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reports on their web sites, which would make it difficult for auditors to control the security of and access and changes to these reports. To increase the security of the audit reports from alterations, audit firms in Saudi should locate their reports on the auditor's web site to give the auditor greater control over the presentation and security of the report. Cautionary comments by the auditor concerning the risks of relying on Internet financial reports may be considered.

Audit firms in Saudi Arabia should also give more consideration to internal control systems within companies, especially control that would be expected in the Internet financial reporting environment. More needs to be done regarding the role of internal auditors and audit committees to implement internal policy to ensure adequate security and to mitigate the risks of Internet financial reporting.

This paper identifies a number of issues that need further research. These issues would have been beyond the scope of the current study. Perceptions of stakeholders regarding the risks associated with Internet financial reporting need to be examined. Another research issue is the role of SOCPA and CMA in reducing the risks associated with Internet financial reporting. Technological and non-technological determinants of improving Internet financial reporting need to be investigated. This study concentrated on joint stock companies in Saudi Arabia; other companies, such as family-owned companies, could also be studied.

will become much more Internet/systems-based, which will lead to a greater need to train potential auditors in Internet/systems skills. Reporting companies will benefit from using the Internet as a cheaper and faster medium to communicate with stakeholders, but will incur additional costs meeting the increased demand for customized and customizable information, protecting data integrity, and enhancing security (Jones and Xiao, 2004). Such developments have potential impacts on the auditing profession. The fact that audited reports are hosted on companies' web sites makes it difficult for auditors to have control over the security of and access to these reports and changes and the changes made to them.

This study reveals that Internet financial reporting has significant implications for the audit profession and auditors in Saudi Arabia. There are many concerns regarding security and the reliability and quality of Internet financial reporting. The Internet is insecure in nature: without reliable security, financial reporting on the Internet is at risk. Audit reports presented on the Web are exposed to unauthorised alteration and interception. Further, the electronic nature of the audit report file can make such manipulation difficult to detect. It is therefore important for the accounting and auditing profession to provide assurance and improve trust in Internet financial reporting. Financial disclosure on the web sites of Saudi companies is voluntary and unregulated. There is no governing body or set of regulations that requires or forbids the disclosure of financial statements on web sites. From the literature published by SOCPA and CMA, no evidence was found of the adaptation of standards or guidelines to cover the publishing of financial statements on the Internet, nor was there any evidence that these bodies were adopting the technologies available to them, such as digital signatures. Accounting regulators in Saudi Arabia need to increase awareness among auditors and users of issues associated with Internet financial reporting. The efforts of audit regulators in Saudi Arabia are likely to play important roles in mitigating the risk of Internet financial reporting.

This study has further implications with respect to the challenges faced by auditors to develop new assurance services for stakeholders. Auditors in Saudi Arabia need to employ technology to distinguish between audited and unaudited financial information. The majority of Saudi companies in this study hosted the

if a stakeholder wishes to use any financial information on a web site to inform a decision, the company should first be contacted to ensure this information is correct.

There is another issue that may increase the risk of publishing financial statements on the Internet: the location of the auditors report. The majority of Saudi companies locate their reports on their web sites. To increase the security of audit reports, audit firms in Saudi Arabia should locate their reports on the auditor's web site to give the auditor greater control over the presentation and security of the report.

The use of digital signatures is another issue for the audit profession in Saudi Arabia to consider. Digital signatures offer security to users. The authenticity of an auditor's report is associated with a digital signature, not a scanned signature. None of the financial reports published on the web sites of Saudi stock companies incorporated the digital signatures of the audit firms. All the audit firms published their reports with scanned signatures.

Another issue raised by this study for the audit profession in Saudi Arabia is the risk of conversion, unauthorised access to, and modification of accounting information published on the companies' web sites.

Our analysis also indicates that there are no promulgations issued by SOCPA and CMA to regulate Internet financial reporting. A slow adaptation to Internet financial reporting by regulators and auditors may significantly dampen the uptake of Internet financial reports by users and may even place auditors at a competitive disadvantage relative to non-auditors in offering new assurance services on the increasing quantity of non-financial and qualitative information appearing on corporate web sites (Xiao et al., 2002). Jones and Xiao (2004) added that audit report pronouncements should also be revised to require modification of the standard audit report wording when the auditor's clients engage in Internet financial reporting practices.

Conclusion and suggestions for further research

Our analysis shows that auditing is being threatened by the power and the dynamic of changes being imposed by information technology systems. Auditing

such as Netscape Communicator and Microsoft Internet Explorer.

It should be noted that 32 statements had an audit firm logo and 3 had no audit firm logo. The audit firm's logo is an important means by which the auditor can assist the user in distinguishing the audit report from other information in the financial statements, which are sourced directly from the company (Khadaroo, 2005b).

The results also show that 35 financial statements had no link to/from the audit report. This finding would be of some comfort to accounting regulators. According to Hodge (2001), auditors have a responsibility to ensure that their name, and that of their firm, is not associated with information without their consent. A common feature of corporate web sites is that unaudited information is incorporated with audited information in such a way that it is difficult for users to distinguish between audited and unaudited information. Specifically, the use of hyperlinks between different documents on corporate web sites allows efficient navigation between documents but also contributes to a blending of information.

Overall, our analysis of financial reporting on the web sites of Saudi companies raised a number of issues and has several implications for auditing. Some possible concerns are related to the audited financial statement. None of the statements had any indication whether these statements were audited. Such distinction between audited and unaudited statements is important for stakeholders. Audit firms in Saudi Arabia should give more consideration to this issue by employing technology to distinguish audited and unaudited information, such as the use of borders, backgrounds, and/or watermarks.

Another issue was found to relate to the role and responsibility of auditors with respect to information placed on corporate web sites. None of the auditor reports referred to the role and responsibilities of directors or auditors with respect to web sites. The auditor should include some cautionary comments concerning the risks of relying on Internet financial reports. Stakeholders should be informed that web sites are not secure and altering financial information is possible; thus,

Table 4 reveals that the majority of the auditors' reports incorporated the auditors' signatures. A total of 30 of the 35 auditors' reports included scanned versions of the auditors' signatures. None of the financial reports published on the web sites of Saudi joint stock companies incorporated digital signatures of the audit firms. All of the audit firms published their reports with a scanned signature. Hodge (2001) stated that digital signatures offer the ability simultaneously to authenticate and assure users of the integrity of signed documents. He insisted that publishing financial reports without digital signatures makes it difficult for users to make an assessment concerning the authenticity of the audit report document.

