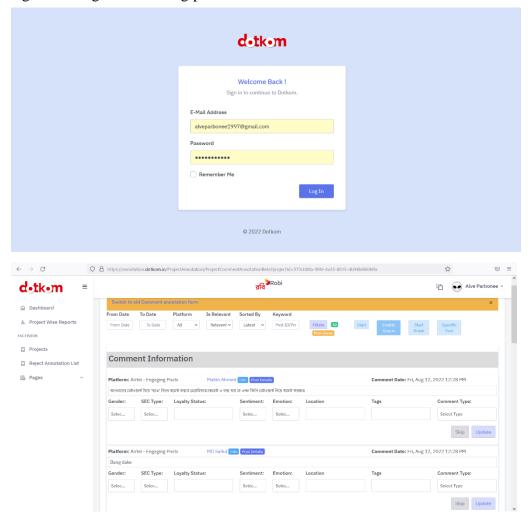


Figure 1

Price: Determining the price is an internal matter for the company, but some information may be disclosed. It is anticipated that the annotator will be paid 100 BDT per hour and the minimum annotation rate is 100 to get paid. In addition to these, IT staff members are responsible for paying the operating costs of software like dotKom. We were unable to obtain any additional detailed information due to confidentiality.

Place: X-Integrated Marketing Agency is located in Mohakhali DOHS. Nearly every employee works from this same location to do their regular office tasks. They have space in several floors of the office building. However, because if there is any emergency, people are permitted to work from home. As a result, we maintained a high level of service and our productivity remained constant.

Promotion: X-Integrated Marketing Agency places more of an emphasis on promoting its clients and customers than acting as a public relations firm. Our business director, Mr. Obayed, frequently remarks that there are time constraints on our work at X. We strive to offer our clients the greatest services and solutions, and we rely on their positive recommendations to spread the word about our business. So, obtaining consumer happiness earns us recognition, which aids in our promotion.

2.4.2 Integrated Marketing of X-Integrated Marketing Agency

There are four more 4Ps for a professional marketing firm like X Integrated Marketing Agency in addition to the standard 4Ps of marketing. These four key divisions of X Integrated Marketing Agency Limited provide the majority of the support.

People: There are four departments within X-Integrated Marketing Agency that offer various services. They are:

- Campaign Planning Team: A significant portion of this division's activity involves more sophisticated showing strategies, like creating fresh channels for various enterprises to join the market, particularly through online media.
- Client and Service Management Team: This team manages the company in relation
 to the actual brand or client using various public relations strategies. They have their
 own methods for connecting clients with customers and presenting the brand's image
 to them.
- Creative team: this team is responsible for overseeing all content uploaded on the
 client's online media platform. This group concentrates on creating the materials
 provided with customers. A number of people are jailed for using substances like TV
 commercials, promotional videos, and static posts.
- Query Management Team: This department works on the front end to serve the clients
 of various brands. Responding to client inquiries and managing customer conversations
 is their key duty.

Principle: The X-Integrate Marketing Agency prioritizes quality over quantity. This is maintained throughout the hiring process and when serving multiple companies. They also maintain a solid pay package for this, which is among the best in the industry. On regular days, part-time workers are paid BDT 100/Hour. In addition to these, there are additional facilities like lunch and snacks. Students that possess the right set of abilities are hired by them. Both parties benefit from this because the students can obtain pocket money and the organization can assist in managing youth and providing employment.

Process: A team of individuals is responsible for upholding this level of quality while we serve our customers. Mr. Fahim Uddin Tofa and Ms. Mumtahina Chowdhury are the members of

this group. They make a constant effort to keep us informed about new developments and information. To keep us informed at all times, various meetings are also planned.

Performance: The X-Integrated Marketing Agency has partnered with some of the top national companies. The brands that are listed in this report demonstrate the organization's acceptance in the industry. Due to consistent performance, in the 2018 COMMWARD survey of all correspondence offices in the country, X-Integrated Marketing Agency came in third place.

2.5 Financial & Accounting Performance

Every single money that is received by the company, goes to the X Integrated Marketing Agency Limited money and records office. In this section, we are concentrating on the following areas:

- 1. Point total Sheets;
- 2. Board funding;
- 3. Exchange of funds between business units through a loan or a beginning installment;
- 4. Cash Flow;
- 5. Month to month transactions preparation;
- 6. Tax; and
- 7. Records and revenue.

