

CORPORATE WEBSITE DISCLOSURE- AN INDEX DEVELOPMENT

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Abstract

“A website is the centre of the digital ecosystem, it’s like a brick or mortar location, the experience matters once a visitor enters, just as much as the perception they have of you before they walk through the door.” - Leland Dieno. The opportunities for companies to take advantage of new technologies and participation features are virtually endless. Due to the dynamic nature of the corporate world, the challenge for a company is to release information about its value creation in a cost-efficient manner while maximizing its influence. Companies have set up their own websites to distribute the financial and non- financial information. Present study provides a description of disclosure index studies and the development of corporate website disclosure index. Findings highlighted that in the construction of a disclosure index, selection of items is the first step. Since the number of items that could possibly be disclosed is very large, so it is important to take some criterion for making the choice. Method of selection generally includes a review of the literature (Chow and Wong-Boren, 1987) and subsequently the relevant user group may be subjected to a survey (Firth, 1980, Cerf, 1961 etc.).

KEYWORDS: Corporate Website Disclosure, Website Disclosure Index Studies, Development of Website Disclosure Index.

Introduction

Websites are considered for multiple aims, including advertising the products, enabling e- commerce, inviting potential employees etc. One of the most popular methods to enter into web-marketing has been to establish a home page or website on the internet. The corporate website is an influential tool to converse with stakeholders and is frequently the first place users will go for information about a corporation and its actions. The corporate websites opens new opportunities for information disclosure practices.

In the initial phase, the main concern of a company was to have a web presence. Website as a communication medium includes the readability, usability and understand-ability of the information. These aspects relate to the nature of the information as well as the technical aspects of the communication medium. “...Web is now perceived as the best platform for the disclosure of financial and non-financial information for stewardship purposes (Lymer, 1997; Robb et al., 2001; Patten, 2002; Marston and Polei, 2004)”.¹

A scan through the literature on corporate website reporting practices and index development brought out the following major lines of study on which website index has been studied and researched by academicians in India and abroad. Marston and Shrivs (1991) examined and explained the use of a disclosure index by reviewing the literature. The study found that construction of an index is a difficult affair that generally involves subjective judgement on the part of the researcher. In addition to this, awarding scores to companies also involves subjective judgement in many cases. Fisher, Laswad and Oyelere (1999) examined the contents of the websites of the New Zealand listed companies and assessed the extent and quality of online financial reporting. Results indicated that out of a total of 230 listed companies, 84 (36.5 per cent) had websites. The analysis indicated that websites provide four types of information i.e. product/service information, company history and profile, announcements and financial information. Hurtt, Kreuze and Langsam (2001) examined the reasons for using the internet to distribute financial reports and the type of information companies disclose. To gather reliable information, an attribute collection form was developed, with attributes selected, based on their relevance to the investment, financial and business reporting, auditing, and other related communities. Findings indicated that 91 out of the Fortune 100 companies had websites. In order to help in website navigation, 88 per cent had a table of contents and 64 per cent had search boxes or a link to a search page. 67 per cent had a link from their home page directly related to the investor relations page. Larran and Giner (2001) studied the use of the internet by companies of Spain to disclose financial information and the reasons to use the new technologies to communicate with interested parties and its consequences. The sample consisted of 144 companies based on the companies listed on the Continuous Market (Mercado Continuo) of the Madrid Stock Exchange and the period of study was kept as the months of October and November 2000. The results showed that size was the main factor that explained not only the quantity but also the quality of financial information. But the level of

¹ Cormier, D., W. Aerts, M.J. Ledoux and M. Magnan (2010), “Web-Based Disclosure about Value Creation Processes: A Monitoring Perspective”, *Abacus*, Vol. 46, No. 3, pp. 320-347.

