

Report On
Data Management Platform in Digital Marketing: A New
Experience for Bangladesh

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

BRAC Business School
Brac University
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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.

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Letter of Transmittal

Md. Shamim Ahmed
Lecturer,
BRAC Business School,
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66 Mohakhali, Dhaka-1212

Subject: Internship Report Submission.

Dear Sir,

With heartfelt respect, I am Soyeb Ahmed, submitting my internship report which is on Data Management Platform in Digital Marketing: A New Experience for Bangladesh., which I was appointed by your direction to complete my degree.

As per the internship requirement, I have worked in AdPlay Technology Ltd. is a digital ad-tech company which empowers brands and agencies to execute data intelligence driven campaigns on digital media. I was always keen to work with any tech based or IT company so I have chosen this company for my internship is to learn the real-life work functions of digital marketing, data management, data crunching and modeling for business at the same time.

Lastly, I hope that the report will satisfy the requirements.

Sincerely yours,

Soyeb Ahmed

16104097

BRAC Business School

BRAC University

Date: September 27, 2020

Non-Disclosure Agreement

This agreement is made and entered into by and between AdPlay Technology Ltd. and the undersigned student at BRAC University named Soyeb Ahmed for the commitment in order to prevent unauthorized disclosure of confidential information of the company AdPlay Technology Ltd.

AdPlay Technology Ltd.

Soyeb Ahmed

Acknowledgement

Without several individuals, completing this report work was very tough for me. The valuable feedbacks, supports and advices provided by them, encouragement and helped me a lot to improve the quality of this report.

Firstly, I would like to thank the Almighty for giving me a path full of grace and patience to complete this report on time.

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Thirdly, I would like to thank all my senior brother and sisters who motivated me throughout the journey at BRAC University and supported me in my hard times.

Finally, I would like to express my gratitude to all the employees of AdPlay Technology Ltd. The support I receive from them was immense. They gave me a lot of advice regarding my work and helped me to sustain in this industry as I was fully new in this marketing sector. The trainings provided by them helped me a lot to learn the new horizons of digital marketing arena.

Lastly, I am very much thankful to BRAC University for giving me all the opportunities inside and outside the premises to polish my skillset and for making me flexible for the real-life work environment.

Executive Summary

Today we are living in a world where technology is advancing in each second. The traditional theories and terms for business is obsoleting and the new terms are introduced by the business owners. The number of brands and startup companies are increasing tremendously. On the other hand, consumers of brands are also changing based on the technology availability. The users now want more reviews and trials of the product before purchasing them. In order to meet the customer satisfaction and provide reviews, number of websites and apps are increasing day by day. This is how technology and business are mixing together and touching the new heights. Since, the consumer behavior has changed the business and brands are shifting more towards online. To understand the consumer behavior and experience is the main factor for digital marketing. There are a lot of platform which helps the brands to understand the consumer experience. However, the Data Management Platform in digital marketing, can track the audience, segment the customers into various groups, serve ads based on their preferences and having positive impact on their buying behavior.

Keywords: Data Management Platform, Digital Marketing, Ads, Consumer Behavior, Audience Track.

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List of Acronyms

DSP	Demand Side Platform
SSP	Seller Side Platform
CTR	Click Trough Rate
CPC	Cost Per Click
CPI	Cost Per Installation
CPM	Cost Per Mile
CPV	Cost Per View
CPA	Cost Per Action/Acquisition
RTB	Real Time Bidding
TD	Trade Desk
DMP	Data Management Platform
CMP	Creative Management Platform
GRP	Growth Rating Point
OTP	On Target Performance
ADX	Ad Exchange
POV	Probability of View
POD	Power of Decision
I/O	Insertion Order

Glossary

Impression	Number of counts for every time a user sees an ad
Reach	Number of unique users for a particular user
Click	User interaction for a served ad
Crawlability	Website discoverable status
Campaign	A set of advertisement to share any idea/product
Frequency	Number of counts for an ad served to a user
Bid Price	The price for purchasing a place to serve an ad
Fixed Buy	The price for purchasing a reserved place to serve an ad
Network	The platform on which the ad will be served
Targeting	Type of audience to serve an ad
Creatives	Banners, Posters or Videos to run an ad
Publisher	The owners of any app or website
Advertiser	The party who wants to promote their product or services
Programmatic	A set of rules/program to serve an ad for a fixed audience
Celtra	A cloud-based software for automating creative production
Native	Ad that matches with the platform on which it appears
Rich Media	An interactive media that responds with user actions
Cookie Mapping	An id to track a user persona and remodeling it in web
Device ID	An id to track a user persona and remodeling it in app
Market Place	Refers to a place where publisher and advertiser buy and sell their inventory (impression) to serve ads
Open Auction	Place where inventory prices are decided through Real Time Bidding

Chapter – I

INTRODUCTION



1.1 Student Whereabouts:

1.1.1 Name & ID:

This is Soyeb Ahmed, ID- 16104097. I started my journey at BRAC University in Spring 2016 session to complete my undergraduate studies and pursue Bachelor of Business Administration degree under BRAC Business School.

1.1.2 Academic Focus:

I always wanted to build my career in any technology-based company or in IT sector of our country. However, I had to study in business background from the very beginning so I decided to pursue my undergraduate degree from BRAC Business School as its quality of education is better than other business institutions. I choose my major in E-Business and Finance. In the meantime, I found my high interests in robotics and wanted to switch from Business School to Computer Science. However, it was not possible for me as I had no prior knowledge of science from my school background. Since, I am very much interested in technology-based items so I found out that E-Business is the only technical subject from the BRAC Business School among all other major courses which will help me to get the business knowledge and technical feel at the same time.

1.1.3 Co-Curricular Activities:

As mentioned before, I found my interest in robotics so I joined the Robotics Club of BRAC University in Fall 2016. However, my hunger for robotics knowledge got increased and in 2017, I switched from the club to the BRACU Mongol-Tori project. I started working in this project with the finance and promotion section. After few months, I attended Indian Rover Challenge competition, IRC-2018 organized by VIT University, India, where my team became 2nd Runner Up. From 2018 to 2019, I became the Sub Team Lead of this project and attended University Rover Challenge, organized by The MARS Society, USA and secured 13th position all over the world. In 2020, I formed the next generation Mars Rover team and worked as an Operations Team Lead. Then I along with my team attended IRC-2020 and URC-2020. Here my team secured 07th and 02nd Runner Up position all over the world respectably.

1.2 Internship Details:

1.2.1 Company Details:

The internship offering company name is Ad-Play Technology Limited. This is Digital Ad Tech company which empowers brands and agencies to execute data intelligence driven campaigns on digital media. The head office is located in Road-12, Banani, Dhaka-1212.

1.2.2 Recruitment Process:

I was looking for an internship in various social media platform. In Facebook I have seen their job recruitment advertise so I just drop my resume to the HR of the company. Later, I found a shortlisting email from their HR. After few days, I got a call for interview and answered the questions. Later, I had to give another interview with the finally short-listed candidates as their job vacancy was only for 1 person. Lastly, I got selected by them and joined the company as an intern.

1.2.3 My Expectation & Experience:

The requirements of this job were to be a marketing major student. However, I never thought I would be selected by the company as an intern even after not having a degree from Marketing major. Initially, I lost all the confidence in myself by overthinking this matter. After my joining, I found a training schedule from the HR, made by my supervisor. Later, I found there are 3 courses mentioned in the training schedule for me. These 3 courses helped me a lot to gain most of the marketing knowledge and terms.

After completion of these courses, I get stable and found this industry very interesting. Now I am working with the Ad Ops team. This is mainly the operations of advertisements or campaigns. Since the industry is small but very attractive and booming positively in Bangladesh market so I will get more work opportunities here.

Lastly, at this point of working, I have gained my confidence back since I get a spark in this work. From this workplace, I am being able to learn the core strategies of other businesses and firms. Also, I am learning how to handle work pressure in corporate life and balance the time between work and personal life.

1.3 Responsibilities & Reporting:

1.3.1 Job Responsibilities:

During the internship time, I have mainly worked with the Ad Ops team. Here my main work was to setup campaigns, run them on time and optimization. The other brief details of my job are given below:

- Preparing weekly updates and reports to track growth and success rates of campaigns
- Work with Media Manager to refine social media strategy and best practices
- Assist in managing social media channels and editorial calendar to ensure content is timely, relevant, and engaging
- Drafting weekly e-newsletters
- Keep up to date and informed on new social media trends and adapt accordingly
- Assist with website copywriting, proofing, and updating as needed

1.3.2 Work Opportunities:

At the beginning I have started my journey as an intern in this company. Back then my only job was to help the ad operations team. As time passed, I have learned a lot more things like media management, campaign run and optimization, ad tracking, website testing and others. So, for me I have got a lot of work opportunities. Most importantly, I have mainly worked with the ad operations division. This is the only place from where I get the opportunity to work directly with the business development team, media management team and learn about the campaign management efficiently. Lastly, since I have learned a lot more on Digital Marketing so I strongly believe this will open some new horizon for me in the future. Based on those, I will be able to complete my higher studies and become an asset for the nation.

1.3.3 Limitations:

Definitely, not having a degree or any major courses ideas from the marketing course is a limitation for me. The main limitations in AdPlay Technology Limited I have found is very busy work schedule because of the COVID impact. As all the brands are shifting towards the digital marketing so every employee here does not get any time to waste due to a heavy work pressure. Most importantly, every business requires success and having a busy workplace provides the spark to work and learn more. However, in spite of having busy schedules I found the environment very friendly and helpful at the same time.

Chapter – II

ORGANIZATION DETAILS



2.1 Basic Details about Organization

2.1.1 Brief History:

AdPlay Technology Limited is launched in 2015. This is the leading provider of interactive digital marketing platform and technologies for advertisers, mobile operators and publishers. AdPlay is committed to exploring digital marketing opportunities through our versatile combination of display, mobile, rich media, video and social marketing proficiency, industry clout, innovative technology as well as sophisticated modelling and deep analytical tools.