Fisher et al. (2004) stated that many of the issues associated with the integrity and authentication of the audit report can be avoided through the application of standard cryptographic techniques commonly used over the Internet. An auditor can digitally sign an audit report by attaching a digital signature file with the web-based audit report. This attachment would have been encrypted using the auditor's secret key (private key) and can only be decrypted using the auditor's publicly known key (public key). The information encrypted by the auditor in the signature file would be the result of a hashing function (algorithm) that would have been performed on the audit report file by the auditor. To verify the web-based audit report, the user of the audit report would obtain the auditor's public key via a digital certificate issued by some trusted third party, such as a certificate authority, and decrypt the digital signature. If the user then performs the same hashing function on the web-based audit report that the auditor had used in producing the digital signature, the user should come to the same hash result as included in the digital signature. Any difference in result would signify a discrepancy between the auditor's version of the audit report and that obtained from the client's web site. Assuming no discrepancy and that the auditor's private key had not been compromised (discovered by another party), the user would have confidence that the report had come from the audit firm, as only the auditor's private key could have been used to generate encrypted information that could subsequently be decrypted using the auditor's public key. Digital signatures and certificates can be processed by most recent versions of common web browsers,

problem on the Web. This can be achieved in a number of ways. First, audited information can be made more visually distinctive from unaudited information. The use of labelling, borders, or watermarks have all been mooted (Hodge, 2001). Second, "intermediate" pages can be displayed on entering and leaving audited sections of the web site, warning users that they are changing zones. Third, a different file format for encoding the audited accounts, such as Acrobat's PDF, can be used.

In addition, none of the auditor reports referred to matters relating to electronic presentation of financial statements, neither did they refer to the responsibilities of directors or auditors with respect to web sites. Other modifications to the content of the traditional audit report may be necessary. For instance, cautionary comments by the auditor concerning the general risks of relying on Internet financial reports may be considered warranted, as might clarification of the role of the management and the auditor with respect to the content and security of the corporate web site. Further, given that corporate web sites are accessible globally, auditors may also wish to clarify which national or international generally accepted accounting principles and generally accepted auditing standards are applicable to the audited financial statements (Fisher et al., 2004).

We found that only 1 audit firm located their audit reports on their own web sites: the majority (34) of reports were located on the companies' web sites. Khadaroo (2005b) stated that locating audit reports on the auditor's web site gives the auditor greater control over the presentation and security of the report, and additionally, helps to distinguish it from the audit subject matter. Further, it may increase the perceived independence of the auditor. Khadaroo added that locating audit reports on the auditor's web site gives the audit opinion greater weight than intended. Other techniques to assist in the authentication of the audit report include locating the audit report on a server controlled by the audit firm, and the use of digital watermarks embedded in digital images, such as scanned images of the audit report and/or signature (Debreceeny and Gray, 1999).

It was mentioned earlier that the aim of this research is to investigate the existing practices of auditors in relation to Internet financial reporting by Saudi joint stock companies. The data for the research were obtained through content analysis of the web sites of joint stock companies in Saudi Arabia. The analysis reveals a number of concerns for the auditing profession.

The results provide evidence that all 35 companies publish audited financial reports with the corresponding audit report. Publishing audited financial reports without the corresponding audit report makes it difficult for users to determine whether the published information has been audited, and whether the audit report has been selectively withheld by management (Fisher et al., 2004).

We found that the major technology employed by Saudi companies to publish financial statements on the Internet is PDF file format, which was used by 30 companies. The result also indicates that the proportion of companies reporting in HTML has declined in favour of PDF files: only 5 reports out of 35 were published in HTML file format. Debreceeny and Lymer (2003) stated that Adobe Acrobat (PDF) has many advantages in the presentation of accounting information: the information comes as a package, comparable to that of the printed report; the package clearly demarcates the boundary between the annual report and the rest of the financial statements; and Adobe Acrobat provides stability with respect to the contents. 4 PDF files out of 35 appeared to have been scanned at a very low resolution, resulting in the scanned images appearing severely pixelated.

Table 4 also shows that there was no indication whether the financial statements published on the Internet had been audited. According to Hodge (2001) and Fisher (2004), the use of a different file format (typically PDF) for audited information is possibly the only distinction. Increasing the distinctiveness of audited information, perhaps through the use of borders, backgrounds, watermarks, and alerts to users, helps mitigate the possibility of the two types of information being blended.

“Ring fencing” audited information may be useful in mitigating the blending

T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
VAR00001	35	1.00	.00 ^a	.00
VAR00002	35	.14	.36	6.00E-02
VAR00003	35	.00	.00 ^a	.00
VAR00004	35	.86	.36	6.00E-02
VAR00005	35	.89	.32	5.46E-02
VAR00006	35	.97	.17	2.86E-02
VAR00007	35	1.00	.00 ^a	.00
VAR00008	35	.86	.36	6.00E-02
VAR00009	35	1.00	.00 ^a	.00
VAR00010	35	.91	.28	4.80E-02
VAR00011	35	.00	.00 ^a	.00
VAR00012	35	.86	.36	6.00E-02
VAR00013	35	5.71E-02	.24	3.98E-02
VAR00014	35	.00	.00 ^a	.00
VAR00015	35	.00	.00 ^a	.00

a. cannot be computed because the standard deviation is 0

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95 % Confidence Interval of the Difference	
					Lower	Upper
VAR00002	2.380	34	.023	.14	2.09E-02	.26
VAR00004	14.283	34	.000	.86	.74	.98
VAR00005	16.233	34	.000	.89	.77	1.00
VAR00006	34.000	34	.000	.97	.91	1.03
VAR00008	14.283	34	.000	.86	.74	.98
VAR00010	19.044	34	.000	.91	.82	1.01
VAR00012	14.283	34	.000	.86	.74	.98
VAR00013	1.435	34	.160	5.71E-02	-2.38E-02	.14

VAR00010

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	3	8.6	8.6	8.6
1	32	91.4	91.4	100.0
Total	35	100.0	100.0	

VAR00011

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	35	100.0	100.0	100.0

VAR00012

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	5	14.3	14.3	14.3
1	30	85.7	85.7	100.0
Total	35	100.0	100.0	

VAR00013

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	33	94.3	94.3	94.3
1	2	5.7	5.7	100.0
Total	35	100.0	100.0	

VAR00014

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	35	100.0	100.0	100.0

VAR00015

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	35	100.0	100.0	100.0

VAR00005

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	4	11.4	11.4	11.4
1	31	88.6	88.6	100.0
Total	35	100.0	100.0	

VAR00006

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	1	2.9	2.9	2.9
1	34	97.1	97.1	100.0
Total	35	100.0	100.0	

VAR00007

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	35	100.0	100.0	100.0

VAR00008

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	5	14.3	14.3	14.3
1	30	85.7	85.7	100.0
Total	35	100.0	100.0	

VAR00009

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	35	100.0	100.0	100.0

Frequencies

Statistics

	AR0000	AR0000	AR0000	AR0000	AR0000	AR0000	AR0000	AR0000	AR0000	AR0000	AR0000	AR0000	AR0000	AR0000	AR0000
N Valid	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Miss	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Frequency Table