These sectors are really confidential. As a result, the members are restricted from disclosing the information that this office holds. As an non full time employee, my ability to obtain all of the necessary knowledge was limited and as there are no information not available on the internet, I was unable to provide vital data here.

2.6 Operations Management and Information System Practices

2.6.1 Operation Management

To make operations easier, X-Integrated Marketing Agency has several rules and Administration and Human Resources oversees all administrative and the organization's tasks. They are tasked with planning meetings, hiring candidates, evaluating personnel, etc. The executive in charge of this company's human resources is Mr. Mirza Shams. He is always working on duties like distributing ID cards, writing action letters, and ensuring that new hires feel more comfortable in their new workplace.

2.6.2 Information Technology System

Information and technology systems are one of X-Integrated Marketing Agency's major selling advantages since the company specializes in digital marketing. The company has its own accounting and human resources units for information management. When it comes to serving the clients, the IT personnel plays a vital role. They are always working to improve programs like dotKom in order to collect information's properly.

2.7 Industry and Competitive Analysis

2.7.1 Analysis of the Industry Porter's Five Forces Analysis Model of

X-Integrated Marketing Agency

The Porter's Five Forces Analysis reveals whether the company can compete in the market and with its rivals. This summarizes the organization's present and future situations. The following is a description of them:

I. Threats of new entrance

New businesses emerge every year as a result of technological advancements and the rise of digital marketing. The competition in this sector has increased, and everyone is attempting to set themselves apart.

II. Threats of Substitutes:

Some clients might consider employing their own electronic media and computer based marketing. But that would cost them money. Therefore, the majority of clients rely on marketing agencies. Therefore, we can conclude that the threat of substitutes is currently minimal.

III. Customers' Bargaining Power

In this market, consumers' bargaining power is never low. In an effort to please their clients, marketing firms aim to the customer's desired solutions within a set budget plan. Consequently, the customer has more negotiating power.

IV. Suppliers' Bargaining Power

In accordance with the Annotation Team, specific software is necessary to deliver service. Many teams nowadays are capable to produce these. As a result, the power of suppliers' bargaining remains limited since there are so many of these entities.

V. Rivalry among Existing Competitors

Due to the large number of renowned marketing agencies in Dhaka, Bangladesh, which performs really well, internal rivalry is really high and intense. But even so, X-Integrated Marketing Agency has consistently maintained exceptional quality and been among the best in terms of innovation and expertise.

2.7.2 SWOT Analysis of X-Integrated Marketing Agency

• Strengths

- 1. Offering Exceptional Service
- 2. Skilled and effective leadership
- 3. A friendly environment
- 4. Good payroll for part-timers

Weaknesses

- 1. Quick to respond to criticism
- 2. Limited activities
- 3. Failure to keep skilled candidates
- 4. Inefficient teamwork

• Opportunities

- 1. The capacity to establish connections with well-known brands.
- 2. Draw in prospective young graduates
- 3. Differentiate to position oneself in the market.

• Threats

- 1. The amount of taxes imposed by the government is continually rising
- 2. Forming local rivalries

2.8 Recommendations

- a. Hire more staff members or interns to ensure that everyone is adequately distributed among the workload.
- b. Try to hold on to skilled professionals.
- c. They must work on staff assessment.

d. Incorporate additional updated technologies

Chapter 3

Project Part: Importance of Data Annotation in Digital

Marketing: Mobile Phone Operators

3.1 Introduction

This report was done to find out the importance of Data Annotation for Mobile Phone Operators

in respect of Digital Marketing. I worked as a Junior Engagement Officer at X-integrated

marketing agency, throughout the duration of my internship contract. I was assigned to the X-

Business Solution (X-BS) Team, which analyzes client's responses towards different

organization's digital media content. My only duty has been to analyze data from different

social media platforms for various clients. I had the opportunity to watch how consumer's

behavior varied according to the situation and the content that have been posted on social

platforms. I've conducted my study for this paper using information from one of Bangladesh's

leading mobile phone providers "Robi". In this period, I have made every effort to fulfill the

organizations goals and provide clients with the best level of customer understanding.

