A STUDY OF CORPORATE WEB-BASED REPORTING IN HOTEL INDUSTRY

CrossMark
← click for updates

Soriya Sushila[1] --- Dhaigude Amol[2][†]
[1]*Assistance Professor, Department of Commerce, Central University of Rajasthan, Ajmer, India*
[2]*Assistant Professor, T.A. Pai Management Institute, Manipal, Karnataka, India*

ABSTRACT

This study investigates the web-based reporting of Indian hotel industry and analyzes the pattern and determinants influencing the web-based reporting. Content analysis has been carried out for exploring dissemination of web-based reporting. The web based reporting is captured via general (162 parameters), financial (117 parameters) and presentation (24 parameters) indices. Ordinary least square regression technique has been deployed to establish the association between web-based reporting and the various determinants. Results revels that web-based reporting is significantly related to the size, liquidity, profitability and productivity of the hotels. Information symmetry and online reporting via internet technology facilitate various stakeholders.

Contribution/ Originality

This study contributes to the existing literature via finding out the significant and positive association between web-based reporting and size of the hotels. With the increase in the size of the hotel there are various other facilities available that are to be reported in increasing the worth of the hotels.

1. INTRODUCTION

In the era of globalization, a large number of listed companies are connected with their stakeholders through internet. Company's information is just a click away. Corporate web-based reporting (WBR) has emerged as one of the most popular medium of communication for disclosing and distributing corporate financial information. Study by Hassan *et al.* (1999) hinted that compared to the cost, the advantages are greater in using web-based financial reporting, both to the companies and for the users. Weare and Lin (2000) were of the opinion that World Wide Web has many advantages like global reach, interactive nature, decentralized and hyperlinked structure and multimedia format. However, information which is provided through internet, should also be previously or simultaneously provided through hard copy format to make it available consistently among the shareholders (McCafferty, 1995).

661

However, Graef and Gaedke (2000) suggested that development of the web-based application depend on content updating and improvement in the services for the users.

As the power and reach of the internet is increasing, so the demand for the online reporting of various information and financial disclosure in particular has increased. The dynamic and interactive nature of the internet as a medium of information distribution has surpassed the traditional hard copy format which is restricted to static words and images. This new form of financial information disclosure has put forward lots of challenges to the companies, regulatory bodies, accounting professions, and IT experts who are primarily responsible for providing the information. The web based reporting has huge impact on financial market and equity market in particular. The volume of small investors and their active participation has been increased owing to web-based reporting. In case of professional analysts and investment corps internet is one of the main source of information collection and distribution.

The revolution generated by the use of the web has multifold implications for regulators. The change in dissemination of accounting information through web is expected to bring many changes to accounting models, the way of communication and finally the profession itself. As the timeliness of the reports is very important in web-based reporting, the regulators have to check whether the inflow of information is on time and whether the information is audited to avoid any unnecessary flows in communication. Or there should be clear mention for audited and non-audited information. If the investors get timely information, they can use it for different analysis purposes. Information asymmetry will be reduced to some extent.

It will benefit the society, both at micro and macro levels. At micro level, shareholders, analysts and investors get proper and timely information; it will save their time and efforts from running around for other means of communication. At macro level, overall reputation of the companies may create a positive environment for investment in the economy. One of the challenges in internet financial reporting is to protect the security and integrity of the financial information that is displayed on the company's websites. It could have the risk that internal or external parties intentionally or unintentionally alter the information published. If the users' critical decisions are based on website information, such activity may harm the company's reputation. The level to which these problems are dealt with will establish long term trust and usefulness of internet as the medium of communication of financial information between users and the corporate.

Service sector is one of the most important pillar of the world economy. And in case of India, service sector accounts for 57.9% of the total GDP compared to 24.2% of industry and 17.9% of agriculture for the year 2014 (http://planningcommission.gov.in/data/datatable/data_2312/DatabookDec2014%202.pdf). Service sector is responsible for various kinds of crucial investments and employment opportunities. Under the head of the service sector hotel industry is one of the most important industry. The industry has been widely researched but with different dimensions. While scanning corporate social responsibility in hotels, Grosbois (2012) observed that the websites lacked clarity in information. Hsieh (2012) examined web pages for selected hotels, but in the context of environmental commitment and engagement. Results implied that 46% of hotels were actually using web pages for environmental disclosure. Holcomb et al. (2007) examined the top ten hotel companies as listed in Hotels magazine to check social responsibility style on the web sites.

There are various studies that investigated the web based reporting in different sectors say food sector (Haddock, 2005) banking industry (Serrano-Cinca et al., 2007) micro financial institutions (Gutierrez-Nieto et al., 2008) overall service sector (Soriya and Dhaigude, 2016) general web-based reporting (Aly et al., 2010; Bozcuk, 2012; Noronha et al., 2013). But the research on hotel industry web-based reporting is sparse (Uyar, 2011). However, in hotel industry, websites based information disclosure and using the internet as a medium of gathering information by the users is

very common. Although hotel industry is important, it has received less attention for research related to web-based reporting. Hence hotel industry is selected for this study. In particular this paper addresses the following questions:

- What is the nature and extent of WBR of Indian hotel industry on their corporate websites?
- How is WBR by Indian firms related to financial determinants like shareholders and firm profitability, leverage, liquidity, productivity, and size of the company?

Implications of the results of this study are multifold. The results of the study will add to the literature related to web-based reporting in service sector specifically in hotel industry. The paper is important as it helps in identifying the important characteristics of the companies associated with the web-based reporting. Regulators may use this study insights to implement the changes required for online information.

The paper is organized in five sections. Next section is for review of the relevant literature on web-based reporting. Third section presents the objectives and research methodology deployed in this study. Fourth section reports the results and analysis of the study. Lastly, Section five concludes the paper with policy implications along with paving direction for future research.

2. LITERATURE REVIEW

The invention of internet is a breakthrough research, and with the advent of the rise in penetration of internet the demand for the information has grown multifold. The geographical boundaries are vanishing and the pace with which information is flowing is unimaginable. There are lots of studies conducted on internet as a medium of information/data distribution (Norris, 2001; Buhalis and Law, 2008; Xiang *et al.*, 2015). Khan and Ismail (2012) concluded that web based reporting is cheap, easier and good investment decisions.

One stream of literature talks about the distribution of financial information via the internet i.e. web based reporting (Ashbaugh *et al.*, 1999; Ettredge *et al.*, 2001; Debreceny *et al.*, 2003; Crowther, 2016). Traditionally the financial reports and the information was made available via hard copy mode only. Mohamed *et al.* (2009) has studied the web based financial reporting of the listed Omani firms. And the authors concluded that the firms are not using the power of the internet for web based reporting to the fullest, and majority of the firms don't have website or underutilized the existing the websites. Unerman and Bennett (2004) concluded that internet is a tool that can help the firms to reach various stakeholders and provide information in a customized way, but the firms are lacking behind to harness the full potential of the internet.

The economic status of the country where the firms are operating has direct impact on the web based reporting (Deller *et al.*, 1999). The firms falling in the territory of developed countries has tendency to go for web based reporting compared to their counterparts in developing or economically backward countries. However there is variation among internet reporting in the developed countries as well. In a comparative analysis of the USA, Germany and the UK firms, Deller *et al.* (1999) found that USA was leading in WBR and the use of internet for reporting in all the three countries was partial. The same partial use phenomenon was noted by Davey and Homkajohn (2004) in case of Thai firms. Swedish companies were also exhibiting similar behavior and as a part of web based reporting, they have added soft copies of the traditional hard copy documents to their websites (Hedlin, 1999). There are ample number of studies related to web based reporting of the developed countries say Momany and Al-Shorman (2006) in UK; Homayoun and Rahman (2010) in Malaysia in U.K; Celik *et al.* (2006) in Turkey; Brennan and Hourigan (1999) in Ireland; Debreceny and Gray (1999) in France, UK, and Germany; Chatterjee and Hawkes (2008) in New Zealand; Haniffa and Cooke (2002) in Malaysia; Prencipe (2004) in Italy etc. There are very few studies that are conducted to find out the status of web based reporting of the developing or underdeveloped countries.