disclosure of financial information by Spanish companies was low. Liu (2003) described the development and validation of a scale measuring the interactivity of websites. A series of studies were conducted to develop a scale assessing the interactivity of websites and to verify the latent structure and the validity and reliability of the scale. Results revealed that interactivity comprised of three correlated but distinct dimensions i.e. active control, two-way communication and synchronicity. The multi-dimensional scale showed a high level of validity and reliability and yielded consistent ratings among both experienced and inexperienced internet users. Davey and Homkajohn (2004) measured the quality of Internet Financial Reporting (IFR) practices of the top 40 Thai listed companies on the Stock Exchange of Thailand. An index was developed by basing closely on the work of Cheng et al. (2000). Findings showed that the nature of IFR disclosures varies considerably across the sample companies. The variations in the content of the websites suggested that companies have different reasons for establishing an internet presence. Bhuiyan, Biswas and Chowdhury (2007) investigated the internet corporate reporting practices of listed companies in Bangladesh. Sample of 91 corporate websites under various sectors were considered and an Internet Disclosure Index (IDI) of 54 items was constructed which contained content and presentation criteria. Findings showed a significant difference in the average IDI among the sectors. Results also indicated that Bangladeshi companies have a lot of work to do in order to enhance the investor relations activities on the internet. Fekete, Tudor and Mutiu (2009) examined the association between corporate characteristics and disclosure comprehensiveness (quality and quantity) measured by the level of Corporate Internet Reporting (CIR). The 48 entities listed in the Bucharest Stock Exchange (BSE), the official stock exchange of Romania were included in the study. Study used the unweighted disclosure index developed by Kelton and Yang (2008) to measure the extent of each sample firm's CIR. Findings suggested that corporate characteristics influence the CIR behaviour of entities and new regulatory guidance in corporate governance, more rigorous legislation and stronger enforcement of rules leads to improved disclosure transparency via CIR. Jain and Kumar (2013) investigated the stakeholder's and user's perception towards the Corporate Financial Reporting on internet. Study used a sample of 110 stakeholders or users, i.e., individual and institutional investors, analysts and academicians. A questionnaire has been distributed to the respondents through electronic media and their responses were accordingly recorded and analyzed. The finding revealed that internet is a cost effective medium and small companies can also use this medium and approach their potential investors in timely manner. Bhatia and Makkar (2020) examined and compared the nature and extent of corporate social responsibility (CSR) reporting practices of companies in developing (BRICS [Brazil, Russia, India, China and South Africa]) and developed (the USA and the UK) countries. Content analysis was conducted on the annual reports and websites of 325 companies listed on stock exchanges of developing markets and of developed markets. Results of the study revealed that developed countries have higher CSR disclosure scores than developing countries. Singh, Chakraborty, Roy and Tripathi (2021) developed a small and medium enterprise (SME) sustainability disclosure index (SSDI) to explore sustainability reporting (SR) practices across manufacturing SMEs listed in Bombay Stock Exchange. Findings indicated scarcity of sustainability reporting practices particularly in the environmental and social dimension. Study also identified the dimensional imbalance where environmental and social disclosures are limited to purely descriptive narrations without any quantified information.

Therefore, the present study is conducted with a view to study the logical path for the development of corporate website disclosure index.

Development of Corporate Website Disclosure Index

The development of disclosure index literature followed a logical path. First, begun in 1961, there was the cautious quantification of released items in accounting information, to identify value-determining variables. In second phase, researchers started constructing theoretical keystones which enlightened the empirical outcomes. In the third phase, researchers struggled to combine theory and exercise with an understanding to determine the ideal company-to-outsider communication relationship. The financial reports were considered, nearly to the exclusion of anything else. Various research studies were done in the US stock market and in different market situations representing how disclosure imitates a company's disclosure features worldwide. Selected worldwide studies as reviewed by different researchers are discussed below, in order to display comparisons and differences found in different market situations (cf. Table 1.1).

