

# Online Information Disclosure, Social Media Strategies and Company Characteristics—The Case of Bangladesh

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## Abstract

**Purpose:** This study analyzes Bangladeshi companies' online information disclosure and social media tactics. We investigated the scope of online reporting and the characteristics of businesses related to exposing information on the internet. Our findings have witnessed the sudden rise of the internet and social media use and their succeeding influence on firms over the past decade, making this research particularly pertinent. **Methodology:** A disclosure index has been developed that includes various financial and non-financial disclosures, one of which is the corporate presence on online social networking platforms. This study then looks into the characteristics of companies linked to the amount of information disclosed on the internet. **Findings:** According to this study, an organization's voluntary internet reporting is linked to business size, industry type and audit firm type, but not to the company age, financial performance and the proportion of independent board members in the audit committee. On the other hand, the company size and external audit firm type significantly impact the firm's social media strategy. **Research Limitations:** The focus of this investigation is on a single nation; nevertheless, it would be fascinating to carry out this research in a collection of developing countries whose economic conditions are comparable to that of Bangladesh. **Originality/Value:** The study focuses on the online disclosures of companies listed on the DSEX in 2022 and includes information regarding their social media strategy. The findings demonstrate the potential for advancement regarding the level of disclosure companies provide over the internet. This study recommends regulatory authorities and standard setters when defining best practice online reporting standards. These recommendations are provided in the form of an extensive and comprehensive index.

## Keywords

Internet Reporting, Voluntary Disclosure, Social Media, Online Reporting

## 1. Introduction

The dissemination of corporate information via the internet has witnessed phenomenal expansion on a global scale over the previous two decades (Xiang & Birt, 2021). Corporate financial and performance data is disseminated on the internet as a means of communication through Internet reporting (Ashbaugh et al., 1999). The evolution of reporting on the internet can be broken down into three distinct stages (IASC, 1999). In the first stages of the implementation process, internet reporting just functions as an additional mode of information delivery in addition to the traditional approach of producing printed financial reports. In the second stage, the websites of companies become more interactive by doing things like making it easy for web browsers to hunt for specific information on the site. This is one example of an action that occurs in this stage. In the third stage, the websites of businesses become even more user-friendly and comprehensive in terms of the information that they present to visitors. For instance, in addition to the printed versions of the typical financial reports, they may additionally provide presentations that contain multimedia features.

Bangladesh's public enterprises are increasingly using the internet to distribute information. Corporate governance, financial performance, social and environmental issues are all examples of data that could be included. A wide range of information is available on company websites, including a wide range in quality and amount of information, and a wide range in the type of information that is available. An investigation into why organizations have different approaches to internet reporting disclosure and social media strategy will be the focus of this article.

There are at least two primary reasons why this study is significant. To begin, there hasn't been a lot of research done in recent years on internet disclosures and social media strategies in Bangladesh, despite the fact that earlier studies have investigated only the factors that determine internet reporting (Bhuiyan et al., 2007; Cormier et al., 2009; Nurunnabi & Hossain, 2012). It is possible that new evidence will be required as a result of the rapid development of information and communication platforms such as social media, the changes in accounting standards relating to disclosure, and the changes in the firms' disclosure environment throughout the course of the years. For instance, during the course of the last ten years, we have seen the introduction and widespread impact of social media platforms such as Facebook, LinkedIn, and Twitter, amongst others. According to Bartov et al. (2018), the dissemination of information to various stakeholders can now also take place via social media. In this article, we not only have investigated the use of social media by companies as one of the categories of internet reporting, but also have investigated the use of each strat-

egy by companies individually. In recent years, there have been developments in information technology that have impacted how information is produced, communicated, and processed. These changes have been brought about as a result of these transitions. In spite of these alterations, the fundamental aspects of a corporation that have an impact on information disclosure will continue to be significant.

Second, this article offers suggestions for businesses on how they might strengthen the reporting capabilities of their own websites. Managers can compare and evaluate whether or not their company websites are lacking in any areas of online reporting if they have access to a comprehensive checklist outlining the current practices of internet reporting. This has the potential to increase the quality of their internet reporting in terms of its number, timeliness, or usability. In a similar spirit, our findings may help Bangladeshi policy-makers define guidelines for internet reporting, which would be beneficial to the companies and their stakeholders.