Another strand in the web based reporting is the determinants of the web based reporting. Fekete *et al.* (2009) concluded that the web based reporting is driven by the corporate culture and characteristics. Various researchers

tried to link the specific characteristics/ variables with the reporting on the web. In the same quest Pirchegger and Wagenhofer (1999) found out that various financial determinants have impact on online reporting. They concluded that profitability is associated with the web based reporting in case of Austrian firms, however the same is not true for German firms. Kelton and Yang (2008) opined that web based reporting is driven by corporate governance mechanism, and transparency is very important for online reporting. Authors concluded that firm size is having significant impact on the online financial reporting. According to Morhardt (2010) return on equity is also having significant impact on web based reporting along with the firm size. Garg and Gakhar (2010) opined that size of the firm, Industry and the business house association has significant impact on web based reporting. Internet as a medium of information distribution offers flexibility in terms of format and form of display. These characteristics also has direct impact on the web based reporting. Procter and Symonds (2001) concluded that the usability of the websites is affected by the graphic contends. The users also prefer the dynamic features rather than the static attributes of the website Debreceny et al. (2001).

The obvious extension of the web based research is the need of standard accounting/reporting standards. Wagenhofer (2003) studied the financial disclosure via internet and concluded that there is lack of standard reporting standards. The birth of the Extensible Business Reporting Language (XBRL) can be a direct result of the same. The impact on integrity and reliability aspect of the online reporting is directly impacted by the accounting standards followed. The use of International Financial Reporting Standards (IFRS) or the generally accepted accounting practice (GAAP) are posing various challenges for web based reporting. Another unending debatable issue is the substitution of the web based reporting for traditional hard copy based reporting for all financial statements.

Studies in Indian context with respect to web based reporting are very limited (Chatterjee and Hawkes, 2008; Gakhar, 2012). Especially studies investigating specific sectors are very sparse. So this study is an attempt to investigate the status and determinants web based reporting of the Indian hotel sector, using a comprehensive web based reporting index.

3. OBJECTIVES AND RESEARCH METHODOLOGY

3.1. Research Objectives

The main focus of the study is to examine the current status of web-based reporting in Indian hotel industry and to find the determinants of web-based reporting. It also aims to discover the general, financial and presentation information reported through internet and to check the variation with respect to Indian hotels. In particular the objectives of the study are

- To study the nature and extent of WBR of hotel industry on the corporate websites.
- To understand the linkages between the WBR and financial determinants like shareholders and firm profitability, leverage, liquidity, productivity, and size of the company

3.2 Sample Design and Data Collection

The sample for this study consist of top 74 market capitalization hotels listed on the National Stock Exchange (NSE) India. The official corporate websites of these 74 hotels has been used for data collection with the help of Google, Yahoo and other search engines. Financial data is collected from Centre for Monitoring Indian Economy (CMIE) database named Prowess. Data has been collected within a period of two months ranging from December 2014 - January 2015. The websites of the companies are dynamic in nature and change very frequently. So, the web pages have been saved and the same were coded for this study. The objective of the study is to examine the web based reporting via the general, financial and presentation indicators which were generally, available all time; so the dynamic nature of the website did not hindered the study.

3.3. Content Analysis

The study uses content analysis for measuring the level of web-based reporting in Indian hotel industry. Neuendorf (2002) has defined content analysis as "the systematic, objective quantitative analysis of message characteristic". Author was of the opinion that there has been constant growth of usage and variety of content analysis methodology. Yale and Gilly (1988) suggested that in the last few years, the methodology has been the fastest-growing technique in mass communication research. Duriau *et al.* (2007) supported with literature review that content analysis is useful in management research. McMillan (2000) also explained the benefits of the using the technique for evaluating the World Wide Web.

Ting *et al.* (2013) analyzes the features offered by the websites of the top 100 independent hotels on four continents. The study used extended Model of Internet Commerce Adoption (eMICA) technique. The results suggested that hotels in Asia have more features than those of the other continents. Macnamara (2007) discussed media content analysis in detail with growing use of the content analysis in various other fields too.

In this study, for using the content analysis the web based reporting index has been created. The index is divided into three parts namely general (162 parameters), financial (117 parameters) and presentation (24 parameters) indices (Refer Appendix A). Binary coding technique is deployed for content analysis, where websites of the sample companies are coded as 0 or 1 for each of the 303 parameters forming the overall web based reporting index. Figure 1 shows the framework used in the study.

3.4. Dependent, Independent and Control Variables

Extensive literature review has been carried out to find the determinants of web-based reporting. It becomes noteworthy to uncover the association between web-based reporting and the variables associated with it. Till now, no unanimous results have been agreed upon.
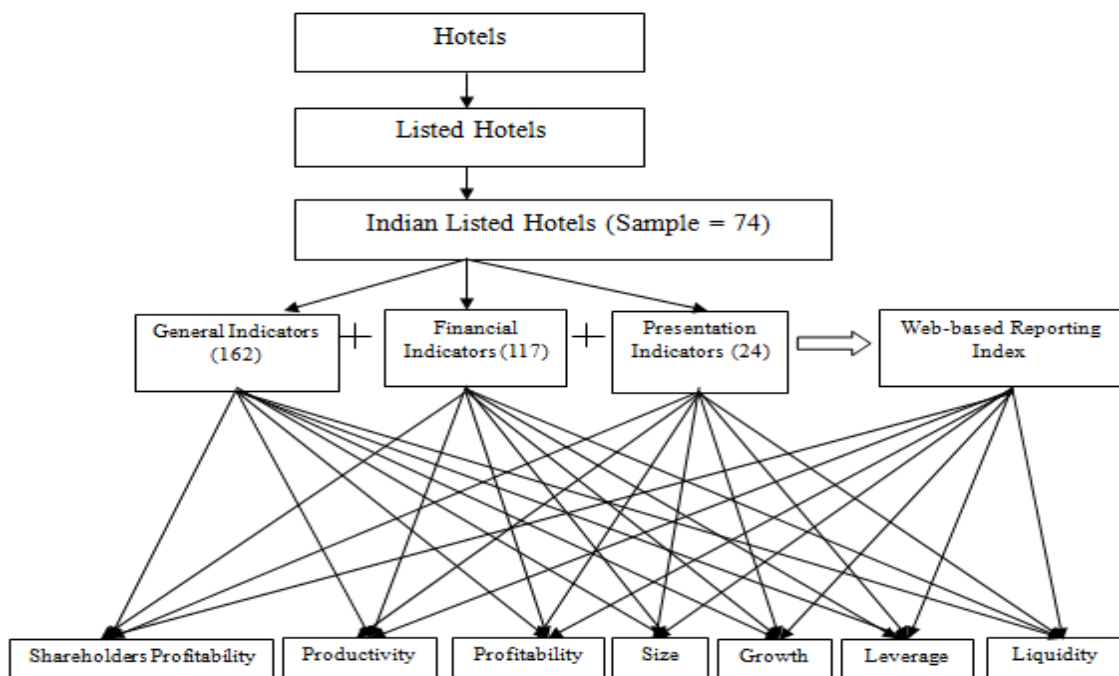

Figure-1. Framework of the study

Source: Created by authors

3.4.1. Web-Based Reporting Index

Web-based reporting index is a combination of three major indexes: (i) general reporting index, (ii) financial reporting index, and (iii) presentation reporting index. These indexes are formed by carrying out extensive literature review (Appendix A). For analysis of the data, content analysis was carried out which was followed by correlation and multiple regression analysis. Before applying content analysis, reliability of the data has been checked. Reliability is defined as the extent to which a measuring procedure yields the same results on repeated trials (Carmines and Zeller, 1979). Inter-coder reliability was checked, as two independent researchers have done the coding for the same websites. The inter coder reliability value of 0.96 signifies that not much variation was found in the results. Hence, the coded data is reliable in nature.