2.1.2 Mission Statement:

We want to overcome the difficulties of digital ads by providing smart tools that automate and reduce the digital marketing campaign system. We want to empower brands and advertisers to have greater influence and exposure over their promotions.

2.1.3 Objective:

Our objective is to become the number one programmatic native advertising platform, helping agencies to accelerate customer engagement and acquisition. Empowering brands and agencies to execute data intelligence driven campaigns on digital media by providing our integrated tech stack covers creative management, programmatic media buying and data analytics to deliver ROI on media investment.

2.2 Management Practice

2.2.1 Organization Structure:

As an ad-tech-based start-up company, AdPlay Technology Limited practices a technically organized management framework composed of its employees to provide their corporate clients with quality product solutions. The management framework as outlined below:



Fig 2.1: Organizational Structure of AdPlay Technology Limited

By maintaining this organized process, all the employees hold their position and maintain one to communication with their upper level managements to provide the best quality service to their respective clients and for the betterment of the organization. An organogram of the organization will help to visualize the management style of AdPlay.

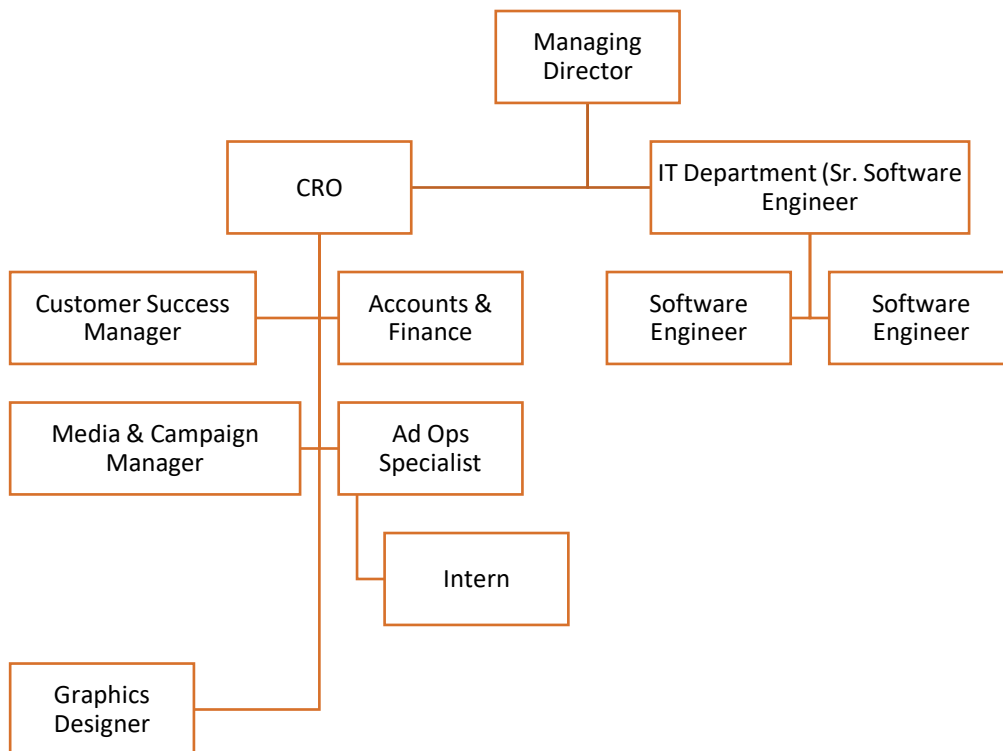


Fig 2.2: Organogram of AdPlay Technology Limited

2.3 AdPlay Products & Services:

AdPlay Technology Limited offers a lot of products and services for their clients in order to give the best ROI on media investment. The products and services are mentioned below with their few features.

2.3.1 AdPlay DSP:

AdPlay is connected with Google AdX or Ad Exchange. DSP stand for Demand Side Platform. Here the advertisers get the access to the open inventory on multiple publishers and global exchanges. Moreover, private marketplace dealing in some of the leading local and global publishers are also offered in this section.

2.3.2 AdPlay CMP:

CMP stands for Creative Management Platform. AdPlay has a partnership with Celtra.com. All the rich media created and stored in the Celtra Platform. By using this AdPlay can offer a wide and interactive variety of creatives to its client.

2.3.3 AdPlay PMP:

PMP is Programmatic Market Place. This is mainly a platform for private dealing and bidding. AdPlay PMP connects all the renowned advertisers and publishers through this platform.

2.3.4 Ad Track:

Ad Track is mainly an ad analytics tool or software-based web platform. After running a campaign, it allows the brands to effectively track about its campaign and help them to measure the success the investment. Moreover, this Ad Track system allows the brands to effectively track competitor and industry activity in online and social media. So that, the clients of this services can make core strategy and plan their inputs.

2.3.5 AdPlay DMP:

AdPlay has its own platform known as AdPlay Data Management Platform which is used to collect immense amount of audience data and categorize them into various segments based on the specific attributes. This stored data helps them for the remarketing and at the same time brands get access to a wide number of customers to advertise their other products. Moreover, this remarketing helps to maintain a good relationship with the customer and the brands. In this report we will be focusing on this segment only as this is a fully new platform for Bangladesh market and holding a great value in the digital marketing arena. Some features of Data Management Platform are given below.

- **Collecting Data:** as mentioned before, this platform can process all the data that we collect from various sources.
- **Managing Data:** DMP allows marketer to organize and manage all customer data types from various sources
- **Activating Data:** DMP offers the ability to activate data with the technology partners in the marketplace, including ad servers or DSP's.
- **Analyzing & Reporting:** Data stored in the DMP can be analyzed within a few clicks only. This also helps to optimize the live campaigns running in various mediums to improve the customer engagement.
- This also allows us to run campaigns to the selected groups only. As a result, the marketer gets the best result by spending less amount of money.

2.4 Departments at a Glance:

There are only few departments in AdPlay Technology Limited for their operation. However, it is really a crucial factor for having less departments to provide the best support and service to the clients. For having less departments, it reduces the process time to reach back any client. The departments and their functions are briefly described below.

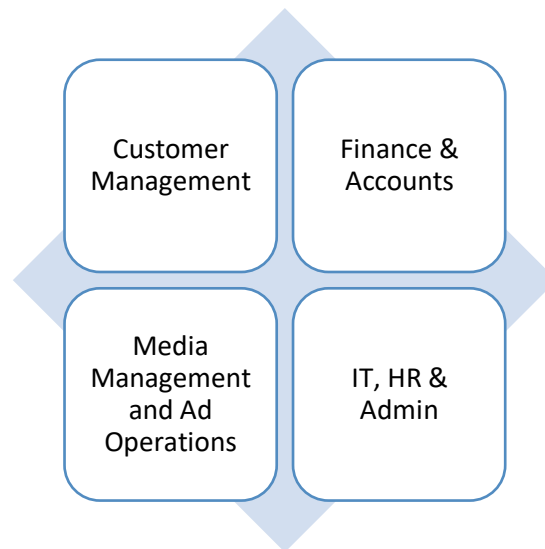


Fig 2.3: Organogram of Departments in AdPlay Technology Limited

2.4.1 Customer Management:

This department mainly works for the business development and client handling. The core work of this department is to reach the clients and make new clients for the business. At the same time, the customer success manager makes sure that they keep a very good relation with their previous clients and the clients are getting their expected supports from AdPlay.

2.4.2 Finance & Accounts:

Executive of Finance & Accounts department make sure that the clients are paying the price on time as they are incurring the services from AdPlay. Also, the supplier (Publishers) are also getting paid based on the service that AdPlay is incurring from them.

2.4.3 Media Management and Ad Operations:

This is the most important part of the entire organization. The main work of this department is to setup the campaign based on the insertion order provided by the clients. After successful setup of the campaign the Ad Ops team make sure that the campaign is live for the actual time and the creatives are provided on time by the IT team. Not only these, but also, the team make sure all the publishing sites and apps are showing the ad on the purchased places. Most importantly, if any site or app fails to maintain the minimum CTR rate then optimizing for that ad is also a responsibility of this team. Furthermore, the team make sures the third-party native campaign reports are up to date during the campaign timeline. As the customers can see over their advertisement performance so it is really necessary to keep the report database updated on a daily basis.

2.4.4 IT, HR & Admin:

The IT team makes sure that the multi-dimensional creatives are on time while the campaign is about to live. Most importantly, the team make sure the rich media creatives and tags are working properly and approved by the Google AdX after the ad is live. Not limiting to these, the team also makes sure the live programmatic campaigns are getting enough impressions from the real time viewer in the AdPlay Platform.

On the other side, the HR and Admin department confirms everyone is having the proper work environment, maintaining work life balance, having proper access to the office supplies, utilizing the resources properly and delivering their best to the organization. The new recruitments, training and development program for an employee when needed is completed on time are also a part of their responsibility.