Therefore, I have decided to write my entry-level position report on this topic.

Today's world is shifting away from traditional offline lifestyles and toward digital ones.

Furthermore, the Covid-19 outbreak had a significant impact on this as individuals learned

more about internet presence. They are expecting the same response from businesses and

brands in the same way. As a result, businesses that are more responsive to online activities are

obtaining new customers in addition to their existing customers.

Since people can access and express themselves easily towards the organizations immediately

from their phones and computers, the digital platform has become one of the major parts of

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marketing of a brand. By using digital marketing, a brand not only can promote their brand but also can understand their targeted group through their responses towards their content and can do necessary changes or input new ideas into their campaigns.

Through survey, observations from working in X-integrated marketing agency, some primary and other secondary data I've tried to uncover what is digital marketing, why data annotation is important, and its impact towards companies and how its accuracy rate helps to understand clients and take essential actions in digital marketing.

3.1.1 Literature Review

Digital marketing is the process through which marketers use digital media to advertise their goods and services to consumers (Yasmin et al., 2015). Everything is now digital. It simplified things for everyone. Clients have more options as well as the organizations as they are able to measure things that cannot be measured in traditional marketing process. The marketing media have also seen a significant change in recent years. Prior this, television, radio, and print media were the primary media outlets (newspaper, magazines, posters etc.) for promoting any product or service. It was impossible to determine the reach and response of those advertisement in these cases. The results of their outcome was mostly based on prediction. Digital advertising, in contrast to traditional mass media, allows one the choice to set their target audience to maximize the return on their advertising spend. One can decide where the advertisements will appear, as well as when, and who will see it. The advertising sector has been completely transformed by the internet. The industry reached new heights thanks to the Internet. 2009 (Taylor). It is also far less expensive than traditional media. The more crucial aspects of digital marketing is the constant accessibility of customers and their rapid response. Organizations can instantly understand the response of their customers as well as can take necessary steps based on the reactions. Customers also have the power of reaching out to them with any complaint or query and companies can solve them within a very short time due to the new era of digital marketing.

On the other hand data annotation, a crucial stage of supervised learning, is the process of labeling data to prepare AI and ML models to recognize particular data categories and produce relevant and important output. Due to its many potential uses in gaining an insight from social media comments, marketing, politics, psychology, social connection, and artificial intelligence, sentiment or emotion analysis has recently emerged as an important topic of research. Emotion analysis which is also known as annotation is the process of finding the emotions present in any given data, including text, audio, and images. The goal of the current study is to recognize and relate social media material to various emotions to differing degrees (B.V. Namrutha Sridhar et al. 2020). Grand View Research predicts that by 2028, the global market for data annotation will be valued USD 8.22 billion. But as of right now, we can already see the sector booming. Data annotation advances significantly in 2022 and to further blends into the current digital environment. The expansion of mobile computing platforms and digital image processing is the main factor driving such changes (Yuliia Kniazieva, 2022). To put it simply, data annotation involve tagging or labeling pertinent information/metadata in a dataset so that computers can recognize them. The data may take any shape, including text, an image, an audio file, or a piece of video. When pieces in data are labeled, machine learning models accurately understand what they will process and retain that information to process newer information built on top of existing knowledge automatically to make judgments in a timely manner. An AI model would be able to tell if the data it receives is audio, video, text, graphics, or a combination of several formats with the help of data annotation. The model would then classify the data and continue with performing its functions based on the features and parameters given (Anonymous, 2022). Numerous benefits of data annotation include improved end-user experience, enhanced user experience, and more. By using large data sets to train the algorithm,

image annotations improve output accuracy. Comment annotations help companies in understanding the query and response of their clients (Gupta, 2020). Moreover, data annotation helps to plan further campaigns and to understand the clients more precisely.

Now the database that have been annotated have no use if they are not accurate. So the accuracy rate of data annotations plays a huge role in digital marketing. Since it is one of the most crucial aspects of data quality, the significance of data accuracy cannot be sufficiently expressed in words. It refers to the reliability of the data values saved for a specific item, good, or service (Roberts, 2019). Given the importance of information in Digital marketing, accurate and trustworthy data is a crucial resource to make the decisions for the company. Data accuracy helps in expanding into new markets, launching new services and promotional campaigns, analyzing market dynamics, competitors, and clients, and providing more personalized customer service, including other things (Kim, 2020).