Another major concern is the validity of the data. Carmines and Zeller (1979) defined that validity of data is actually measuring what the researcher wants to measure. For this purpose literature review has been carried out and indicators are chosen based on well-defined parameters. Computer coding is also widely used, but is applicable only when the data is available in written, audio or video format. In the present study, the input data consists of websites of the companies that cannot be collected by computer. Therefore, the study used manual coding. A number of social researchers also claim that computers are not relevant to media content analysis, suggesting that it must be done manually by detailed human study (Newbold *et al.*, 2002).

3.4.2. Profitability

Aly *et al.* (2010); Pirchegger and Wagenhofer (1999) have shown a positive association between profitability and internet disclosure. The possible reason may be that if the company is earning more profits, it wants to disclose more information. Singhvi and Desai (1971) suggested that as the company has a higher profit, the management would like to disclose more information to the consumers, shareholders, investors and other stakeholders to attain good reputation. Return on total assets (ROA) is taken as the proxy for measuring profitability. ROA is calculated as profit after tax divided by total assets.

3.4.3. Shareholders Profitability

There are two major theories relating to reporting more when there are high profits in the firm. Oyeler *et al.* (2003) argued that signaling theory proposes that profitable firm signals to investors to support levels of compensation. Agency theory also supports the idea of managers disclosing more information for continuous compensation (Abd-El-Salam, 1999); (Wallace *et al.*, 1994). Marston (2003) also supported the literature that profitable companies tend to disclose more financial information. Empirically results have not proved it in all samples. Marston and Polei (2004); Kelton and Yang (2008) found that profitability was not related with internet reporting. But, Aly *et al.* (2010) discovered a positive association between profitability (measured by Return on Equity) and internet financial reporting. ROE is measured as profit after taxes/ shareholders equity.

3.4.4. Leverage

Leverage denotes the risk of the company as it uses more debt for financial purposes. Jensen and Meckling (1976) argued that when company is on high gear it discloses more information to satisfy creditors. Agency theory has been used to explain the relationship between leverage and corporate disclosure. Xiao *et al.* (2004) discussed agency theory and derived the relationship between leverage and corporate reporting. Leverage is denoted by debt equity ratio, i.e. total debt/total equity. No consensus has developed among the researchers as there were mixed results. Contrary to the theory, Brennan and Hourigan (1998); Debreceny *et al.* (2002); Oyeler *et al.* (2003); Xiao *et*

al. (2004); Debreceny and Rahman (2005) found negative relationship between leverage and web-based reporting, whereas Ettredge *et al.* (2002); Ismail (2002) found results supporting the theory.

3.4.5. Size

Size is one of the major factors as large size of the corporate will have the benefit of cost because of large scale economies. Agency theory suggested that larger size of the firm will have more disclosure. There are few reasons supporting the larger disclosure of corporate information through internet. Larger companies have more analysts and therefore they require more information and cost of collecting information can be reduced by providing the information online (McKinnon and Dalimunthe, 1993). Craven and Marston (1999) also pointed out another reason, i.e. rise in agency cost, reduction in public criticism or lesser government intervention (Al-Mulhem, 1997). Ettredge *et al.* (2002); Debreceny *et al.* (2002); Marston (2003); Oyeler *et al.* (2003); Xiao *et al.* (2004); Lodhia *et al.* (2004); Marston and Polei (2004) found positive association between size and corporate disclosure of the firm. On the contrary, Allam and Lymer (2003) found no relationship between the size and internet financial reporting.

3.4.6. Liquidity

Liquidity is also considered a determinant of internet reporting as the larger firms and companies with better liquid position want to show their position to the stakeholders (Abd-El-Salam, 1999). Oyeler *et al.* (2003) found positive relationship between liquidity and internet reporting. But Wallace *et al.* (1994) reported that companies with lower liquidity provide more information in their annual reports. Ahmed and Courtis (1999) found no association between disclosure and liquidity.

3.4.7. Growth

Frankel *et al.* (1999) were of the view that information asymmetry can be reduced by providing more information through internet reporting. Traditional measures were not able to measure high growth prospects (Lev and Sougiannis, 1999). On the contrary, Debreceny *et al.* (2002) argued that companies with high growth but intangible in nature may lead to competitive disadvantage.

3.4.8. Productivity

Company's productivity is measured by assets turnover ratio. It measures the use of assets in generating sales. It is calculated as revenue divided by total assets. Table 1 shows the list of variables used in the study with their calculations. Based on the above literature, we have formulated the hypothesis for our study as shown in Table 2.

Table-1. List of variables used in the study

Variables		Used for	Calculation
Independent and control variables	**ATO**	Productivity	Revenue/Total assets
	ROA	Profitability	Profit after tax/Total assets
	ROE	Shareholders profitability	Profit after taxes and preference dividend/Shareholders equity
	MCap	Size	Log of total market capitalization
	GR	Growth	Market value/Book value
	LIQ	Liquidity	Current assets/Current liabilities
	LEV	Leverage	Total debt/Total equity
Dependent variables	**GEN**	General reporting index	Total score of general indicators
	FIN	Financial reporting index	Total score of financial indicators
	PRE	Presentation reporting index	Total score of presentation indicators
	WBR	Web-based reporting index	Total score of web-based indicators

Source: Compiled by authors

Table-2. Hypothesis of the study

Independent Variables	General Index (Model 1)	Financial Index (Model 2)	Presentation Index (Model 3)	Web-based Index (Model 4)
	Hypothesis (Expected Sign)	Hypothesis (Expected Sign)	Hypothesis (Expected Sign)	Hypothesis (Expected Sign)
ATO	H_{1a} (+)	H_{1b} (+)	H_{1c} (+)	H_{1d} (+)
ROA	H_{2a} (+)	H_{2b} (+)	H_{2c} (+)	H_{2d} (+)
ROE	H_{3a} (+)	H_{3b} (+)	H_{3c} (+)	H_{3d} (+)
MCap	H_{4a} (+)	H_{4b} (+)	H_{4c} (+)	H_{4d} (+)
GR	H_{5a} (+)	H_{5b} (+)	H_{5c} (+)	H_{5d} (+)
LIQ	H_{6a} (+)	H_{6b} (+)	H_{6c} (+)	H_{6d} (+)
LEV	H_{7a} (+)	H_{7b} (+)	H_{7c} (+)	H_{7d} (+)

Source: Compiled by authors

3.5. Tools for Analysis

Corporate disclosure theories have suggested that there is relationship between web-based reporting and productivity, profitability, leverage, size, growth and liquidity of the hotels. So, based on the published literature support regression model for this study has been framed. Abdelsalam *et al.* (2007); Aly *et al.* (2010) also used ordinary least squares regression to check the association between variables. The following model has been derived for checking the association of variables with the dependent variable.

$$WBR = \alpha + \beta_1 (ATO) + \beta_2 (ROA) + \beta_3 (ROE) + \beta_4 (MCap) + \beta_5 (GR) + \beta_6 (LIQ) + \beta_7 (LEV) + \varepsilon_i \dots\dots (i)$$

$$GEN = \alpha + \beta_1 (ATO) + \beta_2 (ROA) + \beta_3 (ROE) + \beta_4 (MCap) + \beta_5 (GR) + \beta_6 (LIQ) + \beta_7 (LEV) + \varepsilon_i \dots\dots (ii)$$

$$FIN = \alpha + \beta_1 (ATO) + \beta_2 (ROA) + \beta_3 (ROE) + \beta_4 (MCap) + \beta_5 (GR) + \beta_6 (LIQ) + \beta_7 (LEV) + \varepsilon_i \dots\dots (iii)$$

$$PRE = \alpha + \beta_1 (ATO) + \beta_2 (ROA) + \beta_3 (ROE) + \beta_4 (MCap) + \beta_5 (GR) + \beta_6 (LIQ) + \beta_7 (LEV) + \varepsilon_i \dots\dots (vi)$$

Here β_1 to β_7 are the slopes; α and ε are intercept and error.