## 2. Internet Reporting Regulation

Accounting bodies are becoming increasingly interested in internet reporting, even though it is largely unregulated (Bonsón & Escobar, 2006; Cormier et al., 2009). Despite the fact that internet reporting is mostly unregulated, accounting bodies are showing an increased interest in the field. Studies on internet reporting have been sponsored by a variety of standard-setters and professional organizations all over the world, such as the US Financial Accounting Standards Board, the Institute of Chartered Accountants in England and Wales, the International Accounting Standard Committee, and the Canadian Institute of Chartered Accountants. In addition, the United States Securities and Exchange Commission (SEC) has lately mandated that corporations use EDGAR to submit their filings. EDGAR is able to efficiently give real-time access to files such as 10-K and 10-Q that are needed by the SEC. An in-depth review of a company's operations, including the issues it faces as well as its operating and financial performance for the most recent fiscal year or quarter, as applicable, is provided to investors in both the 10-K and the 10-Q forms of the company's financial statements. The SEC has also made the use of XBRL mandatory, which requires managers to electronically upload data from their financial statements in order to improve investors' ability to process information from those statements in greater detail.

According to Dhaka Stock Exchange (Listing) Regulations 2015, the issuer of listed securities must make its financial statements (annual/quarterly) available on its website and through a link arrangement on the website of the Exchange, as well (DSE, 2015). However, there is no specific rule dictating what can and cannot be published online in Bangladesh. In Bangladesh, internet reporting disclosure is fundamentally different than in other countries as there are a lot of smaller, less-known companies in the capital market here that are not getting

much attention from analysts. Due to its lack of diversification, the DSEX is heavily weighted toward a few large corporations, and this could impact Bangladesh's internet reporting because smaller or less-known companies tend to have more agency issues and higher information asymmetry.

### 3. Literature Review

It was not until the early 2000s that a significant amount of internet reporting research was conducted. These descriptive studies, the majority of which were carried out in the United States and the United Kingdom, looked at how people currently report on the internet in their country (Ettredge et al., 2001; Gowthorpe & Amat, 1999; Gray & Debrecey, 1997; Larrán Jorge & Giner, 2002). According to Nurunnabi & Hossain (2012), most companies with websites in Bangladesh provide the same information as they do in paper-based reports. However, tools of information technology that are more interactive, such as search engines, email notifications, and webcasting, were utilized far less frequently.

Although descriptive studies provide valuable insights into internet reporting practices, researchers and regulators are interested in why different internet reporting practices exist (Kelton & Yang, 2008). According to Ashbaugh et al. (1999), businesses that participate in internet reporting are larger and more profitable than businesses that do not participate in internet reporting. They also discover that reporting practices on the internet differ from industry to industry. Xiao et al. (2004) examined the voluntary adoption of internet-based reporting by 300 Chinese companies on the stock market, looking at factors such as company size, type of auditor, foreign listing, ownership diffusion, profitability, and leverage. They concluded that the only factors positively associated with internet financial reporting were the company's size, auditor, and industry; on the other hand, profitability was negatively associated with internet financial reporting.

The information gap between managers and investors in corporations could be narrowed with the help of social media (Nuseir & Qasim, 2021). Despite this, they also argued that the use of social media for information disclosure is done strategically so that only the voluntarily provided positive news and information is spread. Zhou et al. (2015) investigates the degree to which popular social media platforms have been adopted and how they are used in corporate disclosure. Khlifi (2021) claimed that the impact of information disclosure on reducing information asymmetry is more pronounced for large companies than for smaller businesses regarding the use of websites and social media.

### 4. Hypothesis Development

Prior studies have provided important insights into the factors influencing corporate disclosure decisions (Khan & Ismail, 2012; Xiang & Birt, 2021; Xiao et al., 2004). However, because of its complexity and the lack of control, the factors influencing internet reporting are also ambiguous. This article examines typical

firm-specific characteristics such as age, company size, financial performance, industry type, and the percentage of independent directors serving on a company's internal audit committee to see if there is a connection between internet reporting and these factors.