3.1.2 Objectives

Broad Objective:

The target of this report is to find out why and how data annotation plays a vital role for mobile phone operators to understand their consumers in respect of digital marketing.

Specific Objectives:

- 1. Identifying the role of data annotation as a digital marketing medium
- 2. Learn about customers thought through digital marketing
- 3. Importance of analyzing data correctly in order to get accurate responses from consumers and to plan further campaigns

3.1.3 Significance of the study

We already know that the world is becoming more dependent on online activities these days. I will attempt to demonstrate in this report why it is critical for businesses to use data annotation accurately in order to understand their clients and business position in the digital marketing platform.

3.2 Methodology

Numerous data were gathered and a specific research methodology was used to carry out this study. The survey approach has been correctly applied in the current study. Additionally, a descriptive analysis of the data gathered will be used to further this research. Two different sources have been used for the data collecting. Following are the examples of them:

- 1. **Primary Sources:** The X- Integrated Marketing Agency team served as the primary source for the majority of the information in this research. A significant part of this has been played by the X-BS team. From the front, they deal with the clients and their requirements.
- 2. **Secondary Sources:** The organization's website as well as information on the internet were available.

3.3 Findings & Analysis

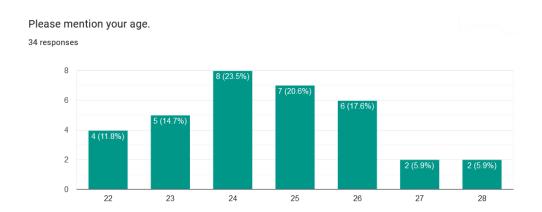
3.3.1 Findings

The importance of data annotation in digital marketing: mobile phone operators is the subject I decided to work on as my research paper. The entire study is based on primary data (surveys, official data, and my own direct observations gathered while doing the internship), secondary data from internal and external sources. To properly conduct the study for this project, there were a total of 35 versatile responders who served as my test subjects and represented the

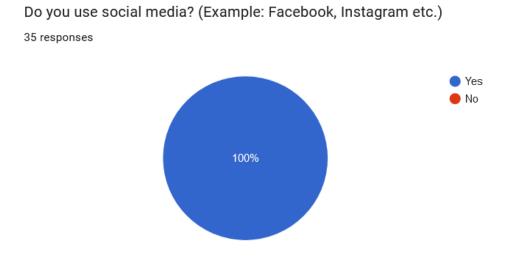
customer's point, as well as information from around 10 posts on the social platform of the brand Robi to support the motive of this paper.

3.3.1.1 Result of Online Survey

The following information was obtained using the online survey. A survey was conducted to better understand consumer's understanding towards digital marketing.

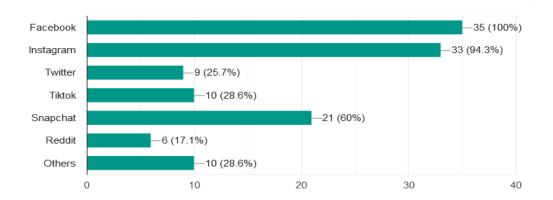


• A total of 35 people took part in the survey, including 17 men and 18 women, with 17 respondents in the 20-24 age range and 17 in the 25-30 age range.



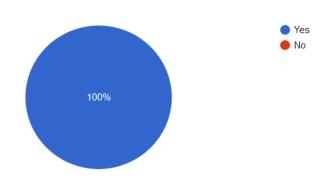
Which of these social platform you use?

35 responses



 Among all these 35 responders, 100% of them are active on social platforms and the most used platforms among them are Facebook and Instagram.

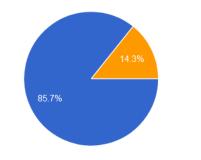
Do you think marketing campaigns changes the brand's image? 35 responses



• When we asked them if they think a marketing campaign of a brand, leaves an impact on the brand image, 100% agreed with this claim and 85.7% of them thinks that a

brand should have online presence.