4. RESULTS AND ANALYSIS

The evaluation of the data given on the websites of the sample companies has been coded by using the DAUB approach (Daub, 2006;2007). Websites were coded using the binary coding on a yes and no basis, encoded as 1 and 0 respectively. Two independent researchers have conducted the coding of the 74 Indian hotel industry websites. The reliability of content analysis is carried out using the percentage agreement and Cohen's kappa (Cohen, 1960) test. Results indicated that the total percentage agreement was 0.94, which was considered as acceptable standard. Cohen's kappa results yielded a score of 0.86 and confirmed excellent level of consistency in the coding.

Table-3. Descriptive statistics of hotel industry

	Minimum	Maximum	Mean	Std. Deviation
ATO	0.000	2.351	0.389	0.369
ROA	-0.418	0.161	-0.007	0.103
ROE	-7.366	0.897	-0.228	1.267
MCap	0.885	4.991	2.868	0.863
GR	-3.278	25.732	2.504	4.423
LIQ	0.003	124.357	4.383	16.816
LEV	-3.148	107.057	3.069	14.332
GEN	2.000	48.000	24.804	7.912
FIN	0.000	23.000	12.054	5.415
PRE	0.000	9.000	4.696	1.747
WBR	2.000	67.000	41.554	13.839

Source: Compiled by authors

4.1. Descriptive Statistics

Table 3 reports the results of descriptive statistics in hotel industries. Mean value of WBR is 41.554 with 2 as minimum and 67 as the maximum number, indicating a high standard deviation in the data. It implies that there are many hotels which are reporting much less or more information in comparison with the average value. ATO is a minimum of 0 and maximum 2.351, with a standard deviation of 0.369, indicating that the data does not deviate much from the mean value. ROA with minimum of (-0.418) and 0.161 maximum shows few of the hotels suffering losses.

4.2. Correlation Matrix

Table 4 shows the correlation matrix of the selected sample hotels. Result indicates that ROA is significantly and negatively correlated with WBR (-0.289) at 5% level of significance, indicating negative association between productivity and web-based reporting. ROE is negatively associated with WBR, i.e. (-0.264) at 5 percent level. It implies that profitability of the hotels is showing significant negative association with ROE.

Results also report that GR is negatively associated with ROE (-0.411) at 1% level of significance. Leverage indicator of risk of a company has positive association, i.e. 0.459 with GR at 1% level of significance, and negative association with ROE, i.e. (-0.849) at 1% level. LEV and size measured by total assets is positively correlated (0.265) at 5% level. None of the independent variables are correlated with each other more than 0.70, indicating that there is no problem of multi-colliearity in the data (Kennedy, 1985).

4.3. Results of OLS Regression

Table 5 reports the results of the ordinary least squares (OLS) regression model, taking general, financial and presentation indexes. A total of all these indicators is considered as web-based reporting index. Abdelsalam *et al.* (2007) also investigated the determinants of corporate internet reporting by carrying out ordinary least squares regression. Results of the regression, taking general index as dependent variable, is showing R^2 as 20.4 and adjusted R^2 is 11.4, which implies that the model is poorly fitting the data. It implies that there may be few more variables which are impacting WBR, but are not used in the study. F-statistic is 2.270 significant at 5% level of significance. Durbin-Watson (D-W) statistics is 2.364, considered satisfactory.

Results from OLS regression implies that the size of the hotels measured by MCap is positively (0.255) associated with the general index at 10 percent significant level. It leads to support for the hypothesis, i.e. H_{4a}. So it can be inferred, as size (Mcap) of the hotels increases, the web based reporting via the general index also increases. These results are consistent with the previous research (Marston and Leow, 1998); (Pirchegger and Wagenhofer, 1999). Liquidity of the hotels is found to be negatively associated with general coefficient (-0.230) at 10 percent level of significance. Results do not support the hypothesis H_{7a}. Other variables such as ATO, ROA, ROE, GR and LEV are not found to be significantly associated with the general index. Hence, hypothesis H_{1a}, H_{2a}, H_{3a} H_{5a} and H_{7a} are also rejected.

Table-4. Correlation probability of hotel industry

	ATO	ROA	ROE	MCap	GR	LIQ	LEV	GEN	FIN	PRE	WBR
ATO	1										
ROA	0.297**										
ROE	0.167	0.388*									
MCap	0.212	0.147	-0.177								
GR	-0.044	-0.038	-0.411*	0.261***							
LIQ	-0.162	0.178	0.056	-0.407*	-0.103						
LEV	-0.114	-0.137	-0.849*	0.204	0.459*	-0.045					
GEN	-0.070	-0.390*	-0.174	0.221	0.083	-0.120	0.145				
FIN	-0.179	-0.063	-0.292**	0.261***	0.148	-0.099	0.244***	0.725*			
PRE	-0.175	-0.328**	-0.398*	0.107	0.150	-0.162	0.283**	0.681*	0.82*6		
WBR	-0.132	-0.289**	-0.264**	0.242***	0.124	-0.128	0.214	0.941*	0.910*	0.839*	1

Note: *significant at < 0.01, ** significant at < 0.05 and *** significant at < 0.10 respectively.

Table-5. OLS regression results of web based reporting as dependent variable of the hotels

	General Index (Model 1)			Financial Index (Model 2)			Presentation Index (Model 3)			Web-based Index (Model 4)		
	Beta Coefficient	t-statistics	Std. Error	Beta Coefficient	t-statistics	Std. Error	Beta Coefficient	t-statistics	Std. Error	Beta Coefficient	t-statistics	Std. Error
Constant		4.814*	3.982		3.535*	2.698		5.208*	0.809		4.797*	6.863
ATO	-0.176	-1.447	4.126	-0.241	-2.006**	2.796	-0.275	-2.353**	0.838	-0.226	-1.906***	7.112
ROA	0.094	0.766	45.66	0.185	1.519	30.941	0.213	1.812***	9.278	0.15	1.256	78.698
ROE	-0.255	-1.396	1.532	-0.313	-1.730***	1.038	-0.398	-2.268**	0.311	-0.314	-1.758***	2.64
MCap	0.255	1.941***	1.271	0.22	1.686***	0.861	0.166	1.316	0.258	0.25	1.944***	2.19
GR	-0.034	-0.265	0.28	-0.061	-0.482	0.19	-0.049	-0.395	0.057	-0.049	-0.39	0.482
LIQ	-0.23	-1.824***	0.362	-0.171	-1.366	0.245	-0.168	-1.384	0.074	-0.217	-1.759***	0.624
LEV	-0.181	-1.024	0.721	-0.128	-0.726	0.488	-0.121	-0.712	0.146	-0.167	-0.964	1.242
R^2			0.204			0.217			0.265			0.239
Adjusted R^2			0.114			0.129			0.182			0.153
R^2 Change			0.204			0.217			0.265			0.239
F-statistics			2.270**			2.461**			3.188*			2.782**
Durbin-Watson			2.364			2.346			2.041			2.343

Note: *significant at < 0.01, ** significant at < 0.05 and *** significant at < 0.10 respectively.