Chapter – III

REPORT OVERVIEW



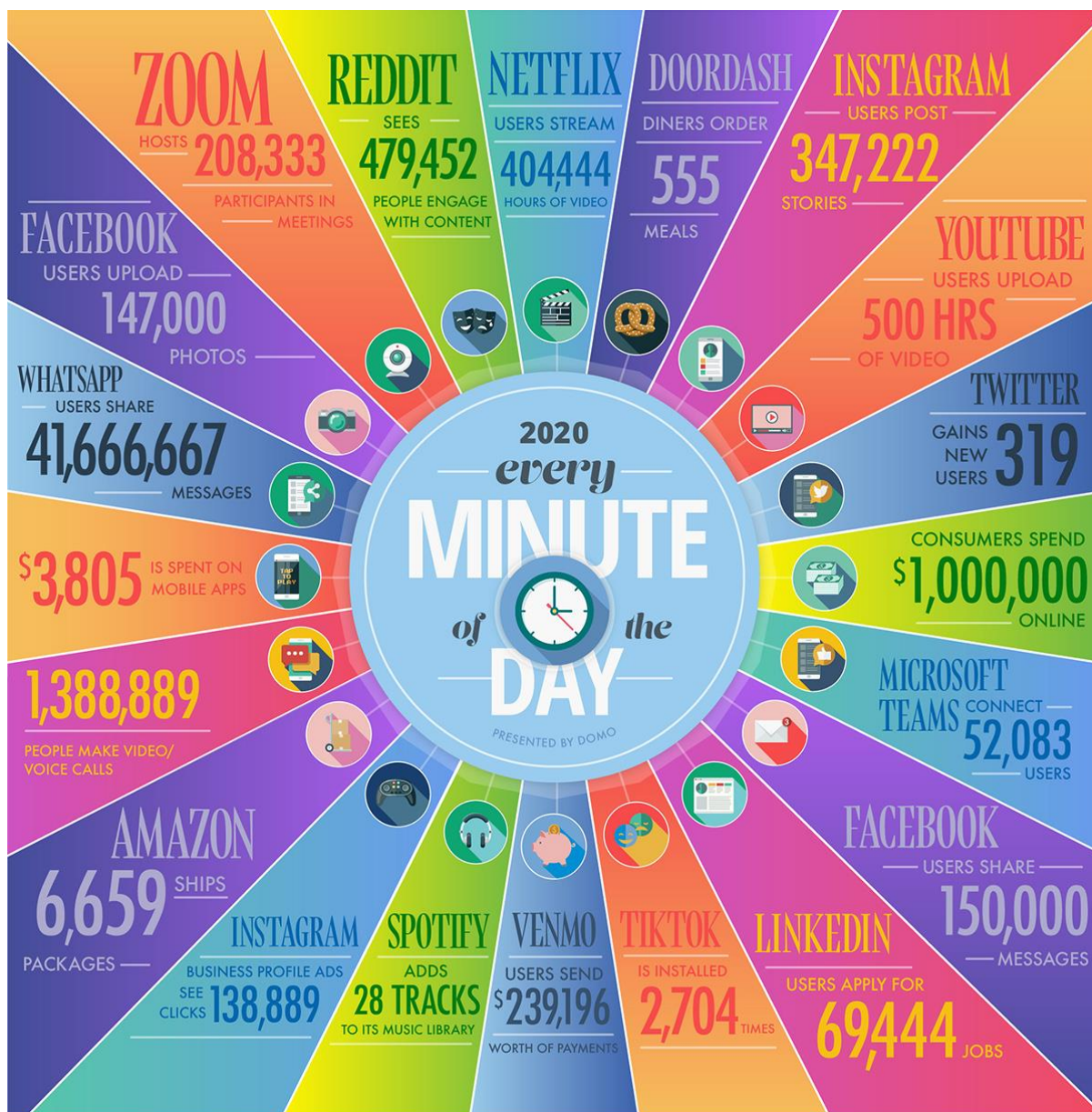
3.1 Digital Marketing:

The theoretical definition of Digital marketing can be: this is a practice of advertising and selling goods and services through the use of internet and online platforms. The history of digital marketing is more like a story telling. After the 29 years of internet invention the iPhone took birth in USA. By this time the number of internet users grew drastically. In the year 2000, when the first iPhone arrived in the USA market then people get the internet in their hand. People started using internet in their iPhones and looking for products in online search engines. After few years, people found they are getting faster and accurate result through the then online marketplace comparing to the salespersons of various brands. People started avoiding the salesperson as they followed only the traditional system of the marketing and tools. Later, the online marketplace gets familiar in various names like, 'Online Marketing', 'Web Marketing', 'Internet Marketing' and lastly in Italy it got the name of 'Digital Marketing'.

3.1.1 Bangladesh Market Scenario:

Five years back from today a great number of companies and brands used the traditional marketing system in order to do business in Bangladesh. In this marketing system the core part was TV Channel Commercials (TVC). Apart from TVC, brands used to advertise their ads in billboards, signboards, newspapers and take help of salesperson to increase their sales. However, in the last Five years the expenditure for the traditional marketing is getting lower and a great number of brands are shifting towards the digital marketing side. This is not because people now-a-days use more social media platforms to spend their leisure time but there are some benefits of using this technology-based marketing. There are 3 main reasons behind it and they are:

- **Proper Audience Targeting:** If a brand uses the technology-based marketing tool then it enables the advertiser to filter the proper age, target group and gender to serve any ads.
- **Low Invest but High ROI:** The lower the viewer the lower the cost will be. If the ads will serve only to the specific people then the ROI will be higher.
- **High Reach:** Since the cost is going to be lower so the number of reaches will be higher. Additionally, the young generation does not want to read newspapers or watch TV so the advertiser can easily reach them by properly using it.



The world's internet population is growing significantly year over year. As of April 2020, the internet reaches 59% of the world's population and now represents 4.57 billion people — a 6% increase from January 2019.



GLOBAL INTERNET POPULATION GROWTH 2014–2020 (IN BILLIONS)

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Fig 3.1: Number of Traffic Generated in Each Minute on Internet

3.1.2 Steer Towards Digital Marketing & COVID-19 Impacts:

Digital Marketing has developed over the last two years, with 88% of businesses using social media as a main promotional tool in Bangladesh and all over the globe as well. Since a lot of brands are using social media as their main promotional tool so before the covid-19 outbreak there were a lot of digital marketing agencies in Bangladesh. Moreover, there are a great number of new startups in Bangladesh who worked as a freelance for Non-Bangladeshi companies.

After emerging of digital marketing system, the traditional marketing is on the stage of decline. Now-a-days every advertiser wants to serve their ads in the social media where a lot of people will see them and get to know about their products. Finally, the COVID-19 has put a full stop on the traditional marketing system. Due to the social distancing most of the salespersons lost their job and the advertisers shifted from offline to online fully. As a result, the digital marketing industry is now booming and having a bright future in Bangladesh. The figure shows the impact of covid-19 on the marketing sector globally.

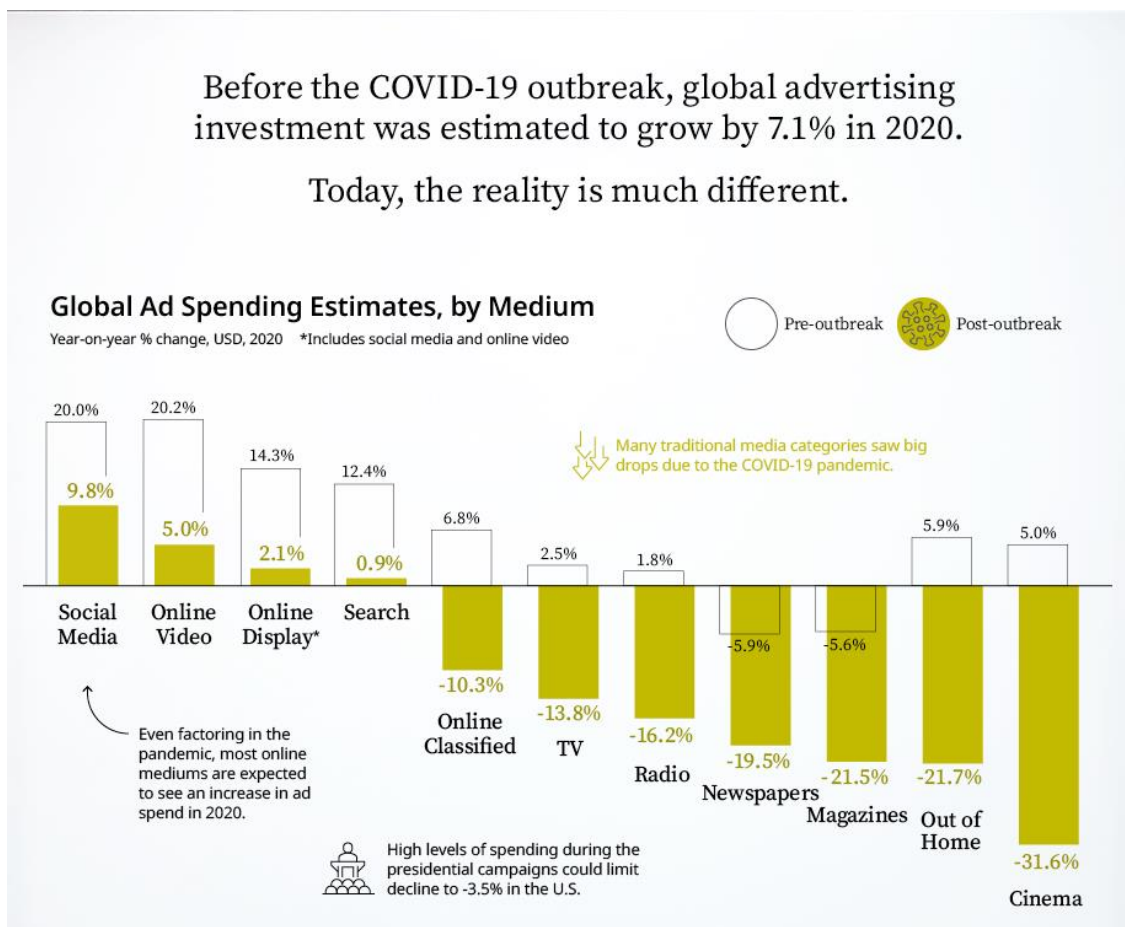


Fig 3.2: The Impact of COVID-19 on Ad Spending by Advertisers

3.2 Data Management Platform:

Previously in the products and services section of the AdPlay Technology Limited, Data Management Platform has been briefly described. This section will cover all the details, history, present usage and basic workflow of DMP.

3.2.1 History:

Previously there were no such platforms by which advertisers can track or monitor who is clicking or watching their ads. Moreover, the ads were served for a generalized audience so there were no options for segmentation. As a result, the marketer needs to spend more money on advertisement and salespersons. These were the story of the marketing industry in 20th century. However, in the 21st century the internet has changed the customer mindset. Previous marketing means, what companies are offering to the customers but then the internet has changed the view point and made the marketing like, what customers want to purchase.