Age of the company:

Older companies may be more inclined to disclose information voluntarily through internet financial reporting (Al-Shammari, 2007; Gandía, 2008; Haniffa & Cooke, 2002). The more established companies are expected to release more information than their younger counterparts. While Al-Shammari (2007) asserts that disclosing information on R&D costs, capital expenditures, and new products could harm a young company's competitive position, other researchers, such as Haniffa and Cooke (2002), contend that companies that have recently obtained a public listing have an incentive to do so to reassure investors. Al-Shammari (2007) tested this variable but found no correlation. Thus, company age will be tested using the following hypotheses:

**H1: The Internet Financial Reports of older companies are more likely to include more voluntary information than younger companies.**

Firm Size:

It is not uncommon for researchers to use firm size as a variable in their studies. For various reasons, it has been linked favourably with the degree of disclosure. According to Brockman and Cicon (2013), Brown et al. (1987) and Hutton (2005), firm size conveys the information environment of a firm. Concerning this, Hutton (2005) found that managers of larger companies are more likely to provide more voluntary disclosure because of the greater demand for information. Second, large companies may disclose more information than smaller ones due to cost savings in the disclosure process (Kasznik & Lev, 1995). A third factor to consider is that large firms are more likely than small ones to be sued because of their "deeper pockets", which can lead to increased disclosure to ward off legal action. Fourth, employees at larger companies are more likely to be well-versed in their fields. According to Hilary and Hsu (2011), managers' level of sophistication is correlated with their firm's size. Due to this, more and better disclosures may be made (Feng et al., 2009). Managers in larger firms are more likely to disclose information because of agency and signalling theories (Watts & Zimmerman, 1978). As a result, they have a greater incentive to establish themselves as providers of high-quality information (King, 1996). When it comes to reporting on the internet, prior studies have found a positive correlation between the size of a company and the amount of reporting that is done online (Ashbaugh et al., 1999; Brennan & Hourigan, 1999). Taken together, the second hypothesis is:

**H2: Large businesses reveal more information online than smaller ones.**

Profitability:

For a variety of reasons, more information may be disclosed in corporate annual reports by businesses with a higher level of profitability than those with

lower profitability. Signaling theory argues that organizations with high profits are motivated to differentiate themselves from those with lower profits in order to raise capital at the lowest possible price. Desoky (2009) discovered a link between profitability and the degree of information disclosed. In research by Desoky (2009), the level of disclosure and profitability were found to be positively associated. Several studies have examined this hypothesis, including Ashbaugh et al. (1999), Ettredge et al. (2002), Marston and Polei (2004), Xiao et al. (2004), and Al-Shammari (2007), with the latter finding a negative correlation between internet financial reporting and profitability, while the former found no significant correlation. As a way to gauge a company's profitability, we looked at its earning per share.

**H3: Companies with higher EPS are more likely than those with lower EPS to use internet financial reporting to a greater extent.**

Industry Type:

The research on voluntary disclosure (Inchausti, 1997) says that businesses in some industries give out more information than businesses in other industries, and it gives evidence for this claim. Craven and Marston (1999), Brennan and Hourigan (1999), Al-Shammari (2007), and Juhmani (2008) and Desoky (2009) did not find any positive association between the variables. However, Oyeler et al. (2003) and Xiao et al. (2004) found a positive association between industry type and the extent of disclosure. In terms of the type of industry, the following specific hypotheses will be examined and tested:

**H4: Companies that belong to the financial industry type reveal a greater amount of financial information on their websites than companies that belong to other business types.**

Auditor Type:

According to agency theory, conducting audits helps to reduce the likelihood of conflicts of interest between management and investors. There is a greater motivation for larger audit firms to retain their independence and to require broad and detailed disclosure because their reputations are more at stake (Xiao et al., 2004). So it is because larger audit firms have a greater incentive to protect their reputations (DeAngelo, 1981; Malone et al., 1993). This inference is supported by the findings of Craswell & Taylor (1992), Inchausti (1997) which demonstrate a positive relationship between companies that employ larger auditors and the level of disclosure practised by those companies. In Bangladesh, the law does not permit foreign auditing firms, including the Big Four; instead, these companies can only perform audit work if affiliated with a Bangladeshi company. The auditing firms in Bangladesh can be divided into two categories: local audit firms with international affiliations with the Big Four and local audit firms that do not have international affiliations with the Big Four (Nurunnabi & Hosain, 2012). The following hypothesis was investigated concerning the size of the audit firm or its international link:

**H5: Audit firms with international Big Four ties are more likely to dis-**

### **close more information online than audit firms without international Big Four affiliations.**

Independent directors in the audit committee:

The establishment of an audit committee has a significant impact on the breadth of disclosures made by a corporation (Ho & Wong, 2001). When evaluating the level of disclosure, another essential consideration is the make-up of audit committees, which include both company insiders and outsiders (Akhtaruddin et al., 2009). The Bangladesh Securities Exchange Commission (SEC) mandates the existence of an Audit Committee for all publicly traded Bangladeshi corporations (SEC, 2021). According to Fama and Jensen (1983), an independent director's reputation, litigation risks, and possible loss of future board opportunities motivate them to perform their monitoring role effectively. As a result, the Audit Committee's independent directors have more control and can limit management's ability to withhold information for its gain (Allegrini & Greco, 2013). Therefore, the quality of the information disclosed may be improved by increasing the proportion of independent directors on the audit committee. Studies by Akhtaruddin and Haron (2010) and Patelli and Prencipe (2007) found a link between the number of independent directors in the audit committee and a company's willingness to disclose more information. As a result, it is hypothesized:

**H6: Companies with more independent directors on the audit committee tend to publish more information on their websites than other companies.**

## **5. Research Method**

Sample Details:

Publicly traded Bangladeshi companies listed on the Dhaka Securities Exchange make up the study's sample. We specifically look at the DSEX list of companies and discover that 301 of the 311 companies have accessible company websites.

Following Marston and Polei (2004) and Bonsón and Escobar (2002), as well as Bollen et al. (2006) comment, we classify the degree of online reporting into seven major groups:

- 1) Information for investors;
- 2) Social responsibility reporting;
- 3) Information regarding corporate governance;
- 4) Timeliness of information;
- 5) Information and communication;
- 6) Social networking;
- 7) Website's convenience.

The first category (information for investors) includes digital renditions of traditionally printed forms of information, such as annual reports and management reports. Social responsibility reporting and information regarding corpo-

rate governance both places a particular emphasis on the disclosure of information about corporate social responsibility and corporate governance, respectively. The information and communication area offers the users many resources that might help them locate information or make requests. The social networking component is associated with the social media strategy that the organization implements. Timeliness of information and website convenience are directly tied to one another and are related to the ease of use of the firm's websites.

When calculating the disclosure score for each group, we first determine whether or not a particular item can be found on the company website. Then we add up the total number of items disclosed within each group. In other words, if a corporation reveals (or fails to disclose) an item of information that is included in the specified group, then the company obtains a score of 1 (0), and the aggregate disclosure for the group is equal to the total of the scores for the items that are included in the group. In addition, we use the unweighted dichotomous disclosure index technique to quantify the comprehensive nature of internet reporting. The dichotomous method is an unweighted disclosure index. According to this index, an item receives a score of one if it has been disclosed, a score of zero if it has not been declared, or the not applicable (NA) designation if the item does not apply to the company (Ali et al., 2004; Yeoh, 2005). This methodology has been utilized quite frequently in previous investigations, including those conducted by Xiang & Birt (2021), Nurunnabi & Hossain (2012), Xiao et al. (2004), and Bonsón and Escobar (2002). As a consequence of this, and to make the total internet reporting disclosure score (TIRDS) easier to understand, it is calculated as follows:

$$TIRDS_j = \sum_{i=1}^n d_{ij}$$

where  $d_{ij} = 1$  if the item is disclosed for firm  $j$ , otherwise  $d_{ij} = 0$ .

#### Regression Models:

Two different models in the general form of the Ordinary Least Squares regression model have been developed. We use the first model to justify the association between the dependent and independent variables in the form of the TIRDS (Total Internet Reporting Disclosure Score) index and the relevant hypotheses. In the second model, we investigate whether or not there is a correlation between the dependent variable, the Total Social Media Score (TSMS), and the six firm-specific factors, which are independent variables (Table 1).