Table-6. Hypothesis and OLS regression results

Independent Variables	General Index (Model 1)		Financial Index (Model 2)		Presentation Index (Model 3)		Web-based Index (Model 4)	
	Hypothesis (Expected Sign)	Results	Hypothesis (Expected Sign)	Results	Hypothesis (Expected Sign)	Results	Hypothesis (Expected Sign)	Results
ATO	H_{1a} (+)	Not Significant	H_{1b} (+)	Not Supported	H_{1c} (+)	Not Supported	H_{1d}(+)	Not Supported
ROA	H_{2a}(+)	Not Significant	H_{2b}(+)	Not Significant	H_{2c} (+)	Supported	H_{2d}(+)	Not Significant
ROE	H_{3a}(+)	Not Significant	H_{3b}(+)	Not Supported	H_{3c} (+)	Not Supported	H_{3d}(+)	Not Supported
MCap	H_{4a}(+)	Supported	H_{4b}(+)	Supported	H_{4c} (+)	Not Significant	H_{4d}(+)	Supported
GR	H_{5a}(+)	Not Supported	H_{5b}(+)	Not Significant	H_{5c} (+)	Not Significant	H_{5d}(+)	Not Significant
LIQ	H_{6a}(+)	Not Supported	H_{6b}(+)	Not Significant	H_{6c} (+)	Not Significant	H_{6d}(+)	Not Supported
LEV	H_{7a} (+)	Not Significant	H_{7b}(+)	Not Significant	H_{7c} (+)	Not Significant	H_{7d}(+)	Not Significant

Source: Compiled by authors

Model 2, taking financial index as dependent variable, found R^2 as 21.7 and adjusted R^2 as 12.9. F-statistics for the model is 2.461 at 5 percent significant level. D-W test result is 2.346. Productivity at (-0.241) and ROE at (-0.313) are negatively associated with the financial index of the company at 5% and 10% level respectively. So, hypothesis H_{1b} and H_{3b} are rejected, leading to not supporting the assumption that there is positive association between financial index with productivity and shareholders profitability. The relationship between the profitability and the reporting via internet is mixed in nature as per the published literature. Some researchers argue that there exists no relationship (Marston and Polei, 2004); (Marston and Polei, 2004) while other opined the positive relationship (Pirchegger and Wagenhofer, 1999); (Pirchegger and Wagenhofer, 1999). As per Street and Gray (2002) the results are not predictable and are influenced by other factors.

Size of the hotel is found to be positively associated (0.220) with the financial index at 10 percent level of significance. It leads to accepting the hypothesis H_{1b} implying that size plays a major role in internet reporting of financial index. Other variables such as ROA, GR, LIQ and LEV are not significantly associated with financial index. So, hypotheses H_{2b}, H_{5b}, H_{6b} and H_{7b} are rejected. Contrary to the results, Debreceny et al. (2002) reported a negative relationship between growth prospects and internet reporting.

Model 3 takes presentation index as dependent variable. Results indicate that R^2 is 26.5 and adjusted R^2 is 12.9. F-statistics is 2.461, significant at 5% level. Result shows that ATO (-0.275) and ROE (-0.398) are negatively associated with the presentation index, both at 5% level. It leads to rejection of two hypothesis, i.e. H_{1c} and H_{3c}. ROA is positively (0.213) associated with the presentation index at 10% level. It implies that hypothesis H_{2c} is supported. Other variables like MCap, GR, LIQ and LEV are not significantly related with the presentation index. So, the hypothesis, i.e. H_{4c}, H_{5c}, H_{6c} and H_{7c} are not supported. Results imply that the association between the presentation index and variable are not significant because the presentation style of the reporting may not play an important role in the disclosure of the information. Abdelsalam et al. (2007) found no association of usability index with ROA and total assets of the companies.

Model 4, taking total indicator as web-based index of the hotels, implies that ATO (-0.226), ROE (-0.314) and LIQ (-0.217) are negatively associated with the web-based reporting index. It leads to rejection of H_{1d}, H_{4d} and H_{6d} hypothesis. Belkaoui and Karpik (1989); Patten (1991); Hackston and Milne (1996); Richardson and Welker (2001) reported weak relationship between profitability and social disclosure. As per the Dichev and Skinner (2002) argument, the plausible reason resulting the poor relationship with leverage might be the poor proxy problem capturing the firm risk. Size (0.250) is found to be positively associated with the web-based reporting index. R^2 is 23.9 and adjusted R^2 is 15.3. F-statistics is 2.782 significant at 5% level. Durbin-Watson is 2.343, indicating that it is in the level of acceptance Similar to the various other relationship the association between leverage and reporting via web is mixed in nature. One stream of research thread says that this relationship is positive (Akhtaruddin, 2005) second thread argued about no relationship at all (Ahmed and Nicholls, 1994; Oyeler et al., 2003). Table 6 presents the hypothesis with their results of all the models.

5. CONCLUSION AND LIMITATIONS OF THE STUDY

This study contributes in the existing literature via finding out the significant and direct relationship between WBR and size of the hotels. With the increase in the size of hotel there are various other facilities available that are to be reported for increasing the worth of the hotel.

The present study is an attempt to enhance the WBR research in Indian hotels. It has examined the relationship of web-based reporting with productivity, profitability, leverage, liquidity and age of the hotels. This paper has showed the relationship between WBR and the three dimensions of the WBR with the various financial determinants. This study is helpful to the small and big investors, managers and the practitioners working in the hotel sector, regulators and policy makers, academicians, and the research scholars.

There are few limitations of this study. First, the present study is related to web-based reporting of only one sector i.e. hotel, that reduced the chances of any variation in the presentation style. For better generalization more sectors should be added. Second of the limitation of this study is that, there are various other factors that affect the web based reporting are not considered in this study. Third, the effect of time dimension on the web based reporting i.e. longitudinal analysis is not carried out in this study. Fourth, only 74 hotels have been taken into account, for generalization of the results the sample needs to be increased. Fifth, the study is restricted to one nation, for finding out interesting patterns cross culture studies needs to be conducted.

Scope for further research includes, increasing the model prediction by adding more indicators or more predictors. Second is finding out ways and means to reduce the variations in disclosure. Third, comparative studies on service vs. product oriented industries is another interesting area to do research. Fourth, the absence of standard guidelines for web based reporting is one of the major reason for variation in terms of reporting, research should be conducted on that in order to come up with a standard web based reporting. Authors urge the researchers to take these topics/areas and carry forward the stream.

REFERENCES

Abd-El-Salam, O.H., 1999. The introduction and application of international accounting standards to accounting disclosure regulations of a capital market in developing country: The case of Egypt. PhD Thesis, Heriot-Watt University, Edinburgh.

Abdelsalam, O.H., S.M. Bryant and D.L. Street, 2007. An examination of the comprehensiveness of corporate internet reporting provided by London-listed companies. Journal of International Accounting Research, 6(2): 1-33.

Ahmed, K. and J.K. Courtis, 1999. Associations between corporate characteristics and disclosure levels in annual reports: A meta-analysis. British Accounting Review, 31(1): 35-61.

Ahmed, K. and D. Nicholls, 1994. The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries: The case of Bangladesh. International Journal of Accounting, 29(1): 62-77.

Akhtaruddin, M., 2005. Corporate mastery disclosure practices in Bangladesh. International Journal of Accounting, 40(4): 399-422.

Al-Mulhem, A.A., 1997. An empirical investigation of the level of financial disclosure by Saudi Arabia corporations. PhD Thesis, The University of Hull.

Allam, A. and A. Lymer, 2003. Developments in internet financial reporting: Review and analysis across five developed countries. International Journal of Digital Accounting Research, 3(6): 165-199.

Aly, D., J. Simon and K. Hussainey, 2010. Determinants of corporate internet reporting: Evidence from Egypt. Managerial Auditing Journal, 25(2): 182-202.

Ashbaugh, H., K.M. Johnstone and T.D. Warfield, 1999. Corporate reporting on the internet. Accounting Horizons, 13(3): 241-257.

Belkaoui, A. and P. Karpik, 1989. Determinants of the corporate decision to disclose social information. Accounting, Auditing and Accountability Journal, 2(1): 36-51.

Bozcuk, A.E., 2012. Internet financial reporting: Turkish companies adapt to change. Managerial Finance, 38(8): 786-800.

Brennan, N. and D. Hourigan, 1998. Corporate reporting on the internet by Irish companies. Accountancy Irel, 30(6): 18-21.

Brennan, N.M. and D. Hourigan, 1999. Corporate reporting on the internet by Irish companies. Irish Accounting Review, 7(1).

Buhalis, D. and R. Law, 2008. Progress in information technology and tourism management: 20 years on and 10 years after the internet—the state of etourism research. Tourism Management, 29(4): 609-623.

Carmines, E.G. and R.A. Zeller, 1979. Reliability validity assessment. Newbury Park, CA: Sage Publications.