VAR00001

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	35	100.0	100.0	100.0

VAR00002

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	30	85.7	85.7	85.7
1	5	14.3	14.3	100.0
Total	35	100.0	100.0	

VAR00003

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	35	100.0	100.0	100.0

VAR00004

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	5	14.3	14.3	14.3
1	30	85.7	85.7	100.0
Total	35	100.0	100.0	

7- Navigation to audit report:	
A- Table of contents with hyperlinks	35
B- Outside annual report	0
8- Is the audit report signed by the auditor?	
A- Yes	30
B- No	5
9- Form of the audit report signature:	
A- Scanned	30
B- Digital	0
10- Is the audit firm's logo included on the audit report	
A- Yes	32
B- No	3
11- Audit firm's logo	
A- Logo with link	0
B- Logo with no link	35
C- No logo	0
12- Financial information and audit report background:	
A- Same	30
B- Different	5
13- Links to/from audit report:	
A- Links from audit report	2
B- Links to audit report	0
C- No links	33
14- Audit report refers to matters relating to electronic presentation of audited financial information:	
A- Yes	
B- No	35
15- Matters referred to:	
A- Directors' responsibilities	0
B- Clarification of auditor's role with respect to web site	0

	How do users find the audit report (table of contents)?
	What is the form of the audit report signature (scanned, digital)?
	Is the audit firm logo included on the audit report and if so, is it hyperlinked to the auditor's web site?
	Is the audit report's background consistent with those used in the audited financial statement?
	Are there any hyperlinks to/from the audit reports?
	Does the audit report refer to matters relating to electronic presentation of audited financial information?
	Does the audit report refer to matters relating to the directors' responsibility or clarify the auditor's role with respect to the web site?

Results and Analysis

**Table 4. Corporate reporting questionnaire:
Frequency of disclosure items by sample source**

	Number of companies
1- Are audited financial statements presented with/without an audit report?	
A- With an audit report	35
B- Without an audit report	0
2- Are there hyperlinks from within the audited financial statements to external unaudited web sites?	
A- Yes	5
B- No	30
3- Is each page of the audited financial statement designated (audited)?	
A- Yes	0
B- No	35
4- Electronic format of audit report:	
A- PDF	30
B- HTML	5
5- Scan quality of PDF audit report:	
A- Good	31
B- Poor	4
6- Location of audit report:	
A- Corporate web site	34
B- Alternative web site	0
C- Auditor's web site	1

using Google (www.google.com), Yahoo (www.yahoo.com), and other search engines were carried out. Of the 86 listed companies, 35 companies were found to have web sites containing corporate financial information. Table 2 shows that this group of 35 companies represents 8 industries: Banking, Industrial, Cement, Services, Electrical, Telecommunication, Insurance, and Agricultural. Once identified, each listed company's web site was visited.

Table 2. Sample and industry distribution

Industry	Total firms	Firms with financial information on the Internet
Banking	10	7
Industrial	34	14
Cement	8	6
Services	23	5
Electrical	1	1
Telecommunication	2	1
Insurance	1	1
Agricultural	7	0
Total	86	35

Table 3. Web collection instrument

	Are audited financial statements presented with/without an audit report?
	Are there hyperlinks from within the audited financial statements to external unaudited web sites?
	Is each page of the audited financial statement designated (audited)?
	What file format is used for the audit report (PDF, HTML, Other)?
	If the audit report is in PDF format, what is the quality of the scanned image?
	Where is the audit report located (corporate web site, auditor's web site)?

of Saudi joint stock companies and its implications for the audit profession. We have chosen to limit our sample to Saudi joint stock companies on the grounds that most of these companies are big companies and are therefore more likely to have a web presence and provide web-based information. Moreover, under Saudi company legislation, joint stock companies are required to publish and send shareholders an annual report incorporating audited financial statements. In this respect, Marston and Leow (1998), in their study of UK FTSE-100 companies, stated that among companies with web sites, larger companies were significantly more likely to include some financial information on their sites.

This study examines the Internet reporting practices of the 86 companies that made up the Saudi Stock Market at the end of 2006. The following steps were followed for the purpose of data collection and analysis.

- The web page attributes examined in this study are similar to those examined by the FASB (2000), Khadaroo (2005b), and Fisher et al. (2004). A questionnaire was developed to examine the attributes relevant to auditing.
- Most of the questions are specifically related to financial reporting and auditing.
- Data were collected in the beginning of November 2006. A standard web page browser, Microsoft Internet Explorer, was used for the purpose of data collection.
- To improve the validity of the information gathered, the researcher recorded each company's web page attributes on a separate questionnaire.

As at 30 October 2006, there were 86 companies listed on the Saudi Stock Market. Several methods were used to ascertain whether each listed company maintained a corporate web site and, if so, the address of that site. First, the TADAWUL web site (www.tadawul.com.sa) of the Saudi Financial Market was consulted. This site provides links to listed company web sites. Next, for those companies where no web address was indicated on the Saudi Financial Market web site, searches

Financial reporting on the Internet and auditors

A review of the extant literature reveals a number of factors specifically associated with Internet financial reporting that have significant implications for auditors, such as the appropriate responsibilities of auditors and the nature of audit reporting in such an environment. These factors include the following (Ettredge, 2001; Fisher et al., 2004; Khadaroo, 2005b):

1. The conversion/transposition process involved in publishing information on the Internet is susceptible to error.
2. Information on the Internet has the potential to be very fluid in nature.
3. Information can be published, modified, or deleted remotely or locally at virtually any point in time without leaving any evidence of these actions ever having taken place.
4. Information from external sources (e.g., web sites, ftp sites, etc.) can be easily incorporated into a corporate web site through hyperlinks.
5. Users are demanding both greater timeliness in corporate disclosure, and greater depth and breadth of disclosure (particularly non-GAAP information).
6. The potential for an inappropriate association of the audit report with unaudited information located at the auditee's web site or information linked to/from external web sites;
7. The nature, timing, form, and content of the audit report on the Internet.

Research approach

Based on the literature review and analysis of the audit issues discussed in the preceding sections, a web collection instrument was developed. This instrument was used to identify the nature and extent of audit-related web practices on the corporate web sites of Saudi joint stock companies. Therefore, the research approach adopted in this paper aims to examine the Internet reporting practices

The 1974 Accountancy Law was the first law to regulate the accounting profession in Saudi Arabia. This law, which was updated in 1991, is still in effect and sets the standards that should be followed by auditors. It consists of articles which establish the fundamental requirements of practising accounting services, such as registration procedures and fees, qualifications, the responsibilities of the auditor, violation and trial proceedings, and other related issues. This law also established SOCPA.