#### Model-1:

$$TIRDS_j = \alpha_0 + \alpha_1 Age_j + \alpha_2 FirmSize_j + \alpha_3 Profitability_j + \alpha_4 IndustryType_j + \alpha_5 BigAudit_j + \alpha_6 IndependentDirector_j + \varepsilon$$

#### Model-2:

$$TSMS_j = \alpha_0 + \alpha_1 Age_j + \alpha_2 FirmSize_j + \alpha_3 Profitability_j + \alpha_4 IndustryType_j + \alpha_5 BigAudit_j + \alpha_6 IndependentDirector_j + \varepsilon$$



**Table 1.** Explanations of independent variables.

Variables	Measurement
Age	Companies listed before 1994 = 1, otherwise 0
Firm Size	Natural log of market capital reported at the most recent financial year
Profitability	Most recently reported earnings per share (EPS)
Industry Type	Company belongs to finance and banking industry = 1, otherwise 0
Big Audit	Company audited by audit firm affiliated with Big4 = 1, otherwise 0 in current fiscal year
Independent Director	Percentage of independent directors in the audit committee

## 6. Results, Interpretations, and Discussions

Descriptive analysis:

The internet reporting checklists for all 311 DSEX-listed companies are presented in **Table 2**. Ten businesses out of 311 are listed but do not have a website, or their website is still under construction. Out of these ten companies, four of them are in the engineering industry. The other industries, including textile, pharmaceuticals and chemicals, insurance, tannery, travel and leisure, and jute, each have one company. According to **Table 2**, we can see that only two companies have presented their annual general meetings (AGMs), making this the least disclosed item. On the other hand, financial reports from the year before have been made public by 272 companies. This accounts for 87.46 percent of the total disclosures and is the item that has been made public the most.

Concerning corporate social responsibility, 22.51 percent of businesses have provided information on their non-commercial community involvement. Only 4.5 percent of companies have published their most recent and most recent CSR reports. It can also be seen that item 13, 14, 17, 18, 27, 28, 29, 32, 36, 37, 42, 43, 46, 47, and 51 are the least disclosed items by the listed companies, each receiving less than 10 percent of the total disclosure score. On the other hand, the items that receive the most disclosure are items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 19, 25, 26, 30, 31, and 38, each of which accounts for more than 40 percent of disclosures. In addition, 66.56 percent of the sample companies have delivered their shareholding structure, and more than 60 percent of the businesses have posted notices of their annual general meetings on their websites. It has come to our attention that many businesses are actively participating in social media to boost their online visibility, with Facebook constituting approximately 47.91 percent of all social platforms utilized. YouTube (29.90 percent) and LinkedIn come in second and third, respectively, in this column (25.40 percent). Only 19.94 percent of businesses have websites that are considered user-friendly based on the presence of a sitemap, the website's internal search engine, video presentation, and financial data in a format that can be processed (Microsoft Excel).

**Table 2.** Internet information disclosure checklists.

	<b>CATEGORIES</b>	<b>Number of companies disclosed the item</b>	<b>Percentage of companies disclosed the item</b>
<b>A. Investor related information</b>			
1	Current year BS/IS/CF/SCE	264	84.89
2	Past BS/IS/CF/SCE	272	87.46
3	Notes to Current Annual Financial Statements	263	84.57
4	Notes to Past Annual FS	270	86.82
5	Current half-year report	229	73.63
6	Past half-year report	237	76.21
7	Current quarterly report	244	78.46
8	Past quarterly report	251	80.71
9	Current management report	250	80.39
10	Past management report	257	82.64
11	Current audit report	256	82.32
12	Past audit report	256	82.32
13	Current segment reporting	8	2.57
14	Past segment reporting	9	2.89
15	Financial ratios	43	13.83
16	Share price history	46	14.79
17	Share price in relation to the market index	13	4.18
18	Directors Report	24	7.72
19	Dividend information	155	49.84
<b>B. CSR</b>			
20	Current CSR report	14	4.50
21	Past CSR report	14	4.50
22	Employee/social/safety or health report	55	17.68
23	Commercial Sponsoring	64	20.58
24	Non-commercial community involvement	70	22.51
<b>C. Corporate Governance</b>			
25	Shareholding structure	207	66.56
26	Notice of AGM	198	63.67

**Continued**

27	Voting results of AGM	6	1.93
28	Speeches of management in AGM	4	1.29
29	Presentation of AGM	2	0.64
30	Corporate governance regulations	203	65.27
31	CV of the board	201	64.63
32	Analyst coverage	5	1.61
<b>D. Investor Relations</b>			
33	Email address of investor relationship department	147	47.27
34	Phone number of investor relationship department	156	50.16
35	Fax or postal address of investor relationship department	120	38.59
36	Multiple language	23	7.40
37	FAQ	11	3.54
<b>E. Social Media Coverage</b>			
38	Facebook	149	47.91
39	YouTube	93	29.90
40	Twitter	63	20.26
41	LinkedIn	79	25.40
42	Blog	5	1.61
43	Others (Instagram/Forum)	31	9.97
<b>F. Timeliness of information</b>			
44	Current share price	33	10.61
45	Recent press releases	117	37.62
46	Financial Calendar	5	1.61
47	Sign up for an email alert	19	6.11
<b>G. User-friendliness of website</b>			
48	Sitemap	43	13.83
49	Website's internal search engine	113	36.33
50	Video presentation	89	28.62
51	Financial data in a processable format (Excel)	3	0.96