Celik, O., A. Ecer and H. Karabacak, 2006. Impact of firm specific characteristics on the web based business reporting: Evidence from the companies listed in Turkey. Problems Perspectives in Management, 4(3): 100-133.

Chatterjee, B. and L. Hawkes, 2008. Does internet reporting improve the accessibility of financial information in a global world? A comparative study of New Zealand and Indian companies. Australasian Accounting Business and Finance Journal, 2(4): 33-56.

Cohen, J., 1960. A coefficient of agreement for nominal scales. Educational Psychological Measurement, 20(1): 37-46.

Craven, B. and C. Marston, 1999. Financial reporting on the internet by leading UK companies. European Accounting Review, 8(2): 321-333.

Crowther, D., 2016. A social critique of corporate reporting: Semiotics and web-based integrated reporting. Routledge.

Daub, C.H., 2006;2007. Corporate sustainability reporting: Evidence from the first Swiss benchmark survey. Sustainability Accounting and Reporting. Eco-Efficiency in Industry and Science, 21(1): 325-337.

Davey, H. and K. Homkajohn, 2004. Corporate internet reporting: An Asian example. Problems and Perspectives in Management, 2(2): 211-227.

Debreceny, R. and G.L. Gray, 1999. Financial reporting on the internet the external audit. European Accounting Review, 8(2): 335-350.

Debreceny, R., G.L. Gray and T.J. Mock, 2001. Financial reporting web sites: What users want in terms of form and content. International Journal of Digital Accounting Research, 1(1): 1-23.

Debreceny, R., G.L. Gray and A. Rahman, 2002. The determinants of internet financial reporting. Journal of Accounting Public Policy, 21(1): 371-394.

Debreceny, R., G.L. Gray and A. Rahman, 2003. The determinants of internet financial reporting. Journal of Accounting and Public Policy, 21(4): 371-394.

Debreceny, R. and A. Rahman, 2005. Firm-specific determinants of continuous corporate disclosures. International Journal of Accounting, 40(3): 249-278.

Deller, D., M. Stubenrath and C. Weber, 1999. A survey on the use of the internet for investor relations in the USA, the UK and Germany. European Accounting Review, 8(2): 351-364.

Dichev, L. and D. Skinner, 2002. Large sample evidence on the debt covenant hypothesis. Journal of Accounting Research, 40(4): 1091-1124.

Duriau, V.J., V.J. Reger and M.D. Pfarrer, 2007. A content analysis of the content analysis literature in organization studies research themes, data sources, and methodological refinements. Organizational Research Methods, 10(1): 5-34.

Ettredge, M., V.J. Richardson and S. Scholz, 2001. The presentation of financial information at corporate web sites. International Journal of Accounting Information Systems, 2(3): 149-168.

Ettredge, M., V.J. Richardson and S. Scholz, 2002. Dissemination of information for investors at corporate web sites. Journal of Accounting Public Policy, 21(1): 357-369.

Fekete, S., A. Tiron-Tudor and A. Muţiu, 2009. Determinants of the comprehensiveness of corporate internet reporting by Romanian listed companies. Available from http://ssrn.com/abstract=1517665.

Frankel, R., M. Johnson and D.J. Skinner, 1999. An empirical examination of conference calls as a voluntary disclosure medium. Journal of Accounting Research, 37(1): 133-150.

Gakhar, D.V., 2012. Perception of stakeholders on web-based corporate reporting practices. Journal of Advances in Management Research, 9(1): 64-76.

Garg, M.C. and D.V. Gakhar, 2010. Web-based corporate reporting practices in India. IUP Journal of Accounting Research & Audit Practices, 9(3): 7-19.

Graef, G. and M. Gaedke, 2000. Evolution of web-based applications using domain-specific mark up languages. Australasian Journal of Information Systems, 8(1): 51-63.

Grosbois, D., 2012. Corporate social responsibility reporting by the global hotel industry: Commitment, initiatives performance. International Journal of Hospitality Management, 31(3): 896-905.

Gutierrez-Nieto, B., Y. Fuertes-Callen and C. Serrano-Cinca, 2008. Internet reporting in microfinance institutions. Online Information Review, 32(3): 415-436.

Hackston, D. and M.J. Milne, 1996. Some determinants of social and environmental disclosures in New Zealand companies. Accounting, Auditing & Accountability Journal, 9(1): 77-108.

Haddock, J., 2005. Consumer influence on internet-based corporate communication of environmental activities: The UK food sector. British Food Journal, 107(10): 792-805.

Haniffa, R.M. and T.E. Cooke, 2002. Culture, corporate governance disclosure in Malaysian corporations. Abacus, 38(3): 317-349.

Hassan, S., N. Jaffar, S.K. Johl and M.N.M. Zain, 1999. Financial reporting on the internet by Malaysian companies: Perceptions and practices. Asia-Pacific Journal of Accounting, 6(2): 299-319.

Hedlin, P., 1999. The internet as a vehicle for investor relations: The Swedish case. European Accounting Review, 8(2): 373-381.

Holcomb, J.L., R.S. Upchurch and F. Okumus, 2007. Corporate social responsibility: What are top hotel companies reporting? International Journal of Contemporary Hospitality Management, 19(6): 461-475.

Homayoun, S. and R.A. Rahman, 2010. Determinants of web-based corporate reporting among top public listed companies in Malaysia. International Journal of Arts and Sciences, 3(13): 187-212.

Hsieh, Y.C.J., 2012. Hotel companies environmental policies and practices: A content analysis of their web pages. International Journal of Contemporary Hospitality Management, 24(1): 97-121.

Ismail, T.H., 2002. An empirical investigation of factors influencing voluntary disclosure of financial information on the internet in the GCC countries. Working Paper. Available from http://ssrn.com/abstract=420700.

Jensen, M. and W. Meckling, 1976. Theory of the firm: Managerial behaviour, agency costs and ownership structure. Journal of Financial Economics, 3(4): 305-360.

Kelton, A.S. and Y.W. Yang, 2008. The impact of corporate governance on internet financial reporting. Journal of Accounting and Public Policy, 27(1): 62-87.

Kennedy, P., 1985. A guide to econometrics. Cambridge: MIT Press.

Khan, M.N.A.A. and N.A. Ismail, 2012. A review of e-financial reporting research. Journal of Internet and e-Business Studies, 4(4): 1-14.

Lev, B. and T. Sougiannis, 1999. Penetrating the book-to-market black box: The R&D effect. Journal of Business Finance and Accounting, 26(1): 419–449. DOI 10.1111/1468-5957.00262.

Lodhia, S., A.A. Allam and A. Lymer, 2004. Corporate reporting on the internet in Australia: An exploratory study. Australian Accounting Review, 4(4): 64-71.

Macnamara, J., 2007. Media content analysis: Its uses; benefits and best practice methodology. Asia Pacific Public Relations Journal, 6(1): 1-34.

Marston, C., 2003. Financial reporting on the internet by leading Japanese companies. Corporate Communications: An International Journal, 8(1): 23-34.

Marston, C. and C. Leow, 1998. Financial reporting on the internet by leading UK companies. Paper Presented at 21st European Accounting Association Annual Congress, Antwerp.

Marston, C. and A. Polei, 2004. Corporate reporting on the internet by German companies. International Journal of Accounting Information Systems, 5(3): 285-311.

McCafferty, J., 1995. Investor relations: How much to reveal online. CFO.

McKinnon, J.L. and L. Dalimunthe, 1993. Voluntary disclosure of segment information by Australian diversified companies. Accounting Finance, 33(1): 33-50.

McMillan, S.J., 2000. The microscope and the moving target: The challenge of applying content analysis to the world wide web. Journalism & Mass Communication Quarterly, 77(1): 80-98.

Mohamed, E.K.A., P. Oyelere and M. Al-Busaidi, 2009. A survey of internet financial reporting in Oman. International Journal of Emerging Markets, 4(1): 56-71.

Momany, M. and S. Al-Shorman, 2006. Web-based voluntary financial reporting of Jordanian companies. International Review of Business Research Paper, 2(2): 127-139.