The customers of 21st century has become highly competitive and capricious. They compare single online brand experience they have with the best available in the world. Brands wanted these journeys to be customized and focused on the basis of consumer engagement with the company across all networks. Moreover, they assumed that they will track each customer devices they use and based on that they will serve the ads. However, if all these tracking and serving ads does not happen in milliseconds, then customers are going to move away to another brand for a better experience.

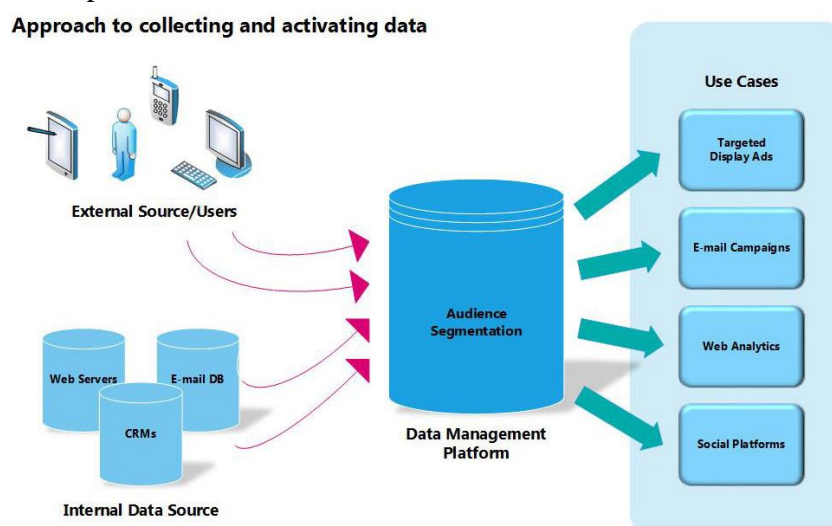


Fig 3.3: Data Management Platform

This is the storyline only based on the customer side. Now coming to the business side. When the customers were looking for variations and customized products for each of them then it

become one of the necessities for the brands to identify and serve the ad to the right customer at the right place in right time. If the brands do not shift towards the technology then there was a high chance of failure as they would not be able to segment the customers and sale their products. At the same the traditional marketing system was very much costly and the ROI was declining heavily. So, to overcome from all these situation business and marketer decided to incorporate the data management platform in the marketing segment. Previously, this DMP term was only used for the science and statistical data related fields. Now for the first time in 21st century this term has been introduced with the business side. As a result, the brands became able to track their audience, categorize them and serve them ads based on their demands.

3.2.2 DMP's Historical & Current System:

Historical System:

Previously there were only 3 parties associated with the DMP. The first party was the Advertiser and second party was the Publisher. Between these two parties there was another party named AdNetwork. So, back then the advertisers send their ads request to the Ad Network and then the Ad Network decided which publisher will serve what ads to their users. This was because back then the number of advertiser and publisher were very low. However, after the technology gets the peak the number of advertiser and publisher increased significantly. As a result, it became tough for the Ad Network to maintain all the advertisers and publishers alone. Then the new system evolved and it is still using with some modifications.

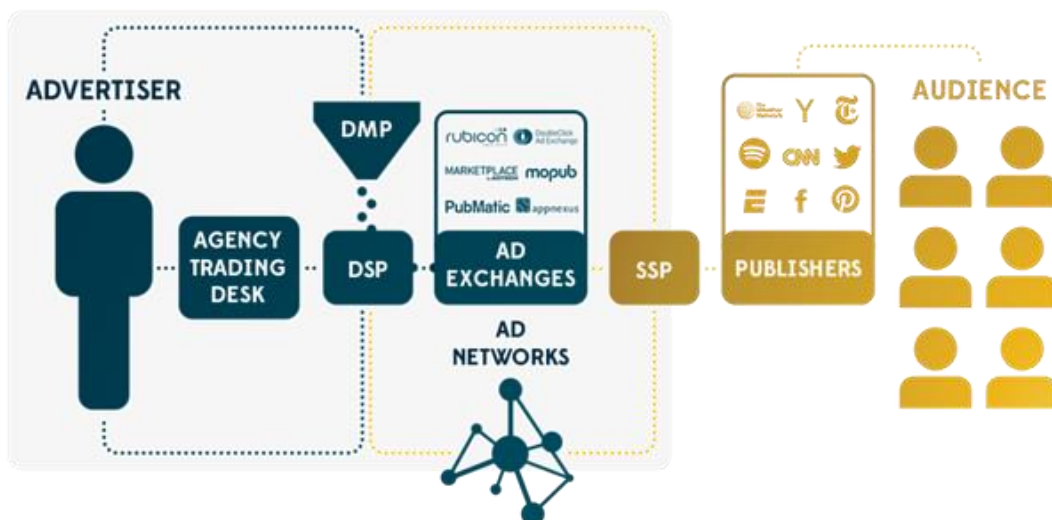


Fig 3.4: Historical and Current System of DMP

Current System:

In the current times, there are a good of TD's or Trade Desk from the advertiser side who handles all the advertisers. Then for all the TD's there are DSP's or Demand Side Platform to maintain the process simultaneously. On the other hand, the SSP's or Supplier Side Platform has evolved from the publisher side to maintain all the publishers as the number of publishers is very high. In between these DSP and SSP there is AdX or Ad Exchange where all the bidding, ad impression buying, selling and conversions take place.

3.2.3 Work Flow of DMP:

Data Management Platform works mainly in 3 steps. The steps are described in this section with visualization.



Fig 3.5: Workflow of Data Management Platform

- **Data Collection:** The first step of DMP is to collect the data. A customer mainly uses 3 devices on average. If the customer uses web browser and click on the add then all the personalization data like: choices, browsing history, clicks, views and others are stores in the cookie. Again, when the customer clicks on the served ad from any mobile device then these data are stored into the device id. It means, DMP collects all the data from the cookie and device id in order to store in its advertiser server or user sheet.
- **Data Stitching:** At this step the DMP matches all the data with each other and create a look alike model. Since the data which has collected are non-sensitive data so it is hard to identify a person exactly but through cookie mapping and remodeling it is easier to find the choices and personality of a user.

- **Categorizing:** Once the data is stitched and model is ready then it's the time for categorizing the data. This categorization is mainly depending on the data/DMP user. The way they want they can filter the data and get the accurate result. For example, if anyone wants to see the geographical location or age group of those who clicked on the served ad then the filter will only show those to the user.

3.3 Benefits of Using DMP & Data Analytics

Publishers and media companies who use a data management platform have several advantages. They are able to collect and analyze information faster and transform their findings into content for customers and advertising opportunities for their partners.

- **Data Improves Decision Making Process:** DMP gathers data from various stores and then analyze those and prepare information so that customer can get one unified sight. This how they offer a more cohesive picture which is very easy to understand. This how decision-making procedure becomes easier.
- **Creating Audience Dataset:** DMP helps advertisers to know their customer better whenever customers visit the site. This helps to serve customer better way through customer segmentation. Through DMP, it is very easy to know more about different groups of customers and their demands. Moreover, its data sorting is way fast than human.
- **Data Analytics Improves Content Quality:** Whenever the advertiser uses the data analytics created by DMP to run any campaign then based on that analytics advertisers take good strategies and make quality contents. This is helpful for targeting large set of customers. Also, this helps to create a good image of the brand in the market.
- **Generate revenue:** DMP provides valuable information of customer to the advertisers and hence this becomes a new way to generate revenue. Advertisers attract customers by making add accordingly. This is the most exciting part of DMP. Companies mostly relies on spray and pray method to reach out to large number of customers. Here DMP helps a lot to reach out to the right target market.

Chapter – IV

CAMPAIGN MANAGEMENT USING DMP



4.1 Goal Setting:

The main objective of digital marketing is to create, share and pursue you're the brand's story with the customer. So that, the customer can feel the need of the advertised product. In order to make the story alive, an ad specialist always needs to ask question to the advertiser to know what they really want to share with the customer and decide through which story they can reach to the proper audience with a higher ROI. The more we ask questions the more successfully plan for the campaign will be designed. A successful campaign mainly depends on the story behind the creative contents and emotions that can click the customers mind to interact with the served advertise. So, if the goal is to share the story and create awareness then the campaign setup will be different but if the goal is to get high number of conversions from the ad then the campaign setup will be based on that.

4.1.1 Purchase Funnel:

Previously there were no such platforms by which advertisers can track or monitor who is clicking or watching their ads. Purchase Funnel mainly refers to the process of engaging the customer. According to the theory, only very few customers take purchase attempt at the very first sign of an served ad. Most of the time people will just see the advertise and scroll down to the next. However, according to the human psychology people can recall something in their mind up to 30 days. So, based on this statement marketers have decided to maintain a process through which they will be reach to the customer and easily convert them into purchase actions. There are mainly 5 steps of the funnel. They are:

- **Awareness:** when a product is launched then it is mandatory to create awareness among the people about the products. If they do not know about the product then they will never feel the need of it. So, in this stage marketer and advertisers only describe the products and its features.
- **Consideration:** At this point, the advertisers run another advertise. In this advertise the main attraction point for the customer is the point of difference. The benefits of the product and the competitiveness of the product is the core concern here. If it is not described properly here, then there is a high chance of losing a potential customer.

- **Conversion:** This is the final step where a potential buyer turns out into a real customer. After considering the product and comparing it with other competitive products a customer purchases it. So, at this point the advertise or marketer promotes some high-quality features in them advertises and put a purchase now option.
- **Loyalty:** These are the post purchasing steps. Whenever a customer completes the purchase then it become a responsibility of the seller to provide good services so that the customer feels good and consider the brand for future purchases. This is called loyalty. Moreover, it helps the advertiser for remarketing.
- **Advocacy:** As a part of remarketing, an advertiser can easily remind the customer about his previous purchase and based on that the advertiser can suggest him for the new and other good services available to them. This is called advocacy from the brand.