SOCPA, which was established in 1992, has the responsibility of issuing accounting and auditing standards and has the authority to qualify public accountants (Naser and Nuseibeh, 2003). Since its inception, SOCPA has actively issued a series of accounting and auditing standards through its specialized committees. It operates under the supervision of the MCI in order to promote the accounting and auditing profession and all matters that might lead to the development of the profession and upgrade its status. Apart from standards issuance, SOCPA bears the responsibility for overseeing the audit profession, by periodically reviewing the performance of audit firms by the use of quality control programmes, by holding the CPA exam semi-annually, by designing and presenting continuing professional education, and by giving guidelines concerning and answers to the various requests that have been received.

In 2003, the Capital Market Authority (CMA) was established: it regulates and develops the capital market, protects investors and the general public from unfair and unsound practices involving fraud, deceit, cheating, manipulation, and insider trading, and regulates and monitors full disclosure of information related to securities and their issuers. The CMA requires that firms wishing to raise capital issue a prospectus containing detailed information on the new issuance, a directors' report, fully audited financial statements, and other related issues. Further, publicly listed firms are required to announce any material events that take place, such as the resignation of directors and the acquisition or the disposition of significant amounts of assets. Listed firms are also required to furnish annual and quarterly reports on a timely basis. In sum, the establishment of SOCPA, combined with the emergence of the Financial Market Committee, should enhance the quality of disclosure (Alsaeed, 2005).

accounting bodies, such as AITF, ICAEW, IASB, and IFAC, show the changes in the regulatory environment of financial reporting on the Internet and also the responses from these professional bodies. They also indicate that the disclosure of financial information on the Internet is attracting the attention not only of the researchers but also of professional accounting bodies. In fact, these regulatory recommendations and requirements will lead to an increase in the amount of financial information disclosed on companies' web sites. These publications by the professional bodies also indicate that this new way of providing information can complement the current (manual) one, but can also be seen as a substitute for it in the near future (Larran and Giner, 2002). Therefore, the main challenge to the accounting and auditing professional bodies is to impose rules and recommendations that will help to guarantee the reliability of financial reporting on the Internet.

Financial Reporting in Saudi Arabia

At present, financial disclosure at corporate web sites in Saudi Arabia is voluntary and unregulated. Companies are under no obligation to maintain a web site. If they do, the site content is largely discretionary. There is no governing body or set of regulations that either requires or forbids the disclosure of any specific data on web sites.

Accounting practices in Saudi Arabia are regulated by the Ministry of Commerce and Industry (MCI), the Saudi Organization for Certified Public Accountants (SOCPA), and the Capital Market Authority (CMA). None of these organizations has issued requirements regarding publishing annual reports on the Internet.

The Company Law issued by MCI, the primary authoritative reference for professional accounting practice, includes some accounting guidelines. It determines the legal basis for companies and accountants and its articles deal with the fundamental details of formation, such as registration procedures, minimum capital required, number of partners, number of directors, and other related matters. Article 38, for example, asks the board of directors to prepare a balance sheet for every financial year, a profit and loss account, and a report on the company's operations and financial position. It also provides some guidance on auditing and accounting measurement and procedures.

In 2001, the Auditing Practices Board (APB) in the UK issued a document titled Electronic publication of auditors reports (APB, 2001) to provide guidance to auditors relating to the electronic presentation of financial reports. It provides guidance on the role of auditors, security considerations in the Internet reporting environment, the integrity of Internet reporting information, and the audit procedures to be followed. In addition, these guidelines stress that the respective responsibilities of auditors and directors do not change when companies disseminate information on the Internet.

In 2002, the International Federation of Accountants (IFAC) issued an international auditing pronouncement relating to internet financial reporting: they released a staff paper (August 2002) which primarily focused on the responsibilities of directors and management in relation to financial reporting on the Internet. A key recommendation of the paper is that management should formulate and openly publish a detailed policy concerning the enterprise's use of internet financial reporting. Among other things, the policy should require that management discuss and agree with the auditor the extent to which audited information will be included on the enterprise's corporate web site.

In November 2002, the US Securities and Exchange Commission (SEC) mandated companies to disclose in their annual reports where investors can obtain access to SEC filings, whether they are available on the company's web site, and if not, provide reasons for not providing Internet access to those reports (SEC, 2002).

In March 2003, the SEC adopted new rules to implement Sections 406 and 407 of the Sarbanes-Oxley Act of 2002. These rules require a public company to either disclose its corporate code of ethics as an exhibit in its annual report or post the text of the code of ethics, or the relevant portions of it, on its Internet web site, provided that it says in its annual reports that the code of ethics appears on its web site and gives its Internet address. Moreover, in June 2003, the SEC mandated the electronic filing, and web-site posting by issuers with corporate web sites, of beneficial ownership reports filed by officers, directors, and principal security holders under Section 403 of the Sarbanes-Oxley Act of 2002 (SEC, 2003b).

In summary, the previous recommendations and guides issued by the professional

- Management's responsibility for the maintenance and integrity of the web site, and that work carried out by the auditors does not involve consideration of these matters.
- Disclaimer of responsibility for changes to financial statements subsequent to their initial publishing on the web site. The fact that legislation in the local country governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.
- Specific identification of the other information on the web site read by the auditor in order to consider whether it was consistent with the audited financial statements.
- Specific identification of the financial statements covered by the audit report.

Although not an authoritative statement, the IASC's 1999 discussion paper, *Business Reporting on the Internet* (Lymer et al., 1999), contains several recommendations concerning auditor responsibilities, which may influence future pronouncements of the IASC (now the International Accounting Standards Board). The discussion paper develops a proposed code of conduct, *Standards for Web-based Business Reporting – A Code of Conduct for Current Application*, which it believes should be the foundation of a mutual agreement concerning use of the Web for business reporting. In particular, it suggests that auditors of listed companies should ensure that reporting entities conform fully to the "code of conduct" where they claim to do so or that any deviations are noted in the audit report. Further, auditors should actively monitor the entity's web site for significant changes to information between periodic audits, and note, by changing the audit report, any changes that could bring into question the continued validity of any audit report on the data.

In May 2001, the International Federation of Accountants (IFAC) issued a proposed international auditing practice statement (IAPS) to assist auditors in addressing risks associated with e-commerce. The exposure draft (ED) deals with the knowledge and skills needed to understand the effect of e-commerce on the audit. In particular, ED examines the key aspects of the entity's business environment the auditor should know about and the implications of e-commerce risks on internal controls and audit evidence (IFAC, 2001).

The guidance statement states that the auditor should consider whether these matters impact on the wording or format of the audit report, and, in extreme cases, whether permission for the electronic presentation of the audit report is to be denied. Importantly, it is clearly stated that after the financial report has been published, the auditor has no obligation to make any inquiry regarding the financial report, unless the auditor becomes aware that the audit report is being used inappropriately.