The descriptive statistics of the sample companies based on their industry are presented in **Table 3**. There are twenty distinct types of industries, each of which can be used to categorize the DSEX-listed companies that belong to that particular industry. Most businesses, or 64 percent, are located in the textile industry, followed by engineering, banking, insurance, and pharmaceuticals.

**Table 3.** Descriptive statistics according to industry type.

Industry Type	Number of sample companies	Minimum	Maximum	Mean	Standard Deviation	Percentage of companies by industry type listed in DSEX
Textile	48	0	28	14.33	7.68	15.95
Insurance	47	0	34	19.70	5.22	15.61
Engineering	36	0	29	16.85	8.35	11.96
Bank	31	9	36	23.81	6.32	10.30
Pharmaceuticals	30	0	35	18.16	8.68	9.97
Fuel & Power	21	1	28	18.81	6.52	6.98
Financial Institutions	19	5	35	21.05	7.86	6.31
Food & Allied	15	1	29	15.47	9.26	4.98
Miscellaneous	13	2	32	16.77	7.05	4.32
IT Sector	9	8	26	19.44	5.25	2.99
Tannery Industries	5	0	27	13.33	11.11	1.66
Cement	5	18	25	21.80	2.86	1.66
Ceramics Sector	5	1	39	17.00	14.21	1.66
Services & Real Estate	4	21	32	24.25	5.25	1.33
Paper & Printing	4	13	24	18.50	4.51	1.33
Travel & Leisure	3	0	23	14.75	10.40	1.00
Telecommunication	3	21	39	31.00	9.17	1.00
Jute	1	24	24	24.00	-	0.33
Leasing and Finance	1	21	21	21.00	-	0.33
Energy	1	15	15	15.00	-	0.33
<b>Total</b>	<b>301</b>					

However, the TIRDS mean for these industry types (except for the banking industry) is significantly lower than that of other relatively small industries. For example, the telecommunication industry achieves the highest mean TIRDS (mean score 31) out of all the industries, with a maximum score of 39 and a minimum score of 21. This industry also has the highest possible score of 39. On the other hand, the mean score for textile companies (49 out of 301 companies) is just 14.33, with a maximum score of 28 and a minimum score of 0. The DSEX only includes a single company in the energy sector and a single leasing and finance company. Companies may have different disclosure scores for several reasons, one of which is company-specific characteristics; the topic of discussion is in the following section. The percentage of our sample companies' online reports that fall into each classification is outlined in **Table 4**. It draws attention to the fact that the mean of TIRDS is around 19. It indicates that there are, on

**Table 4.** Descriptive statistics of the variables.

Variables	Minimum	Maximum	Mean	Std. Deviation
<i>TIRDS</i>	1.00	39.00	18.90	7.41
<i>TSMS</i>	0.00	6.00	1.40	1.64
<i>Age</i>	0.00	1.00	0.26	0.44
<i>Firm Size</i>	0.00	12.94	8.40	1.41
<i>Profitability</i>	-125.14	171.03	3.25	17.48
<i>Industry Type</i>	0.00	1.00	0.31	0.46
<i>Big Audit</i>	0.00	1.00	0.07	0.26
<i>Independent Director</i>	27.00	53.00	39.17	7.83

average, 19 items disclosed on company websites, whereas the maximum number of items that aggregate in the checklist is 51. Besides, The lowest possible number of items disclosed in samples was 1, and the highest possible number was 39.

In addition, the table illustrates that the average total score on social media (TSMS) is around 1.40. The number of social media platforms used can range from zero to six, with zero being the minimum and six being the maximum.

