Measuring the Association between Facebook Marketing and Brand Awareness

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Abstract
A brand is an image of a product, a service, or a company. Through name, logo, and way of communication, a company or business wants to create its brand image in the minds of customers in order to create a loyal customer base. Loyal customers consistently purchase products of their preferred brands, regardless of convenience or price. This research paper tries to measure the association between Social Media [mainly Facebook] marketing of different brands of products and services by the concerned companies, and brand awareness created among their targeted customers thereof. The research has produced handful results regarding the effects of Facebook marketing on creating brand awareness among customers, revealing a considerable amount of correlation between the two factors. Analyses of the findings indicate that the most influencing social media (Facebook) factors to create awareness among customers are - participation in Facebook events, getting invitation from different events, and sharing events on one's own timeline.
Keywords: Marketer, Facebook, Brand, Social Media, Awareness, Sharing, Communication, Promotion, Information, Consumer.

I.   Introduction

The past decade blessed us with such technologies that we never imagined before. Advancement in communication brought lots of opportunities for businesses as well as for customers. The evolution of social media websites along with the advent of social media platforms revealed wide range of ways in which the technology could be used. People all over the world started using social media for both personal and professional purposes.

Marketers have not been any exception — they quickly adopted the platform to promote their products and drive sales through it. Soon enough, social media marketing turned into a very popular and widely used tool for businesses and marketers worldwide. Now a decade later, social media has expanded to the farthest corners of the world. In Bangladesh, social media platforms are as popular as in any developed country. Today, most marketers in Bangladesh too extensively use social media to stay in the competition and reach out to the maximum number of audiences (Nayeem, Murshed, and Dwivedi, 2019).

In recent years, social media have been an emerging tool for marketers to promote their businesses. Since a huge number of people are spending a significant part of their time / days on social media, these social medial apps or online communication tools are also used as a platform to target those people as potential customers. It is often noticed that besides the traditional marketing activities regarding a brand, social media-based branding is also eliciting brand awareness among customers. This indicates a 360-degree change in the landscape of communication.

The wide use of Facebook, YouTube, and other social sites facilitates the way of spreading a brand name so quickly through interaction among the customers (Hutter, Hautz, Dennhardt, and Füller, 2013).
Compared to traditional media, social media is creating new forms of socialization which is a significant contribution towards the growth and sustenance of modern day businesses.

Nevertheless, social interaction can be the cause of negative image too, as nowadays people can express their bad experience with or about a brand by sharing a post or giving reviews on a product or service of the said brand. Because of the technical support system and innovative features, social media can be used as a solution to any emerging issues or problems (Obar and Wildman, 2015).

Most importantly, Facebook marketing is to be done with extreme care, and utmost caution as it can create controversy and dispute because of its multiple usage perspectives. Businesses use it for promoting

products/services while customers use it for collecting information and communicating with others. To keep pace with the competitive business world, it is mandatory to refresh the Facebook page with new offers and information, initiate new campaigns, introduce new offerings for reminding customers continuously of the brand which will be helpful for the brand to create awareness and position in the minds of customers (Pinto and Yagnik, 2017).

Among all other activities of a marketer, creating brand awareness is the first and foremost one to start with. Systematic and strategic use of digital marketing tools makes the marketing process active and responsive. In this context, Cizmeci and ERCAN (2015) mentioned in a study about the Delphi Method which is used in measuring the impact of digital marketing tool on brand awareness that indicated a greater impact of "paid digital content" than "proactive content".

Businesses have lots of opportunities in the digital world to attract customers according to their taste. Many models and theories which were proposed by researchers and academics as a means of increasing managers' understanding of brands and achieving sustainable differentiation in developing brand awareness gradually among the potential target group, were evaluated by leading-edge brand consultants, and thus revised models were initiated (de Chernatony and Dall'Olmo Riley, 1998).

Despite the demand for social media, the number of studies exploring the impact and influence of social media on brand awareness is not adequate in academia (Jayasuriya and Azam, 2017). Further studies are needed to conduct to draw more knowledgeable recommendations and social media theories in a business context. Thus this study set out to measure the effectiveness (if there is any) of social media marketing on customers' brand awareness and thus attempted to resolve the questions mentioned earlier.