AGS 1050 addresses the auditor's general responsibility to read other information contained in a document containing audited financial statements by indicating that "the legal framework for electronic documents is not yet well established regarding what constitutes an "electronic" document ..." (para 37) and therefore the auditor should use professional judgement in this regard.

AGS 1050 recommends that the web-based audit report include the following additional information: specific reference to the audited statements by name; a statement that the audit report does not provide an opinion on any other information hyperlinked to/from the audited financial report; and a statement recommending that readers who are concerned with inherent risks arising from electronic data communications should corroborate web-based financial statements with hard-copy versions. Where a reporting entity includes less than complete financial statements, e.g., financial highlights, summary financial statements, etc., AGS 1050 recommends that management incorporate a cautionary note in their web site indicating that the extracts cannot be expected to provide a complete understanding of the entity's financial situation.

In 2001, the UK Auditing Practices Board's Bulletin 2001/1: The Electronic Publication of Auditors' Reports (Auditing Practices Board, 2001) recommended that auditors should enquire whether directors have obtained a copy of the Institute of Chartered Secretaries and Administrators (ICSA) guidance document, Electronic Communications with Shareholders: A Guide to Recommended Best Practice, and whether this guidance has been followed in connection with information presented on corporate web sites. Further, Bulletin 2001/1 suggests that auditors retain a printout or a copy on disk of the final electronic version of the audited financial statements for future reference. With respect to the audit report, Bulletin 2001/1 suggests the following additions to the traditional hard-copy audit report:

business reporting, and proposed a code of conduct for web-based business reporting. As regards auditing, the code recommended that: the boundaries of the “financial report” need to be clearly laid out so that users are given clear indication when a departure point has been reached from the audited financial report; users need to be able to distinguish information that is prepared using international accounting standards from those that are not; the audit report needs to make clear to users what pages are subject to audit opinion; where translated financial statements are provided online and only the primary language financial statements were audited, that fact should be clearly noted in the translated version.

In December 1999, the Auditing and Assurance Standards Board of the Australian Accounting Research Foundation produced an authoritative statement on the auditing implications of electronic presentation of financial statements when it issued the guidance statement AGS 1050, Audit Issues Relation to the Electronic Presentation of Financial Statements (Australian Accounting Research Foundation, 1999). AGS 1050 states that the reporting entity is responsible for the electronic presentation of financial statements on its web site, and for ensuring adequate security and control.

The guidance statement recommends that these responsibilities should be communicated in the engagement letter and audit report. AGS 1050 indicates that assurance provided by the auditor over aspects of the client’s web site, other than the financial statements, represents a separate web-site assurance engagement and, consequently, does not form part of the audit of financial statements. AGS 1050 states the auditor should communicate with management regarding matters relating to the electronic presentation of the audited financial statements, such as: management’s responsibility for the web site and its content; legal provisions relating to the distribution of the financial reports; nature, extent, and format of financial information provided on the entity’s web site; steps taken to reduce the likelihood of the web site content being misleading or the likelihood of an inappropriate association between the audit report and unaudited information; the structure of the web site (e.g., the use of hyperlinks to/from audited financial information or audit report); and the security and integrity of the electronic financial report.

Regulation of Corporate Web Sites

Disclosure and Auditing

This section discusses the regulation of the financial reporting on the Internet by professional bodies. It also discusses the impact on the audit profession of financial reporting on the Internet (Ettredge, 2001; Fisher et al., 2004; Jones and Zezhong, 2004).

In 1997, the Audit Issues Task Force (AITF) in the USA issued AU550 – Other Information in Electronic Sites Containing Audited Financial Statements - to provide guidance on the application of SAS 8 – Other Information in Documents Containing Audited Financial Statements - to companies disclosing corporate information on the Internet.

In 1998, the Institute of Chartered Accountants of England and Wales (ICAEW) published the 21st Century Annual Report, which indicates that “corporate reporting has traditionally been regulation-led with innovations arising principally from new accounting standards and, less frequently, changes in legislation” (ICAEW, 1998). The ICAEW report notes that there has been a fundamental shift in the process of accounting development. Technology and other factors, such as globalisation and notions of accountability, are currently driving changes in financial reporting practices. While external drivers, such as technology, help ensure the ongoing relevance of the accounting product, the speed with which they are revolutionising accounting makes it difficult for regulators to keep pace. For example, in the absence of formal relevant professional promulgations, the adoption of the Web for corporate disclosure has seen the US Securities and Exchange Commission (SEC) initiate more than 200 web-related enforcement actions as of March 2001 (Hodge, 2001), and recently establish an office (the Office of Internet Enforcement) dedicated exclusively to web surveillance and enforcement.

In 1999, the International Accounting Standards Board (IASB), commissioned a study as part of a project to develop standards of Internet reporting. The study examined the shortcomings of business reporting on the Internet within current technologies and the role of technological changes in improving electronic

traditional national regulations and laws to the Internet environment may not be appropriate. The present study extends this literature by investigating the existing practices of auditors in relation to the Internet financial reporting of Saudi joint stock companies. The data for the research were obtained through content analysis of the web sites of joint stock companies in Saudi Arabia.

Table 1: Studies on auditing and financial reporting on the Internet.

Year	Author(s)	Country Sample
1999	Debreceeny and Gray	45 largest companies in the UK, France, and Germany
1999	The Financial Accounting Standards Board (FASB)	The Fortune 100 companies - USA
2000	Ponte et al.	50 companies listed on the Dow Jones, Eurostoxx50 index as of October 1999
2001	Hodge F.	Graduate Business Students acting as potential investors - USA
2003	Lymer and Debreceeny	22 countries
2003	Pike and Lanis	Australia
2003	Marston	The top 99 Japanese companies
2004	Fisher et al.	210 listed companies in New Zealand
2004	Jones and Zezhong	Twenty UK experts in accounting and the Internet, including academics, auditors, regulators, reporting companies, and users
2005a	Khadaroo	The 100 companies on the Kuala Lumpur Stock Exchange Composite Index (KLSE CI) and the 45 companies on Singapore's Straits Times Index
2005b	Khadaroo	Companies that make up the Kuala Lumpur Stock Exchange Composite Index (KLSE CI)

certainty concerning what information needs to be audited, and reduce audit risks. Internet reporting increases the risk of auditors giving an inappropriate opinion concerning their clients' financial statements (i.e., audit risk), thereby exposing them to the risks of litigation claims and even bankruptcy. Nevertheless, Internet reporting also creates a lucrative business opportunity for auditors, as the increase in risks and Internet auditing costs are usually passed on to audit clients in the form of higher audit fees. In addition, Internet reporting provides the opportunity for audit firms to earn higher fees from their other services, such as IT consultancy and web-site design, but not to their same audit clients because it may compromise their independence. Regulators play an important role in protecting users and improving trust and the quality of Internet reporting information. By mandating the types of information disclosed by companies, security regulators are making good progress towards protecting users' interests and improving trust in the system. Similarly, by providing Internet auditing guidance, auditing standard setters are (indirectly) making the business community and users alike more aware of good practices and the types of control that can be expected in the Internet reporting environment. However, more needs to be done.