This detailed picture will help to visualize the process easily.

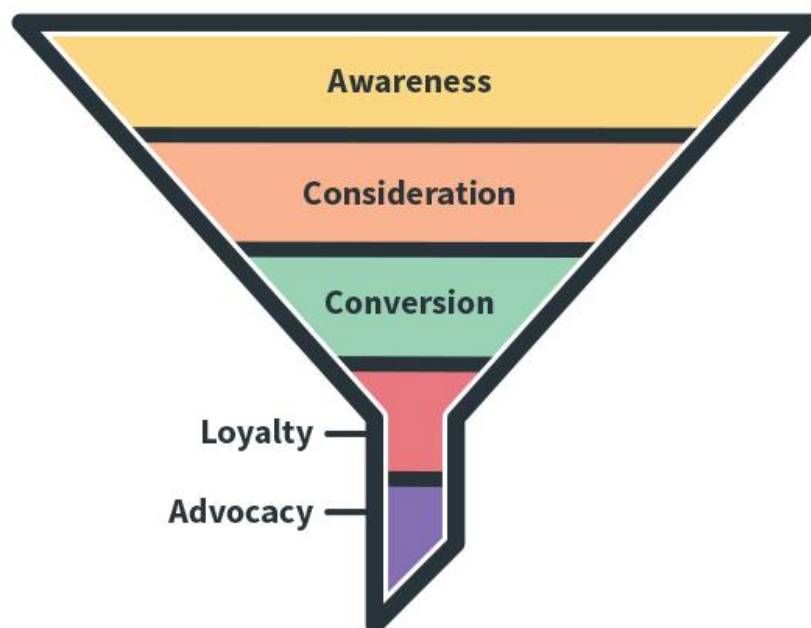


Fig 4.1: Purchase Funnel

4.1.2 Probability of View:

The probability of view is mainly the chances of getting the ad viewed by a customer. Ultimately, there is no guarantee that any device user will see the ad. The user might skip the ad or the ad might not be able to attract the user. So, the advertiser must need to make the storyline in a way based on that a user understand why s/he should watch that ad. The more connecting the story will be the more viewability rate will be. Apart from this, there are also few costs associated with the probability.

- **Normal Cost:** The normal cost is mainly the cost for per view. This rate or cost is applicable for the normal market scenario.
- **Market Cost:** The market cost is mainly depending on the type of advertise and the time of the advertise. For example, during this COVID-19 times, most of the brands are trying to sell hand sanitizer so everyone made the ad for it and wants their ad to be served. In this time, the market cost will be higher for everyone and the one who will pay the higher for the ad, only their ads will be served.
- **Opportunity Cost:** Relating with previous example given on the market cost, if food cart (a restaurant) wants to serve their ad in any platform then they will get the place at a lower cost as their product and industry is different. This is the opportunity cost for food cart.

4.1.3 Power of Decision:

Power of decision is mainly referring to an ability for making choices to where the ad will be shown in the publisher site provided by the advertiser. Whenever a user enters into a website right that moment the website ad section sends a request to the ad exchange to serve the ads. As a result, the user can see the ads in various places of the website. The mentioned figure 4.2 will clearly indicate the ad sections in the devices.

The ad sections are sold by the publishers through SSP in the ad exchange. So, the power of decision allows the advertiser to directly communicate with the publisher and purchase some of the places at a fixed rate. The left-over ad spaces are then sold in the ad exchange.



Fig 4.2: Ad Spaces in Multiple Websites & Apps

4.1.4 Growth Rating Point (GRP):

The GRP is mainly a measurement tool in the advertising section. It mainly measures the effect on the demography after seeing an ad. The calculation formula of GRP is = $Reach \times Frequency$. The reach is number of people who saw the ad and the frequency is the number of times they saw the ad. Based on this result, the total impact on a demography is determined. There is another cost associated with the GRP. That is Click Per Point of CPP. The

formula of CPP calculation is = $\frac{Total\ Cost\ of\ Advertisement}{Total\ GRP\ Value}$.

4.1.5 On Target Performance (OTP):

This is another measurement tool for the campaign management. The result of this measurement determines the success rate of the campaign. The formula of OTP calculation is

= $\frac{Targeted\ Audience}{Total\ Campaign\ Impression}$. The narrower the audience will result the less OTP. Based, the

campaign can be optimized for getting better results.

4.1.6 Type of Ads:

There are 8 types of ads in the digital marketing industry. In AdPlay Technology we only focus on 2 types of ad. They are:

- **Native Advertising:** This is mainly a paid type of advertisement where the ads look and functions like other segments in the web or app. For example: while using Facebook, a user finds some sponsored contents which looks like normal posts of Facebook. These types of ads are known as Native Advertising. It can be in a picture/banner format or in a video format. Here, the number of impression goal is set but the audiences is not fully segmented. As a result, a lot of people can view or click on these ads.
- **Programmatic Advertising:** This is mainly an upgraded version of the native advertising but there are some set of rules used in this advertising. These ads are fully segmented and the all rules are defined at the beginning. For example: the number of viewers, target age group, target platform like social media, other apps etc. or demography of the viewers, everything is defined here.

4.1.7 Ad Formats:

There are no limits to the ad formats. There can be display banners, prime/lead banner, interstitial and many more. Some featured and high performing ad formats are shown in the picture.

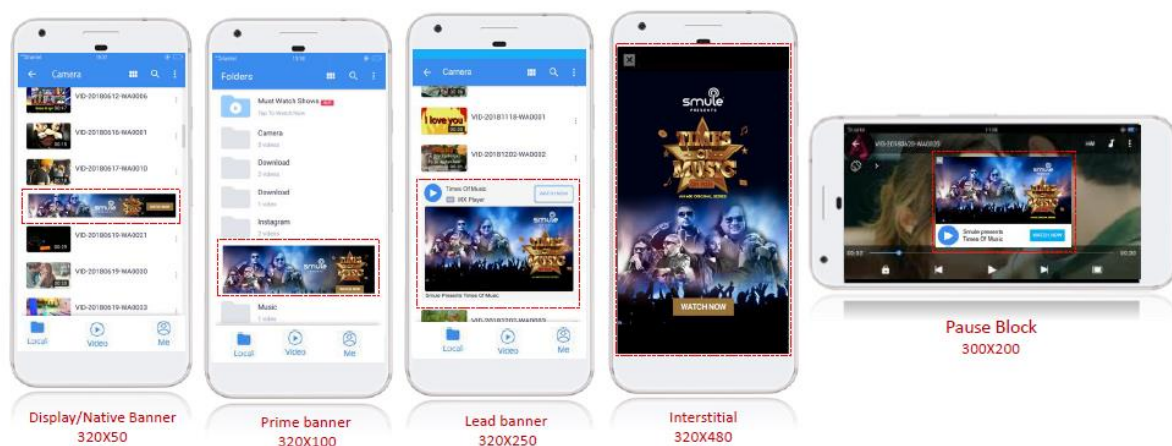


Fig 4.3: Ad Formats in Various Ratios

The ad formats mainly depend on the publisher platform and campaign goal. The budget and demand of the customer/advertiser is also an important role as well.

4.2 Campaign Setup Using DMP:

In this section of the report, an example will help to understand the campaign setup using DMP. For example, a well-known mobile app making company wants to advertise their newly launched app ‘Workout’ for 10 days within a budget of BDT 1,00,000. This app will help the people to workout at home and stay healthy. They want more installations of the app during and after the campaign. So, for this section let the client be X Mobile and the advertiser be the AdPlay.

4.2.1 Setting Campaign Goal:

The goal of the campaign is very important as there are few types of campaign. They are:

- **CPA:** CPA is mainly Cost Per Action or Acquisition. In this campaign the cost is mainly incurred when a viewer takes any action after seeing the add by clicking on it.
- **CPC:** Cost Per Click is mainly the cost incurred by the AdX upon each click on the ad.
- **CPI:** Cost Per Installation. In this type of campaign, the advertiser is charged only when someone installs the app on their device.
- **CPV:** Cost Per View. This is the cost for each view. If the ad is served to 10,000 people than based on these 10,000 impressions the advertiser will be charged.

In the mentioned example campaign the goal is to get more installations so it is mainly a CPI campaign.

4.2.2 Insertion Order:

When the campaign goal and the price is negotiated with X Mobile then AdPlay will provide a placement plan. Before making the insertion order, X Mobile will get to know about the campaign plans, platforms and some other details through the placement plan. After that, they will provide the insertion order and AdPlay will start working on the campaign setup. AdPlay will be bound to run the campaign on the publisher’s site/app for the mentioned number of impressions, budget and days, if the insertion order is signed between the parties.

For this reason, the advertisers are bound to share their campaign plans with the client before signing the insertion order.

4.2.3 Marketplace:

At this point, AdPlay will select the publishers from the marketplace based on client's demand. It has a vast inventory in their platform. From there, AdPlay will sort out all the health and beauty related apps and sites. After that it will take approval from the X Mobile to run their ad on these filtered platforms. If the clients ask for some other platforms then AdPlay will filter it again. Based on the impressions available on these publishing sites/apps AdPlay will purchase the impression inventory from them through ad exchange.

4.2.4 Geography:

The geography is extremely important for making the campaign successful. As X Mobiles wanted more installations and the product is a 'Workout' app so the target audience is going to be the all Bangladesh. Sometimes, in other campaign the targeted area depends on the product. For example, if a food cart wants to create awareness about its products then the targeted location will be around 300-500 meters of his cart. There is no benefit of target a huge number of people as it will increase the cost and the success rate of the campaign will fall.