Statistical analysis:

An examination of the dependent variable's relationship with the independent variables is presented in **Table 5**. At the 0.05 level of significance, it seems to imply that the level of voluntarily disclosed information via the internet positively correlates with six different firm specific independent variables. The variable, Industry Type, has inverse relationship with three other variables (Age, Profitability, independent directors). According to [Bryman and Cramer \(1997\)](#) and [Judge et al. \(1981\)](#), the correlation between independent variables should not be considered harmful if it does not exceed 0.80. According to the findings of this research, all of the correlations between the independent variables are significantly lower than the threshold of acceptable variation.

Utilizing the Variance Inflation Factors that are laid forth in **Table 4**, future work on the potential for multicollinearity was carried out. [Weisberg \(2005\)](#) recommended Variance Inflation Factors (VIF) in order to determine whether or not the explanatory variables contained multicollinearity. According to [Neter et al. \(1989\)](#) and [Myers \(1990\)](#), a VIF that is deemed to be more significant than 10 indicates a considerable correlation. Because the VIFs of all of our explanatory variables are lower than 10, which suggests that there is no deleterious multicollinearity between them. Therefore, it is implausible that the interpretation of the regression results will result in any issue.

Regression analysis

The results of an analysis using ordinary least squares have been compiled for the regression model and can be found in **Table 4**. The value of adjusted R<sup>2</sup>, also

**Table 5.** Correlation matrix for TIRDS.

Variable	TIRDS	Age	Firm Size	Profitability	Industry type	Big Audit	Independent Director
TIRDS	1.000						
Age	0.081	1.000					
Firm Size	0.435	0.039	1.000				
Profitability	0.174	0.099	0.362	1.000			
Industry Type	0.245	-0.079	0.083	-0.058	1.000		
Big Audit	0.354	0.199	0.379	0.354	0.072	1.000	
Independent Director	0.150	0.080	0.386	0.073	-0.143	0.161	1.000

known as the Adjusted Coefficient of Determination, is 0.236. It indicates that 23.6 per cent of the variance in the dependent variable, total internet reporting disclosure, can be explained by the variation in the explanatory variables. When compared to the findings of [Bollen et al. \(2006\)](#), who found a rate of 25.7 per cent, [Ettredge et al. \(2002\)](#) with 17.5 per cent, and [Desoky \(2009\)](#) with a rate of 28.8 per cent, this result (23.6 per cent) is favourable. On the other hand, it contradicts what [Marston and Polei \(2004\)](#) found, which was 31.2 per cent, and [Xiao et al. \(2004\)](#) at 8 per cent.

All six variables are positively correlated with the TIRD score change. Nevertheless, the company's listing period, represented by Age, has no substantial impact on the TIRD score; hence, the first hypothesis is not supported. Moreover, the profitability of the company and the fraction of independent directors on the internal audit committee do not affect the dependent variable, as  $p$  is greater than the 0.05 significance level. Therefore, our third and sixth hypotheses have also been refuted. In contrast, the  $p$ -values for Firm Size, Industry Type, and Big Audit are all identical to 0.000, which is below the significance level; hence, these three predictor factors are statistically significant. Therefore, our hypotheses 2, 4, and 5 cannot be disproved. Larger corporations appear to reveal more financial information than smaller ones. Additionally, it seems that companies in the financial industry disclose more information than companies in other industries. In addition, corporations audited by local audit firms unaffiliated with the four largest audit firms (Deloitte, Ernst & Young, PricewaterhouseCoopers, and Klynveld Peat Marwick Goerdeler) present investors with less useful information on their websites ([Table 6](#)).

## 7. Social Media Presence

Online social platforms may allow companies to communicate with their customers and investors in real time, control the timing of information dissemination, send out multiple messages about a single information event, and keep track of how many people are following them. The following set of results presented in [Table 7](#) and [Table 8](#) focus primarily on the firm's social media strategy

**Table 6.** Regression results for TIRDS.

<i>Variable</i>	<i>Coefficients</i>	<i>Std. Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>VIF</i>
Intercept	1.327	2.935	0.452	0.651	
Age	0.682	0.941	0.725	0.469	1.054
Firm Size	1.572	0.334	4.710	0.000	1.386
Profitability	0.002	0.026	0.088	0.930	1.245
Industry type	3.728	0.892	4.177	0.000	1.071
Big Audit	7.072	1.799	3.931	0.000	1.292
Independent Director	0.051	0.056	0.918	0.360	1.180

Summary: Multiple R = 0.501, R square = 0.251, Adjusted R Square = 0.236, F = 16.98, Significance F = 0.000.