The survey produced data designed to find whether social media marketing (Facebook) had ever affected them and drawn their attention to a particular promotional activity— and if it had, to what extent. The study considerably added to the research material gathered on the effectiveness of social media marketing. As yet, much research hasn't been done on the subject in Bangladesh, so hopefully, this study will serve as a stepping stone for individuals taking interest in the subject. And also, despite the study being exclusively focused on Bangladeshi customers, the end results should be relevant in a more global context as well.

The identified problem of this research paper was to find out the strength of association between social media (Facebook) marketing and brand awareness created among customers (social media users). To what extent Facebook users encounter social media marketing promotion i.e. page, event, a direct link, and celebrity endorsement (photos or video), and which of the four Facebook marketing tools (page, event, direct link, celebrity endorsement through photos/videos) is the most effective in creating a positive impression among customers has also been discussed in this study.

II. Objectives of the Study

The study has been conducted to determine the strength of association between Facebook marketing and brand awareness created among customers. More specifically, the objectives are:

- Measuring the importance of different social media (Facebook) marketing tools (page, event, direct link, and celebrity endorsement).
- Measuring the extent to which customers interact with different social media (Facebook) marketing tools (page, event, direct links, and celebrity endorsement)
- Analyzing customers' responses toward social media marketing communication options through a descriptive study considering social media marketing tools as independent variables and brand awareness as the dependent variable.

III. Literature Review

The rapid growth of social media platforms has reshaped the way of communicating with customers. Among all social media, Facebook is the most attractive and effective tool for doing marketing and branding activities because of its popularity and acceptability among people (Cvijikj and Michahelles, 2013). In a study on Facebook marketing, Yasmin and Khanam (2017) described that customers can be aware of a business or brand through many factors, i.e. number of likes, shares, location-based check-ins, posts, and many more. In another study, it is found that customers prefer Facebook in case of enquiring about a product because they can take part in the conversation as well. Even, Facebook can reach more customers than a traditional website (Khanam, 2018).

On the other hand, brand awareness is simply recognizing a brand or the information customers know about a brand (Keller, 2008). Building brand awareness is a must for gaining a competitive advantage in this global business era where businesses are continuously trying to create an interactive environment for customers as online platforms are available and widely used by both customers and organizations.

To cope up with the competitors, it is necessary to enhance the business arena by reaching as many customers as possible. Providing information about the brand to the customers through sponsorship, event

marketing, sports marketing, advertising, and integrated marketing communication process is crucial along with the normal business activities. In this modern marketing environment, components and criteria have been changed which should be considered by the businesses (Latif et al., 2014).

Hutter, Hautz, Dennhardt, and Füller (2013) analyzed potential aspects of social media tools and how this communication channel influences brand activities. A brands' social media activities can have an impact on the purchase decision-making process of customers. Engagement with a Facebook fan page and word-of-mouth activities create brand awareness among customers as people prefer to get recommendations from the actual users before buying products or services for ultimate consumption or use. This scenario is creating new challenges, and possibilities at the same time for businesses. By using Facebook Ads, Facebook Brand Pages, Social Plugins, Facebook Applications, and Sponsored Stories, companies can perfectly utilize their possibilities. Negativity is also spreading in some cases which is considered as a threat to the image of a brand (Cvijikj and Michahelles, 2013).

Another article examined demographic aspects for assessing the relationship between Facebook marketing and brand awareness by using some instruments which are found very influential: Online Communities, Interaction, Sharing of Content, Accessibility, and Credibility. Moreover, it is found that creating networks with customers through Facebook fan pages is an effective way of communicating and interacting for building up brand awareness (ElAydi, 2018).

Alnsour and Tayeh, (2019) pointed out that brand awareness, brand recognition, brand recall, brand top-of-mind, and brand dominance are strongly associated with social media interaction with customers which is important to enhance their knowledge level with updated information and 24/7 service facilities.

In a comprehensive statistical study, Coursaris, Osch, and McKay (2013) suggested adopting a Multi-Grounded Theory Approach for a highly recognized and holistically satisfactory communication process. Under this theory, the qualitative and quantitative mix of brand awareness, corporate social responsibility, customer service, engagement, product awareness, promotional, and seasonal activities through social media tools is possible for designing the context for the study to overcome ongoing and upcoming challenges.

An empirical study showed the differences between the effects of two types of social media brand communication (i.e., firm-created and user-generated social media brand communication) on brand awareness. It is particularly needed to understand the proper arena within the organization for implementing the appropriate type of social media brand communication (Schivinski and Dabrowski, 2015).