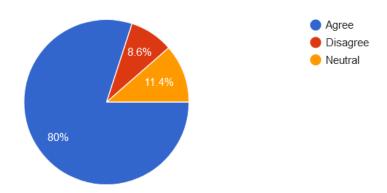
Do you think a Brand should have online presence? 35 responses



YesNo

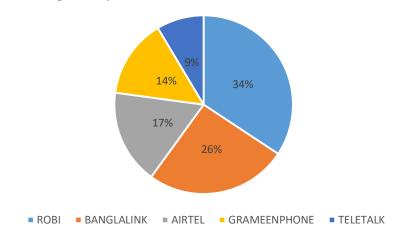
Maybe

Digital Marketing is leading every form of marketing recently.
35 responses



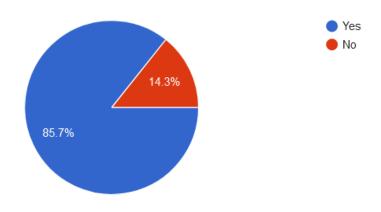
In our work at X-Integrated Marketing Agency, we interact with clients and use digital
marketing to create engagement. According to this survey, the majority of respondents
of 80% believes that digital marketing is currently dominating all other forms of
marketing.

Which mobile operator you use?

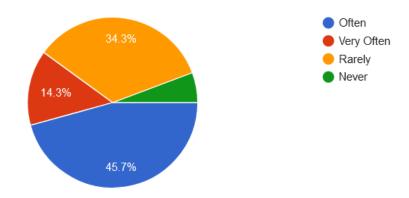


• In the next question, when they were asked about their mobile phone operator, 34% of them responded to use "ROBI", 26% uses "BANGLALINK", 17% "AIRTEL", 14% "GRAMEENPHNE" and only 9% uses "TELETALK" as their operator.

Do you see their promotional offer campaign content online?
35 responses



How often do you redeem those offers by seeing them online?
35 responses



• While being asked if they see any promotional offer related content about their mobile operator, 85.7% answered in affirmative where in the next question, only 14.3% responded to redeem those offers on a daily basis, 45.7% claimed to redeem those quite often, 34.3% redeem those rarely and 5.7% doesn't redeem those offers at all.

On the question
Does a good promotional content attracts you?
35 responses
Yes, very often
Yes, Sometimes
No, Never
not, the majority
of 65.7%
31.4%

they do sometimes where 31.4% voted for very often and only 2.9% said no.

In the next question, the responders were asked if they comments on their mobile
 phone operator's
 Do you comment on brand's social post?

35 responses social posts and

only 17% of them
said yes, 34% of
them said
sometimes and

denied to comment on those posts.

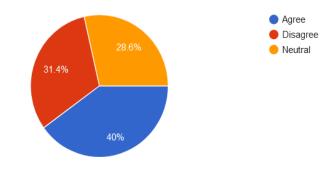
-

48% of them

• The majority of 40% respondents in this graph believe that all types of clients can be serviced online where 31.4% disagrees and 28.6% have a

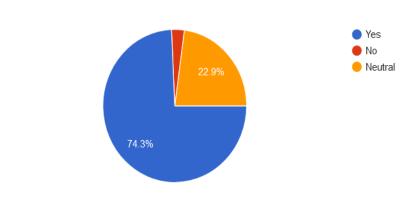
neutral opinion about this.

Through online, company can serve all kind of customers. 35 responses



Next they were asked if they thinks that it's easier to reach a brand through online where 73.3% of the responders agreed with the claim, 22.9% of them had a neutral

Do you think it's easier to reach the brand through online? 35 responses



Yes

No

opinion and only 2.9% of them disagreed

57.1% of the responder said in this survey that they have shared their experience about

Have you complained or share your experience about your telecom brand online their experience 35 responses of the telecom 42.9% brand they use online where 42.9% of them

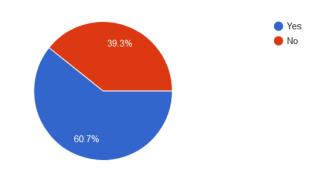
haven't.