4.2.5 Target Audience:

Targeting the right audience at the right is the main strategy of this section. The main success of a campaign is hidden behind the audience targeting. For example, the food cart mentioned in the above segment, wants to sell burgers. Now, if the cart owner wants to target the people who are aged from 45-60 then it is never going to get the customers. Similarly, for the income level, users who have monthly income of more than Tk. 50,000 will never come to eat at the food cart on the road. On the other hand, AdPlay will select the audience with a age group of 24-40 aged people for the X Workout campaign in order to get maximum number of installations. So, targeting the right audience at the right time in right place is very important for a successful campaign.

4.2.6 Creatives & Rich Media:

The creatives are the main attraction point of a successful campaign. If the story behind the creative is not understandable then the campaign will be failed. The creatives need to connect with the audience's emotions so that they can relate this with their need. Moreover, there are various dimensions of creatives for various placements. So, the placement of creative also matters to get viewed by the user. On the other hand, AdPlay uses the rich media for some of their campaigns. As a result, users can interact with those ads. They are directed to the linked page once they click on any rich media ad options.

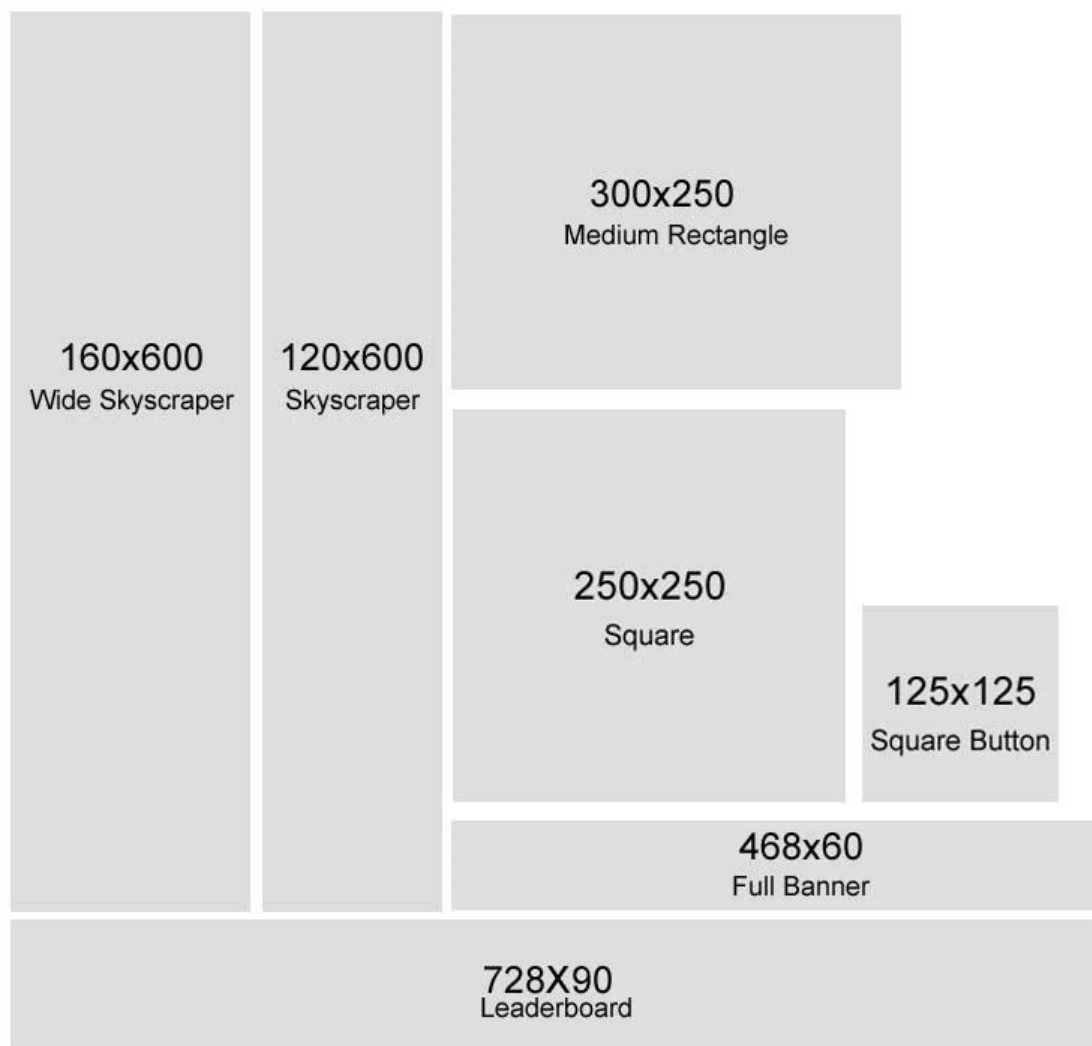


Fig 4.4: Various Dimensions of Ads for Web

Chapter – V

THE BIG PROBLEM



5.1 Challenges of DMP in Bangladesh:

Data Management Platform is fully a new concept in digital marketing industry of Bangladesh. As a result, the number of challenges is not measurable yet. A lot of research is required to get the best results for its challenges in Bangladesh. However, there are some challenges in general that are associated with such platform. They are briefly described below.

5.1.1 Expectations Meeting:

Since the platform uses the cooking mapping and device id tracking system to create a look alike model of a user on the internet so always it may not meet the desired results. The reason behind this is, users from Bangladesh on an average uses 2-3 devices and for each device their behavior is different. For example, a user uses his computer for playing games, laptop for works and other net browsing in leisure time and mobile device to stay connected with everyone in social media. As a result, their behavior is different on each device. This will be a great challenge for the platform to create a single look alike model and the user will see various types of ads based on his device usage.

5.1.2 Ad Frequency:

The ad frequency means the number of time that a user will see those ads in a day. As digital marketing is now getting very popular and the data management platform is segmenting the users based on their behavior so every advertiser will want to serve their ads to the user. As a result, the ad frequency for a user will go up for the user.

5.1.3 Data Security:

The data security is one of the biggest concerns all over the world. Few days back there was a virus called ransomware which occupied all the data in the user devices and removes them from the device. However, the data which is used in the data management platform are not sensitive. As in they do not contains any card information, name, cell number or user's address. Still there are chances for the hackers to create a system behind any advertisement. As a result, when the user will click on that ad all his sensitive credentials will be passed through it. So, this is one of the biggest challenges for Bangladesh as it is not a highly tech advanced country yet.

5.1.4 Employee Expertise:

Data management Platform is new in Bangladesh and only a few digital marketing companies is directly working with it. Other than those, there are a lot of agencies who just take the order from brands and pass them to the advertising companies. So, having a skilled employee set in the organization is very important. For example, if the ad-tech company gets an order from a brand to promote their newly launched product and an employee makes wrong segmentation then the entire campaign will be failure as there will be no return at all from the campaign.

5.1.5 Start of Monopoly Business:

As the number of ad-tech company who works directly with the publishers are low so there is a high chance of starting a monopoly business. As a result, the cost of marketing products will be higher and the small brands will face great difficulties to reach out to the customers. In Bangladesh, the number of tech-skilled employees are low so this industry will remain in the monopoly state unless other companies are not coming forward with new technologies and such platforms.

5.2 Objective of the Report:

The core objective of this study is to know the experience about the data management platform in Bangladesh, future research scopes, developments in the marketing sector and future challenges. Moreover, there are some short-term objectives of this report. They are:

- Campaign setup using DMP
- Measure the proper uses of DMP System in marketing in order to reach more people
- People's buying behavior after watching an ad

The first point 'Campaign setup using DMP' has already been discussed in the previous chapter. The following sections of the report will cover the rest two points mentioned in the short-term objective.

5.3 Problem Statement:

In this new era the business models are evolving very fast. The technology and business are mixing together and touching the new heights. Now-a-days, business and brands are shifting more towards online. To understand the consumer behavior and experience is the main factor for digital marketing. Data Management Platform in digital marketing, can segment the customers into various groups and having positive impact on their buying behavior.

5.4 Literature Review:

Any individual, firm or groups product selection behavior for consumption to satisfy their needs refers to consumer behavior (Rasool Madni, 2014). A proper understanding on consumer behavior is prime for success in digital marketing as lately consumer rely more on online for any purchase or feedback (Vinerean, Cetina, Dumitrescu, and Tichindelean, 2013). Nowadays, consumer is tended to gather more cognitive knowledge before making a decision to purchase any product in order to reduce risk (Sheth and Parvatiyar, 1995). In this regard, online shopping platform has helped a lot by delivering more accurate information and by giving lots of options to customers (Alba et al., 1997).

Crosby and Stephens (1987) stated that the whole information that is provided for a good and service information is related to consumer satisfaction and dissatisfaction. Again, this consist checking reviews in webpages and experience from an organization as well (Jones and Suh, 2000). DeLone and McLean (1992) in his article mentioned from the information system literature, information quality and user edge quality both affects consumer's information satisfaction.

Kamlesh K Bajaj, Debjani Nag (2016) in their E-commerce had claimed that technology has created new global competitive market place which also avails both the business and consumer. Furthermore, it has become more dependent on electronic stuff rather traditional paper work. Kril (2013) found that a sub category of E-commerce is known as internet shopping since it entails the buying behavior and selling behavior of both consumer and seller over the internet thorough digital transaction. Technology can be much more useful and it's vaster and deep than whatever we are seeing (Campbell et al., 2011). Even based on this many startups is now fully based on online and they don't have any physical shop.

However, there some related problem as well. One is it requires lots of revolution to attract customers. Again, often customers get annoyed by that when firm do not understand the customer’s current mood. Not only this but also online shopping is not getting all about proper advertisement and brand loyalty. Hence, coming up with more improved facilities and options would be the core priority of digital marketing (Garbey, 2013). He further added that different website publishing, social marketing and digital advertising is much related with the success of digital business.

5.5 Conceptual Framework & Hypothesis:

The framework model for the problem, ‘Segmented ads are having positive impact and effecting customer buying behavior’ is shown below.