For escalating the level of interaction with customers by using Facebook, e-WOM strategies along with the strategies of viral marketing are a great way to portray a positive brand image (Shen and Bissell, 2013). Customers try to collect information about a brand by posting on Facebook groups or by sending messages to business pages for comparison before considering purchasing online or even while buying from a physical store. The other important influences were the opinion of friends and peers, social media exposure, and display of product details (Khanam, 2018).

Nowadays, many campaigns and events are arranged in social media for promoting a brand by spreading detail information about it. Both social media platforms and traditional media are used to publicize these social media events to attract as many users or customers as possible to ensure maximum number of participation during the event hours.

This is a very useful strategy for engaging those who don't have access to the internet or Facebook but are potential customers. Some organizations operate business activities both online and offline for capturing a wide customer base. In this case, they can be benefited from both the media by measuring the social media reach and traditional media rating as it will be used in calculating profits and budgets (Amin, 2018).
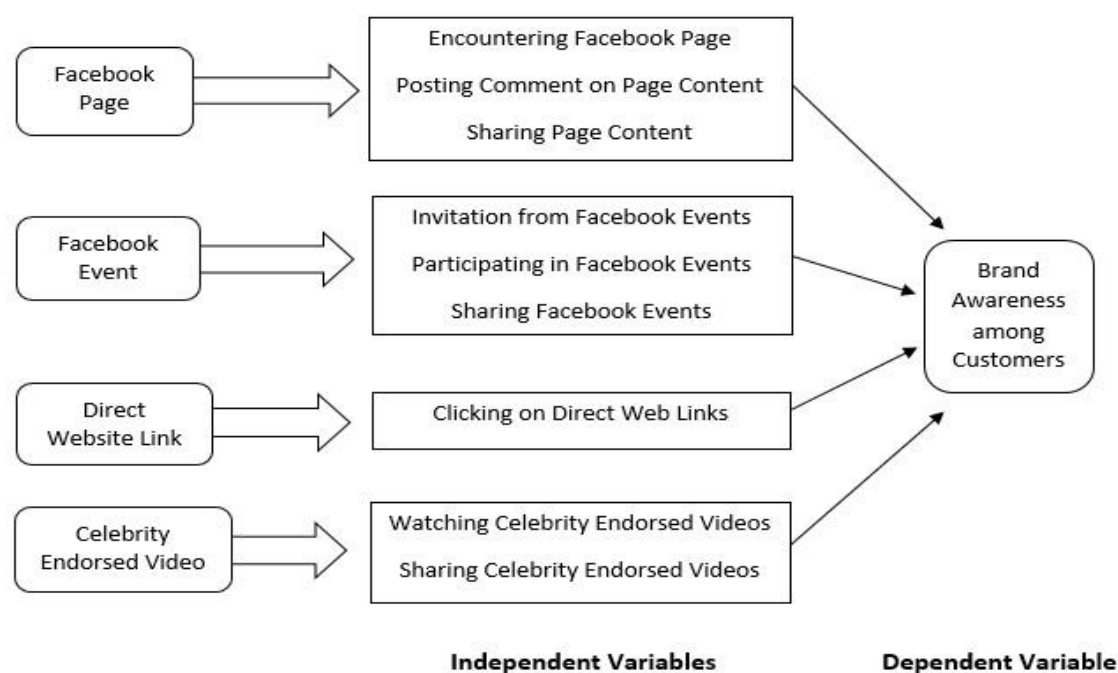
IV. Conceptual Framework

Figure 1: Conceptual framework

Research Hypothesis
H_0: There is a no association between Facebook marketing and brand awareness
H_1: There is association between Facebook marketing and brand awareness.

V. Research Design

This study is descriptive research since it tries to describe the strength of association between social media (Facebook) marketing and brand awareness created among customers. According to Malhotra (2015), descriptive research is a type of conclusive research that has as its major objective the description of something- usually market characteristics or functions.

Descriptive research was conducted on 9 independent variables centering different Facebook marketing tools (page, event, direct link, and celebrity endorsement) and one dependent variable that is brand awareness among customers using a structured questionnaire. Again among two types of descriptive research designs, cross-sectional design was used. Malhotra (2005) defined cross-sectional design as a type of research design involving the collection of information from any given sample of population elements only. Finally, among two types of cross-sectional research designs, a single cross-sectional design was used for this study.