shared that they

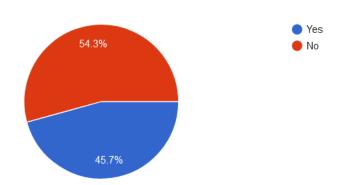
Among the 35 responders, 28 people answered this question and among them, 60% If yes, did the brand reach out to you? people said that the brand 28 responses

57.1%

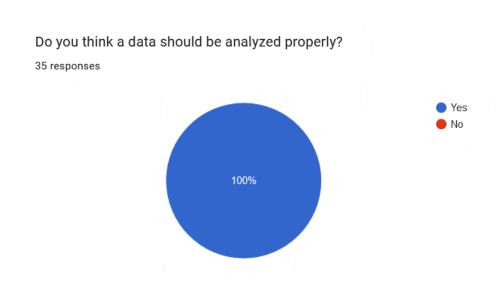
has reached them after sharing their experience with them and 39% said that the brand didn't reach out to them.



Are you familiar with the term data annotation? 35 responses



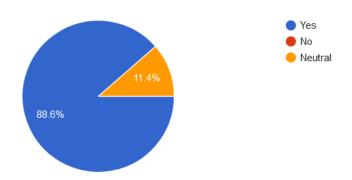
• Though this survey, we got to know that only 45.7% of our responders knows about data annotation where the majority of 54.3% didn't know about this.



• As data plays a vital role in everything, 100% of the responders believes that data should be analyzed properly.

If a data has not been analyzed properly, do you thing it effects the analyzing purpose?

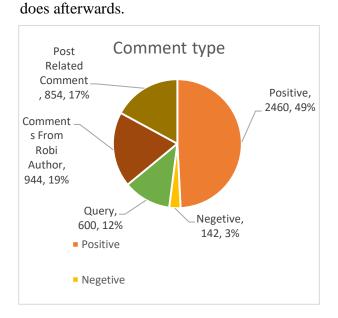
35 responses



• On the final question, our responders were asked if they thinks it effects the analyzing purpose if a data has not been analyzed properly and as an answer the majority of 88.6% people thinks that it does where on the other hand 11.4% have a neutral point of view on this and 0% disagrees with this claim.

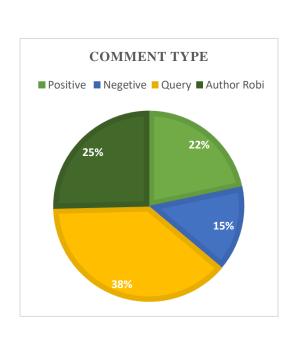
3.3.1.2 Result of Brand's post annotation

For this part, I've used the data crawling tool from my office to analysis and annotate the data of around10 highly engaged post of the brand "Robi", in order to put depth in my objective. The following information was gathered by using the data crawling tool "dotKom" to better understand consumer's engagement type towards the brand and to understand what the brand





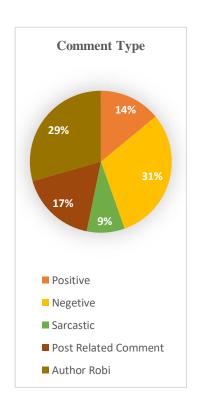
After analyzing and annotating the data of this post, we can see that this is one of the most engaged post of the brand in recent days. Through in-depth annotation, the reaction of customers towards this post falls under positive as 48% of the comments are about the good service the brand provide, 18% are engaging comment which are related to the post, 12% are different queries of customers, 19% are comments from Author Robi, which are basically different customer service officers of Robi whom are giving solutions to customer's query or leaving positive comments under consumer's review and finally there are only 3% of negative comments on this post.





• In the next post about sim service, the data annotation result shows that around 38% comments are different queries about the offered service in the post, 22% are positive comments appreciating the brand about its internet speed, coverage area, offers etc. 15% of the comments are complains and negative feedback towards the brand and the

rest of the 25% comments are from "Author Robi", which includes answering all the queries.