Table 1.1: Disclosure Index Studies Worldwide

Author	Sample	Method(s)	Index	Findings
Cerf (1961)	258 NYSE, 113 other exchanges and 156 OTC firms-annual reports (1 July 1956-30 June 1957)	Regression	31 weighted items	A positive relation between disclosure and: (1) asset size, (2) number of stockholders, and (3) profitability exists.
Copeland and Fredericks (1968)	200 NYSE listing applications (1964)	Rank correlations	Six specific indices, one for each of six specific purposes for listing a stock	A positive relationship between materiality and disclosure exists. This relationship, however, is statistically insignificant.
Singhvi (1968)	100 of the <i>Fortune</i> 500 firms and 50 OTC firms-10-Ks and annual reports (1 April 1965-31 March 1966)	Classification and tabulation	32 items	Firms publish a narrower range of financial information in their annual reports than they divulge to the SEC.
Singhvi and Desai (1971)	100 NYSE and 55 OTC firms-annual reports (1 April 1965-31 March 1966)	Regression	34 weighted items	Firms disclosing inadequate information tend to be: (1) small, (2) free from listing requirements, (3) audited by small CPA firms and (4) less profitable. In addition, they tend to have more volatile stock prices.
Buzby (1974)	44 NYSE and AMEX firms plus 44 OTC firms-annual reports (30 June 1970-30 June 1971)	Rank correlations	38 weighted items	The correlation between the relative importance of the items and the extent of their disclosure is low.
Barrett (1975)	103 firms: U.S., Japan, U.K., France, Germany, Sweden and the Netherlands-annual reports (1963-72)	Evaluation of disclosure indices and subindices	17 unweighted and weighted items, based on literature and judgment	The overall extent and quality of American annual report disclosure is not better than that of British firms. In specific disclosure areas there are also differences between countries.
Stanga (1976)	80 of the <i>Fortune</i> 1,000 firms-annual reports (31 October 1972-30 September 1973)	Disclosure scores and frequencies of disclosed items	79 weighted items	Many disclosure deficiencies exist. Firm size, among large industrial firms, is not an important factor in explaining disclosure. The industrial sector of the sample firms is related to the extent of disclosure.
Firth (1978)	750 respondents: 250 financial directors, 250 auditors, 120 financial analysts, and 130 loan officers-questionnaire	Differences in rankings	75 items, based on literature, recent annual reports, and discussions with users	Finance directors and auditors have somewhat similar views. Financial analysts and bank loan officers have somewhat similar views. However, users (analysts, officers) attach higher importance to directors' disclosures than to preparers (directors, auditors).
Garsombke (1979)	100 NYSE firms-annual reports (1 April 1965-31 March 1966)	Regression	34 weighted items-identical to Singhvi and Desai (1971)	Disclosure and risk are not related.
Spero (1979)	60 firms: France, U.K. and Sweden-annual reports (1964-1967-1970-1972)	Regression	Replication of some previous indices, adjusted for voluntary disclosure	The firm's need for capital explains voluntary disclosure. Furthermore, disclosure increases in each sample country during the research period: 1964-72.
Chow and Wong-Boren (1987)	52 Mexican Stock Exchange firms - annual reports (1982)	Regression	24 unweighted and weighted items, based on experts' review and literature	Large firms voluntarily disclose more than do small firms.
Williams (1992)	316 firms in 13 countries - annual reports	Regression	43 weighted items, based on literature	Size and profitability are significantly associated to disclosure. Results also specify that nationality is a significant factor of disclosure.
Gray, Meek, and Roberts (1994, April)	116 U.S., 64 U.K., and 100 Continental European multinational firms-annual reports (1989)	ANOVA	128 unweighted items, based on an analysis of international trends, actual reporting practices, and literature	The results show that there are significant differences in financial reporting between internationally listed and domestically listed firms.

Source: Hannu J. Schadewitz and Dallas R. Blevins: *From Disclosure Indices to Business Communication: A Review of the Transformation*

As numerous purposes are served by corporate reporting, it is important for the companies to focus on specific requirements of particular target stakeholders. The studies from time to time have taken into account the degree of concurrence between supply of and demand for disclosure. But still the findings of these studies have showed a low match between the producers and users of disclosed information. (cf. Table 1.2).