Though some previous studies have been found related to this issue, as part of conducting an original study, mainly primary data have been collected. A little amount of secondary data has also been accumulated for the study. The survey method has been chosen as the mode of data collection using a questionnaire as an instrument. For measuring the variables, an ordinal scale named the 5-point Likert scale has been used. The data measured by this scale is non-metric or comparative in nature. The questionnaire consists of 10 statements indicating exposure to 4 different social media marketing tools (Facebook page, event, direct link, and celebrity endorsement). The question type is multiple choice ranging from 1 (strongly disagree) to 5 (strongly agree).

The target population for this study is all the active users of Facebook. The number of active users of Facebook, according to *Statista (2021),* is 2.70 billion as of the third quarter of 2021. In order to ensure probability sampling in the study, the simple random sampling technique has been used. According to Malhotra (2015), simple random sampling is a probability sampling technique in which each element in the population has a known and equal probability of selection. Every element is selected independently of every other element and the sample is drawn by a random procedure from a sampling frame.

The sample size has been determined as 300 for convenience. Since this study focused completely on social media, the questionnaire has been generated online. A polling website was used to make the questionnaire

available online. The link of the questionnaire was sent to the people who have Facebook accounts and active users of Facebook. Since the Facebook friend lists are not mutually exclusive and collectively exhaustive, this system is not the cluster sampling technique. The technique used by the authors ensured that all the elements of the population have an equal probabilistic chance of being selected thus ensuring the use of simple random sampling.

In this study quantitative analysis has been performed. The analysis method used for this study is the Multiple Linear Regression Model. For data processing, the IBM SPSS Statistical Software version 16.0 package has been used.

VI. Limitations

- In this study, only four marketing tools (page, event, direct link, celebrity endorsement) were taken into account. In the relevant area, there might be other tools that can be used as effective marketing tools.
- The authors worked with ordinal data which are generally used for non-metric and comparative scaling. Using interval or ratio data would yield more accurate results.
- The data analysis procedure was the linear regression model which only shows the association between dependent and independent variables, but doesn't prove causality. Hence there is no absolute assurance that these marketing tools are creating awareness.

VII. Data Analyses And Findings

Regression Analysis

Table 1: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793	.629	.617	.65297

1. Predictors (Constant): I often encounter Facebook page links of different brands; I post comment or opinion on the brand's Facebook pages; I share the Facebook page content; I always get invited to events from different brands; I always participate in Facebook events created by different brands; I share the Facebook event and invite friends to the event; I always click on the web links shared in Facebook; I always watch videos endorsed by celebrities; I share the video of the celebrity for other friends.
2. Dependents variable: The presence of brands on Facebook creates awareness in me.

Explanation

Here, by stating the model summary of the research, it was tried to identify the association between Facebook marketing and brand awareness created in and among consumers. R square represents the strength of association between the dependent variable and independent variables. When the value of **R square** exceeds **.5**, then it suggests a moderate association between dependent variables and independent variables.

Table 1 shows that the value of **R is .793** which indicates that there is a strong association between Facebook marketing and brand awareness created in consumers. It also shows that the value of **R square is .629**, which means that the dependent variable is strongly associated with independent variables. Here, the value of the adjusted R square is **.617**. As there is a small difference between R square and adjusted R square, there are few opportunities to add more variables.

Table 2: ANOVA table

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	209.484	9	23.276	54.591	.000
	Residual	123.646	290	.426		
	Total	333.130	299			

Here in Table 2, the significance value is 0.00 which is below 0.05 and the value of F ratio is 54.591, which is beyond the critical value at 5% significant level. So independent variables influence the dependent variable.

Table 3: Coefficient chart

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.410	.230		1.780	.076
	Encountering Facebook page links	.067	.048	.054	1.393	.165
	Posting comment or opinion on the pages	-.033	.058	-.034	-.580	.562
	Sharing the Facebook page content	-.090	.051	-.097	-1.749	.081
	Invitation to events	.405	.054	.373	7.479	.000
	Participation in Facebook events	.467	.058	.498	7.996	.000
	Sharing the Facebook event and invite friends to the event	.171	.056	.201	3.050	.003
	Clicking on the web links	-.012	.016	-.029	-.770	.442
	Watching videos endorsed by celebrities	-.046	.051	-.051	-.894	.372
	Sharing the video of the celebrity	-.008	.049	-.010	-.169	.866

Coefficient Analysis

Using the values shown in Table 3, the regression model developed is presented here with the associated values of different variables as incorporated into the model.