 This campaign of Robi includes two popular celebrities from Bangladesh's media industry and as a result the engagement rate of this post is very high. While analyzing

the data of comments, it showed that the negative comment rate are higher than any other post. The reason behind this was people were not accepting the concept of 4.5G as most of them complained about the poor network. After getting the feedback of this post, Robi immediately launched a new campaign with a Bangladeshi Actor and the idea of the campaign was to go to different cities and promote

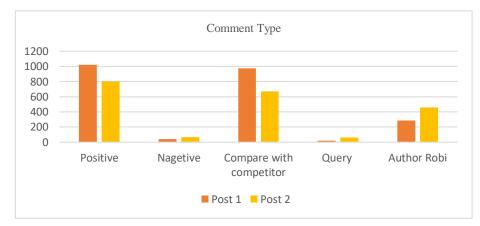


the new 4.5G concept. This new campaign turn out to be a massive hit as people were

really engaged and happy with this type of promotion and the rate of those post's comments were more than 90% positive.







• In these two particular post, we can see that the positive comments and comparison with competitors are the highest. Robi launched this helping flood effected campaigns in Bangladesh before any other telecom brand which resulted in a positive way.

3.2 Analysis of the findings

As from the findings, we get an idea about the mindsets of mobile operator users and mobile operator brands. We see that how users thinks about digital marketing and how brands use digital marketing to reach out their customers.

While in the survey, most of the users thinks that a brand should have a good online presence, they usually don't get engage with the brand's promotional contents. Most of them are also not aware about data annotation but they do believe that data plays an important role in analyzing and should be done accurately to fulfil the analysis purpose.

On the other hand while analyzing the data from a brand's prospective, we have analyzed around 10 posts from the official Facebook page of the brand containing 19480 comments.

■ Author Robi

ROBI'S OVERALL SOCIAL REPORT

■ Compare with other brands ■ Negetive

18%

Positive

■ Others

12%

Among them, 54% are positive comments, 18% are from Author Robi,

12% are customer's query, only 5% are negative comments, 3% are comparison with other's brand and rest of the 8% are about different topics.

rest of the 8% are about different topics.

By analyzing these data thoroughly,

we can see that, if a data has been analyzed properly, it helps to understand the current market and opinion of the customers properly. As we have seen in the findings, Robi immediately launched a new campaign after getting backlash for their internet speed. In this case, if data's were not annotated properly, the brand wouldn't have known the consumers feedback and wouldn't have taken any actions.

Thus it can be said that in this digital marketing era, the accuracy level of data annotations plays a very important role for a brand's image.

3.4 Summary & Conclusion

I was able to take a close look at the state of digital marketing in our country during my internship with X- Integrated Marketing Agency. The founders of this usage-based technology are without a doubt telecom operators. Over 5 million people in our nation sign up for social media each year. As a result, social media is becoming more influential in the marketing industry. Not only are businesses realizing how important digital agencies are, but they are also hiring them to keep up their online presence. To maintain the online image, data annotation has been playing a very important role all over the world. Though this feature is very new to our country but it's getting popular day by day. By annotating data, a brand not only can understand customer's point of view towards them, they can also keep an eye on their competitor as well and can create certain buzz by understanding the situation.

Furthermore, the use of data annotation enabled service is by default making Bangladesh digitalized and making brands more creative and available to their consumers every day.

To conclude, keeping in mind the variables mentioned, I would like to emphasize on the point that it is important to use data annotation correctly in order to develop Bangladesh's digital marketing environment.

3.5 Recommendations:

- Regardless of how big or little a company is, every brand need to be active on social media as customers are always drawn to newly updated pages since they provide the impression that they are available 24/7.
- Today, a company's strategy for digital marketing and campaign management may
 make or break its image, so it's really important to understand the concept before
 creating any marketing campaigns.

- Today's marketing sector needs data more than ever. Data security and data accuracy
 are one of the things Robi Axiata should guarantee in this competitive period.
- They are able to target brand-new social media groups. The majority of recent social media planning and engagement is focused on young people. But they should diversify their target audience to include different age groups in order to increase audiences.
- Data annotation should be done in completely neutral way of thinking by the employees.
- Proper training should be provided to the employees to ensure the quality of work.
- To prevent employee frustration, every firm should have a committed staff, and work duties should be balanced for each individual employee.

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Appendix A.

An Example of an Appendix

Appendices should be used for supplemental information that does not form part of the main research. Remember that figures and tables in appendices should not be listed in the List of Figures or List of Tables. Refer to the Thesis Template Instructions for more information.