Table 1.2: Disclosure Index Studies with User Inputs

Author	Sample	Method(s)	Index	Findings
Baker and Haslem (1973)	1,623 individual investors- questionnaire	Arithmetic means and standard deviations	33 items, based on pretested questionnaire	Individual investors use many items, especially to assist in the anticipation process.
Kahl and Belkaoui (1981)	70 commercial banks from 18 countries-annual reports (1975)	Disclosure scores and disclosure consensus	30 weighted items, based on literature, judgment, professors, and CFAs	Differences exist in disclosure adequacy, internationally. The U.S. banks are leaders in the extent of disclosure. A positive correlation exists between size and disclosure. There is a low consensus between producers and users on the ten disclosure items.
McNally, Eng, and Hasseldine (1982)	103 New Zealand Stock Exchange firms-annual reports (1979)	Differences in disclosure scores	41 weighted items, based on literature, recent annual reports, and pilot-test by stockbrokers	Stockbrokers and financial editors perceive the voluntary disclosure of a wide variety of items of information to be important. There is divergence between the actual degree of disclosure provided by the firm and that degree of disclosure which is perceived by external users to be desirable. Size is related to voluntary disclosure.
Firer and Meth (1986)	36 Johannesburg Stock Exchange firms-annual reports (1979-83)	Differences in disclosure scores	49 weighted items, based on literature, annual reports, and questionnaire for investment analysts and financial directors	Investment analysts place: (1) high importance on items that embody predictive information, (2) low importance on inflation related items, and (3) high importance on a statement of transactions in foreign currency. A low level of correlation between South African investment analysts and their U.K. counterparts is found.
Wallace (1988)	1,200 persons: 300 chartered accountants, 200 investors, 100 senior civil servants, 200 managers, 200 financial analysts, and 200 other professionals-questionnaire (1986)	Disclosure scores and consensus among user-groups	109 items, based on literature, regulation, and degree of controversy surrounding the issue	The major finding of the study is the lack of consensus between accountants, as a user group, and all other user groups.

Source: Hannu J. Schadewitz and Dallas R. Blevins: From Disclosure Indices to Business Communication: A Review of the Transformation

The Disclosure Index was first time used in 1961 when Cerf's research results were published. Many researchers from time to time followed the Cerf's idea, like in the 1970s by Singhvi and Desai, Buzby (1974,1975) and Barrett (1976) followed by Firth (1978, 1979, 1980 and 1984), Chow and Wong-Boren (1987) and Cooke (1989).

Selection of items is the first step in the construction of a disclosure index. Since the number of items that could possibly be disclosed is very large, so it is important to take some criterion for making the choice. Method of selection generally includes a review of the literature (Chow and Wong-Boren, 1987) and subsequently the relevant user group may be subjected to a survey (Firth, 1980, Cerf, 1961 etc.). Cooke in 1989 has given an underlying assumption which requires no further justification: 'Clearly one class of user will attach different weights to an item than another class of user'. Gray, McSweeney and Shaw (1984) outlined the information demands of the 'major participant groups' such as financial analysts and employees. Information needs of different groups are likely to overlap even though the main focus may differ. For example, financial analysts will be more interested in disclosures relating to financial performance and earnings potential whereas employee groups will be more interested in disclosures relating to employment conditions, remuneration and job prospects. Thus, the items selection mainly depends upon the user group orientation of the index. An existing index from the literature can also be employed if it appears to be appropriate. Marston (1986) used Barrett's (1976) index in carrying out a comparison of financial disclosure in the UK and India. Direct comparisons can

be made with former research work, but the construction of a new index denies this opportunity. However, a new index can be developed based on the experiences of previous researchers.²

Conclusion

Internet's growth as a medium for providing corporate reporting information has improved the manner in which information flows from companies to investors and to the other stakeholders. Corporate and financial reporting data provided on a company's website needs to be appropriate, up-to-date, comprehensive, perfect and well-structured. This is a tactical matter and needs the same degree of consideration as any other considered area of a company.

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² Marston, C. L. and P. J. Shrivies (1991), "The Use Of Disclosure Indices In Accounting Research: A Review Article", *British Accounting Review*, 23, 195-210.