Morhardt, J.E., 2010. Corporate social responsibility and sustainability reporting on the internet. Business Strategy and the Environment, 19(7): 436-452.

Neuendorf, K.A., 2002. The content analysis guidebook. CA: Sage Publications, 300.

Newbold, C., O. Boyd-Barrett and D.B.H. Van, 2002. The media book. London: Arnold Hodder Headline.

Noronha, C., S. Tou, M.I. Cynthia and J.J. Guan, 2013. Corporate social responsibility reporting in China: An overview and comparison with major trends. Corporate Social Responsibility and Environmental Management, 20(1): 29-42.

Norris, P., 2001. Digital divide: Civic engagement, information poverty, and the internet worldwide. Cambridge University Press.

Oyeler, P., F. Laswad and R. Fisher, 2003. Determinants of internet financial reporting by New Zeal companies. Journal of International Financial Management Accounting, 14(1): 26-63.

Patten, D., 1991. Exposure, legitimacy, and social disclosure. Journal of Accounting and Public Policy, 10(4): 297-308.

Pirchegger, B. and A. Wagenhofer, 1999. Financial information on the internet: A survey of the homepages of Austrian companies. European Accounting Review, 8(2): 233-247.

Prencipe, A., 2004. Proprietary costs determinants of voluntary segment disclosure: Evidence from Italian listed companies. European Accounting Review, 13(2): 319-340.

Procter, C. and J. Symonds, 2001. Designing for web site usability. Australasian Journal of Information Systems, 9(1): 92-101.

Richardson, A.J. and M. Welker, 2001. Social disclosure, financial disclosure and the cost of equity capital. Accounting, Organizations and Society, 26(7): 597-616.

Serrano-Cinca, C., Y. Fuertes-Callen and B. Gutierrez-Nieto, 2007. Online reporting by banks: A structural modelling approach. Online Information Review, 31(3): 310-332.

Singhvi, S.S. and H.B. Desai, 1971. An empirical analysis of the quality of corporate financial disclosure. Accounting Review, 46(1): 129-138.

Soriya, S. and A.S. Dhaigude, 2016. Corporate online reporting and their determinants in Indian services sector. Handbook of Research on Promotional Strategies and Consumer Influence in the Service Sector: 355-367.

Street, D.L. and S.J. Gray, 2002. Factors influencing the extent of corporate compliance with international accounting standards: Summary of a research monograph. Journal of International Accounting, Auditing Taxation, 11(1): 51-76.

Ting, P., S. Wang, D. Bau and M. Chiang, 2013. Website evaluation of the top 100 hotels using advanced content analysis and eMICA model. Cornell Hospitality Quarterly, 54(3): 284-293.

Unerman, J. and M. Bennett, 2004. Increased stakeholder dialogue and the internet: Towards greater corporate accountability or reinforcing capitalist hegemony? Accounting, Organizations and Society, 29(7): 685-707.

Uyar, A., 2011. Determinants of corporate reporting on the internet: An analysis of companies listed on the Istanbul stock exchange (ISE). Managerial Auditing Journal, 27(1): 87-104.

Wagenhofer, A., 2003. Economic consequences of internet financial reporting. Schmalenbach Business Review, 55(3): 21-32.

Wallace, R.S.O., K. Naser and A. Mora, 1994. The relationship between the comprehensiveness of corporate annual reports firm characteristics in Spain. Accounting Business Research, 25(97): 41–53.

Weare, C. and W. Lin, 2000. Content analysis of the world wide web opportunities challenges. Social Science Computer Review, 18(3): 272-292.

Xiang, Z., V.P. Magnini and D.R. Fesenmaier, 2015. Information technology and consumer behavior in travel and tourism: Insights from travel planning using the internet. Journal of Retailing and Consumer Services, 22(1): 244-249.

Xiao, J., H. Yang and C. Chow, 2004. The determinants characteristics of voluntary internet-based disclosures by listed Chinese companies. Journal of Accounting Public Policy, 23(3): 191-225.

Yale, L. and M. Gilly, 1988. Trends in advertising research: A look at the content of marketing-orientated journals from 1976 to 1985. Journal of Advertising, 17(1): 12–22.

Appendix-A. General Indicators (Total 162)

Sr No.	General Indicators	Sr No	General Indicators	Sr No.	General Indicators
1	Advertisement of own products/services	28	Chairman's message to shareholders - with financial charts/graphs	55	Disclaimer
2	Advertisements for another companies' products/services	29	Chairman's message to shareholders - with hyperlinks inside/outside annual report	56	E-commerce assurance logos or seals
3	A link to stock data on Euronext, Boursorama, Yahoo Finance	30	Chairman's message to shareholders - with signature	57	E-mail to investor relations or financial control manager
4	Annual report in HTML format	31	Chairman's message to shareholders - with video	58	Employee profile
5	Annual report in PDF format	32	Clear boundaries for annual reports(between Audited n unaudited)	59	Employee profile - with financial charts/graphs
6	Auditor's report - with auditor's signature	33	Companies' news summaries	60	Employee profile - with hyperlinks inside/outside annual report
7	Auditor's report - with financial charts/graphs	34	Company profile	61	Employee profile - with other graphics/animated
8	Auditor's report - with hyperlinks inside/outside annual report	35	Company profile - with financial charts/graphs	62	Employee profile - with photos
					Continue

9	Auditor's report - with photos	36	Company profile - with hyperlinks inside/outside annual report	63	Employee profile - with sound
10	Auditor's report - with sound	37	Company profile - with other graphics/animated	64	Employee profile - with sound
11	Auditor's report - with video	38	Company profile - with photos	65	Employee profile - with video
12	Background or history of the organisation	39	Company profile - with sound	66	Hindi version of web site
13	Balance sheet - with financial charts/graphs	40	Company profile - with video	67	Financial ratios, key statistics or other information presented apart from the annual report
14	Balance sheet - with photos	41	Company's charter	68	Financial data in excel
15	Board of directors & officers - with financial charts/graphs	42	Conference calls	69	Financial data in HTML
16	Board of directors & officers - with hyperlinks inside/outside annual report	43	Contact to the webmaster	70	Financial data in PDF format
17	Board of directors & officers - with other graphics/animated	44	Contact us	71	Financial data in processable format
18	Board of directors & officers - with photos	45	Corporate citizenship	72	Financial data in Word
19	Board of directors & officers - with sound	46	Current year material events	73	Financial highlights/summary
20	Board of directors & officers - with video	47	Customer profile	74	Financial highlights/summary - with financial charts/graphs
21	Board of directors & officers' names	48	Customer profile - with financial charts/graphs	75	Financial highlights/summary - with hyperlinks inside/outside annual report
22	Board of directors & officers' profiles/biographies	49	Customer profile - with hyperlinks inside/outside annual report	76	Financial highlights/summary - with number of years shown
23	Cash Flows statement - with financial charts/graphs	50	Customer profile - with other graphics/animated	77	Financial highlights/summary - with other graphics/animated
24	Cash Flows statement - with photos	51	Customer profile - with photos	78	Financial highlights/summary - with photos
25	Chairman or CEO's signature	52	Customer profile - with sound	79	Financial information found in more than one place
26	Chairman's message to shareholders	53	Dialog box that pops up to indicate that the user is leaving the annual	80	Financial information in alternative formats (i.e. different accounting conventions, formats, currencies)
27	Chairman's message to shareholders -photo	54	Customer profile - with Video	81	Financial calendar

General Indicators (Total 162)

Sr No.	General Indicators	Sr No	General Indicators	Sr No.	General Indicators
82	Financial review/overview - with hyperlinks inside/outside annual report	109	Management responsibility statement - with photos	136	Segmental report
83	Financial review/overview - with narrative/words	110	Management responsibility statement - with signatures	137	Services or products provided
84	Financial review/overview - with other graphics/animated	111	Management responsibility statement - with video	138	Share price performance - with other graphics/animated
85	Financial review/overview - with photos	112	Market share of key products	139	Share price performance - with photos
86	Forward looking information	113	Monthly or weekly sale or operating data	140	Share price performance in narrative/words
87	Goods/services sold online - other companies' goods/services	114	Monthly/weekly sales/operation data	141	Share price performance in narrative/words - with financial charts/graphs
					Continue