**Table 7.** Correlation matrix for TSMS.

<i>Variable</i>	<i>TSMS</i>	<i>Independent Director</i>	<i>Big Audit</i>	<i>Industry type</i>	<i>Profitability</i>	<i>Age</i>	<i>Firm Size</i>
TSMS	1.000						
Independent Director	0.126	1.000					
Big Audit	0.264	0.161	1.000				
Industry type	0.127	-0.143	0.072	1.000			
Profitability	0.063	0.077	0.355	-0.064	1.000		
Age	0.039	0.078	0.199	-0.078	0.102	1.000	
Firm Size	0.304	0.335	0.361	0.091	0.344	0.047	1.000

**Table 8.** Regression results for TSMS.

<i>Variable</i>	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	-1.461	0.643	-2.271	0.024
Independent Director	0.007	0.012	0.561	0.575
Big Audit	1.266	0.394	3.211	0.001
Industry type	0.319	0.196	1.632	0.104
Profitability	-0.008	0.006	-1.466	0.144
Age	0.009	0.206	0.045	0.964
Firm Size	0.285	0.073	3.890	0.000

Summary: Multiple R = 0.368, R square = 0.136, Adjusted R Square = 0.119, F = 7.956, Significance F = 0.000.

and its association with our firm specific variables. The presence of a company on social media platforms is examined in order to gauge its social media presence. Company presence on Facebook, Twitter, YouTube, LinkedIn, Blogs and other platforms like Instagram is analysed here. The correlation matrix in **Table 7** suggests that there has positive relationship between the social media presence and six independent variables. According to the regression analysis in **Table 8**, companies audited by big four affiliated audit firms have significant influence over the social media presence of companies as the  $p$  value is less than the level of significance. Besides, Company size in terms of market capital is also statistically significant. However, independent board members in the audit committee, industry type, profitability of the firm and age of the company are not statistically significant at 5 percent level. There are primarily two reasons why we anticipate companies to build a variety of social media strategies. First, a company's decision to communicate financial information through social media may be seen as an extension of the company's method to disclose information. The dissemination of information through social media is not expressly required to comply with the regulation. Since the material has already been communicated through traditional means, it follows that smaller companies are less likely to implement any media initiatives (Jung et al., 2018). Second, different social media platforms serve various functions, allowing businesses to learn how to make the most of these tools by applying their expertise and dexterity.

## 8. Conclusion

Over the past few decades, there has been a considerable increase in the use of the internet for disclosing information to stakeholders by companies worldwide. Companies utilize online platforms to disseminate information regarding corporate governance, strategies for social media, financial performance, and environmental concerns. In this study, we attempted to determine whether or not there is a statistically significant difference in the nature, quantity, and quality of the information presented on company websites in Bangladesh. In addition, we looked for the outcomes depending on the six different variables employed in the social media strategy that the company implemented.

Our research is particularly pertinent at the present moment because of the rapid development of information technology, the rise in social media usage, and the subsequent influence on business and the economy. The following types of information are included in the index: investor-related data, social responsibility disclosures, statistics on corporate governance, and social media strategy. We can establish a connection between the online reporting of a corporation and the size, industry type, and types of the audit firm that the corporation employs. A company's social media presence depends on the size of the company and the sort of audit firm that the company chooses to work with. According to the findings, there is a significant amount of opportunity for advancement in terms of the amount of information available and the type of information available.



How information is made available on the internet is not presented in a standardized fashion, which is another issue. Some businesses' web strategies now routinely include videos, search engines, and linkages to various social media platforms. However, many companies have been sluggish in adapting to new technology and whose websites do not yet have a social media strategy. Companies are responsible for keeping pace with the change in the digital age. People who have a working knowledge of technology and frequently access the internet use accounting information.

This study is limited to a single country, which may limit its generalizability to other countries, so comparative research with other growing economic countries could expand its coverage. In addition, further studies can be done to find the differences in social media strategies of the companies using more variables such as multi-nationality, climate change disclosure, number of followers on the social media platform etc. However, the findings of this article could be used as a resource by those who design accounting standards and by those who regulate disclosure on the internet to assist them in developing new accounting rules and recommendations. In the same manner that integrated reporting frameworks and global reporting initiative standards were formed, the employed index could be a model for building a high-quality online information disclosure standard. This research can also assist those responsible for setting standards in better understanding some factors contributing to internet reporting.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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