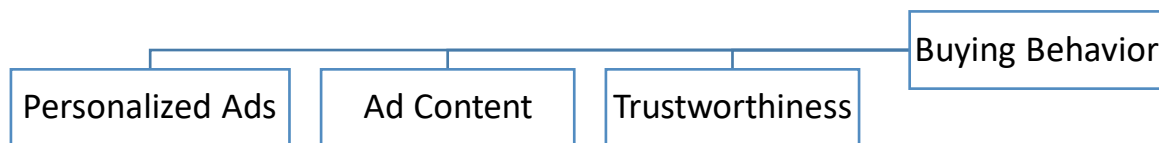


Fig 5.1: Independent & Dependent Variable Framework

Personalized ads, ad content and trustworthiness of the ad are the main factor for changing the buying behavior of customers. So, here the buying behavior is the dependent variable.

5.5.1 Personalized Ads:

These types of ads are mainly for the different segments of the customers. The data management platform segments the audience data based on their behavior and device usage. It stores the data of a user’s likes, dislikes and interest points. Based on that whenever a user visits a website or app it sends a bid request to the ad server and the user is served with an ad based on his interest point within few milliseconds.

Hypothesis-1: Personalized ads creates an interest to the user to see the served ads.

5.5.2 Ad Contents:

The ad content and the creative the most important part for getting clicked or viewed by the audience. The story behind the ad needed to be connected to it otherwise no one will click on that ad. For example, if an ad is for a product then the product picture in an understandable way and 2-3 key features of that product should be in that content so that audience find interest to click on it.

Hypothesis-2: Ad Contents creates an impact on the user and help them to consider the brand.

5.5.3 Trustworthiness:

Trustworthiness towards a brand is the main key point as this helps the customers to take the risk for buying the product. If there is any issue rises regarding trust towards a brand than a buyer will never purchase the product from that brand again. While serving ads it is necessary to represent the product in such a way that audience can easily trust on that advertisement and product.

Hypothesis-3: Trustworthiness force customers to buy the products from the same brand repeatedly.

5.5.4 Buying Behavior:

Buying behavior is the personality which shows how much does a user spend on products. In this study the buying behavior is the dependent variable which is getting impacted by the other independent variables.

Hypothesis-4: Buying behavior has the direct positive relation with the brand equity.

5.6 Methodology:

Methodology mainly talks about the data collection, data analyzing and interpretation process. For this research topic, data has been collected through 2 major sources. They are described below:

- **Primary Data Source:** this type of data refers to collecting the information using direct involvement. There might be a lot more process. This section will only contain the process that has been used for generating this report.
 - Survey questions and responses with online shopping
 - Directly participated in the work process of the company
 - Gathering information from personal observations
 - Trainings from the company about the digital marketing
 - Direct discussion with the employees

- **Secondary Data Source:** this type of data refers to the information gathered previously in any research or study materials. This is one of the fastest and easier way to collect data as it is available in various repositories. The secondary data sources of this report are given below.
 - Online articles and journals
 - Various publications
 - Company website
 - Campaign success rate

- **Sample Size:** The sample size for this survey is 80 responses. The main population is mainly those who purchased from online and are interested in online shopping. Mainly, the responses are collected via direct survey with the users using various social media platforms.

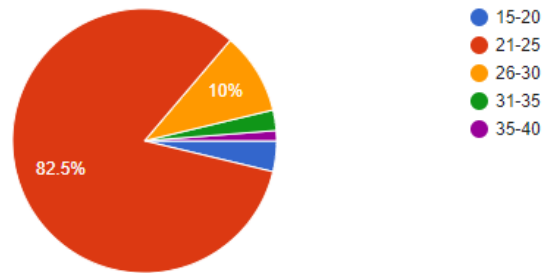
- **Measurements:** Based on my experience, the survey form provided to the respondents was designed to analyze the change in the behavior of consumers who used online purchasing. For the response section of the survey form, I have used 5 point linear Likert Scale which started from strongly disagree and ended at strongly agree point.

5.7 Research Findings:

5.7.1 Demographic Analysis:

To understand the demography of the target group, there are some specific questions and the survey results are given below.

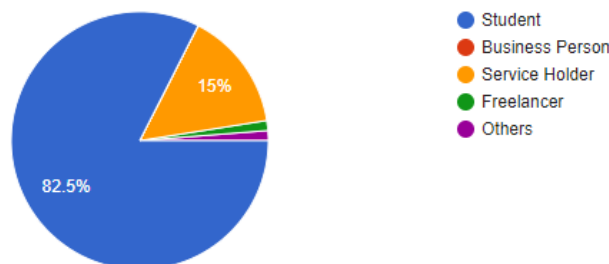
Age Group
80 responses



From the graph we understand that, 82.5% respondents are from age of 21-25 years and 10% are from 26-30.

Fig 5.2: Age Group of Respondents

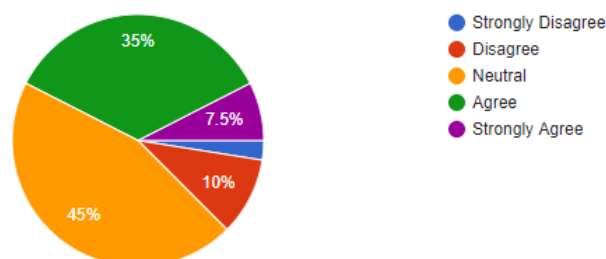
Profession
80 responses



From the graph we understand that, 82.5% respondents are student in profession and 15% are service holder.

Fig 5.3: Profession of Respondents

I prefer purchasing goods from online
80 responses



From the graph we understand that, 45% respondents are neutral but 35% has agreed for online shopping.

Fig 5.4: Preference of Respondents

- **Other analysis from the questionnaire:**

- ⇒ Majority of the respondents (46 out of 80) has an income level of 5,000
- ⇒ Majority of the respondents (63 people) has an expense on online shopping below 5,000
- ⇒ Majority of the respondents (30 people) answered ads help them for purchasing
- ⇒ Majority of the respondents (45 people) answered ads creates interest to browse the product
- ⇒ 48 respondents answered they preferred reviews while purchasing from online
- ⇒ 38 respondents agreed they feel connected when the ad is from about a brand product
- ⇒ 20 respondents agreed personalized ads choose them to purchase better
- ⇒ 45 respondents feel safe when they purchase a brand product from online
- ⇒ 47 respondents agreed, ads should be based on personal preferences

5.7.2 Factors Analysis & Hypothesis Testing:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.561 ^a	.315	.287	.67956

a. Predictors: (Constant), Trustworthiness, Ad_Content, Personalized_Ad

Table 1: Model Summary Table

In the Model Summary table from the above, we find that the R is 0.561 which means there is a strong correlation between dependent and independent variables.

Here, R² measures the proportion of the total variability in the dependent variable. R² is 0.315 which means buyer behavior changes based on advertisements through digital media is 31.5% dependent on its independent variables.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.103	3	5.368	11.624	.000 ^b
	Residual	35.097	76	.462		
	Total	51.200	79			

a. Dependent Variable: Buying_Behavior

b. Predictors: (Constant), Trustworthiness, Ad_Content, Personalized_Ad

Table 2: ANOVA Table

Above mentioned ANOVA Table explains whether the independent variables estimated the dependent variable accurately or not. The P-value is related to the alpha level (usually 0.05). If the significance result is smaller than 0.05 then we can accept it. Here, the significance level of the model is 0.000 which means independent variables are fully capable to estimate the dependent variable perfectly.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.808	.403		4.490	.000
	Personalized_Ad	.282	.075	.370	3.765	.000
	Ad_Content	-.035	.072	-.046	-.484	.630
	Trustworthiness	.303	.085	.348	3.567	.001

a. Dependent Variable: Buying_Behavior

Table 3: Coefficients Table

The Hypothesis testing is conducted by evaluating the significance of the direction coefficients through Partial Least Square analysis. If the P-value of the coefficient is less (< 0.05 or $< 5\%$) then, we can assume that the null hypothesis is rejected and we accept the alternate hypothesis. Therefore, it indicates that independent variables have a major impact on the dependent variable.

5.7.3 Hypothesis Testing Results:

Hypothesis-1: ‘Personalized ads creates an interest to the user to see the served ads.’ In the coefficient table, we can see the coefficient result is 0.282 which is a positive influence with the coefficient path. At the same time the significance level is 0.000 which is absolutely less ($P < 0.05$). So, we accept this hypothesis as the lower p-value shows the strong and positive relationship with the dependent variable. This means, personalized ads create an interest to the user to see the served ads. As a result, it effects the customer buying behavior.

Hypothesis-2: ‘Ad Contents creates an impact on the user and help them to consider the brand.’ In the coefficient table, we can see the coefficient result is -0.035 which is a negative influence with the coefficient path. At the same time the significance level is 0.630 which is clearly higher ($P < 0.05$). So, we cannot accept this hypothesis as the higher p-value shows the weak and negative relationship with the dependent variable. This means, ad contents do not able to create an impact on the user and help them to consider the brand. As a result, it does not effects the customer buying behavior but according to null we can say that consumer look for reviews more than ads.

Hypothesis-3: ‘Trustworthiness force customers to buy the products from the same brand repeatedly.’ In the coefficient table, we can see the coefficient result is 0.303 which is a positive influence with the coefficient path. At the same time the significance level is 0.001 which is clearly less ($P < 0.05$). So, we accept this hypothesis as the lower p-value shows the strong and positive relationship with the dependent variable. This means, trustworthiness force customers to buy the products from the same brand repeatedly. As a result, it effects the customer buying behavior greatly.

Hypothesis-4: ‘Buying behavior has the direct positive relation with the brand equity.’ So, based on the upper 3 hypotheses testing we can say that Data Management Platform in digital marketing, can segment the customers into various groups to serve ads and having positive impact on their buying behavior. This is an ultimate result that once the brand is able to sale their product then it also effects the brand equity.

5.7.4 Campaign Success Rate:

In an ad-tech company like AdPlay there are some systems through which they measure that campaign success rate. These are not like the statistical method but still these shows the clear condition of a brand’s advertisement status.