88	Goods/services sold online - own primary goods/services	115	Multiple languages	142	Share price performance in narrative/words - with hyperlinks inside/outside annual report
89	Goods/services sold online - promotional items/gifts	116	No of years available for annual report	143	Shareholders' equity statement - with financial charts/graphs
90	Graphing/other analysis tools that users can tailor to their own use	117	Notes to financial statements/accounts - with financial charts/graphs	144	Shareholders' equity statement - with number of years shown
91	Homepage button	118	Notes to financial statements/accounts - with other graphics/animated	145	Shareholders' equity statement - with other graphics/animated
92	Hyperlinks inside the annual report to accounting data	119	One click to get to investor relations or financial information	146	Shareholders' equity statement - with photos
93	Industry statistics or data	120	One click to get to press releases or news	147	States/Informs language requirements - Java
94	Information about the firm's stock transfer agent (address, e-mail, web site, etc.)	121	Organizational chart	148	States/Informs language requirements - JavaScript
95	Internal search engines	122	Other information supplied to analysts	149	States/Informs minimum required browser - other browser requirements
96	Last update date	123	Past year material events	150	Supplement or amendment to current year annual report
97	Letter from the chairman or CEO	124	Postal address	151	Table of content/sitemap
98	Link to parent or subsidiary	125	Power-point or presentation of financial data	152	The use of graphics images:, e.g. share price graphs
99	Link to the stock exchange web sites	126	Press releases	153	The web site presents the advantages of holding the company's stock
100	Links to data on a third-party's Web site	127	Profit & Loss account - with financial charts/graphs	154	Top ten stockholders in current year
101	Links to product & sales information	128	Profit & Loss account - with photos	155	Use of frames
102	List of BOD names	129	Pull-down menu	156	Vision statement
103	List of key executives names and phone number	130	Quarterly reports	157	Vision statement - with financial charts/graphs
104	Loading time of the web site, 10 seconds	131	Quarterly reports downloadable	158	Financial highlights/summary - with other graphics/animated
105	Management responsibility statement	132	Quick reach	159	Vision statement - with photos
106	Management responsibility statement - with financial charts/graphs	133	Ratings	160	Vision statement - with sound
107	Management responsibility statement - with hyperlinks inside/outside annual report	134	Sales of key products	161	Vision statement - with video
108	Management responsibility statement - with other graphics/animated	135	Search box (or link to search page)	162	Special CSR page

Financial Indicators (Total 117)

Sr No.	Financial Indicators	Sr No	Financial Indicators
1	Analysts' reports	30	CV of the members of the management or supervisory board
2	Annual report of current year (full text)	31	Direct link to annual report on home page
3	Annual report of past years (full text)	32	Disclosure policy
4	Articles of association	33	Dividend distribution policy
5	Auditor's name printed	34	Dividend distribution table
6	Auditor's report of current year	35	Dividend of past year
7	Auditor's report of past years	36	Documentation of press and analysts' conference
8	Auditor's signature	37	Donations/sponsoring to community groups and charitable bodies information
9	Auditor's report	38	Earnings or sales forecast
10	Balance sheet - with downloadable spreadsheet	39	Education of employees
11	Changes in shareholders' equity	40	E-mail address for investor relations
12	Changes in stockholders' equity in current year	41	Employee profile
13	Classes of shares	42	Employee training
14	Code of conduct and ethics for directors, officers and employees	43	Employee/safety/health/or Social report
15	Code of ethics	44	Environmental policy statement
16	Compensation of the members of the management board	45	Environmental report or a dedicated webpage
17	Compensation of the members of the supervisory board	46	Events of interests to investors
18	Corporate governance compliance report	47	Financial highlights/summary - with downloadable spreadsheet
19	Corporate governance principles/guidelines	48	Financial highlights/summary - with sound
20	Corporate governance rating report	49	Financial highlights/summary - with video
21	Corporate social and environmental attributes	50	Financial review/overview - with sound
22	Current dividend	51	Financial review/overview - with video
23	Current resolutions of the supervisory board	52	Frequently asked questions
24	Current share/stock price	53	Full annual report in HTML
25	Current year shareholder's meeting resolutions	54	Half-year report of current year (interim statements)
26	Current year resolutions of shareholders' meeting	55	Half-year report of past years (interim statements)
27	Current year resolutions of the board of directors	56	Historical share prices
28	Current year material events	57	Income statement of current year (profit and loss account)
29	Customer commitment charter/quality charter	58	Income statement of past years

Financial Indicators (Total 117)

Sr No.	Financial Indicators	Sr No	Financial Indicators
59	Information about directors dealing	89	Notes to financial statements/accounts - with photos
60	Information about share option programs	90	Notes to financial statements/accounts - with sound
61	Information on audit committee	91	Ownership structure
62	Information on compensation committee	92	Page divided into frames
63	Information on energy savings	93	Past resolutions of the supervisory board
			Continue

64	Information providing a dividend reinvestment plan	94	Past year resolutions of shareholders' meeting
65	Interim statements of current year	95	Past year resolutions of the board of directors
66	Investor relations phone number	96	Past year resolutions of the board of directors and/or supervisory board
67	Investor relations postal address	97	Past year shareholder's meeting resolutions
68	Investor Relations/Financial Information Attributes	98	Preferred shares information
69	Investors calendar	99	Press releases/news about the company in informative media
70	Link to investor relations from home page	100	Product quality and safety
71	List of analysts or links to analysts following the firm	101	Profit & Loss account - with downloadable spreadsheet
72	Listing of analysts following the firm	102	Profit & Loss account - with hyperlinks inside/outside annual report
73	Local community involvement (e.g. support for nongovernmental organizations, arts sponsorship, etc.)	103	Profit & Loss account - with number of years shown
74	Management report/analysis in current year	104	Profit & Loss account - with other graphics/animated
75	Management responsibility statement - with sound	105	Profit & Loss account - with sound
76	Market outlook - with photos	106	Profit & Loss account - with video
77	Mgt discussion & analysis - with sound	107	Projected (pro-forma) financial statements and forecasts
78	Mgt discussion & analysis - with video	108	Quarterly report of current year
79	Name of investor relations officer	109	Quarterly report of past years
80	News summary or link to news summary (press releases and general news)	110	Quarterly statements - with sound
81	Next/previous buttons to navigate sequentially	111	Responsible person's name for investor relations
82	Notes to financial statement/accounts - with video	112	Sales or market share of key products
83	Notes to financial statements	113	Special condition disclosures
84	Notes to financial statements of current year	114	Statement of changes in equity of current year
85	Notes to financial statements of past years	115	Summary of financial data over at least three years
86	Notes to financial statements/accounts	116	Summary of key ratios over a period of at least five years
87	Supplement or amendment to current year annual report	117	Supplement or amendment to current year annual report
88	Notes to financial statements/accounts - with hyperlinks inside/outside annual report		

Presentation Indicators (Total 24)

Sr. No	Presentation Indicator	Sr. No	Presentation Indicator
1	Accounting information with highlights	13	Historical series (three years or more)
2	Animated graphics	14	Home page fully loaded in less than ten seconds
3	Annual accounts analysis. Financial ratios and graphs	15	Link to parent or subsidiary
4	Chat room	16	Multimedia
5	Click over menu	17	Next/previous bottoms to navigate sequentially
6	Conference calls	18	Page divided into frames
7	Data in XBRL format	19	Phone number, fax or address to investor relation
			Continue

8	Direct e-mail hyperlink to investor relation	20	Postal address to investor relations
9	Goods or services sold online (e-commerce)	21	PowerPoint or presentation of financial data
10	Help/information icon	22	Pull-down menu
11	Historical financial statements	23	Warning to users when leaving audited pages
12	Historical overview of the firm	24	Web site allows navigation in text-only mode