The above literature review shows that a number of academics have investigated web-reporting practices in the UK, the USA, Germany, Spain, Austria, Finland, and more recently Japan, Singapore, and Malaysia. Most research done in this area is concentrated in Western Europe, Asia, and the USA. To our knowledge, the impact on the audit profession of corporate financial reporting on the Internet by Saudi joint stock companies has not been the subject of any study. It is believed that conducting this study in Saudi Arabia could yield fruitful results.

The literature reveals a number of factors specifically associated with Internet financial reporting that have significant implications for auditors, such as the appropriate responsibilities of auditors and the nature of audit reporting in such an environment.

These factors include that corporate disclosure over the Internet is currently unregulated and because of the global nature of the Internet, the application of

change (conservatism, gradualism, or radicalism). The consensus view was that the financial reporting package would evolve into a core of general purpose, standardised information (in both the hard copy and Internet version) together with a non-core of general purpose and customised information. Auditors would be reactive and cautious, and regulators would adopt a minimalist approach. The fundamental dilemma of financial reporting in the Internet environment would be between standardisation and customisation.

Khadaroo (2005a) examined the business reporting practices of listed companies in Malaysia and Singapore. The research was carried out in February 2003. He chose the 100 companies on the Kuala Lumpur Stock Exchange Composite Index (KLSE CI) and the 45 companies on Singapore's Straits Times Index on the grounds that listed companies are more likely to have a web presence and provide web-based information. Khadaroo examined the implications of web technology for business reporting and the challenges it poses for standard-setting bodies. A standard web browser was used to survey the web sites of listed companies and collect the data. The Internet reporting practices of listed companies in Malaysia and Singapore only were compared. The results showed that 75 % (75 companies) of the KLSE CI companies had web sites as compared to 87 % (39 companies) of companies on the Singapore Stock Exchange (SGX) index. These results indicate that Singaporean companies make more use of the Internet as a reporting tool than do their Malaysian counterparts.

Khadaroo's (2005b) study aimed to examine the Internet reporting practices of companies that make up the KLSE CI and to discuss the auditing implications of companies reporting on the Internet. His survey of Internet reporting practices shows that there has been an increase in the number of companies providing information on the Internet as well as the various types of financial and non-financial information provided. The survey also provides some evidence that there has been little improvement in the quality and reliability of information provided to users. In this respect, the important contributions of the accounting and auditing profession in enhancing the integrity, credibility, and reliability of Internet reporting information are discussed. The study also reveals that auditors have little control over web content or the changes that can be made to audited information. Further guidance to standardise the types of Internet reporting information may help protect the interests of users, provide more

Marston (2003) surveyed the financial reporting on the Internet of the top 99 Japanese companies in 1998. She found that 78 of these companies had a web site in English and that of these, 68 reported some financial information with 57 providing detailed accounting information. Company size was significantly positively associated with the existence of a web site but the extent of financial disclosure did not appear to be related to size. There was no significant association between profitability, industry grouping, or overseas listing status and Internet disclosure. The survey was updated in 2001 by re-evaluating those companies which had no web site or only a Japanese web site in 1998. It was found that the majority of these companies had by 2001 established an English language web site with full annual reports available.

Fisher et al. (2004) identified the key audit implications of Internet financial reporting through a comprehensive review of the academic and professional literature. Further, they studied the Internet reporting practices of 210 listed companies in New Zealand. The authors found that only 188 had web sites; 131 companies provided some financial information on their web sites; 128 provided audit reports; 101 included the auditors' signatures; 1 had a hyperlink "from" the audit report to other locations within the web site and 11 had a hyperlink "to" the audit report from other locations within the web site. The researchers found that there were a number of concerns for the auditing profession arising mostly from poor presentation of information to users. They focused on the need to place more emphasis on preventive controls and real-time detective controls, the need for continuous auditing, and the need to consider the possibility of changing the audit reporting routine, for example, "shorter interval" reporting, "evergreen" reporting (i.e., always available and dated), or "report on demand".

Jones and Zezhong (2004) explored future financial reporting on the Internet; their aims were to develop a consensus among participating experts (representing key interested parties) on the likely developments in financial reporting on the Internet by 2010 and then to explore the main issues and consequences for these parties. Twenty UK experts in accounting and the Internet, including academics, auditors, regulators, reporting companies, and users, participated in the study. A three-dimensional conceptual framework was adopted consisting of the role of the Internet, the determinant of change (technological determinism, non-technological determinism, or contingency perspective), and the pace of

confused the investors. Audited information may be useful in mitigating the blending problem on the web. This mitigation could be achieved in a number of ways. First, audited information could be made more visually distinctive from unaudited information: the use of labelling, borders, or watermarks have all been mooted.

Lymer and Debreceeny (2003) investigated potential causes of the variations in the Internet financial reporting of 660 corporations in 22 countries to identify the firm-specific and environmental determinants of Internet financial reporting. The study revealed that firm size, level of technology employed, growth prospects, and intangibles were firm-specific determinants of Internet financial reporting. Given that Internet financial reporting is not just about the content of disclosure but also about employing new presentation methods, the environment of disclosure was included in the research. The overarching disclosure environment of a country was found to be an important environmental driver for Internet financial reporting presentation and a less strong driver for Internet financial reporting content. The presentation aspect of Internet financial reporting was more associated with the identified determinants than the content of Internet financial reporting, which suggests that Internet presentation technologies were more related to the determinants than the content of the reports on the company web sites.

Pike and Lanis (2003) identified a possible relationship between WebTrust, initiated by the American Institute of Certified Public Accountants (AICPA) / The Canadian Institute of Chartered Accountants (CICA) as an attestation service for web sites, and the potentially misleading effect of hyperlinking audited financial statements to unaudited information. They argue that firms hyperlinking such information increase the perceived credibility of the unaudited information, which may be exacerbated by the presence of a recognisable, symbolically trustworthy logo. Pike and Lanis formulated testable hypotheses by modifying an existing theoretical framework related to hyperlinked materials and their effect on investor judgements. The amended model extends to all potential users of financial information and incorporates the web-based assurance logo of WebTrust. The study proposed a model to ascertain the extent of the expectation gap among users and argued that simple disclosure is sufficient to eliminate the potentially misleading effects of web-based financial information, thereby reducing the risk of corporate fraud and legal liability of auditors.

statements. The authors questioned whether the web-based audit report should reside at the auditor's or the client's web site and whether changes made to the web-based version of the financial statements might affect the audit opinion. Debrecey and Gray suggested either applying a digital signature to the annual report, which would indicate the area of the web site that had been audited, or placing all audited web pages on the auditor's web site.

Professional accounting bodies are also concerned with financial reporting on the Internet. The Financial Accounting Standards Board (FASB) Business Reporting Research Project report includes a 1999 survey of the web practices of the Fortune 100 companies (FASB, 2000). This survey found that 22 % of the audit reports located online included hyperlinks, usually to notes mentioned in the audit reports. In addition, 99 % of the companies had a web site, and 94 % of the corporate web sites included some form of investor relations page and the annual report, which was mainly presented in either HTML or PDF format, or both. These findings would provide an interesting topic for audit regulators to ponder. The authors commented that since the auditors did not deliver their reports with built-in hyperlinks, the companies must have added them later.

Ponte et al. (2000) surveyed 50 companies listed on the Dow Jones Eurostoxx50 index as of October 1999, with the aim of analysing the scope and impact of the electronic dissemination of accounting information in Europe. The study revealed that all of the companies (100 %) had web sites and presented annual reports on the Internet, with some also including unaudited interim statements, mailing lists, and shareholder information.

A study by Hodge (2001) found that a common feature of corporate web sites is that unaudited information is incorporated with audited information in such a way that it is difficult for users to distinguish between the two. In particular, the study revealed that compared to investors who viewed similar information in hard-copy format, investors who viewed hyperlinked materials on the web misclassified more unaudited information as audited, inflated the credibility of unaudited information, and judged the firm's earnings potential to be higher. The author argued that users confused audited and unaudited information because hyperlinking them to and from one another gave the impression that all the information was part of one comprehensive database: in short, hyperlinking

financial reporting on the Internet and auditors. Section 4 explains the research approach adopted in this paper. Section 5 discusses the findings of content analysis of the web sites of Saudi companies. The final section summarizes the paper, draws a conclusion, and makes suggestions for further research.

LITERATURE REVIEW

This section discusses prior research on corporate financial reporting on the Internet and the auditing implications thereof. A number of studies have directly or indirectly focused on this issue, most of which have been undertaken over the last eight years. Almost all of the earlier studies, and many of the more recent ones, are at least partially descriptive in nature. Typically, they describe the incidence of Internet financial reporting via groups of very large companies. Among the early studies, Hussey et al. (1998) and Craven and Marston (1999) studied FTSE 100 companies in the UK and listed companies in Finland. In addition, a special section of the *European Accounting Review* in 1999 was devoted to the Internet and corporate reporting in Europe; it contained studies in several countries, including the UK (Craven and Marston, 1999; Ashbaugh et al., 1999), the USA, the UK, and Germany (Deller et al., 1999), Spain (Gowthorpe and Amat, 1999), Sweden (Hedlin, 1999), and Austria (Pirchegger and Wagenhofer, 1999). Marston (2003) surveyed financial reporting on the Internet by Japanese companies, and Ashbaugh et al. (1999) published a detailed study of reporting on the Internet by US companies. The following literature discussion will concentrate only on studies related to corporate financial reporting on the Internet. Table 1 provides a summary of the main aspects of these studies.

Debreceeny and Gray (1999) surveyed the web-reporting practices of the 45 largest companies in the UK, France, and Germany. They found that 44 of them had a web site, of which 36 incorporated financial statements. The researchers focused their attention on the 17 companies that presented their financial statements in HTML format; audit reports were included on the web for ten out of the 17 companies. None of the audit reports of these ten companies included scanned auditors' signatures, and none of their financial statements contained hyperlinks to their corresponding audit reports. All of the audit reports were located on the companies' web sites and only four audit reports contained links to the financial

with Internet financial reporting that have significant implications for auditors. For example, audit reports presented on the web are exposed to unauthorised alteration from sources both internal and external (e.g., hackers) to the client. The audited reports are also hosted on companies' web sites, making it difficult for auditors to have control over these reports with respect to security, access, and changes. Further, the electronic nature of the audit report file can make such manipulation difficult to detect (Debreceeny and Gray, 1999; Liang et al., 2001; Higgins, 2002; Broad et al., 2003; Pathak, 2003).

The second primary issue is the inclusion of audited and unaudited information: as financial reports are normally delivered as just one part of a corporate web site, misleading information may potentially be presented alongside the financial data for which the auditor is primarily responsible. The determination of the boundary of the external auditor's responsibility may therefore become problematic (Fisher et al., 2004). Another issue is hyperlinking audited financial statements to unaudited information, thus increasing the perceived credibility of the unaudited information.

This paper contributes to the ongoing research on Internet reporting. More specifically, it surveys the Internet reporting practices of joint stock companies in Saudi Arabia and further explores the broader implications for the auditing profession of Internet financial reporting.

Saudi Arabia was considered an interesting setting for this research, as to our knowledge, no research on this issue has been conducted within a Saudi joint stock companies. Furthermore, no national professional body has yet issued formal standards addressing the specific auditing issues associated with corporate Internet reporting. This paper seeks to identify such issues, which will assist professional bodies and regulators to develop well-informed policies, regulations, and standards in response to these issues. Both the Saudi Organization for Certified Accountants (SOCPA) and the Saudi Capital Market Authority (CMA) will be able to refer to the results of this study in determining appropriate responses to the growth in Internet financial reporting.

The rest of the paper is structured as follows. In the next section, we provide a review of the literature on Internet reporting practices. Section 3 discusses the regulations concerning corporate web site disclosure; this section will also discuss

amount and type of data disclosed as well as allowing the timely and efficient exchange of information between preparers and various stakeholders; 4) allowing corporate information to be presented in innovative ways (Trites, 1999; Bury, 1999; Fisher et al., 2000).

In fact, the Internet is having a profound impact on external financial reporting. Many corporations have established web sites on the Internet and a substantial proportion of these corporations use them to provide financial information to corporate stakeholders (Fisher et al., 2004). The Internet has become the principal medium for the distribution of traditional financial reports to users, with many companies choosing to make available financial information on their corporate web sites (Fisher et al., 2004; Khadaroo, 2005a). This Internet usage varies between countries (Deller et al., 1999; Gowthorpe and Amat, 1999; Hedlin, 1999; Lymer et al., 1999; Khadaroo 2005a) with, for example, Asian, African, and South American companies lagging behind North American and European companies in their provision of online corporate and financial information.

Professional bodies are also concerned about how companies use web sites to communicate with stakeholders; for example, a statement issued by the Auditing Practices Board (APB, 2001) states that various types of financial information can be found on web sites, including information that has been audited (for example, the annual financial statements), information which auditors may have reviewed (for example, interim financial information), and information with which the auditors have had no direct involvement, such as financial highlights from a company's Annual Report, or may never have seen, such as presentations for analysts.

Studies on financial reporting on the Internet shows that the use of the Internet for corporate reporting has been increasing and is already a common practice for companies in many countries (Lymer and Debreceeny, 2003; Marston, 2003; Fisher et al., 2004; Khadaroo, 2005a). The Internet offers companies new opportunities to supplement, replace, and enhance traditional ways of investor and stakeholder communication (Jones and Zezhong, 2004). On the other hand, the rapid increase in financial reporting on the Internet raises the issue of audit and has had a significant impact on the auditing profession.

A review of the literature reveals a number of factors specifically associated

INTRODUCTION

This study investigates the impact on the audit profession of financial reporting on the Internet by Saudi joint stock companies. Specifically, the study analyses the content of the web sites of joint stock companies in Saudi Arabia to assess the nature of current audit-related web practices.

Bonsón and Escobar (2002) stated that the economic system is increasingly becoming digital. Because of low relative costs and the power of information and communication technologies, companies are using them to undertake some activities that until now have been done in more rudimentary ways.

Jones and Zezhong (2004) pointed out that the Internet has revolutionized the way business information is reported to stakeholders. In line with this, there have been fundamental changes in the business-reporting practices of companies. With the Internet becoming a favoured medium, recent technological advances have led to unprecedented changes in the means available to corporations, government agencies, and the investing public to obtain and disseminate information. Jones and Zezhong added that today, most companies have some sort of web presence, which can range from provision of information only to full e-commerce.

In a study by Beattie (1999) using questionnaires and interviews with the accounting users, she concluded that it is necessary to change the current model and suggested that financial information should be published on the Internet in order to make access easier for all potential interested parties. Bonsón and Escobar (2002) added that initially, companies had web pages to improve their corporate image; now, however, firms can also use the Internet to obtain competitive advantage. The growth in the number of users, improvements in the speed and security of communication, and the low costs of technology are allowing the Internet to become an important medium for monetary and information resources.

Several factors could be taken into account to explain the provision of financial information on the Internet, such as: 1) elimination of the substantial cost of the printing and posting of annual reports and accessibility of information to a much wider audience; 2) up-to-date information through the regular maintenance of web sites and reducing the time to distribute information; 3) increasing the

ملخص :

تهدف هذه الدراسة الى فحص التقارير المالية للشركات المساهمة السعودية والمنشورة على الانترنت وتأثيرها على مهنة المراجع. استمارة تجميع البيانات من الانترنت تم استخدامها وذلك لمعرفة طبيعة التقارير المالية المنشورة. تم مراجعة موقع ٨٦ شركة مساهمة سعودية وهي عدد الشركات المتواجده في سوق الأسهم السعودية بنهاية عام ٢٠٠٦. ٣٥ شركة من تلك الشركات وجد لديها موقع الكتروني يحتوي تقارير مالية.

٣٥ شركة تشر قوائمها المالية مع تقرير المراجع. معظم تلك التقارير يتم نشرها باستخدام تقنية ملفات PDF . الدراسة اكتشفت قيام الشركات بنشر التقارير المالية على موقعها متضمنة معلومات مالية بالإضافة الى معلومات غير مالية وغير مدققة من المراجع. نشر المعلومات الغير مالية مرفقة بتقرير المالية تخلق مشكلة لقراء ومستخدمي تلك التقارير. من التوصيات التي توصلت اليها الدراسة ضرورة الفصل بين المعلومات المالية التي راجعها المراجع وبين المعلومات غير المالية و التي لم يتم مراجعتها من قبل المراجع.

تقرير المراجع المنشور مع القوائم المالية لا يشير إلى المعلومات المالية المنشورة على الانترنت ولا يفرق بينها وبين التقارير اليدوية. كما لا يشير تقرير المراجع إلى مدى مسؤولية كل من المراجع ومدراء الشركة عن المعلومات المالية المنشورة على الانترنت. من المهم قيام المراجع بوضع فقرة تحذيرات عند قيام الشركة بنشر تقريره اليدوي على الإنترنت وخاصة فيما يتعلق بالمخاطر المصاحبة لنشر المعلومات المالية على الإنترنت ومنها التحريفات التي من الممكن ان تتعرف لها تلك المعلومات.

الدراسة وجدت ان ٣٤ شركة تشر تقاريرها على موقع الشركة وليس موقع مكتب المراجع، وهذا يخلق مشكلة رقابية للمراجع حيث من الأفضل نشر تلك المعلومات على الأقل على موقع المراجع وخاصة فيما يتعلق بأمن تلك المعلومات. ٣٠ تقرير من تقارير تلك الشركات يتضمن توقيع المراجع على التقرير منسوخ من التقرير اليدوي.

حتى يتم ضمان عدم وجود تحريفات على التقارير المالية المنشورة على الإنترنت تقترح الدراسة قيام كل من الهيئة السعودية للمحاسبين القانونيين إصدار مجموعة من القواعد والتوصيات التي تضمن صدق التقارير المالية المنشورة على الانترنت ومصداقيتها.

Financial Reporting on the Internet by Saudi Joint Stock Companies: Impact on the Audit Profession

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Abstract

This study investigates financial reporting on the Internet by Saudi joint stock companies and its impact on the audit profession. The data were obtained through content analysis of the web sites of Saudi joint stock companies representing eight industries. A web collection instrument was developed; this instrument was used to identify the nature and extent of audit-related web practices on the corporate web sites of the 86 companies that made up the Saudi Stock Market at the end of 2006. Of the 86 listed companies, 35 companies were found to have web sites containing corporate financial information.

The results provide evidence that all 35 companies publish audited financial reports with the corresponding audit report. The major technology employed by Saudi companies to publish financial statements on the Internet is the PDF file format. The study also reveals that in addition to the annual report, companies publish a considerable volume of financial and non-financial information on their web sites. Users are likely to find it difficult to distinguish between audited and unaudited financial information. Audit firms in Saudi Arabia should employ technology to distinguish audited and unaudited information, such as the use of borders, backgrounds, and/or watermarks.

In addition, none of the auditor reports referred to matters relating to electronic presentation of financial statements, neither did they refer to the responsibilities of directors or auditors with respect to web sites. Cautionary comments by the auditor concerning the risks of relying on Internet financial reports may be considered. We also found that the majority (34) of audit reports were located on the companies' web sites, which would make it difficult for auditors to have control over these reports with respect to security, access, and changes. To increase the security of the audit report, audit firms in Saudi Arabia should locate their reports on the auditor's web site.

A total of 30 auditors' reports included scanned versions of the auditors' signatures. The use of digital signatures, which offer security to users, is suggested. The results also show that 35 financial statements had no links to/from the audit report.

To provide assurance and improve trust in Internet financial reporting in Saudi Arabia, the study recommends that professional accounting and auditing bodies in Saudi such as Saudi Organisation for Certified Public Accountants (SOCPA) should give more consideration to and issue rules and recommendations that would help to guarantee the reliability of financial reporting on the Internet in Saudi Arabia.