Brand awareness= .410 + .054 (encountering Facebook page links)- .034 (posting comment or opinion on Facebook pages) -.097 (sharing the page content) +.373 (invitation to events) + .498 (participation in Facebook events) + .201 (sharing the Facebook event)- .029 (clicking on the web links) - .051 (watching videos endorsed by celebrities) - .010 (sharing the video of the celebrity) + ei (error term).

Standardized coefficients are calculated for each predictor variable, showing the percentage of variation in the dependent variable caused by the individual independent variables. It can be revealed that invitations to events from different brands, participation in Facebook events, and sharing of Facebook events are significant at a **5%** level. The Standardized beta coefficient of participation in Facebook events is **.498** which means it is an important variable that creates brand awareness. The second important variable is invitations to events. Its standardized coefficient is **.373.** The third most important variable is sharing of Facebook events having a standardized coefficient of **.201.**

Correlation Matrix

Table 4: Correlation chart

	DV	IV1	IV2	IV3	IV4	IV5	IV6	IV7	IV8	IV9
DV	1	.290**	.479**	.389**	.550**	.716**	.610**	.071	.246**	.239**
IV1	.290**	1	.214**	.156**	.296**	.245**	.175**	.135*	.059	.154**
IV2	.479**	.214**	1	.666**	.663**	.508**	.437**	.153**	.294**	.268**
IV3	.389**	.156**	.666**	1	.463**	.474**	.591**	.177**	.365**	.395**
IV4	.550**	.296**	.663**	.463**	1	.367**	.302**	.121*	.200**	.112
IV5	.716**	.245**	.508**	.474**	.367**	1	.785**	.103	.379**	.393**
IV6	.610**	.175**	.437**	.591**	.302**	.785**	1	.145*	.442**	.472**
IV7	.071	.135*	.153**	.177**	.121*	.103	.145*	1	.176**	.206**
IV8	.246**	.059	.294**	.365**	.200**	.379**	.442**	.176**	1	.760**
IV9	.239**	.154**	.268**	.395**	.112	.393**	.472**	.206**	.760**	1

Explanation

Here from the above correlation matrix (Table 4), it is evident that most of the values are less than 0.5. It is known that if most of the values of the correlation matrix exceed 0.5, then the research result is supposed to suffer from the multi-collinearity problem. But in this study, very few correlation values are above 0.5. So it may be concluded that the research result is not suffering from the multi-collinearity problem.

Factors Creating Brand Awareness

The brand awareness created in consumers are dependent on many factors as follows.

Table 5: Beta values of variables

Variables	Sig.
Encountering Facebook page links of different brands	.165
Posting comment or opinion on the brands' Facebook pages	.562
Sharing the Facebook page content	.081
Getting invitations to events from different brands	.000
Participating in Facebook events created by different brands	.000
Sharing the Facebook event and invite friends to the event	.003
Clicking on the web links shared in Facebook	.442
Watching videos endorsed by celebrities	.372
Sharing the video of the celebrity for other friends	.866

In table 5 provided above, "Participation in Facebook events created by different brands**"** has been identified as the most influencing factor of brand elements to create brand awareness among the Facebook users about a brand. Its beta value is **.498**. The second most important predictor that creates brand awareness in consumers about a brand is the frequency of invitations from events created by different brands with the beta value **.373**. The third influencing predictor of brand awareness is the frequency of sharing Facebook events and inviting friends to the events which contain a beta value of **.201**.

Hypothesis Testing.

H_0: There is a no association between Facebook marketing and brand awareness
H_1: There is association between Facebook marketing and brand awareness.

Coefficient Chart in Table 3 shows that significance levels of a very few values related to the null hypothesis are below 0.05, which are 0.000, 0.036, 0.047 etc. So, the null hypothesis – "There is no association between Facebook marketing and brand awareness" can be rejected.

VIII.   Conclusion

In today's world, social media has drilled itself into our lives to the point where most of the people cannot even imagine a normal life without it. People around the world are getting more and more accustomed to the conveniences and benefits that come with social media. In a world where social media has become such a popular platform, it is only wise for marketers to use the platform to its utmost capacity.

As an effective brand strategy, building awareness regarding a brand has already been proven to be an increasingly demanding and extremely competitive marketing tool. The importance of social media to create awareness among potential and existing customers can no longer be denied. Businesses that are not focused on their virtual segments will run the risk of lagging in the competition. Marketers need to continuously come up with innovative social media campaigns. In order to stay in the competition, marketers need to implement impression-based marketing with as much effort as any other marketing strategy.

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