For example, ABC is a restaurant which wants to run their home delivery service in Gulshan-2 but it requires a 10% above conversion rate throughout the campaign timeline. So, AdPlay setup a campaign for them after maintaining all the procedures. Now, the campaign is live and ABC wants to see the daily progress. If the conversion rate is below 10% then they will count the campaign as a failure. They run the campaign for 4 days and the data for measuring the success rate is given below.

Date	Impression	Clicks	CTR	Conversion	Conversion Rate
22-09-2020	10266	774	7.54%	124	16.02%
23-09-2020	11547	596	5.16%	184	30.87%
24-09-2020	11309	617	5.46%	121	19.61%
25-09-2020	11872	903	7.61%	198	21.93%

Table 4: Campaign Data Table

Now, these data will be shown in the graph with various segments for the example given.

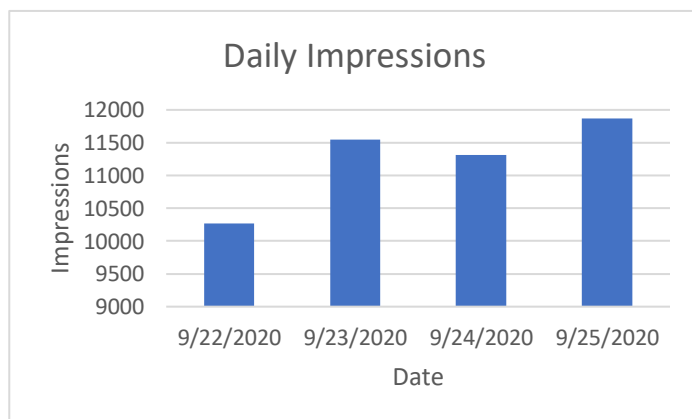


Fig 5.5: Daily Impressions

Fig 5.6: Daily Clicks

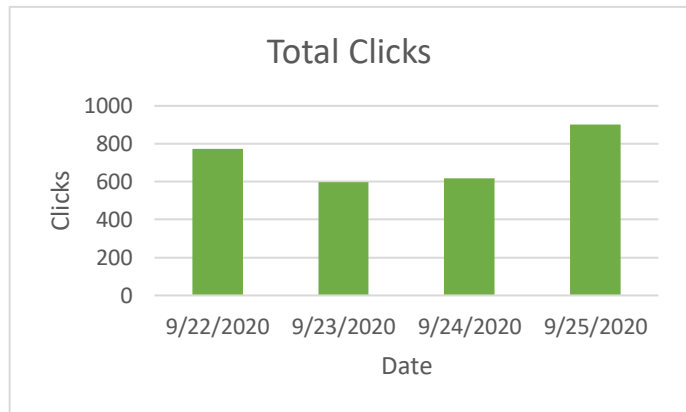


Fig 5.7: Daily Conversions

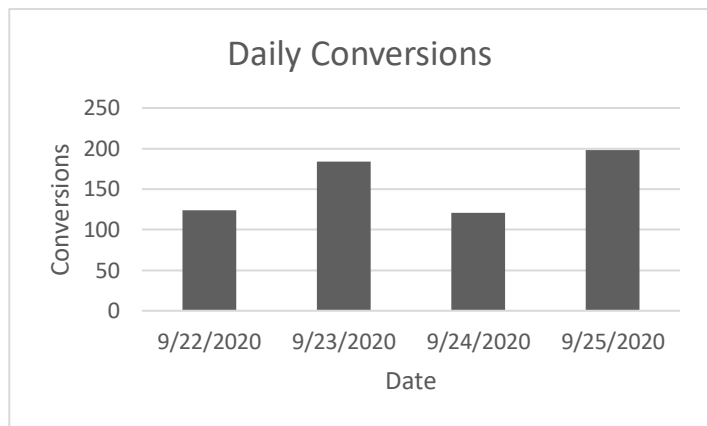
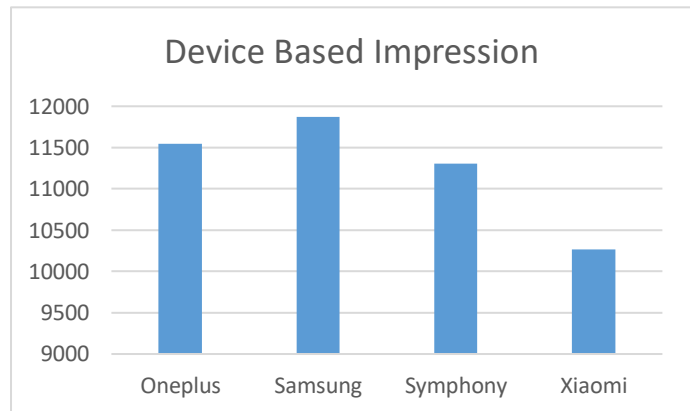


Fig 5.8: Device Based Impression



Chapter – VI

CONCLUSION



6.1 Future Study Scopes:

As the technology is breaking all its previous records in advancement, similarly business is also evolving day by day. There are no more theoretical or traditional business definition remained in the world. New technology is merging with business and creating new models. The business owners finding new ways to become success and lead the marketing. At this point of time, this topic is all about marketing and technology. The way digital marketing took over the traditional marketing system, in near future the scopes of emerging new systems in marketing is not going to be tough. This study on ‘Data Management Platform in Digital Marketing: A New Experience for Bangladesh’ has a great future and there are a lot more parts remaining, which has not covered in this report. As a result, the scope of future studies is high. Some of these points may be covered in the near future.

- Integrating machine learning in marketing sector. This will allow the virtual presence of brands in the social media. Moreover, users will feel connected when they can communicate in such a way.
- Use more of Data Analytics. Since everyone on the internet enjoy things based on their set of choices and preferences so the data analytics will open new paths for the understanding a user persona more easily.
- Study of Artificial Intelligence will help the user to find a product from the online market at the best possible deal. This will create some barriers for the brands as they will not be able to charge premium but it will surely benefit the customers as they can avail the best product at minimum price range.
- Another study of Marketing Information System or Marketing Technology Tactics can be introduced in order to make a skilled and valued workforce.

Except these points, there are a lot more options for future research scopes from this study.

6.2 Recommendation:

Since the AdPlay Technology Limited is a successful business in terms of getting clients and having profits, still there are some areas for its development. They are as recommendations given below.

- While recruiting interns, AdPlay can introduce a test working facility for the intern. This can be unpaid for the intern. This is open a new path of understanding the workflow and workability for both the company and the interns.
- While working in AdPlay I found there should be some more interactive sessions of activities, like: giving a weekly presentation of their learning in front of the supervisor.
- The time given for the training sessions are adequate but there could be some more online courses and one to one training programs for better understanding on this industry.
- The training evaluation system can be the core player to test the learnings of an intern. This will help the organization to know about the ability of the intern.
- While working in the Ad Ops department, sometimes we were disorganized in terms of time allocation due last moment workloads. According to me, a proper work flow can help to complete the works on time.
- As AdPlay deals with a lot of brands so there should be one performance analyzer who can analyze the ads performance and notify the ad ops section regularly to optimize the ads.
- Lastly, the platform used in the AdPlay needs to be updated, fast and secured as data is a valuable and key asset in digital marketing.

6.3 Ending Statement:

The position of digital media service providers and ad-tech firms are improving. At the same time number of competitors in this industry are increasing rapidly as the world is more going forward to the technological inventions. In this industry AdPlay is one of the leading names here. Brands can easily avail all the services related to digital marketing, recover their gaps in the market and made their promotions consistent while learning the consumer behavior with AdPlay.

In a respect of my job experience, I can consider myself fortunate to work in the Ad Operations department of AdPlay Technology where I have learned a lot about digital marketing, e-commerce options, data management, campaign setup, audience targeting, how data is impacting the consumer buying behavior, how ads are a way to generate revenue. Also, I have got the chance to integrate my academic knowledge and project experience here. After all, ups and down I had a very good working experience that inspired me to work harder. The experience I have gained from this internship option would help me to achieve a good career and I look forward to work with AdPlay Technology Limited.

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Web Links:

- <https://adplaytechnology.com/>
- <http://website.adplaytechnology.com/native-advertising>
- www.consumerbehaviour-online.com
- www.onlineconsumers.com
- <https://www.gamify.com/gamification-blog/how-digital-marketing-is-influencing-buyer-behaviour-customer-acquisition>
- <https://talentedge.com/blog/how-digitalmarketing-affect-consumer-behaviour/>

Appendix:

This is the survey questionnaire to know how the advertises impacting consumer behavior.

Share your Experience on Online Shopping

Section: Demographic

- Age Group *
 - 15-20
 - 21-25
 - 26-30
 - 31-35
 - 35-40
- Gender *
 - Female
 - Male
 - Prefer not to say
- Profession *
 - Student
 - Business Person
 - Service Holder
 - Freelancer
 - Others
- Income Level *
 - Income < 5,000
 - 5,000 to 10,000
 - 10,000 to 15,000
 - 15,000 to 20,000
 - Income > 20,000
- Online Shopping Expense (Monthly) *
 - Below 5,000
 - 5,000 to 10,000
 - 10,000 to 20,000
 - 20,000+ (Based on products & discount offers)

Section: Convenience

- I prefer purchasing goods from online *
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
- I purchase almost everything I can *
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
- Ads help me to purchase more *
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

Section: Control

- Ads creates interest in me to see the product *
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
- I click on the ads every now and then to see about the product *
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

- I consider reviews before purchasing a product from online *
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

Section: Credibility

- I feel connected when I see any ad based on my preference *
 - Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree
- I click only when I see the ads from renowned brand *
 - Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree
- Ads help me to choose better product *
 - Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree
- I feel secure to purchase from the any renowned website/app *
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

Section: Experience

- I believe the product is genuine and similar with the ad shown *
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

- I give reviews for sharing my experience and help others for their purchase decision *
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

- I believe, all brands should come forward with personalized ad technology to gain more customers and notify about their products
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree