ATTITUDES OF STAKEHOLDERS TOWARDS WEB-BASED DISCLOSURE: EMPIRICAL EVIDENCE FROM AN EMERGING ECONOMY

BY

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DEDICATION

This thesis is dedicated to my husband Dr Patrick Amoah Bekoe, my children: Nhyira Kwaku Amoah Bekoe, Aseda Oye Amoah Bekoe and the memory of my late grandfather Mr Ernest Edward Amponsah.

ABSTRACT

Empirical studies on web-based reporting have usually been examined from a company's perspective. However, this study provides some evidence on web-based reporting from users' perspective. The study relied on the Technology Acceptance Model (TAM) and the Innovation Diffusion Theory (IDT) to examine the attitudes of users towards the use of online accounting information and investigate the dominant factors that influence such attitudes. A survey method of research was adopted and a set of questionnaires were designed and administered to different stakeholder groups on the Ghana Stock Exchange (GSE). Out of 435 questionnaires administered, 175 were returned of which 171 were used in the study. The data was analyzed using the Structural Equation Modeling technique (the partial least squares approach). Results of the study suggest that stakeholders generally have a positive attitude towards web-based reporting. Thus, the majority of the respondents consider web-based reporting to be a useful medium for the dissemination of accounting information. The study also demonstrates that attitude is an important determinant of stakeholders' use of the web-based report. Moreover, stakeholders' perceptions of the usefulness, ease of use, social network pressures and compatibility of the web-based reporting have a positive influence on attitude towards web-based report. This study makes some important contributions to the financial reporting literature. The study develops a framework that provides insight into users' attitudes towards web-based reporting, the determinants of such attitudes and their influence on the use of web-based reports. The findings of this study also provide some insightful implications for stakeholders in the corporate web reporting environment by demonstrating amongst others that businesses providing online accounting information should place more emphasis on the quality of the information provided, by ensuring that it is timely, reliable and transparent.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The increasingly dynamic and competitive nature of the business environment, coupled with the recognition of broader stakeholder interest in business has increased demands on corporate reporting over the years (Ashbaugh, Johnstone, & Warfield, 1999; Uyar, 2012). The need for and the provision of reliable timely information on business activities remains one of the key issues businesses are confronted with in their bid to remain relevant in contemporary times. Many commentators are now advocating for a wide range of reports of companies including forward-looking, non-financial and other qualitative information in a more frequent and timely manner than before (Beattie & Pratt, 2003; Jones & Xiao, 2004). Instructively, the demands on businesses today have also moved beyond national borders and have assumed international dimensions due to globalization and growth in Information and Communication Technology (ICT). There is, therefore, a greater demand on businesses in their reporting practices and the need to be more transparent than before.

While the demand for greater transparency from companies continues to rise, the relevance of the traditional paper-based medium of disseminating accounting information to stakeholders has come under intense criticism. It has been established in the literature that the provision of accounting information through the paper-based medium is expensive, time-consuming and quite burdensome in distribution (Beattie & Pratt, 2003). Due to its perceived limitations, some researchers have

argued that the printed annual report will gradually disappear as corporate reports increasingly move to the worldwide electronic medium of the internet (Beattie & Pratt 2003).

As Fisher, Oyelere, & Laswad (2004) earlier predicted, the internet may become the principal medium for the dissemination of financial reports to users. It is therefore not surprising that the recent advances in information technology have propelled the widespread use of the internet to communicate corporate information to its stakeholders (Marston & Polei, 2004; Uyar, 2012).

Unlike the traditional medium of reporting, the internet provides a unique platform for corporate disclosure that enables companies to provide information instantaneously to a global audience on a real-time basis, offer major opportunities for fast and cheap information transfer, as well as provide investors with several options regarding which type of financial disclosure to view and the format in which to view these information (Kelton & Pennington, 2012; Kelton & Yang, 2008; Sánchez, Domínguez, & Álvarez, 2011).

Again, the internet affords managers the opportunity to increase the frequency and volume of financial information disclosures and to report more on non-financial information (Chatterjee & Hawkes, 2008). The internet also provides the platform for management to interact with investors and provide updates of important corporate information. Such transparency and interaction between management and investors reduce information asymmetry, especially for foreign investors, while enhancing investor confidence in the capital market (Bushman & Smith, 2001). The argument is that reporting through the internet provides equal access to information to all stakeholders at the same time, thereby reducing information asymmetry between home-country and foreign users of financial information. It is on this basis that, Debreceny & Rahman (2002) conclude that the increase in web disclosure improves transparency in reporting and the overall

market efficiency. By implication, the effective functioning of the capital market depends greatly on an effective flow of information between a company and its stakeholders.4

Also, web-based reporting can be a useful channel to attract Foreign Direct Investment (FDI) inflows to these countries (Hunter & Smith, 2009). The argument is that reporting via the internet is usually an attempt to signal to investors that financial reporting will be on a timely basis and accessible to all. This signal may lead to a positive response from participants in the capital market both locally and internationally to invest in a country. As Hunter & Smith, (2009) point out, firms that invest in web technology for reporting purposes are better positioned to attract foreign investments inflows than those that do not.

The above arguments clearly demonstrate that web-based reporting offers a number of benefits to the firm and country at large, particularly in enhancing information flow between management and stakeholders, improving the overall corporate governance mechanisms of a firm and by extension capital market transparency and efficiency (Kelton & Yang, 2008). Notwithstanding its benefits and the tremendous change it has brought in the reporting practices of businesses in many parts of the world, most developing countries are yet to harness the economic benefits of this digital change. This trend appears worrying given the numerous benefits associated with this medium of communicating accounting information to users.

A frequently cited reason for this trend has been the fact that the penetration of internet and diffusion of the technology, though growing, is still low in developing countries (AbuGhazaleh, Qasim, & Haddad, 2012). While this remains a challenge to most developing countries, an important issue yet to receive research attention on web-based reporting from the perspective of users is their view on this channel of reporting. This study seeks to investigate stakeholders'

attitude towards web-based reports and how such attitudes influence their use of accounting information on corporate websites.

1.2 Problem Statement

Studies on web-based reporting have mostly concentrated on the providers of accounting information on corporate websites and the motivation for engaging in such reporting practice. Not discounting the relevance of these studies, existing studies have largely ignored the perspective of users who are the ultimate beneficiaries of web-based financial reports. In particular, the attitudes of users towards web-based reporting is yet to be fully examined in the literature despite its theoretical importance.

Against the backdrop that literature on the acceptance and use of technology suggest that attitudes (positive or negative) of users/potential users towards a particular technology are key determinants of their actual use of same (Adams, Nelson, & Todd, 1992; Davis, 1989), the need to examine the attitude of users towards web-based reporting cannot be overemphasized. Again, the motivations for organizations to disclose accounting information on their websites and the extent of disclosure could be influenced hugely by the attitudes of users towards this medium of the disclosure. Thus, users' attitude is a critical determinant of the success or failure of any information system project. Nonetheless, little is known about users' attitudes towards web-based reporting and most importantly the dominant factors that influence such attitudes.

Moreover, studies on corporate internet reporting, in general, have focused largely on the developed countries with little attention to developing countries. As AbuGhazaleh et al., (2012)

point out, there exist significant differences between the developed and developing countries in terms of culture, social, economic and technological development hence findings from the developed countries may be very different for developing countries.

This study, therefore, fills these gaps in the literature by examining users' attitudes towards web-based reporting and the predictors of such attitudes from a developing country perspective.

1.3 Objectives of the Study

The overall objective of this study is to examine the attitudes of users towards web-based financial reporting and investigate the factors that influence attitudes towards the use of web-based financial information.

Specifically, this study seeks to:

1. examine the attitudes of users towards the use of online accounting information.
2. investigate the relationship between attitudes and use of web-based report
3. examine the factors that influence users' attitude towards the use of the web-based report.

1.4 Research Questions

1. Do users of accounting information have positive attitudes towards web-based financial reporting?
2. What are the factors that affect users' attitude towards the use of accounting information on corporate websites?

3. Do the attitudes of users affect their actual use of accounting information on corporate websites?

1.5 Motivation for the Study

Among the numerous challenges most developing countries have been confronted with for decades, the issue of how to raise the much-needed finances domestically to execute their developmental agenda has remained topical for years. For most of these countries, it has been increasingly difficult to mobilize the needed resources for development domestically and therefore have over the years depended largely on external sources of financing to fill the financing gap. Thus, dependence on foreign capital has become an inevitable option for most of these countries since domestic sources of finance have been woefully inadequate to support their developmental agenda (Osei, Morrissey, & Lensink, 2002).

At the firm level, businesses in these countries are also confronted with liquidity challenges due to limited access to finances. Foreign sources of financing, therefore, remain critical to the growth and development of firms in developing countries and by extension their overall economic growth. Against the backdrop that access to foreign capital has been uneven across countries for years (Leuz, Lins, & Warnock, 2010), the need for firms to position themselves to be attractive to foreign capital has become more apparent.

Whilst a number of factors have been cited in existing studies to be key determinants of foreign capital movements, information asymmetries between foreign and domestic investors continue to be cited as the key reason why investors usually shy away from foreign firms (Dahlquist & Robertsson, 2001; Khurana & Michas, 2011; Young & Guenther, 2003). By implication, a

reduction in information asymmetry by indigenous firms have huge implications on their ability to attract foreign capital. In the field of accounting, one of the ways of reducing information asymmetry is by improving the disclosure practices of firms. The internet provides the platform for firms to increase the frequency, the amount of financial information provided as well as provide more non-financial information, thereby, improving the interaction between stakeholders and management. This provides a signal to investors about the transparency of such local firms in developing countries. Despite its far-reaching advantages, penetration of the internet and diffusion of technology is quite low in developing countries.

Ghana is a developing economy which has seen tremendous growth in the use of the internet and information and communication technology in general. The Government of Ghana adopted the Ghana ICT for Accelerated Development (ICT4AD) policy in 2003 to engineer an ICT-led socio-economic development process to transform the country into a middle income, information-rich, knowledge-based and technology-driven economy and society. The Ghana Stock Exchange (GSE), in order to perform its core functions effectively in mobilizing both domestic and international capital for economic growth inter alia, migrated to the electronic trading system in 2008 with the belief that it will improve the efficiency (both operational and informational) of the market. The exchange has seen tremendous improvements in its operations over the years recording an increase in market capitalization of 68% in 2013 (Performance Review, GSE, 2013).

Against the backdrop that emerging economies are critical in driving the global economic growth (Global Economy Watch, 2013) and business will look beyond their home countries in order to expand their market and increase wealth, this thesis investigates from the accounting perspective the behaviour of stakeholders towards accounting information provided on the internet. Motivated by the fact that stakeholders' use of accounting information provided on corporate websites is key

to achieving the aim of reducing information asymmetry, this study examines the attitudes of stakeholders towards web-based reporting and the factors that influence such attitudes.

1.6 Scope of the Study

Although this study considers corporate internet reporting in its entirety and provides an extensive review of disclosure of information on corporate websites, the empirical evidence is limited to stakeholders of firms listed on the Ghana stock exchange. However, there may be non-listed firms engaged in internet reporting which were not considered in this study. This thesis specifically focuses on the attitudes of these stakeholders towards accounting information on corporate websites. The stakeholders considered in this research are those who could be located in Ghana, although there may be others beyond the boundaries of Ghana who were not considered.

1.7 Significance and Contributions of the Study

This thesis contributes to the literature on corporate internet reporting in several ways. First, the study extends the literature on corporate internet reporting by focusing on key behavioural issues that influence stakeholders' use of online accounting information. Specifically, the study explains stakeholders attitude towards corporate internet reporting employing technological and behavioural theories which have seldom been applied within the context of web-based disclosure research.

Second, the study extends literature that employs the technology acceptance model by examining other antecedents of peoples' attitude towards the use of online accounting information. Prior studies that adopted the technology acceptance model mostly considered the role of perceived usefulness and perceived ease of use on attitudes towards technology adoption. This study extends the existing framework within the context of technology adoption by demonstrating that other

factors such as compatibility and social influence have important implications on the attitude of individuals towards the adoption of a new technology. Specifically, this study suggests that the compatibility of online accounting information with stakeholders' needs and past experiences as well as the influence of some significant persons in the social environment are important factors that determine peoples' attitude (whether positive or negative) towards online accounting information.

From a methodological perspective, the study employs the structural equation modelling (SEM) technique which addresses some of the key limitations associated with first generation analysis techniques (e.g. principal component analysis, factor analysis, or multiple regression) which have predominantly been used in most existing studies. Apart from the fact that SEM techniques are very effective in evaluating the overall fitness of a model and structural paths involving multiple dependent variables with multi-item indicator variables (Hair, Sarstedt, Ringle, & Mena, 2012; Wong, 2013), a proper application of SEM allows researchers to deal with unobservable variables and complex models; to model relationships among multiple predictors, and statistically test a priori theoretical and measurement assumptions against empirical data.

Findings of this study have several implications for the security market, accounting practice and other stakeholders of firms in Ghana. As the study findings suggest users generally find online reporting useful and informative and hence, management could take advantage of this important platform to communicate with its stakeholders in a more timely fashion with less effort. In particular, information such as reports and agenda for the annual general meeting could be communicated via companies' websites and also when properly developed shareholders could be afforded the opportunity to follow proceedings of annual general meetings on websites. This will enhance communication between management and shareholders.

To regulators of the stock market, findings of this study also provide some valuable insights into the perception of the reporting behaviour of firms by the key stakeholders of the firms that they regulate. Given that the stakeholders of most of the sampled firms have a positive attitude towards online provision of accounting information, the regulators of listed firms such as the Security and Exchange Commission, the Ghana Stock Exchange etc. could take advantage of this positive attitudes of users to encourage or through some legislations mandate companies to increase both relational and informational capacities of their websites thereby improving transparency on the stock market.

1.8 Organization of the Study

This study is organized into five chapters. A brief explanation of each chapter is as follows:

Chapter One provides a general overview of the study and includes the background, the problem statement, research objectives, research questions, motivation for the study, the scope and significance of the study.

Chapter Two is presented in two parts. The first part presents a comprehensive review of the existing and relevant literature on corporate reporting on the web to indicate the present status of work in the area and also identify the research gap. The second part discusses the theories underpinning the study. Based on the review of the relevant theories the conceptual framework and the research hypotheses are developed in relation to the objectives of the study

Chapter Three discusses the research design employed in this study. It provides a detailed description of the various methods adopted in this study. The key constructs and their measurements are outlined. The structural equation modelling employed to analyze the data is specified.

Chapter Four discusses the key findings from this study with reference to the objectives of the study

Chapter Five finally provides a summary of the thesis, highlights the major contributions of the study and discusses the key limitations of the study. This chapter also suggests areas for future research.

CHAPTER TWO

LITERATURE REVIEW AND RESEARCH MODEL

2.1 Introduction

This chapter reviews empirical literature on corporate reporting on the internet. The first section provides an overview of corporate disclosure on the internet taking into consideration the advantages and challenges of this reporting medium. The next two sections present earlier practices and determinants of disclosing accounting information on corporate websites. Stakeholders' perception about reporting on the internet is presented next. An analysis of the first three sections is presented indicating the focus of previous studies, their contributions, and theories used. The theoretical framework for this study is also discussed outlining the theories used in this study. From the theoretical framework, the research model and hypotheses of the study are developed, followed by an overview of Ghana's stock market. Finally, conclusions are drawn by establishing the basis for this study.

2.2 Overview of Corporate Internet Reporting

This section discusses the use of the internet as a corporate communication tool as well as a source of information. It also discusses the advantages and challenges despite its increasing use.

2.2.1 Disclosure of Online Information and its Advantages

Information and communication technology has permeated through different aspects of the business environment including corporate reporting. The internet is seen as a global tool for

communication and a source of information. Thus, it provides a platform for total disclosure i.e. providing audited and non-audited information as well as financial and non-financial information and many businesses are increasingly using it as a means of communicating corporate information (AbuGhazaleh et al., 2012; Marston & Polei, 2004; Sánchez et al., 2011; Uyar, 2012). This may be attributed to the opportunities the internet provides, such as satisfying investors' demand for more forward-looking and qualitative information, increasing the volume and frequency of information and delivering information through a more convenient and easy-to-access medium (Beattie & Pratt, 2003; Chatterjee & Hawkes, 2008). With the internet, companies are able to provide investors with additional financial and non-financial information presented in different innovative ways and on a timely basis. The variations in the presentation of accounting information also influence investor decision-making (Hodge & Pronk, 2006). The use of the internet further provides equal access to information to all users both within and outside thereby reducing the information advantages of institutional investors and analysts relative to other users (Healy & Palepu, 2001). Users have access to information that meets their specific information needs. With the power of technology, potential corporate investors can take relevant and critical decisions about a company without necessarily going there in person for such information thereby reducing the cost of accessing information. From the perspective of the company, there is also a reduction in the cost of producing and distributing the corporate annual reports. Thus, Lymer (1999) summarizes the advantage of the internet for the dissemination of accounting information as less costly, fast, dynamic and flexible to use.

Compared with the traditional paper-based reporting, the internet provides more opportunities for companies to communicate corporate information to various stakeholders thereby enhancing the traditional ways of communicating to stakeholders (Marston & Polei, 2004). Consequently, the

internet provides a basis for improving communication, meeting user information demands and speeding up companies' transactions. Moreover, companies are able to highlight the positive aspects of corporate information and provide an explanation for potentially negative information (Sánchez et al., 2011). Not only do companies improve their corporate image but also obtain competitive advantages by improving both the quantity and quality of the information provided (Ashbaugh et al., 1999; Bonsón & Escobar, 2006). This means that the internet has come to improve corporate communication given that the people who manage the affairs of a company (management) are separate from the owners; management is able to satisfy to a large extent the information needs of owners.

With the separation of ownership from the management of a company, agency issues arise as a result of the fact that owners are usually not sure if decisions taken by these managers are to their benefit. Increased disclosure, according to the literature, reduces this problem of information asymmetry thereby reducing the cost of capital (Ojah & Mokoaleli-Mokoteli, 2012). The internet, thus, provides the medium for increased disclosure or total disclosure of financial and non-financial information which may be in the form of audited or non-audited information. Small businesses are not left out, as the use of the internet may also improve their business reporting practices, attract both domestic and foreign investors and contribute to economic growth. Notwithstanding its benefits, there are some limitations to the use of the internet for reporting purposes and relying on such information. The next section discusses some of these challenges.

2.2.2 Challenges and Limitations of Corporate Reporting on the Internet

Despite its growing use for business reporting, there are some limitations to the use of the internet for corporate reporting such as reliability, the integrity of reports and selective reporting (Uyar, 2012). To date, there are few mandatory guidelines or standards prescribing the content and presentation of financial and non-financial information on the websites of corporate entities. As a result, companies involved in internet reporting do so voluntarily by choosing the amount and quality of information they provide. Thus, corporate internet reporting is done at the discretion of management (Kelton & Yang, 2008). This may result in companies withholding some information that may be important to the decisions of stakeholders. Consequently, companies may highlight information that will benefit them and hide bad information. The issue of content differences across companies also poses a problem due to the non-regulatory and voluntary nature of internet reporting. It may make it difficult for users to do a comparative analysis of information from different companies and across countries since there is virtually no standard reporting format and content.

While some information on the internet is audited, others are not and this poses a challenge to the reliability of web information (Uyar, 2012). This is so because according to Khadaroo (2005), auditors have little control over the contents and changes that can be made to audited information on the internet. Again, accounting information on the internet can be accessed easily and modified by users (Fisher et al., 2004). Apart from the modification of information, (Ettredge et al., 2001) further posits that companies that have received modifications to their audit report were more likely to omit it entirely from their webpage. Lymer & Debreceny (2003) suggest that the challenges of accounting information on the web have significant implications for the auditing profession in terms of the nature of auditing and the auditors' responsibilities.

Ojah & Mokoaleli-Mokoteli (2012) further note that the internet is more accessible to sophisticated current and potential stakeholders than to the general public, which can have consequences on the efficiency of the securities market. The implication is that diffusion of and access to technology is critical to the success of corporate internet reporting and there is the need for users to be technologically sophisticated. It, therefore, becomes a challenge when only a few people have access to and can actually access corporate web information. This challenge is more pronounced especially in the developing economies where internet penetration is relatively low. In spite of these challenges, the internet has changed the way business is conducted by giving businesses a worldwide audience. Developing economies can take advantage of this technology to boost their image and attract more foreign and local investors and also contribute to global economic growth.

2.3 Early Studies on Internet Reporting Practices

Corporate internet reporting has gained much attention in academic research due to how information technology is influencing business activities and reporting. The rapid development of technology, specifically the internet, requires both internal and external accounting to change to meet the demand of the reporting environment and transform corporate reporting (Elliot, 1992; Xiao, Yang, & Chow, 2004). Though the internet has existed since the 1960s, it was not until the late 1990s that businesses started using it for commercial and reporting purposes (Lymer, 1999). Since then empirical studies have been undertaken to examine companies' internet reporting practices in terms of the amount of information provided and the way in which it is provided. Earlier studies mostly undertaken towards the end of the 1990s were in the developed countries (such as US, UK, Australia, Canada and Germany) where most companies had websites and used

them mainly as an advertising medium and sometimes for financial reporting purposes (Allam & Lymer, 2003). Later, obtaining competitive advantage became the key feature to the use of the internet. (Bonsón & Escobar, 2006).

Empirical literature suggests that most earlier studies were predominantly descriptive in nature. These studies focused mostly on whether companies had websites, the kinds of accounting information provided and the reporting formats (Abdelsalam & Street, 2007; Ettredge et al., 2001; Xiao et al., 2004). These studies found that about 70% to 90% of companies surveyed had websites and used them for investor relations activities as well as for financial reporting. The findings from these surveys showed there were substantial variations in the level of corporate internet reporting among companies and across countries. Corporate information was presented in different formats such as PDF, HTML, and XBRL. While some companies provided comprehensive accounting and other financial and non-financial information, others provided little corporate information on their websites.

From the studies, some of the issues reported on corporate websites included annual financial statements with audit reports for present and past years, quarterly and semi-annual reports, share prices, press releases, corporate governance issues, social and environmental reports among others. Companies that disclosed little information on their websites mostly provided summaries or highlights of their financial information (Craven & Marston, 1999). Ashbaugh et al., (1999) noted that while some companies restricted their websites to online commerce, others disclosed information to enhance their corporate image. An interview conducted as part of the study of Ettredge et al., (2001) indicates that some companies were involved in corporate internet reporting in order not to be perceived as primitive relative to industry peers. Xiao et al., (2004) also noted

that the presentation format of information provided on corporate websites was not considered as important as the content of the information provided.

Besides, studies also found that larger and more profitable companies provided more financial information on their websites than smaller ones. Consequently, they found a positive relationship between company size and online reporting (Ashbaugh et al., 1999; Craven & Marston, 1999; Ettredge et al., 2001;). This implies that smaller firms which did not have larger distribution networks and the audience did not engage their stakeholders much via this medium. However, with the benefits of corporate internet reporting, they could easily imitate the large companies that had been successful in this area of reporting.

In conclusion, earlier studies show that companies that used the internet for corporate communication reported information already contained in the paper-based reports. Additional information was provided by some companies to enhance their corporate image. It was also found that companies that practised corporate internet reporting were larger companies.

2.4 Factors Influencing Corporate Reporting on the Internet

Some studies have also focused on firm-specific characteristics that influenced the adoption and use of the internet for corporate reporting. Factors such as firm size, profitability, leverage, liquidity, industry type, auditor type (big four auditing firms), foreign listing as well as corporate governance attributes (e.g. board size, board independence, CEO/Chairman duality etc.) have been examined thoroughly in prior research (AbuGhazaleh et al., 2012; Aly et al., 2010; Bonsón & Escobar, 2006; Debreceny et al., 2002; Oyelere et al., 2003; Uyar, 2012). There have, however, been mixed results from these studies, especially between advanced and developing economies.

Results may therefore not be generalizable to countries at different developmental stages. Moreover, the dynamic nature of information technology, developments in internet related technologies as well as the increasing demands for information could change the nature, extent, and the amount of information provided on corporate websites. There is, therefore, the need for continuous empirical studies on the subject.

For instance, while Oyelere et al., (2003) indicate that there is no significant relationship between internet reporting and foreign listing, Debreceny et al., (2002) found that there is a significant relationship. Aly et al., (2010) undertaking a study in Egypt (a developing country) found profitability, foreign listing and industry type to be significantly correlated to internet reporting. Most studies including that of Uyar (2012) from Turkey have similar findings to attest that there is no significant relationship between corporate internet reporting and profitability, foreign listing, industry type and the level of technology. While some studies suggest that there is no significant relationship between internet reporting and the level of technology, Debreceny et al., (2002) indicate that the level of technology and disclosure environment are associated with the format of reporting but not the content. This study analyzes firm-specific and environmental variables (such as internet penetration measured by the level of technology) for 660 large companies across 22 countries. Despite the variations in the content of information provided on their websites, companies that are more technologically inclined may use more sophisticated technology to present corporate information than those that are not. Marston & Polei (2004) note that the size of a company may have a positive relationship with the amount of information reported on corporate websites, the presentation format of such information is not determined by the size. They further explain that presentation features have a lower impact on the usefulness of the information provided.

Generally, company size has been identified as one of the key determinants of the corporate voluntary disclosure. Most studies have found that there is a significant relationship between the size of a company and its internet reporting practice (e.g. Ashbaugh et al., 1999; Boubaker et al., 2012; Debreceny et al., 2002; Marston & Polei, 2004; Oyelere et al., 2003). Despite other variables being used to determine the amount of information disclosed on the websites of German companies, Marston & Polei (2004) found the only firm size to be significantly related to it. However, some studies from a developing economy context show that not all large companies use the internet (AbuGhazaleh et al., 2012; Aly et al., 2010). While Aly et al. (2010) found no association between firm size and internet reporting for Egyptian listed firms, AbuGhazaleh et al. (2012) also noted through the use of interviews that not all large listed companies in Jordan disclose corporate financial information on their websites. They note that managers perceive users will not be interested in online information. The above discussions indicate that undertaking corporate internet reporting research in an environment that is still developing and has restricted technological advancement could produce different results. Perceptions about this reporting practice could drive its adoption and use in a different direction.

Some other studies have also considered corporate reporting on the internet from the technological perspective i.e. the way in which online information is presented. Such studies have explained corporate internet reporting by examining the different presentation formats (PDF, HTML and XBRL) as well as another website features such as hyperlink, navigational flexibility, audio and video files, internal search engines among others (Bozcuk, 2012; Debreceny et al., 2002; Kelton & Pennington, 2012). The conclusion is that internet penetration (the level of technology) has an effect on the way financial information is presented on the corporate website (presentation format). Moreover, the presentation format does not have an effect on the overall judgment of a decision

maker and that it only makes his decision making much easier. The implication of such findings is that there is the need for users to be sophisticated in the use of technology to be able to enjoy the full benefits of corporate internet information and make investment decisions less complicated.

2.5 Perceptions about Corporate Internet Reporting

Little attention has been given to the perceptions and attitudes of stakeholders especially from the context of developing economies where diffusion and accessibility to technology are restricted. Though subjective, literature on technology suggest that users' perception is a key determinant of technology usage and that people will often want to have some knowledge of technology which informs their attitude towards its use and actual use (Adams, Nelson, & Todd, 1992; Davis, Bagozzi, & Warshaw, 1989; Davis, 1989; Moore & Benbasat, 1991). Thus, system usage is attributed to a positive attitude towards it by users. Understanding the attitudes and preferences of stakeholders towards corporate internet reporting can provide valuable insight into the provision and use of this reporting medium. Ghani, Laswad, & Tooley (2010) found that the perceptions of users about three reporting formats influenced their actual use. This means that the perceptions of stakeholders about corporate internet reporting could influence their attitude towards its adoption and use. However, there has been little research into the attitudes and preferences of stakeholders which could have implications for the direction of corporate internet reporting. Ettredge et al. (2001) noted that the provision of financial information on the internet is mostly guided by users' acceptability and use.

Studies have shown that stakeholders hold different perceptions and attitudes towards the various aspects of corporate internet reporting. Beattie & Pratt (2003) report that preparers, users and

auditors hold different views on the usefulness of different navigation and search aids and preferences for reporting formats. Despite these differences, there is consensus on the kinds of additional information to be provided on corporate websites. Ghani et al. (2010) also examined users' perception about three digital reporting formats (PDF, HTML, and XBRL). Though this study focused on only users, they found that users' perceptions of the usefulness of these reporting formats differed significantly but they had similar perceptions about their ease of use. They established that users' perceptions though different influenced their preferred reporting format. These findings are similar to that of Hodge & Pronk (2006) who found that professional and non-professional users have different preferences for the reporting formats. This indicates that stakeholders may have different perceptions about internet reporting in general. These differences in their perceptions could have some implications for the effectiveness, efficiency and reliability of internet reporting practices in organizations.

Other studies into the perceptions of stakeholders about internet reporting have indicated that there are some external variables that influence the perceived usefulness and ease of use of a technology. Al-Htaybat, Von Alberti-Alhtaybat, & Hutaibat (2011) found that users' perceived usefulness and perceived ease of use of internet reporting in Jordan is influenced by education, knowledge about the technology and cost. A further study from the perspective of preparers, in Jordan, found that though they perceive the internet to provide a better platform for corporate reporting, some did not find it necessary as they perceived that the Jordanian community was not ready to source for accounting information from the corporate website. This perception has an implication on the perceived use of internet reporting. Thus, companies that provided financial information on their corporate websites did so because it is a trend in the industry and not because it is particularly useful to do so. However, Legris, Ingham, & Collerette (2003) note that such external variables

contribute little to the explanation of the variance in system use. Flanagin (2000) also sought to find factors influencing the adoption of organizational websites and found that social pressures are significant in companies' decision to develop a website. Thus, the social environment plays a role in the use of technology.

Results from these studies show that while there is growing literature on the content, presentation and determinants of corporate information on the internet, the perceptions of stakeholders about this form of corporate disclosure which could have implications for its use, effectiveness and reliability are rarely addressed. The few that have done so (as indicated from preceding discussions) focused on the online needs of users, preferred reporting formats and their effect on decision-making. These studies have not extensively discussed whether the attitudes and preferences of these stakeholders are influenced by their perceptions about them which are likely to impact the direction of corporate internet reporting. AbuGhazaleh et al. (2012) note that regardless of the fact that companies may have established websites and even provide some financial information, their perceptions of usefulness and usability may differ significantly. This creates a gap in the literature which needs to be addressed.

2.6 Analysis of Literature

The review of the literature shows that despite the growing use of the internet for corporate reporting, there are significant variations in the practices. While developed countries have the more advanced technology and their reporting practices increased over time, developing countries seem to be lurking behind. One key finding that seems to run across countries is that company size appears to be positively related to the level of internet reporting of a country. Thus, larger

companies are more likely to engage in internet reporting practices than smaller ones. Developing countries, though gradually catching up on this reporting medium, do not have highly efficient stock markets and large companies on these markets may not be as large as those found in the developed stock markets.

Furthermore, academic research into corporate internet reporting in developing economies is still in its infancy (Arussi et al., 2009; Khadaroo, 2005) while diffusion and access to technology are also restricted. This raises issues of perceived usefulness, effectiveness and reliability of corporate financial information on companies' websites which according to Abdelsalam & Street (2007) vary greatly among stakeholders even in the developed countries. Such issues may be more pronounced in developing economies where there is little awareness of how the internet is used to disseminate corporate financial and non-financial information (Alali & Romero, 2012). While 80% and more of the population in advanced countries have access to and actually use the internet, less than 50% of the population in developing countries have access to the internet, with sub-Saharan Africa having the lowest internet penetration of 28.3% (Internet World Statistics, 2017).

Additionally, technology is dynamic and this could change the nature and extent of corporate internet reporting. Unlike the developed countries where companies have to register their financial information through systems such as the Electronic Data Gathering, Analysis and Retrieval (EDGAR) for US-listed companies and the System for Electronic Document Analysis and Retrieval for Canadian companies (SEDAR) before uploading them online (meaning they are to some extent regulated), most African stock markets such as the Ghana Stock Exchange do not have guidelines for providing online information hence the variations may be more pronounced. Therefore, there is the need for more studies into corporate internet reporting from such perspective given the fact that the dynamic nature of the internet could change the reporting practice and also

determine the direction of this reporting medium. Besides, stakeholders' perception and attitude could vary greatly.

2.7 Theoretical Framework for the Study

Most studies on corporate internet reporting or internet financial reporting provide little theoretical and conceptual underpinning for their analysis. As indicated earlier, studies have mostly used voluntary disclosure theories such as agency, signalling and cost-benefit theories to explain internet reporting. These theories have explained voluntary disclosure in the traditional paper-based reporting. However, Oyelere et al., (2003) indicate that the reporting environment for internet reporting differs from the traditional paper-based reporting hence findings may vary. Thus, the uncertainty of this reporting environment goes beyond the factors considered by the voluntary disclosure theories.

Besides, most studies on perceptions about technology do not consider non-technological factors. Such factors like social, cultural, legislation and institutional factors, competition as well as demographics are all important in determining their acceptance, usefulness, effectiveness, and reliability (Aly et al., 2010; Sánchez et al., 2011; Xiao, Jones, & Lymer, 2005). This section, therefore, identifies theories that will broaden the scope of analysis of stakeholders' attitudes towards disclosure of accounting information on corporate websites. To this end, the conceptual framework of this study is established on the basis of two theories; the technology acceptance model and the innovation diffusion theory. These theories will help explain human behaviour in the adoption and use of information technology.

2.7.1 The Technology Acceptance Model

The success or failure of information technology is mostly dependent on users' acceptance. This implies that user acceptance measures are critical for systems designers who would like to assess user demand for new designs and for managers who would like to evaluate these designs. Generally, studies show that the internet has become an acceptable medium of communication of corporate information to various stakeholders. However, not all companies use this medium of communication for corporate reporting especially in developing economies (AbuGhazaleh et al., 2012).

The technology acceptance model is a widely accepted model that has been found to explain at least 40% of the variance in user acceptance and use of technology (Legris et al., 2003; Park, 2009; Turner, Kitchenham, Brereton, Charters, & Budgen, 2010; Venkatesh & Davis, 2000). Developed as an extension of the theory of reasoned action, the technology acceptance model provides a basis to explain and predict the behaviour of people in the acceptance and use of a particular technology. The theory of reasoned action developed by Fishbein & Ajzen (1975) - is a social psychology theory that provides a framework for understanding human behaviour. It is a theory that has been proven to be successful in predicting and explaining human behaviour across a wide variety of disciplines (Chen, Gillenson, & Sherrell, 2002). The underlying assumption of this theory is that a person's behaviour is determined by their attitude and subjective norms (Fishbein & Ajzen, 1975). Thus, peoples' actions are determined by their positive or negative evaluation of the act as well as perceptions of social pressures to perform or not to perform a particular action.

While the theory of reasoned action sought to explain any human behaviour, Davis (1989) developed the technology acceptance model to explain and predict in particular the determinants of technology adoption and use. Thus, the model seeks to guide research and practice in the acceptance and use of particular technologies. It posits that perceived usefulness and perceived ease of use are the two main determinants of system use. Davis (1989) explained that perceived usefulness is the extent to which a person believes that using a particular technology will enhance job performance. Thus, a person holds the belief that there is a positive relationship between performance and the use of a particular system. They further define perceived ease of use as the degree to which a person believes that it is easier to use a particular technology compared to other systems in performing the same functions (i.e. the use of a system is free from the effort). Though they are all primary determinants of use of a system, Davis (1989) found that perceived usefulness has a stronger link with usage than perceived ease of use. This means that a user may be willing to cope with a system that may be difficult to use but enables them to perform their needed functions. However, no matter how easy it is to use a system if it does not provide any useful function in with its acceptance and use will be difficult.

The model (as shown in Fig 1 below) indicates that the actual use of a particular system is determined by an individual's behavioural intention to use, which is in turn influenced by his or her attitude towards its use. The model further hypothesizes that a positive attitude towards the use of a system is determined by an individual's perceived usefulness and perceived ease of use. Thus, the factors that determine individuals' use of a technology (and for that matter the constructs of the model) are their behavioural intentions, attitude towards use, perceived usefulness and perceived ease of use. Davis (1989) notes that there are some external variables that affect the behavioural intentions and actual usage of the system through the perceived usefulness and

perceived ease of use. However, according to Legris et al. (2003), such external variables are fully mediated by perceived usefulness and perceived ease of use. Hence, the addition of such variables contributes marginally to the explanation of the variance in system use. These external variables only provide a better understanding of what influences perceived usefulness and perceived ease of use.

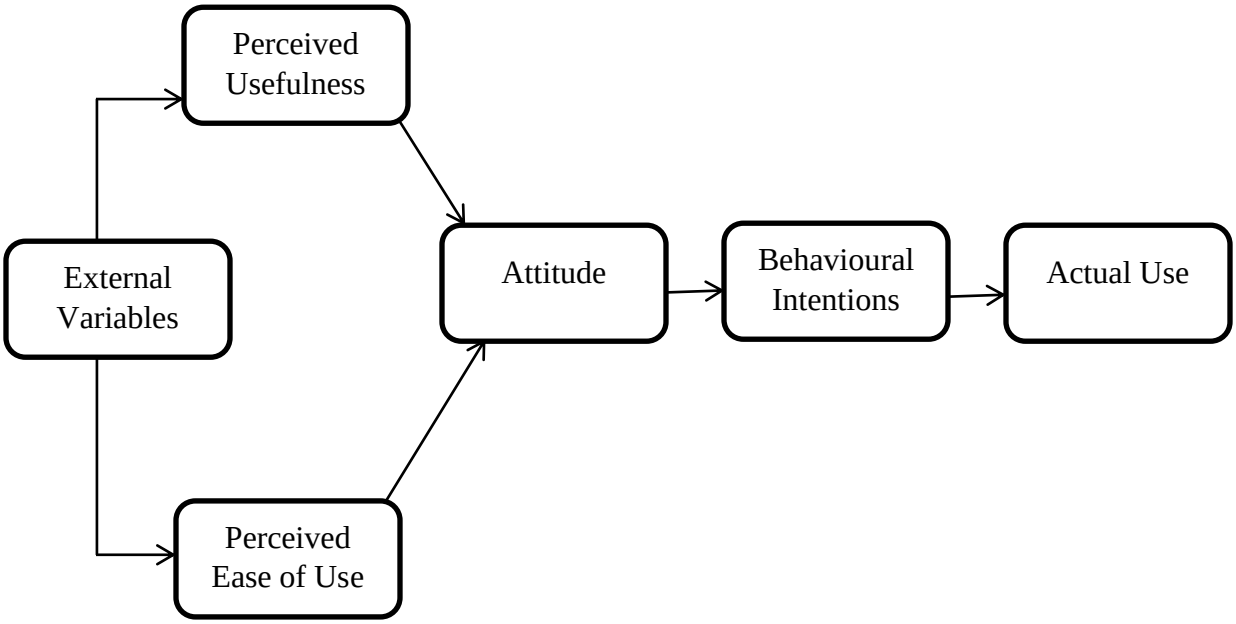

Fig 1: Technology Acceptance Model (Davies, 1989)

The technology acceptance model has been widely applied in several academic disciplines concerning the use of various technologies (Chen et al., 2002; Ngadiman, Pambudi, Kusuma Wardani, & Sabandi, 2014; Tung, Chang, & Chou, 2008). Some studies have indicated that it is widely used because it is robust, explains more variance in attitude, and is a parsimonious model for predicting user technology acceptance (Legris et al., 2003; Turner et al., 2010; Venkatesh & Davis, 2000).

Despite its wide use as a useful tool in predicting behavioural intentions and actual use of a system across various research fields, the technology acceptance model has also evolved over time and has also been criticized for not including some factors that may lead to an increase in its predictive abilities. In this regard, some researchers have sought to extend the original model to include some constructs such as subjective norms or social influence (Venkatesh & Davis, 2000), while others have formulated a unified model, the unified theory of acceptance and use of technology by Venkatesh, Morris, Davis, & Davis (2003). Some other studies have combined the model with other theories relevant to their study area to explain the use of a particular technology (Chen et al., 2002; Giovanis, Binioris, & Polychronopoulos, 2012; Tung et al., 2008; Vijayasarathy, 2004). For instance, Venkatesh & Davis (2000) in their development of the technology acceptance model 2 dropped the attitude towards use in the original technology acceptance model which was mediated through the perceived usefulness and perceived ease of use and included a variable that measured social influence through the mediating effect of the perceived usefulness. They confirmed that social pressures (as included in the theory of reasoned action) also have an effect on people's acceptance of the technology. More innovative is the unified theory of acceptance and use of the technology also developed to bring together all theories that seek to explain user acceptance of the technology. This theory was developed on the basis of the technology acceptance model by replacing the perceived usefulness and perceived ease of use constructs with performance expectancy and effort expectancy respectively and introducing the facilitating condition construct as a determinant of behavioural intentions.

Regardless of these modifications and criticisms, a number of studies have also indicated that the technology acceptance model still remains a strong basis for predicting and explaining attitudes, behavioural intention and actual usage of technology (Holden & Karsh, 2010; King & He, 2006;

Legris et al., 2003; Park, 2009; Schepers & Wetzels, 2007a; Turner et al., 2010; Venkatesh & Davis, 2000). Therefore, using it as a basis for this study is not out of place and will provide a theoretical paradigm that can explain the use of the internet for the disclosure and use of accounting information on corporate websites for investment decision-making. Thus, the perceptions that stakeholders have about internet reporting could affect their attitude towards its use and this may have some implications for corporate reporting.

2.7.2 The Innovation Diffusion Theory

Another theory that has been widely used in technology adoption research is the innovation diffusion theory. Proposed by Rogers (1983), the theory seeks to explain user-adoption and decision-making process within a particular social context. It indicates that the adoption or rejection of an innovation or idea is usually based on the attributes as perceived by the stakeholders involved. Rogers (1983) further indicates that there is some level of uncertainty and perceived risk in the diffusion process because of the newness of an idea or innovation and the way to reduce these risks is by acquiring information through the social system. Thus, the innovation diffusion theory involves the communication of some innovation through certain channels over time among members of a particular social system (Rogers, 1983). The theory further notes that the communication of an innovation (technology) is characterized by five significant attributes that seek to explain the rate at which different people adopt or reject an innovation.

The five attributes are relative advantage, compatibility, complexity, trialability and observability. The implication is that innovations (such as technology) that are perceived as having higher traits of these characteristics will be adopted more rapidly. The five attributes are briefly explained as follows:

Relative Advantage is the degree to which an innovation is perceived as better than the idea it supersedes. Thus, the perceived relative advantage of an innovation is positively related to its rate of adoption.

Compatibility is the degree to which an innovation is perceived to comply with existing values, past experiences and needs of potential adopters. This implies that to make an innovation more compatible, users should be able to position it relative to previous ideas.

Complexity is the degree to which an innovation is perceived as relatively difficult to understand or use. Thus, the higher the perceived difficulty of using an innovation, the lower the rate of its adoption.

Trialability is the degree to which an innovation may be experimented with by non-experts. Rogers (1983) further notes that the trialability of an innovation as perceived by members of a social system is positively related to its rate of adoption.

Observability is the degree to which the results of an innovation are visible to all.

While Moore & Benbasat (1991) indicate that the perceived attributes of an innovation rather than the perception of the innovation itself influences its adoption, Holden & Karsh (2010) also posit that perceptions of an innovation determine its usage. Agarwal & Prasad (1997) found that though the attributes do explain about 49% of the variance in user adoption, only relative advantage, complexity and compatibility are consistently related to the adoption process. Subsequently, some studies that have used the innovation diffusion theory to examine the adoption and use of some technology have confirmed this assertion (Brown, Cajee, Davies, & Stroebel, 2003; Chen et al., 2002; Flanagin, 2000; Lee, Hsieh, & Hsu, 2011; Wu & Wang, 2005).

2.7.3 The Relationship between the Technology Acceptance Model and the Innovation Diffusion Theory

This study combines the two theories to explain stakeholders' acceptance and use of online accounting information. Prior studies have noted that the technology acceptance model and the innovation diffusion theory are similar in constructs and to some extent supplement each other. The perceived usefulness and the perceived ease of use in the technology acceptance model have been found to be similar to the relative advantage and complexity in the innovation diffusion theory (Moore & Benbasat, 1991). This further enhances the reliability and validity of these theories and their application to research studies.

While the innovation diffusion theory indicates whether there is a favourable or unfavourable attitude towards an innovation, technology acceptance model provides theoretical linkages among its constructs (Chen et al., 2002). Both theories have been criticized for not including certain key constructs in their framework. For instance, while the innovation diffusion theory has been criticized for not providing how attitude evolves into acceptance or rejection decisions, the technology acceptance model has also been criticized for not including social influence on user acceptance.

Social influence has been regarded as also important in predicting and explaining the use of technology. Studies in human behaviour have found that people adapt their behaviour and attitude to their social context. In organizational settings, institutions model their behaviour around other organizations they perceive to be successful (Flanagin, 2000). Results from some studies show

that there is a positive relationship between social influence and attitude towards the use of a particular technology (Lu, Yao, & Yu, 2005; Venkatesh & Davis, 2000; Yang, Lu, Gupta, Cao, & Zhang, 2012). Apart from it being a robust model in predicting and explaining the adoption and use of technology, it also has the potential for wider applicability (King & He, 2006).

One other key construct that is not studied in the technology acceptance model is compatibility. This construct is an innovation diffusion attribute which indicates that the greater the compatibility between peoples' needs and an innovation, the higher the rate of its adoption. Thus, greater compatibility means that an innovation is communicated in a more familiar context (Lu et al., 2005) leading to a more positive attitude towards it (Vijayasarathy, 2004).

While these two theories are useful in explaining the attitudes of stakeholders towards web-based reporting, the attitude of stakeholders can also be viewed from the lenses of the information asymmetry theory. From the perspective of the Information Asymmetry Theory, it is expected that disclosure of accounting information on companies' website should result in greater disclosure than would otherwise be from only the traditional paper-based system of disclosure. This presupposes that online disclosure of accounting information could be a useful channel for reducing information asymmetry between management and stakeholders in a form of greater disclosure. To the extent that online disclosure of accounting information reduces information asymmetry, it should create a positive attitude of various stakeholders towards web-based reporting. Thus, apart from the technology acceptance model and the innovation diffusion theory, the information asymmetry theory is also relevant in explaining the attitude of stakeholders towards web-based reporting.

2.8 Research Framework and Hypotheses Development

This section discusses the conceptual framework and based on the framework the hypotheses for this study are developed.

2.8.1 The Research Framework

Based on the technology acceptance model, the conceptual framework of this study posits that stakeholders' adoption and use of accounting information on corporate websites is a function of their behavioural beliefs and attitudes. Despite its usefulness in predicting and explaining the use of technology, Legris et al. (2003) suggest that the technology acceptance model could be integrated with other theories in order to improve its explanatory power. The study, therefore, synthesizes the technology acceptance model and the innovation diffusion theory to provide a better explanation of stakeholders' use of accounting information on corporate websites. The relationship between these theories is complementary. While the technology acceptance model provides theoretical linkages among beliefs, attitudes, intentions and actions, the innovation diffusion theory predicts attitudes towards the adoption of an innovation. The framework of this study, therefore, is developed by adapting two important constructs (compatibility and social pressure) to extend the technology acceptance model. Consequently, the conceptual framework for this study is provided in Fig 2.

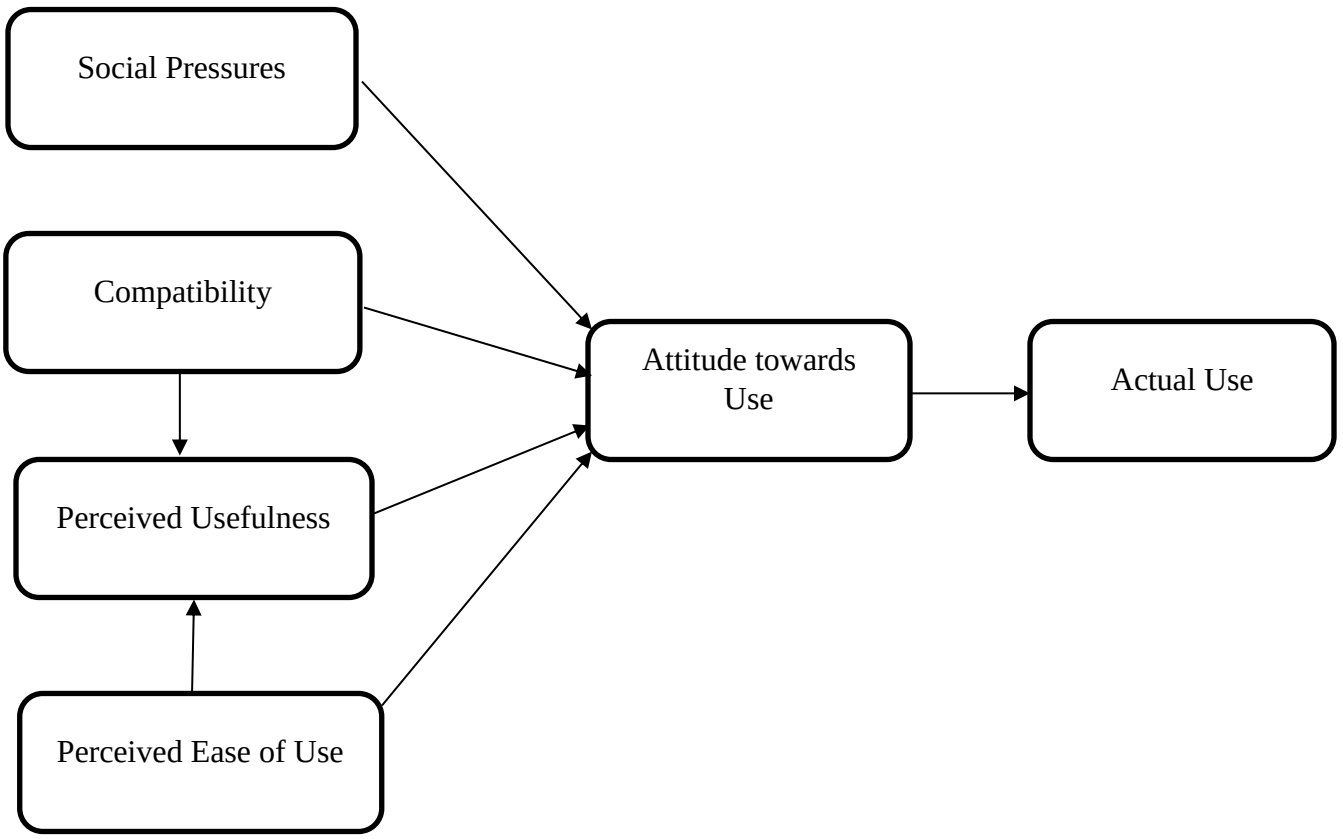

Fig 2. The Proposed Research Model

From the proposed research model, the actual use of accounting information on corporate websites is posited to be influenced by stakeholders' attitudes towards it. Attitudes towards the use of online accounting information refer to stakeholders' positive or negative evaluation of it. Perceived usefulness and perceived ease of use are expected to directly influence stakeholders' attitude towards online accounting information. When stakeholders perceive online accounting

information as useful and easy to use, they are likely to form a positive attitude towards it and eventually use it. In addition, stakeholders' perceived ease of use of accounting information on corporate websites is proposed to have a direct impact on their perceptions about its usefulness. Davis (1993), on the other hand, explains that the reverse is not true since the technology that is perceived to be difficult to use may not be used by potential users no matter how useful it is perceived to be.

From the innovation diffusion theory, potential users are likely to adopt a new technology if it is compatible with their needs, preferences and past experiences. Accordingly, if the technology is compatible with their needs in one way or the other, they may use it. The model, therefore, proposes that compatibility will directly influence both attitude and perceived usefulness. The research framework further posits that stakeholders' attitude towards online accounting information is directly affected by social influence. Table 2.1 provides an explanation of each construct as used in the framework and the sources from which they were adapted for the study.

Table 2.1 Brief Definition of Constructs

Constructs	Definition	Source
Actual Use	The provision and use of accounting information on corporate websites.	Davis et al, 1989
Attitude towards Use	Stakeholders' evaluation and judgment (whether positive or negative) of accounting information on corporate websites	Davis, 1989; Venkatesh et al, 2003
Perceived Usefulness	The extent to which stakeholders believe that accounting information on corporate websites will provide adequate information, facilitate investment and other decision making and enhance communication	Davis, 1989; Rogers, 1995
Perceived Ease of Use	The extent to which stakeholders believe that the use of accounting information on the corporate website is easy to use and free from effort.	Davis, 1989; Rogers, 1995; Vijayasarathy, 2004
Compatibility	The extent to which stakeholders believe that accounting information on corporate websites suits their values, needs and past experiences.	Rogers, 1995
Social Pressures	the extent to which stakeholders believe that other people or institutions they perceive to be important approve or disapprove of their use of accounting information on corporate websites thereby improving their social status	Moore & Benbasat, 1991; Venkatesh & Davis, 2000

2.8.2 Hypotheses Development

This section provides details of the key hypotheses of the study based on the research framework as shown in Fig 2. Having been predominantly employed in many existing studies to explain user behaviour across a wide range of end-user technologies in different context (Schepers & Wetzels, 2007; Teo, 2011), this study also relies on the technology acceptance model to explain the relationship among perceived usefulness, perceived ease of use, attitude towards use and actual use of online accounting information as depicted in the framework of the study. Further, the innovation diffusion theory is also employed to explain the influence of two constructs (social pressure and compatibility) of online accounting information usage. On the basis of the research framework and the theories, seven different hypotheses are developed as follows:

2.8.2.1 Attitude towards Use and Actual Use

From a theoretical perspective, the relationship between the attitude of an individual and his/her behaviour is well established. The technology acceptance model, for instance, predicts that attitude which describes a person's beliefs about a behaviour has important implications for the individual's behaviour. According to Teo (2011), an individual's attitude is a reflection of that individual's feelings (be it positive or negative) about performing the target behaviour or object. It represents a person's positive or negative evaluation about undertaking a specific behaviour. A favourable attitude is therefore determined by a person's positive evaluation of an action which in turn influences the decision to perform that function. Empirically, the relationship between attitude and use or acceptance of technology within the technology acceptance model framework appears mixed. Some earlier studies for instance found the predictive value of attitude in explaining users' acceptance of technology to be mild by concluding that regardless of a person's attitude toward technology, an individual may use a technology as long as it is perceived to be useful and capable of enhancing their productivity Davis et al (1989).

However, evidence in most emerging studies clearly suggests that attitude is an important predictor of technology used most especially in situations where technology use is voluntary (Teo & Noyes, 2011). Most of these studies according to Legris et al. (2003) also demonstrate a good degree of reliability. Lin (2011) for instance document a positive and highly significant relationship between attitudes towards mobile banking technology and the decision to use it. Similarly, Chen et al. (2002) also conclude that consumers who have more positive attitudes towards virtual stores are more likely to adopt and use it. Thus, a positive attitude towards corporate internet reporting may positively affect its use. It is therefore hypothesized that:

H_1 Stakeholders' attitude towards the use of online accounting information positively affects their actual use of it

2.8.2.2 Compatibility and Attitude towards Use

Proponents of the innovation diffusion theory argue that the adoption of an innovation is largely dependent on three important factors; relative advantage, complexity and compatibility (Moore & Benbasat, 1991). Within the technology acceptance model, however, perceived usefulness and perceived ease of use are considered to be essentially the same as relative advantage and complexity respectively. By implication, although both theories complement each other, the inclusion of the construct "compatibility" in the innovation diffusion theory constitutes one of the major differences between these two theories.

Compatibility, according to Rogers (1983), refers to the degree to which an innovation fits with the existing values, previous practices and current needs of potential adopter's. From a technology adoption perspective, users are more likely to consider the adoption of a new technology if they find it compatible with their needs in one way or the other. On the other hand, when a technology is recognized to be incompatible, the willingness to adopt is likely to be low as some effort may be required on the part of the potential user to adjust, which may discourage them from adopting such a technology (Low, Chen, & Wu, 2011). Due to its importance in explaining the attitude of people towards the adoption of a technology, it has been incorporated in many existing studies that examine the attitudes of people towards technology adoption.

Chen et al., (2002) for instance combined the technology acceptance model and the innovation diffusion theory to explain consumers' use of a virtual store and conclude that consumers' attitudes towards using virtual stores are significantly determined by compatibility. Vijayasarathy (2004) in a similar study found compatibility to be a significant predictor of consumer attitude towards

online shopping. Within the healthcare sector, Tung et al (2005) also document that the higher the compatibility of electronic logistics information systems with nurses' needs, the more positive their attitude towards it. Wu & Wang (2005) also examined the determinants of users' acceptance of mobile commerce and found compatibility to be significant and positively associated with their use of mobile commerce. Giovanis et al (2012) examined customers' acceptance of internet banking and found compatibility to be a key factor in influencing customers' acceptance and use of internet banking.

Results of the above studies clearly demonstrate that technologies that are perceived to be compatible with users' needs, experiences and working styles in some shape or form are likely to generate feelings of familiarity which will increase their rate of adoption (Chen et al., 2002). Specific to this study, it is argued that the extent to which stakeholders believe that accounting information on corporate websites suits their information needs, working styles and past experiences may have some implications on their attitude towards online accounting information use. Hence it is hypothesized that:

H_2 The compatibility between stakeholders' use of online accounting information and their values, past experiences and needs positively affect their attitudes towards its use

Some studies have also found that there is a link between compatibility and perceived usefulness (Chen et al., 2002; Chen, Yen, & Chen, 2009; Giovanis et al., 2012; Wu & Wang, 2005). This study, therefore, expects that stakeholders who perceive online accounting information as compatible with their working styles and experiences are likely to have a positive attitude towards it.

H_3 ***The compatibility between stakeholders' use of online accounting information and their values, past experiences and needs positively affect their perceptions about its usefulness***

2.8.2.3 Social Pressure and Attitude towards Use

The attitudes of individuals to some extent are also influenced by their interaction with the immediate society. As suggested by Lewis et al., (2003), an individual's attitude, behaviour and perceptions are affected significantly by the information he or she receives from the social environment. Social influence has been defined as the perceived pressures from social networks to make or not to make a certain behavioural decision (Lu et al., 2005). It has also been explained in terms of one's perception of how others will assess a specific individual's behaviour (Ajzen & Fishbein, 1975; Venkatesh, Morris, Davis, & Davis, 2003). Taken together, social influence thus refers to the extent to which an individual perceives the relevance of his/her significant other's consent pertaining to the adoption of a particular technology (Arteaga Sánchez, Cortijo, & Javed, 2014). Indeed a number of studies demonstrate that social influence has an impact on individual behaviour and particularly relevant in motivating people to use a technological system (Legris et al., 2003; Schepers & Wetzels, 2007a; Venkatesh & Davis, 2000; Venkatesh et al., 2003). Social influence is therefore viewed to be relevant in the adoption of a technology for use by individuals.

A common explanation is that people tend to use social network consultations to reduce some form of anxiety that may arise as a result of uncertainties around the adoption and use of a technology. As Lu et al. (2005) point out, there is usually some form of uncertainties about the expected outcome of an innovation or technology for potential adopters. Potential adopters who may be uncomfortable with such uncertainties will tend to rely on social network ties to aid the adoption decisions. Thus, an important assumption from the social pressure hypothesis is that people tend

to rely on social networks to gain insights into the uncertainties surrounding the use of a new idea, innovation or technology. From the perspective of the innovation diffusion literature, therefore, social pressure is considered as an important construct that influences the attitude of individuals towards technology adoption and usage.

Empirically, a number of technology acceptance related studies have examined the influence of social pressure in their analytical framework. Yang et al (2012) found that social influences are critical in examining the adoption and use of mobile payment services. By integrating the task-technology fit and the unified theory of acceptance and use of technology, Lee et al (2005) and Zhou et al (2010) also find social pressures to have a significant effect on users' adoption and use of wireless internet via mobile technology and mobile internet banking respectively. Similarly, Shin (2009) reveals that individuals' attitude towards the use of mobile wallet is significantly influenced by their peers (social pressures). On the adoption and use of mobile wireless data services, Lu et al (2008) documents that consumers' attitude towards its use is also determined by social influences. In relation to this study, it is expected that stakeholders' use of online accounting information will be influenced by some significant others. It is therefore hypothesized that:

H_4 Social pressures will positively affect stakeholders' attitudes towards the use of online accounting information

2.8.2.4 Perceived Usefulness, Perceived Ease of Use and Attitude towards Use

Users' perception regarding the usefulness of a technology has been acknowledged to be an important determinant of technology usage. Within the TAM framework, perceived usefulness is defined to be the prospective user's subjective probability that using a specific application system will increase his or her job performance within an organizational context (Davis et al., 1989). The

prediction is that, the extent to which an individual perceives something to be useful directly influences his or her attitude towards the usage of that particular thing. Consequently, from the perspective of the technology acceptance model, it is argued that perceived usefulness directly influences users' attitude towards the use of a particular technology. Closely connected to the perception of usefulness argument is the construct "perceived ease of use" which measures the degree to which a person believes that using a particular system would be free of effort" (Davis. 1989, p.82). The argument is that the extent of adoption of a technology by users are likely to be high when it is relatively easier to use a particular technology than another. Thus, apart from how useful a technology may be the ease of use also affects users' attitudes towards technology use.

Empirically, a number of studies across several fields have tested the effect of these two constructs on technology adoption by users. (Chen et al., 2002; Porter & Donthu, 2006) for instance conclude that perceived usefulness and perceived ease of use are the main determinants of users' attitudes towards the use of the internet and virtual stores. Again, users' choice of the form of digital reporting formats (such as PDF, HTML, XBRL etc.) was primarily determined by their perceptions about usefulness and ease of use (Ghani et al., 2010). Similarly, Lee et al (2005) report that students' attitude towards internet-based learning medium is directly influenced by their perceptions about its usefulness and how easy it is to use. In the same way, nurses' attitude towards the use of electronic logistics information system is influenced by perceived usefulness and perceived ease of use (Tung et al., 2008).

While majority of these studies have confirmed the existence of a positive and significant relationship between perceived usefulness and perceived ease of use and the use of a specific technology (Ma & Liu, 2004; Schepers & Wetzels, 2007a), others have found weak or no significant correlation (Legris et al., 2003; Turner et al., 2010). Notwithstanding the fact that the

impact of perceived usefulness and perceived ease of use on technology adoption or use appear mixed from the above analysis, this study argues that stakeholders' perceptions about the usefulness and ease of use of accounting information on corporate websites would influence their attitude towards its use positively and for that matter their actual use. Hence, the following hypotheses are made:

H_5 stakeholders' perceived usefulness of online accounting information positively affects their attitude towards its use

H_6 stakeholders' perceived ease of use of online accounting information positively affects their attitude towards its use

2.8.2.5 The Relationship between Perceived Ease of Use and Perceived Usefulness

While the perception of usefulness and ease of use have been predominantly been examined on attitude towards use, the relationship between the two constructs has also been a subject of investigation by some empirical studies. Bahli (2005) in particular emphasized that perceived ease of use has important implications on individuals' perception of usefulness. Other studies have also shown the existence of a positive correlation between perceived usefulness and perceived ease of use (King & He, 2006; Turner et al., 2010). The key argument from these studies is that, individuals who perceive a system to be easy to use would usually find it to be more useful. On the other hand, this argument has been challenged by some studies that contend that as people gain experience with the use of some technology and therefore their perceptions about its usefulness is not determined by how easy it is to use the technology (Chung, Park, Wang, Fulk, & Mclaughlin, 2010; Schepers & Wetzels, 2007). Thus, ease of use only become relevant to usefulness when a technology is new to an individual. As Davis (1989) earlier surmised, peoples' perception on the

usefulness of a specific technology is not dependent on the ease with which they can handle it but substantially because of the significant benefits it provides. The following hypothesis is made;

H_7 stakeholders' perceived ease of use of online accounting information positively affects their perceived usefulness of online accounting information

The hypotheses of this study are summarized in Table 2.2

Table 2.2 Summary of Hypotheses

	Statement of Hypotheses
H1	Stakeholders' attitude towards the use of online accounting information positively affects their actual use of it
H2	The compatibility between stakeholders' use of online accounting information and their values, past experiences and needs positively affect their attitudes towards its use
H3	The compatibility between stakeholders' use of online accounting information and their values, past experiences and needs positively affect their perceptions about its usefulness
H4	Social pressures will positively affect stakeholders' attitudes towards the use on online accounting information
H5	Stakeholders' perceived usefulness on online accounting information positively affects their attitudes towards its use
H6	stakeholders' perceived ease of use of online accounting information positively affects their attitude towards its use
H7	Stakeholders' perceived ease of use of online accounting information positively affects their perceived usefulness of online accounting information

2.9 An Overview of Ghana's Emerging Stock Market

The Ghana stock exchange, the principal stock exchange in Ghana, was established in July 1989 and commenced trading in November 1990 with 12 listed companies and a government bond. It currently has 37 listed companies. The Ghana stock exchange is an emerging market that has seen tremendous improvement in its operations over the years. Performance review for the year 2013 indicates that market capitalization of listed securities at the end of the year under review was GH¢61,158.29million compared to the same period in 2012 of GH¢57,264.22million which represents an increase of 68%. The exchange performed very well in 2013 as a result of increased investor awareness and good operating results by many listed companies supported by the renewed investor confidence in the Ghanaian market and economy (Performance Review, GSE, 2013).

The stock exchange performance review further indicates that the return on index recorded for the year 2013 makes it one of the best performing stock markets in sub-Saharan Africa. In September 2010 the Ghana stock exchange was adjudged the "Most Innovative African Stock Exchange" for 2010 at the Africa investor (Ai) prestigious annual Index Series Awards held at the New York Stock Exchange. Not only has the exchange gained prominence in Africa but also gained worldwide recognition with its data available on Bloomberg and Thompson Reuters. This move will enhance the market's data accessibility, transparency and increase the trading opportunities of both local and global clients.

In 2008, the exchange established the Ghana stock exchange Securities Depository Company Ltd, a wholly owned subsidiary of the exchange, to ensure a fast and efficient delivery system on the market thus recording, maintaining and registering the transfer of securities without any physical movement or endorsement of certificates. In catching up with technology the Ghana stock

exchange, among other things, embarked on the electronic system in June, 2009. The automation of the stock market is to ensure liquidity and efficiency of the market and to compete as a quality exchange among emerging markets.

2.10 Conclusions

The review of the literature suggests that while there is growing literature on corporate internet reporting, the perceptions of stakeholders concerning the subject is rarely addressed especially in developing economies where technology is still growing. Extant literature on the subject area suggests a significant difference between results from developing economies and those from the advanced countries. For instance, studies undertaken in the advanced economies indicate that the size of a company has a direct relationship with corporate internet reporting (Ashbaugh et al., 1999; Debreceny et al., 2002; Marston & Polei, 2004; Oyelere et al., 2003). Thus, large companies are more likely to engage in corporate internet reporting than smaller companies. However, some studies undertaken in developing economies have shown different results that the size of a firm is not significantly related to or does not explain internet reporting (AbuGhazaleh et al., 2012; Aly et al., 2010). Probably, the perceptions of stakeholders concerning corporate internet reporting, which have implications for corporate behaviour, could explain the differences in the results. This study could provide some empirical evidence on the matter.

Though subjective, empirical evidence indicates that users' attitude is a key determinant of technology usage. Research into the attitudes of interested parties in relation to internet reporting is limited and little is known about its implications for corporate behaviour. This study brings into perspective internet reporting from an emerging economy using the technology acceptance model

and the innovation diffusion theory. Prior studies on corporate internet reporting generally lack theoretical underpinnings that link the use of technology to the perceived provision and use of accounting information which could have some implications for corporate financial reporting.

Most studies have used theories such as agency theory, signalling theory and the cost-benefit theory to explain why companies will communicate corporate information on their websites. It must be noted that these theories explain voluntary disclosure in the traditional paper-based corporate reporting and the reporting environment for these two media may vary greatly which may, in turn, produce different results. It is therefore important to consider theories that explain the adoption and use of technology so as to have a better understanding of issues. For that matter, this study synthesizes the technology acceptance model and the innovation diffusion theory to explain stakeholders' attitude towards the use of accounting information on corporate websites. This chapter has established that the perceived usefulness, ease of use, compatibility and social pressures play an important role in the adoption and use of the system. Thus, stakeholders' attitudes about corporate reporting on the internet could affect their adoption and use of it.

2.11 Summary of Chapter Two

This chapter reveals that the focus of previous studies has been on the content and presentation of accounting information on corporate websites. Based on prior studies, the chapter also highlights the fact that social psychology theories have not been used to examine stakeholders' use of online accounting information. The chapter thus synthesizes two theories adapted to conceptualize the research model of the study. Based on the conceptualization, the hypotheses of the study are

developed. The next chapter discusses the research methods and analysis techniques adopted to examine stakeholders' attitude towards the use of online accounting information.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the procedures that were followed in conducting this study. Specifically, it discusses the philosophical assumptions (the research paradigm) underpinning the study and outlines the specific research approach followed for the study. The types of data and data collection methods, as well as the sampling technique employed in this study, are also documented. This is followed by a discussion of the data analysis technique adapted for this study and the procedure followed to evaluate the reliability and validity of the research model.

3.2 Research Paradigm

A researcher's views about the world and what the individual considers to be the truth is important in the research process. A paradigm "represents a worldview that defines its holders, the nature of the 'world', the individual's place in it and the range of possible relationships to that world and its parts" (Guba & Lincoln, 1994 p. 107). Since a research paradigm generally defines the boundaries of viewing reality, it plays an important role in the process of knowledge generation by demonstrating the researcher's orientation about the world and building his/her identity. Thus, the researcher's view of knowledge is influenced by his/her research paradigm which determines the choice of research topic, questions, methodology and interpretation of results (Lukka, 2010). Research paradigm can be viewed from 2 main perspectives; the positivists and interpretivists.

The positivists perceive the world to be a single universal reality that can be measured reliably and validly using scientific principles (Onwuegbuzie & Leech, 2005). Thus, the positivist researcher follows the orientation of the natural scientist where knowledge is reduced into a discrete set of ideas so as to determine the outcome of some observable social reality (Creswell, 2009; Saunders et al., 2007). The research is undertaken under strict assumptions independent of the researcher in a value-free way (Saunders et al, 2007). The researcher is seen to be external and independent of the study and does not influence the data collection and analysis so as to ensure objectivity.

On the contrary, interpretivists believe that the world consists of human subjective experiences and that knowledge is socially constructed and not objectively obtained (Willis, 2007). The interpretivist researcher seeks answers to research questions from the experiences of people of a particular group or culture and interprets them based on his/her lens (Onwuegbuzie & Leech, 2005). Researchers within this paradigm interact with the study subjects in order to gain an in-depth understanding of the background, beliefs and experiences of participants (Creswell, 2009) and interpret the results from their own perspective.

This study identifies with the positivist view because the nature of study objectives could better be investigated by reference to the philosophical assumptions of the positivists. The main objective of this study is to test theories and specific research hypotheses so as to predict and explain the attitudes of stakeholders towards accounting information on corporate websites with the aim of generalizing the results.

3.3. Research Approach

This study adopts the quantitative approach which follows from the philosophical assumptions of the positivist researchers. It is a deductive theory-based approach that focuses on testing theories and developing specific research hypotheses. By examining the relationships among the constructs of the study, statistical procedures are used to make inferences and draw conclusions about the empirical results. With the quantitative approach, factors that influence or affect the outcome of a phenomenon are identified by determining variables or constructs that comprise hypothesis and research questions. Thus, quantitative research identifies a theory and develops hypotheses; data is then collected to support (in whole or part) or refute the theory and the results generalized to a population. Here the researcher is considered independent of the study in order to reduce an influenced outcome of the phenomenon.

This study follows the quantitative approach as it seeks to examine stakeholders' attitude towards accounting information on corporate websites. By synthesizing the technology acceptance model and the innovation diffusion theory and other empirical evidence, a conceptual framework was developed for this study. Based on the conceptual framework, the research hypotheses were also developed and tested.

3.4 Research Strategy

This is a cross-sectional study that used the survey method of inquiry to collect data from corporate stakeholders. This method of inquiry was chosen because it allows data to be collected from a population (by drawing a sample) at a point in time and inferences made about their characteristics,

attitudes and behaviour (Creswell, 2009). By studying a sample of the population, the survey method seeks to determine relationships that are common across the sample through a quantitative description of attitudes, trends and opinions and to generalize the results to the entire population. Furthermore, data collected from survey research are standardized and allows for easy comparison. By using this strategy, the results of this study provide an explanation of stakeholders' attitudes towards the use of accounting information on corporate websites. In addition, factors that influence such attitudes are also examined.

Self-administered questionnaires were the form of data collection instrument for this study. This survey instrument was developed from measurement scales used in previous studies with some modifications made to the wording to fit the context of this study. The questions took the form of a Likert scale, with anchors ranging from 1 to 7 (where 1 represents strongly disagree and 7 represents strongly agree) and respondents were asked to indicate their agreement or disagreement with various statements on the constructs of the study. This was to allow respondents to choose options that best aligned with their perceptions on web-based corporate reporting and to help properly examine the implications of their perceptions on corporate behaviour. Section 3.8 provides detailed discussions on the design and administration of the questionnaires.

3.5 Population and Sample

All stakeholders of companies listed on the Ghana Stock Exchange constituted the population of the study. The stratified sampling method was used by categorizing the stakeholders into three groups and selecting samples randomly from each stratum. The three stakeholder groups include the management, investors and corporate lenders. The management group consists of senior

accounts/finance officers of the listed companies who are responsible for the provision of accounting information on their companies' websites. All major institutional investors and investment companies duly registered with and active on the Ghana stock exchange constituted the investor group. This group is more concerned with equity investment. Financial analysts and investment fund managers represent the respondents for this group. The third stakeholder group comprises corporate lenders (banks and non-bank financial institutions) who are more concerned with non-equity investments (debt capital). Respondents are credit officers who extend credit on behalf of these institutions to corporate organizations on the basis of their eligibility to such credit. These classifications are made so as to provide a wider understanding of their perceptions and attitudes concerning internet reporting.

The stratified random sampling was chosen to ensure that all stakeholders are adequately represented. Furthermore, the categorization of stakeholders is to enable the study highlight the perceptions and attitudes of specific stakeholder groups to enhance understanding of their behaviour and observe their relationship.

With 37 companies on the stock market, information about such companies is obtained from the Ghana stock exchange as well as the Securities and Exchange Commission. Given the number of companies listed on the stock exchange, all the companies are considered for this study. Senior officers from the finance/accounts departments of each of the companies are sampled. On the average, there are about six senior accounts officers in each of these companies of which three are randomly sampled. Thus, a total of 111 senior accounts officers were sampled. Four financial analysts/fund managers from each of the 20 registered investment companies were randomly selected and all the 33 registered associate members are sampled for the study. A total of 112 investors were sampled for the investor group. Information on financial analysts/fund managers is

obtained from the Ghana Stock Exchange and the Securities and Exchange Commission. There are 28 banks and 25 non-bank financial institutions registered with the Bank of Ghana. Four credit officers were randomly selected from each of these institutions to form the respondents for the group of corporate lenders. A total of 212 corporate lenders were sampled. As shown in Table 3.1, a total of 435 respondents were sampled for the study.

Table 3.1 Sample size of the study

Stakeholder Group	Sample Size
Management of listed companies	111
Investors	112
Corporate lenders	212
TOTAL	**435**

Source: Field data, 2016

3.6 Questionnaire Design and Administration

The questionnaire was categorized into three main sections. Section one contained a cover letter, the next section was made up of questions concerning the various constructs from the conceptual framework of this study. The questions used a seven-point Likert scale with anchors ranging from 1 (strongly disagree) to 7 (strongly agree). Each of the constructs was briefly explained to help respondents understand the statements for which they were required to agree or disagree. For the

final section, respondents were requested to provide some demographic information for statistical purposes.

Existing multi-item scales from prior studies were adapted to suit the context of this study to measure key constructs: perceived usefulness, perceived ease of use, compatibility, social pressures, attitude towards use and actual use. For each of the indicators of the respective constructs, respondents were required to score each item on a Likert scale with anchors ranging from 1 to 7. The actual use and attitude towards using online accounting information were measured using the scale developed by Chen et al, (2002). The measurement for perceived usefulness, perceived ease of use and compatibility were adapted from the study of Moore & Benbasat, (1991) as well as Chen et al (2002). Social pressure was also measured using the scale developed by Lewis et al, (2003). Details of the number of indicators for each construct and the sources of measurement are provided in Table 3.2

Table 3.2 Indicators and Sources

Constructs	Number of Indicators	Sources
Actual Use	4	Chen et al (2002)
Attitude towards Use	7	Davis et al., (1989); Chen et al., (2002)
Perceived Usefulness	12	Davis et al., (1989); Moore & Benbasat, (1991)
Perceived Ease of Use	11	Davis et al., (1989); Moore & Benbasat, (1991)
Compatibility	7	Chen et al., (2002); Moore & Benbasat, (1991); Rogers, (1973)
Social Pressures	9	Lewis et al (2003)

3.6.1 Questionnaire Administration

Before the questionnaires were administered, approval was given by the Ethics in Research Committee of the Faculty of Commerce, University of Cape Town. A cover letter was provided which assured respondents of anonymity and absolute confidentiality. Questionnaires were personally administered to the respondents. The offices of the various categories of respondents were located and questionnaires personally administered to them. This was to help increase the response rate. Reminders were sent out to the respondents and in other cases, the researcher followed up on the distributed questionnaires until the responses were finally retrieved. Once the responses were retrieved, they were observed to ensure that the questionnaires were not incomplete. Out of 435 questionnaires administered, 175 were returned and duly coded. However, 4 of the questionnaires were excluded from the final analysis because respondents failed to fully answer the questions. The data was then entered into an excel sheet. The structural equation modelling technique (partial least square method) was used to analyze the data. The next section describes the data analysis technique adapted for this study i.e. the partial least square approach of the structural equation modelling technique.

3.7 Data Analysis Techniques

This section explains structural equation modelling which is the technique used to analyze the data for this study. It discusses the two approaches (co-variance based and partial least square) and why the partial least square approach was chosen for this study as well as the evaluation criteria.

3.7.1 Structural Equation Modeling (SEM)

Structural equation modelling (SEM) is a multivariate statistical technique used to evaluate the validity of substantive theories and conceptual models with empirical data. This is to determine

whether a hypothesized theoretical model is consistent with the data collected to reflect that theory. This multivariate technique allows for a flexible interplay between theory and data. The use of SEM to validate instruments and test linkages between constructs has become a current trend in information systems research (Gefen, Straub, & Boudreau, 2000). Business researchers in areas such as accounting, marketing and information systems management, among others, have also embraced the use of SEM because of its ability to test theories and concepts.

Key among the several advantages it has over other general linear modelling procedures is the fact that it does not only assess the structural model but also enables hypotheses testing, evaluates the measurement model, as well as undertakes factor analysis in the same model. Furthermore, direct, indirect and total effect mediation can be assessed simultaneously. Indeed, Chin, Peterson, & Brown, (2008) notes that SEM has features that reduce errors and improve the quality of the constructs in a model by identifying and removing weak measurement indicators.

The co-variance based structural equation modelling (CB-SEM) approach and the component based structural equation modelling (partial least squares - PLS-SEM) approach are the two primary methods of structural equation methods. Though different in approaches, these two methods complement each other, depending on the objectives and specific empirical context of the study (Chin, 2010). Thus, structural models and concepts with good measurement indicators and data will yield similar results from the use of both techniques (Reinartz, Haenlein, & Henseler, 2009).

3.7.1.1 Co-variance Based Approach

The co-variance based structural equation modelling is a technique that seeks to minimize the difference between the theoretical and estimated covariance matrices (Hair, Ringle, & Sarstedt,

2011). Thus, it seeks to show how a proposed model fits the sample drawn from the population of a particular study. This approach requires a sound theoretical base to enable theory testing and is particularly useful for confirmatory research (Gefen et al., 2000). A set of assumptions such as a large sample size with a normally distributed data is required to use this method of analysis. Thus, in a study where data is not normally distributed implies the co-variance based approach cannot be used. It also requires a minimum of three indicators per construct. Reinartz et al., (2009) observe, however, that it is sometimes difficult to maintain this minimum requirement since some significant indicators are eliminated during the confirmatory factor analysis. When these assumptions are not adhered to, results emanating from its use could be misleading.

3.7.1.2 Component-Based Approach (Partial Least Squares)

The partial least square on the other hand is a causal modelling procedure that seeks to maximize the explained variance (predictive accuracy) of dependent latent constructs (Hair et al., 2011). Thus, it maximizes the predictive accuracy of a model while at the same time retaining more measurement indicators for each construct. Unlike the co-variance based approach, the partial least square approach is particularly appropriate when the research objective focuses more on prediction or explanation of constructs, and a study has a relatively smaller sample size and a non-normal distribution of data (Henseler, Ringle & Sinkovics, 2009). Where the nature of the research restricts the use of the co-variance based method (the study cannot meet the assumptions of co-variance based approach), the partial least square becomes the alternative approach.

Additionally, the partial least squares approach has been used extensively in marketing and other business-related research. It has developed rapidly over the period and demonstrated several technical advancements (Hair et al., 2011; Henseler et al., 2009). It is more appropriate for

prediction and theory building studies since it provides parameter estimates that maximize the explained variance of the dependent construct (Hair et al., 2011).

Since the two methods complement each other, deciding which technique is appropriate for a particular study requires the use of rules of thumb. This study follows the rules of thumb proposed by Hair et al., (2011) to choose the appropriate technique which is discussed in the next section.

3.7.2 Rules of Thumb for Choosing Co-Variance Based or Partial Least Squares

The rules of thumb discussed in this section is based on the studies of Hair et al., (2011) and Henseler et al., (2009). This is done on the basis of the research objectives, measurement model specification, structural model, characteristics of data and model evaluation.

Firstly, it is more appropriate to use the co-variance based approach when the objective of the study is to test or confirm a theory where the prior theory is strong. This is because the co-variance based approach has the ability to show how well the theoretical model fits the observed data. In addition, it uses the global goodness of fit measure that emphasizes theory testing. On the other hand, when the objective of the study is theory development or prediction of the dependent construct, then the partial least square is most suitable. It focuses on maximizing the explained variance of dependent constructs i.e. explaining or predicting the target constructs in the structural model. Hair et al (2011) further note that partial least squares method can also be selected if the objective of the research is to extend an existing structural theory.

Secondly, the use of co-variance based approach is restricted to models that use reflective constructs. Although it can be used for models with both reflective and formative indicators, it is relatively complicated and requires adherence to complex and restricting specification rules (Hair et al., 2011). Not only is its use complex in such situations but also it leads to identification

problems (Henseler et al., 2009). In contrast, the partial least square approach allows researchers to use either reflective or formative measurement indicators or a combination of both. Furthermore, Hair et al., (2011) note that where the structural model has many constructs and indicators the partial least square approach is more appropriate.

Thirdly, the use of co-variance based method requires some informational and distributional assumptions to be met (Hair et al., 2011). The data should have a normal distribution and the sample size should be large. Besides that, the number of indicators per construct should be more so as to provide accurate parameter estimates and greater reliability especially when some of them may be eliminated due to poor loading. These requirements make it difficult sometimes to use the co-variance based approach. When these assumptions cannot be met, the partial least squares method may be applied. Thus, it can be used for data with non-normal distribution and relatively small sample size. This is because it applies a non-parametric bootstrapping method to obtain standard errors enabling hypotheses testing.

Finally, in evaluating the structural model, the co-variance based method is the preferred approach if the study requires a global goodness of fit criterion (i.e. theory testing and confirmation). On the other hand, where a particular study seeks to explain or predict a model based on empirical literature, the evaluation procedure for partial least square is a preferred option (Hair et al., 2011).

Based on the above rules of thumb, this study adopted the partial least square approach to analyze and evaluate the research model. The following are the reasons for its adoption:

1. This study seeks to explain stakeholders' attitudes towards the use of accounting information on corporate websites. Hence, using the latent construct scores to examine the relationship between the constructs is important.

2. This study focuses on testing relationship according to prior theoretical knowledge. PLS-SEM has the ability to estimate correlations between the residuals and assess the impact.
3. The sample size for this study is relatively small and does not meet the minimum requirement for the use of CB-SEM.
4. Data has a non-normal distribution.

3.7.3 The Partial Least Square Algorithm

A structural equation modelling has two major components: the structural model and the measurement model. When using the partial least squares, the structural model is known as the inner model and the measurement model is known as the outer model. The inner model shows the relationship between the latent constructs. The outer model, on the other hand, shows the relationship between a latent construct and its indicators (observed variables). The path relationship between the latent constructs and their indicators could be reflective or formative or both

The coefficients of the relationship between the latent constructs and the indicators are known as outer loadings and outer weights for reflective and formative indicators respectively.

The basic PLS-SEM algorithm comprises a three-stage procedure as estimated by Henseler et al., (2009):

1. The latent construct scores are estimated;
2. Outer loadings and weights are estimated as well as the path coefficients of the structural model, and
3. Location parameters are then estimated.

The estimation of the latent construct scores involves four steps:

1. Outer approximation of the latent constructs;
2. Estimation of inner weights to determine the relationships between the latent constructs;
3. Inner approximation of latent construct scores;
4. Estimation of proxies for coefficients in the measurement models.

These four steps are repeated until a convergence is obtained.

3.7.4 Formative and Reflective Constructs

The reflective measurement models are considered to be functions of the latent construct (Henseler et al., 2009; Hair et al., 2011). Thus, indicators are seen to be caused by the constructs they reflect. Hair et al., (2014a) note that a change in the construct leads to changes in all its indicators and is represented by single-headed arrows pointing from the latent construct to the indicators. This further implies that the exclusion of an indicator does not affect the meaning or nature of the construct. On the other hand, formative measurement models have causal relationships from the indicators to the latent constructs (Henseler et al., 2009). Thus, the latent construct is defined by a collective combination of its indicators. Hence, an omission of an indicator changes the meaning or nature of the construct. They are typically represented by single-headed arrows pointing from the indicators to the constructs.

For this study, the latent constructs are measured using the reflective measurement indicators. These measurement indicators were developed based on empirical literature. This is to ensure that measurement misspecification (which leads to an incorrect assessment of relationships) is avoided (Henseler et al., 2009)

3.8 Evaluation of Measurement and Structural Model

There are two steps in assessing the results from the partial least squares structural equation modelling: 1. an assessment of the outer model (measurement model); 2. an assessment of the inner model (structural model). The first step is to examine the validity and reliability of the measurement indicators. The evaluation of the measurement indicators is based on whether the indicators are formative or reflective (Note: the evaluation criteria for both measures differ). Since the reflective measurement indicators were used in this study, the next section discusses the evaluation criteria for reflective measures. This is to ensure that the indicators used to measure the latent constructs truly represent them. It is only when the measures are adequate (valid and reliable) that they can be used to examine the structural model (second step).

3.8.1 Evaluation of Measurement Model

In order to evaluate the measurement model, it is important to distinguish between constructs that are measured reflectively and those that are measured formatively. This is because there are different approaches for evaluating each measure. Reflective measurement models are assessed based on their internal consistency reliability and validity (convergent validity and discriminant validity) while formative measurement models are also assessed based on their convergent validity, collinearity between indicators and significance and relevance of outer weights.

3.8.1.1 Internal Consistency Reliability

Internal consistency reliability is assessed traditionally by the Cronbach's alpha which is based on the intercorrelations of observed indicator variables. This measure of internal consistency assumes that all indicators have equal outer loading on the construct. According to Henseler et al., (2009),

such an assumption leads to severe underestimation of internal consistency. To overcome this limitation, Hair et al., (2014) suggest that in addition to the Cronbach's alpha, Composite reliability should also be reported. This measure takes into account the fact that indicators have different outer loadings. Generally, internal consistency reliability values of 0.6 to 0.7 in the early stages of research and 0.8 to 0.9 in more advanced research are considered satisfactory. However, values below 0.60 indicate that there is a lack of internal consistency.

3.8.1.2 Convergent Validity

With acceptable internal consistency values, convergent validity is accessed. The convergent validity examines the extent to which an indicator correlates positively with other indicators measuring the same construct. To evaluate convergent validity of reflective constructs, the outer loadings of indicators and the average variance extract (AVE) are examined. A general rule of thumb is that the outer loadings of indicators should be 0.708 or higher. A higher loading implies that indicators are related and have much in common. Hair et al., (2011) caution that care should be taken in eliminating indicator loadings below 0.7. It is generally accepted that such indicators (between 0.4 and 0.7) should be considered for elimination if it will lead to an increase in the composite reliability. Again, such indicators should be retained if they contribute positively to content validity. However, indicator loading below 0.4 should be eliminated. The average variance extract should also be examined to evaluate the convergent validity at the construct level. A value of 0.50 or higher for the average variance extract is considered to explain more than half the variance of its indicators (Henseler et al., 2009).

3.8.1.3 Discriminant Validity

Discriminant validity measures the extent to which constructs are distinct and indeed different from one another in a model. Generally, prior research has recommended two main criteria for measuring discriminant validity; the cross-loadings and the Fornell-Larcker criterion (Henseler et al., 2009; Hair et al., 2011; Ringle, Sarsdedt & Straub, 2012). These have been the traditional measure of discriminant validity when undertaking the partial least squares structural equation modelling. The cross-loadings are used to assess the discriminant validity of the indicators. It postulates that an indicator's loadings with its construct should be greater than its loadings with the other constructs in the model (Chin, 1998). The Fornell-Larcker criterion, on the other hand, posits that the square root of each construct's average variance extract should be greater than its highest correlation with any other construct. Despite the two measures being widely used, Henseler, Ringle, & Sarstedt, (2015) have suggested assessing the ratio of the between-traits correlation to the within-trait correlations as a test of discriminant validity. This measure is known as a heterotrait-monotrait ratio (HTMT) of correlations. The HTMT is, from their study, an estimate of the correlation between two constructs. Henseler et al., (2015) recommend a threshold of 0.90 based on prior studies. This implies that an HTMT value above 0.90 suggests that a study lacks discriminant validity.

This study follows the criteria discussed above to evaluate the measurement model. An assessment of internal consistency reliability, convergent validity and discriminant validity show that the reliability and validity of the measurement model are adequate and can, therefore, be used to estimate the structural model. The next chapter (chapter 4) provides a detailed discussion of the results from the measurement model.

3.8.2 Assessing the Structural Model

Once the estimates of the measurement model are reliable and valid, an evaluation of the structural (inner) model can be undertaken. This is done by examining the predictive abilities of the model and the relationships between the constructs in the model. Since the partial least square approach seeks to determine the predictive capabilities of a model, the structural model is assessed based on how well it predicts the endogenous constructs. The criteria for this assessment are evaluating collinearity levels, examining the significance of the path coefficients, the level of the R^2 values as well as the predictive relevance of the model.

3.8.2.1 Assessing Collinearity

There is the need to assess collinearity levels when evaluating the structural model. This is because estimation of the path coefficients (in the partial least squares approach) is based on OLS (ordinary least squares) regression and as such may be biased if the estimation involves critical levels of collinearity among the constructs. The variance inflation factor (VIF) values are used to check for collinearity. Hair et al., (2014) suggest that there is a critical level of collinearity if the VIF value is above 5 for the predictor constructs.

3.8.2.2 Structural Model's Path Coefficients

When the collinearity levels are acceptable, the next step is to examine the significance of the hypothesized relationship. The relationship is interpreted to be strong and positive if the path coefficient is closer to +1; and those close to -1 indicate strong negative relationships. This means that the closer the value to zero the weaker the relationship. The p-value can also be used to assess the significance of the relationship depending on the significant level. Again the significance of the relationships can further be examined using the bootstrap confidence interval. Based on prior

research, Hair et al., (2014) recommend the use of the bootstrap confidence interval bias corrected. The rule of thumb here is that there is a significant effect if the confidence interval for an estimated coefficient does not include zero. In testing for the significance of the structural model relationships, it is important to report on the t-values, p-values and the bootstrap confidence intervals.

3.8.2.3 Coefficient of Determination (R^2)

The measure of a model's predictive ability is to examine the coefficient of determination (R^2). Thus, the R^2 value indicates the amount of variance in the endogenous construct that is explained by the exogenous construct. Hence, a larger R^2 value means a higher predictive ability of the structural model. For an R^2 value to be classified as high depends on the nature of research. Some studies (Henseler et al., 2009) have however suggested as a rule of thumb, R^2 values of 0.75, 0.50 and 0.25 to be described as substantial, moderate or weak.

3.8.2.4 Cross-validated Redundancy (Q^2)

After examining the predictive accuracy of a model, it is important to also evaluate its predictive relevance. The Stone-Geisser's Q^2 value is the traditional measure of predictive relevance. With the partial least square approach the Q^2 value is obtained by using a blindfolding procedure which produces the cross-validated redundancy values (Hair et al., 2014; Henseler et al., 2009, Chin, 1998). It is recommended for the measure of Q^2 because it uses both the path estimates of the structural and measurement models for data prediction. A cross-validated redundancy value (Q^2) greater than zero for a particular reflective endogenous construct implies that the path model has predictive relevance for the dependent construct (Hair et al., 2011).

An analysis of the structural model of this study showed that the path coefficients were adequate. The model exhibits adequate predictive ability and predictive relevance. The structural model also shows acceptable levels of collinearity. The details of the results and discussions are presented in chapter 4.

3.9 Mediating Analysis

Mediation analysis is a procedure used to determine if an independent variable (exogenous construct) affects a dependent variable (endogenous construct) through a mediator (a third variable). This study follows the procedure outlined by Zhao, Lynch Jr., & Chen (2010) for testing mediation. From their study, the significance of the indirect effect (a*b in Fig 3.1) determines whether there is mediation or not. Zhao et al., (2010) identifies three types of mediation and two types of nonmediation. The three types of mediation they identified are;

Complementary mediation: where both the indirect effect and the direct effect are significant and point to the same direction

Competitive mediation: where the indirect effect and direct effect are both significant but point to opposite directions

Indirect only mediation: where the indirect effect is significant but the direct effect is not.

The implication of the above is that in the case of the complementary and competitive mediation, it is possible that there may be some variable that may have been omitted and could be further investigated in future research. These represent partial mediation in the Baron & Kenny (1986) approach. On the other hand, indirect only mediation implies that the mediation identified is consistent with theory (full mediation in the Baron & Kenny (1986) approach).

The two nonmediation identified are;

Direct only nonmediation: where the direct effect is significant but the indirect effect is not

No effect nonmediation: where neither the direct effect nor the indirect effect is significant

This means that there is not mediation detected for the model.

This study followed the procedure for testing mediation as indicated by Zhao et al., (2010). The results from the mediation analysis are discussed in the next chapter.

3.10 Summary of Chapter Three

This chapter discusses the research paradigm the study ascribes to. It also discusses the research process and how the survey method was adopted for this study. How questionnaires were designed and administered are also presented in this chapter. The measurement of the indicators used in this study as well as their sources are also discussed in this chapter. The structural equation modelling, specifically the partial least squares approach, is presented as the analysis technique. The next chapter analyses the results of this study in terms of the measurement and structural model as well as in line with the theoretical constructs used.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents the empirical findings of this study. Thus, after providing a brief statistical description of the respondents, the validity and reliability of the measurement model are evaluated. Next, the structural model is assessed to examine its predictive capabilities. Mediating analysis is conducted following the procedure suggested by Zhao et al., (2010). The next section analyses the finding of the study in the light of existing literature and the research questions. The chapter then ends with a summary.

4.2 Descriptive Statistics of Respondents

This section presents the demographic profiles of the respondents and the descriptive statistics of the main constructs used in this study. Out of the 171 respondents who fully completed the questionnaire, 60.2% were males with the remaining 39.8% being females as shown in Table 4.1. The respondents are made up of individuals who provide corporate accounting information via the website or use such information for investment decision-making. The majority (56.1) of the respondents hold a bachelor's degree and 54% hold a master's degree. 21 of the respondents (representing 12.3%) hold a diploma certificate. Furthermore, some of the respondents hold professional certificates. Of those respondents who hold professional certificates, 39.2% hold the

Association of Certified Chartered Accountant (ACCA) certificate, 9% hold Chartered Institute of Management Accountants (CIMA) certificate and 9.9% hold the Institute of Chartered Accountants, Ghana (ICAG) certificates. The remaining 25.7% hold other professional certificates. The educational and professional qualifications of the respondents indicate that these are people who have adequate knowledge about corporate reporting.

The analysis further shows that more than half of the respondents (53.2%) are between the ages of 20 and 30 with only 4 being above the age of 50. 37.5% of the respondents were in the age range of 31 to 40 years. This indicates that close to 90% of respondents are youthful and it is likely that this group of people in this age bracket make more use of information and communication technology especially the internet. It is therefore likely to impact their responses to questions about corporate internet reporting.

Table 4.1: Demographic Statistics of Respondents

Variable	Frequency (n=171)	Percentage (%)
Gender		
Male	103	60.2
Female	68	39.8
Education		
Doctorate Degree	0	0
Master's Degree	54	31.6
Bachelor's Degree	96	56.1
Diploma	21	12.3
Professional Certificates		
ICA	17	9.9
ACCA	67	39.2
CIMA	9	5.3
Other Professional certificates	44	25.7
None	34	19.9
Age		
20-25 years	26	15.2
26 to 30 years	65	38.0
31-35 years	48	28.1
36-40 years	16	9.4
41-45 years	8	4.7
46-50 years	4	2.3
above 50 years	4	2.3

Source: Field Data, 2016

4.3 Evaluation of the Measurement Model

Before proceeding with the structural model analysis to examine the study hypotheses, the measurement characteristics of the study constructs and their indicators were assessed to determine their appropriateness for inclusion in the structural model analysis based on the recommended thresholds. As indicated in chapter three, the reliability and validity of the indicators should be examined to show that the measures are adequate before conducting the structural model analysis. Consequently, four distinct set of tests were conducted on the study constructs including; the internal consistency reliability test, indicator reliability test, convergent validity and divergent validity tests. The findings from each of these tests are presented in the following subsections.

4.3.1 Internal Consistency Reliability

The internal consistency reliability tests generally measure whether the several indicators that propose to measure the same construct actually do so. The traditional criterion for internal consistency is the Cronbach's alpha. Based on the Cronbach's alpha (Table 4.2 below), the internal consistency for each of the construct is adequate with values between 0.754 and 0.881.

Table 4.2 Cronbach's Alpha

	Cronbachs Alpha
ATU	0.853
AU	0.859
CPT	0.881
PEU	0.797
PU	0.754
SP	0.881

However, due to the limitations of the Cronbach's alpha (i.e. it assumes that all indicators are equally reliable thus they have equal outer loadings), a further test was conducted using the composite reliability. This measure takes into consideration the different outer loadings of the indicators and does not assume that all indicators are equally reliable. Hair et al (2014) provide that a composite reliability value of 0.7 to 0.9 is satisfactory. From Table 4.3 below, composite reliability values were between 0.83 and 0.905 for the study constructs.

Table 4.3 Composite Reliability

	Composite Reliability
ATU	0.895
AU	0.905
CPT	0.908
PEU	0.860
PU	0.833
SP	0.907

Based on the results from the Cronbach's alpha and composite reliability, it can be reliably concluded that internal consistency for each of the study construct is adequate.

4.3.2 Convergent Validity

The convergent validity tests the extent to which a measure correlates positively with alternative measures of the same construct. This measure is to ensure that a particular set of indicators relate to one and the same construct. The indicator reliability and average variance extract (AVE) were used to test the convergent validity of the constructs.

4.3.2.1 Indicator Reliability

The outer loadings of indicators were used to test the indicator reliability. The general rule of thumb is that the outer loadings should be 0.70 or higher (Hair et al., 2011). However, some studies

have further provided that indicators above with values above 0.4 should be included in the analysis if it does not affect the validity and reliability of the constructs. On the other hand, indicators with values below 0.40 should be considered for removal. Table 4.4 shows the outer loadings of the indicators for this study. Generally, the results from this study show that indicator reliability is adequate.

Table 4.4 Outer Loadings

	ATU	AU	CPT	PEU	PU	SP
ATU2	0.760					
ATU3	0.740					
ATU4	0.776					
ATU6	0.851					
ATU7	0.838					
AU1		0.896				
AU2		0.841				
AU3		0.753				
AU4		0.863				
CPT1			0.775			
CPT2			0.813			
CPT3			0.748			
CPT4			0.798			
CPT5			0.675			
CPT6			0.763			
CPT7			0.771			
PEU2				0.719		
PEU3				0.718		
PEU4				0.768		
PEU5				0.777		
PEU6				0.729		
PU1					0.764	
PU11					0.657	
PU12					0.763	
PU2					0.710	
PU3					0.635	
SP2						0.821
SP3						0.704
SP4						0.743
SP5						0.762
SP6						0.770
SP7						0.741
SP8						0.796

4.3.2.2 Average Variance Extract

At the construct level, the average variance extract (AVE) is used to test convergent validity. Generally, an AVE value of 0.50 or higher is deemed acceptable (Henseler et al., 2009) and indicates that a particular construct explains more than half of the variance of its indicators. As shown in Table 4.5 below, the AVE for this study exceeded the recommended threshold of 0.5 and thus is deemed to be adequate.

Table 4.5 Average Variance Extract (AVE)

	AVE
ATU	0.630
AU	0.705
CPT	0.584
PEU	0.551
PU	0.501
SP	0.583

With acceptable indicator loadings and AVE (from the results above), this study shows that convergent validity is satisfactory.

4.3.3 Discriminant Validity

The cross-loadings and the Fornell-Larcker criterion were assessed in order to examine discriminant validity. To evaluate the cross-loadings, an indicator's loadings with its construct should be greater than its cross-loadings on other constructs in the model. The results (Appendix1) show that each construct is indeed distinct from other constructs in the model. Thus, all indicator loadings were higher than their cross-loadings. An analysis of the Fornell-Larcker criterion results (Table 4.6 below) indicates that all the AVEs in this study were higher than the squared inter-construct correlations.

Table 4.6 Fornell-Larcker Criterion

	ATU	AU	CPT	PEU	PU	SP
ATU	**0.794**					
AU	0.646	**0.840**				
CPT	0.708	0.634	**0.764**			
PEU	0.497	0.392	0.573	**0.743**		
PU	0.590	0.533	0.608	0.419	**0.708**	
SP	0.690	0.496	0.591	0.400	0.534	**0.763**

Despite the adequacy of the results from the cross-loadings and the Fornell-Larcker criterion, a further assessment was undertaken. The heterotrait-monotrait ratio (HTMT) of correlations was evaluated as proposed by Henseler et al., (2015), and Table 4.7 (below) shows that the HTMT values are below 0.9 which implies that there is adequate discriminant validity. Based on the three evaluation criteria, the overall discriminant validity of this study is adequately established.

Based on the cross-loadings and the Fornell-Larcker criterion the overall discriminant validity of this study is adequate.

Table 4.7 Heterotrait-Monotrait Ratio (HTMT)

	ATU	AU	CPT	PEU	PU	SP
ATU						
AU	0.754					
CPT	0.805	0.720				
PEU	0.605	0.471	0.677			
PU	0.711	0.644	0.709	0.508		
SP	0.782	0.553	0.655	0.465	0.629	

Overall, the results from the validity and reliability tests conducted show that the measurement model for this study is valid and reliable. Thus, it can be used to estimate the parameters of the structural model.

4.4 Evaluation of the Structural Model

Having confirmed the validity and reliability of the indicators, the next step was to assess the predictive capabilities and the relationships between the constructs in this study. Before proceeding to that, the structural model was examined for collinearity. This is because the estimation of the path coefficients (in the partial least squares of the structural equation modeling) is based on OLS (ordinary least squares) regression and as such may be biased if the estimation involves critical levels of collinearity among the constructs (Hair et al, 2014). To check for collinearity the VIF values were examined. Table 4.8 (below) shows that minimum levels of collinearity were found since the VIF values were below the accepted threshold value of 5. Thus, the collinearity levels in this study are acceptable.

Table 4.8 Variance Inflation Factor (VIF) values

	ATU	AU	CPT	PEU	PU	SP
ATU		1.000				
AU						
CPT	2.224				1.488	
PEU	1.513				1.488	
PU	1.726					
SP	1.667					

4.4.1 Path Coefficients

Estimated paths that are close to +1 represent strong positive relationships that are usually statistically significant. On the other hand, values closer to -1 represent negative relationships. Results from the path coefficients (see Table 4.9 below) shows that stakeholders' perceptions about people they perceive to be important - social pressures – (0.371) is the most important exogenous construct for attitude towards use of accounting information on corporate websites; followed by the compatibility (0.353) and then their perceptions about usefulness (0.140). In contrast, their perceptions about ease of use (0.088) have very little bearing on their attitude towards use. Moving on, the results further show that compatibility is a key determinant of their perceptions about the usefulness of online accounting information (0.548) whereas their perceptions about ease of use has very little effect on perceived usefulness.

Table 4.9 Path Coefficients

	ATU	AU	CPT	PEU	PU	SP
ATU		0.646				
AU						
CPT	0.353				0.548	
PEU	0.088				0.105	
PU	0.140					
SP	0.371					

In order to evaluate how each of the four exogenous constructs ultimately influence stakeholders' use of online accounting information through the mediation construct attitude towards use, the total effects were examined. The results (Table 4.10) show that compatibility has the strongest total effect (0.278) meaning stakeholders' use of online accounting information depends on how compatible it is with their practices and work styles. A further analysis of the indicator loadings

(Table 4.4 earlier) shows that compatibility has the highest loading. This implies stakeholders are ready to use online accounting information if it fits well with their business information need. Social pressures follow with a value of 0.240 with the highest indicator leading showing that stakeholders will use online accounting information if it enhances the image of the organization. On the other hand, perceived usefulness and perceived ease of use have rather low path coefficient values.

Table 4.10 Total Effects

	ATU	AU	CPT	PEU	PU	SP
ATU	1.000	0.646				
AU		1.000				
CPT	0.430	0.278	1.000		0.548	
PEU	0.103	0.066		1.000	0.105	
PU	0.140	0.091			1.000	
SP	0.371	0.240				1.000

4.4.2 Hypotheses Testing

The next step was to assess the hypothesized relationships and the significance of the relationship by applying the bootstrapping procedure. A summary of the results of the bootstrapping analysis is provided in Table 4.11 (the detailed results are shown in Appendix 2).

Table 4.11 Bootstrapping Results

	Path Coefficients (β)	p Values	t Values	95% Confidence Intervals	Significant?
ATU⟶AU	0.646	0.000	10.104	(0.524, 0.769)	Yes
CPT⟶ATU	0.353	0.000	4.710	(0.182, 0.476)	Yes
CPT⟶PU	0.548	0.000	5.776	(0.348, 0.711)	Yes
PU⟶ATU	0.140	0.073	1.562	(-0.022, 0.293)	Yes*
PEU⟶PU	0.105	0.288	1.062	(-0.058, 0.328)	No
PEU⟶ATU	0.088	0.118	1.793	(-0.001, 0.221)	No
SP⟶ATU	0.371	0.000	6.164	(0.257, 0.494)	Yes

*significant at $p<0.10$

4.4.2.1 Discussion of Findings (Bootstrapping Results)

The results of the bootstrapping procedure in Table 4.11 show the hypothesized relationships among the study constructs as demonstrated in the framework of the study. In all, five out of the seven hypothesized relationship (H_1, H_2, H_3 H_4 and H_7) were significant except for H_5 and H_6 which were not supported.

***The relationship between Stakeholders' attitude towards the use of online accounting information and their actual use of* (H_1)**

The results in Table 4.11 indicate a positive and highly significant relationship (p-value<0.001) between the attitude of stakeholders towards web-based reporting and usage of online accounting information. This is an indication that individuals who have a positive attitude towards web-based reporting usually have greater motivation to use online accounting information. Thus, the findings of this study support hypothesis H_1. This finding in effect suggests that use of online accounting

information can be explained reasonably by the kind of attitude an individual has towards it. Empirically, a number of existing studies (Giovanis et al., 2012; Lei-da Chen et al., 2002; Porter & Donthu, 2006) have documented that users' attitude towards the use of a technology has a positive influence on their actual use of it. For instance, the findings of Porter & Donthu (2006) suggest that the use of the internet in the US is influenced by the attitudes towards it. While the younger, highly educated and wealthier Americans have higher usage rate, the older, less educated and lower income earners have a lower usage rate. Similarly, Lei-da Chen et al., (2002) also found that consumer acceptance and use of a virtual store is affected by their attitude towards it.

***The Compatibility between Stakeholders' Use of Online Accounting Information and their Values, Past Experiences and Needs and their Attitudes towards its Use* (H_2)**

The results also suggest a positive and statistically significant association between compatibility (p-value 0.001) and attitude towards the use of online accounting information. In this study, compatibility is defined as the extent to which stakeholders believe that accounting information on corporate websites suits their values, needs and past experiences.

This means that the compatibility between stakeholders' use of online accounting information and their values, needs and past experiences positively affects their attitude towards its use. Impliedly, stakeholders' attitude towards web-based reporting is strongly influenced by the extent of compatibility between the type of accounting information provided on corporate websites and the needs and past experiences of the stakeholders (their working styles and previous experiences).

This finding is consistent with the assertion by Lei-da Chen et al., (2002) that when a technology is perceived to be compatible with different aspects of peoples' work practices, preferred working

styles and past experiences the likelihood of its acceptance and actual use is high. Giovanis et al., (2012) for instance found compatibility to be a key factor that influences customers' acceptance and use of internet banking. Similarly, Chen et al., (2002) conclude that customers' attitude towards using virtual store is greatly influenced by the construct compatibility. The argument by these studies is that when people feel a sense of familiarity with the technology (thus a particular technology is not completely different from their daily routine) the likelihood of developing a positive attitude towards it is high.

The use of accounting information on a corporate website can be said to be compatible with stakeholders' existing work practices, preferred working style and past experiences since it is mostly consistent with the hard copy annual report circulated by companies. Online accounting information may fit their business information needs since there may be additional disclosures hoisted on corporate websites that may not be found in the hard copy annual report. This enhances investment decision making, communication among stakeholders as well as cost reduction (Lymer, 1999; Marston & Polei, 2004; Sánchez et al., 2011). On the basis of the above discourse, hypothesis H_2 is supported.

***The Relationship between Social Pressures and Stakeholders' Attitudes towards the Use of Online Accounting Information* (H_4)**

The relationship between social pressure and attitude towards the use of online accounting information was found to be positive and significant. The findings imply that stakeholders' use of online accounting information is positively influenced by their perception that some people or

institutions they perceive to be important approve of its use. Thus, hypothesis H_4 is supported by the results of this study.

As suggested by Legris et al., (2003) that the technology acceptance model be extended to include organizational and social factors so as to enhance and increase its predictive capacity, some studies have subsequently found significant relationship between social pressure and the use of particular technology (Lu et al., 2005; Shin, 2009; Yang et al., 2012). For instance, Lu et al., (2005) found that social influences, in the form of friends and important social connections, are critical determinants for peoples' adoption of wireless internet services via mobile technology. Similarly, Yang et al., (2012) also found that mobile money payment services are largely determined by social influences.

The results from this study show that stakeholders' use of online accounting information is influenced by their perceptions of what others are perceived to be doing in the industry as well as management requirements or the opinions of superiors on the job. Analyses of the results show that stakeholders' use of online accounting information is also based on what they learn about it from their peers within or outside their industry. This result is consistent with the studies of Flanagin (2000), who found that organizational behaviour is modelled around other organizations they perceive to be successful. It is also consistent with other studies that have examined the relationship between social influence and the use of some technology (Lu et al., 2005; Shin, 2009; Yang et al., 2012; Zhou, Lu, & Wang, 2010). Zhou, Lu, & Wang, (2010) which demonstrate that the adoption and use of mobile banking are mainly influenced by some importance placed on it by others. The results, thus, confirm the need to include social factors in the technology acceptance model.

The Relationship between Stakeholders' Perceived Usefulness of Online Accounting Information and their Attitude towards its Use (H_5)

Again, as shown in Table 4.11, the relationship between perceived usefulness and attitude towards the use of web-based reporting was found to be positive and significant at 1% significance level. This finding is an indication that users generally develop a positive attitude towards web-based reporting when they perceive it to be a useful means of communication.

From the perspective of the technology acceptance model, perception about how useful a technology is plays a vital role in forming a positive attitude towards it (Davis, 1989). Empirically, several studies have found perceived usefulness to be an important determinant of technology usage (Lei-da Chen et al., 2002; Ghani et al., 2010; Lee, Cheung, & Chen, 2005; Legris et al., 2003; Porter & Donthu, 2006). Ghani et al., (2010) found that users generally perceived online useful and that their choice of a digital reporting format in an online reporting environment is determined by their perception of its usefulness. Students' perceptions about the usefulness of internet-based learning medium generally affected their attitude towards its use (Lee, Cheung, & Chen, 2005). A meta-analysis by Legris et al. (2003) indicated that studies reviewed mostly found that peoples' attitudes towards the use of a particular technology are affected by their perceptions about its usefulness.

The Relationship between Stakeholders' Perceived Ease of Use of Online Accounting Information and their Attitude Towards Use (H_6)

While the perception of usefulness was found to be a significant predictor of attitude towards use, contrary to the expectation of this study, the relationship between perceived ease of use and attitude

towards use yielded an insignificant result even though the coefficient was positive. This finding thus, suggests that stakeholders' perceptions about the ease of use of online accounting information do not affect their attitude towards its use in any significant way. This finding is however not surprising given that several studies (Chung, Park, Wang, Fulk, & Mclaughlin, 2010; Schepers & Wetzels, 2007a) have also documented an insignificant relationship between ease of use and attitude towards use. As pointed out by these studies, ease of use is overshadowed by other factors given that users gain experience with a particular system over time. Notwithstanding this, some studies also document a strong relationship between perceived ease of use and the use of particular technology (Lei-da Chen et al., 2002; Lee et al., 2005; Lu et al., 2005; Tung et al., 2008). Central to the findings of studies that associate ease of use to attitude towards use is the fact they were mostly undertaken for relatively new technologies that required new skills or some time for users to be familiar with. Therefore, for such technologies perceptions about ease of use is important in determining its usefulness and subsequently its acceptance and use.

On the contrary, the provision and use of accounting information on corporate websites imply that stakeholders' may already be familiar with the content and presentation, thereby their attitude towards its use is not determined by how easy it is to use. For instance, an investment banker may be interested in the outcome of using online accounting information for investment decisions and not necessarily how easy it is to use. As people become familiar and more experienced in the use of a particular system, the expectation that perceived ease of use will significantly predict perceived usefulness and attitude is minimal.

The Relationship between Perceived Ease of Use and Stakeholders' Perceptions about the Usefulness of Online Accounting Information (H_7)

Moreover, while it has been suggested that the ease of use of a technology could affect the perception of usefulness in some studies, results, as shown in Table 4.11, indicate that the construct perceived ease of use does not affect stakeholders' perceived usefulness of online accounting information. Hence, this study does not support hypothesis H_7.

***The Relationship between* Compatibility *and Stakeholders' Perceived Usefulness of Online Accounting Information* (H_3)**

The relationship between compatibility and perceived usefulness was also tested. As argued by some studies (Chen et al., 2002; Chen, Yen, & Chen, 2009; Giovanis et al., 2012; Wu & Wang, 2005), stakeholders who perceive online accounting information as compatible with their working styles and experiences are likely to have a positive attitude towards it. Findings of this study also confirm this assertion as a positive and highly significant relationship was found between compatibility and the construct perceived usefulness. Hypothesis H_3 is therefore supported.

Table 4.12 provides a summary of the results of the hypotheses as discussed in the preceding sections.

Table 4.12 Hypotheses Testing

	Hypotheses Statements	Results
H1 ATU - AU	Stakeholders' attitude towards the use of online accounting information positively affects their actual use of it	Supported
H2 CPT - ATU	The compatibility between stakeholders' use of online accounting information and their values, past experiences and needs positively affect their attitudes towards its use	Supported
H3 CPT - PU	The compatibility between stakeholders' use of online accounting information and their values, past experiences and needs positively affect their perceptions about its usefulness	Supported
H4 SP – ATU	Social pressures will positively affect stakeholders' attitudes towards the use of online accounting information	Supported
H5 PU -ATU	Stakeholders' perceived usefulness of online accounting information positively affects their attitude towards its use	Supported
H6 PEU - ATU	Stakeholders' perceived ease of use of online accounting information positively affects their attitude towards its use	Not Supported
H7 PEU - PU	Stakeholders' perceived ease of use of online accounting information positively affects their perceived usefulness of online accounting information	Not Supported

4.5 Mediating Analysis

As demonstrated in the framework of this study, whilst attitude towards use is predicted to have a direct positive impact on actual use, attitude was also hypothesized to mediate the relationship between all the exogenous constructs of this study and actual use. From the conceptual framework, this study asserted that attitude towards the use (ATU) of online accounting information mediates the relationship between the exogenous constructs (compatibility (CPT), social pressures (SP),

perceived usefulness (PU) and perceived ease of use PEU)) and the endogenous construct actual use (AU).

This assertion was based on the theoretical assumption that the decision to perform or not to perform a particular behaviour is determined by an individual's positive or negative evaluation (Davis, 1989; Legris et al., 2003). Consequently, both the direct and indirect relationships between the exogenous and endogenous constructs are examined through mediation analysis. In order to test for mediation, this study followed the bootstrapping procedure by Zhao et al., (2010) as discussed in chapter three. Thus, the sampling distribution of the indirect effect was bootstrapped (detailed results are shown in Appendix 2).

Following the Zhao et al., (2010) procedure, the first step was to check for the significance of the indirect effect by bootstrapping. An analysis of the results from the bootstrapping procedure shows that all the indirect effects are significant (see Table 4.14) since none of their 95% confidence interval bias corrected includes zero. Specifically, the empirical *t*-value of the indirect effect (0.225) for the CPT – AU relationship is 3.903 resulting in a *p*-value of 0.000 while that for SP – AU (0.237) relationship has a *t*-value of 5.174 and a *p*-value of 0.000. However, though the 95% confidence interval for the indirect relationships for PU – AU; and PEU – AU do not include zero, an analysis of their *p*-values shows that they are weakly significant at $p<0.10$.

Table 4.14 Indirect Effect

Constructs path	Indirect effect	95% confidence interval bias corrected	*t* value	*p* value	Sig?
CPT - AU	0.225	{0.122, 0.310}	3.903	0.000	Yes
PEU – AU	0.065	{0.023, 0.135}	1.897	0.058	*Yes
PU – AU	0.094	{0.018, 0.181}	1.875	0.061	*Yes
SP - AU	0.237	{0.156, 0.307}	5.174	0.000	Yes

*Significant at $p<0.10$

The next step focused on the significance of the direct effect of the relationships. The results (Table 4.15) show that all the direct effects are significant except for the direct relationship between PU – AU. While CPT shows a pronounced and significant (t=4.427; p=0.000) effect on AU, the direct effect between PEU – AU (0.066) shows a weakly significant relationship (t=1.772; p<0.10). On the other hand, the effect for PU – AU is statistically not significant because the confidence interval does not include zero (-0.012, 0.194). This study thus draws the following conclusion on the mediation analysis:

Table 4.15 Direct Effect

Constructs path	Direct effect	95% confidence interval bias corrected	t value	p value	Sig?
CPT - AU	0.278	{0.153, 0.397}	4.427	0.000	Yes
PEU – AU	0.066	{0.005, 0.151}	1.772	0.076	*Yes
PU – AU	0.091	{-0.012, 0.194}	1.731	0.084	*Yes
SP - AU	0.240	{0.157, 0.335}	5.321	0.000	Yes

*Significant at p<0.10

Since the indirect effect for PU – AU is significant and the direct effect is not significant, this study concludes that there is indirect-only mediation (full mediation). Thus, attitude towards use of online accounting information fully mediates the relationship between stakeholders' perceived usefulness and their actual use of online accounting information.

On the other hand, attitude towards the use of online accounting information partially mediates the relationships between CPT – AU; PEU – AU; and SP – AU. This is because both the indirect and direct effects on these relationships are significant. More specifically, they are complementary mediations since both effects point in the same direction.

4.5.1 Summary of Mediation Analysis

The mediation analysis conducted showed that stakeholders' attitude towards the use of online accounting information mediates the relationship between their perceptions about its usefulness, ease of use, compatibility and social influence and their actual use of online accounting information. Thus, all the exogenous constructs of this study have positive implication on actual use of online accounting information by stakeholders and that their attitude towards online accounting information is critical to this relationship. These findings have received some empirical support in some existing studies (AbuGhazaleh et al., 2012; Aly et al., 2010; Sánchez et al., 2011).

4.6 Coefficient of Determination (R^2)

To evaluate the quality of the structural model, the coefficient of determination (R^2) was examined. The R^2 measures the model's predictive ability. Hence, a larger R^2 value means a higher predictive ability of the structural model. The R^2 values of the 3 endogenous constructs are provided in Table 4.13. The results show that attitude towards use has a high predictive power given the reported R^2 value of 0.632. This implies that perceived usefulness, compatibility, perceived ease of use and social pressures highly predict attitude towards use of corporate internet reporting. Also, compatibility and perceived ease of use explain 37.7% of the variance in perceived usefulness. This is evident in that perceived ease of use does not have any significant impact on perceived usefulness. A further analysis shows that 41.8% of the variance in actual use is explained by attitude towards use. Overall, the structural model has adequate predictive ability.

Table 4.13 Coefficient of Determination (R^2)

	R Square
ATU	0.632
AU	0.418
PU	0.377

4.4.3 Predictive Relevance

The blindfolding procedure was run to assess the predictive relevance of the structural path model. Table 4.14 shows the blindfolding results for the construct cross-validated redundancy estimates. As indicated in the Table, the Q^2 values of all the three endogenous constructs are considerably above zero. Specifically, attitude towards use has the highest Q^2 value (0.390), followed by actual use (0.285) and then perceived usefulness (0.171). These results provide support for the structural model's predictive relevance of the endogenous constructs.

Table 4.13 Cross Validated Redundancy (Q^2)

	SSO	SSE	Q¬≤ (=1-SSE/SSO)
ATU	855.000	521.414	0.390
AU	684.000	489.272	0.285
CPT	1,197.000	1,197.000	
PEU	855.000	855.000	
PU	855.000	708.668	0.171
SP	1,197.000	1,197.000	

4.7 Summary of Chapter Four

This chapter analyses the results of the study by following the procedure for evaluating the measurement and structural model. The results indicated that the measurement model showed adequate reliability and validity measures. The structural model also demonstrated satisfactory results as it showed strong explanatory power. The findings were discussed with respect to the research hypotheses and questions and the results generally support the proposed model. Stakeholders' actual use of online accounting information is mostly determined by compatibility and social pressures. Meanwhile, perception about ease of use does not have any direct influence on stakeholders' attitude towards the use of online accounting information. As a result, hypotheses H_1, H_2, H_3, H_4 and H_5 are supported whilst H_6 and H_7 are not supported. The research model also revealed some mediating relationships. Attitude towards use fully mediates the relationship between stakeholders' perceptions about the usefulness of online accounting information and their actual use of it. The next chapter presents a summary of the research as well as a discussion of the theoretical and practical implications of the study.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the main issues discussed in the study. The chapter highlights the key findings of the study as well as the implications of the findings. It also discusses major conclusions drawn and contributions to academic research. The limitations of the study are also presented. The chapter is organized as follows: the next section presents an overall summary of this study. This is then followed by the conclusions drawn from the study. Next is a discussion of the implications of the study. Following from the implications is the contributions made by this study. The next section then highlights the limitations of the study. Finally, the thesis ends with suggestions for future research.

5.2 Summary of the Study

Current developments and advances in the area of information and communication technology, specifically the internet, have changed the way corporate information is disseminated among stakeholders. The internet provides the platform for organizations to disseminate accounting information to a wide audience within and beyond the borders of a country. A number of studies have been carried out to examine this reporting practice. These studies have mostly focused on the content, quality and determinants of financial reporting on corporate websites. Despite the numerous studies on internet financial reporting, there is a general lack of empirical studies that

examine the behaviour of stakeholders (management, users and regulatory bodies) in the use of accounting information provided via the internet. This study addresses this gap by examining the factors that determine stakeholders' attitude towards the use of online accounting information.

Literature suggests that the uncertainty of reporting accounting information on the internet goes beyond factors determined by voluntary disclosure theories. Empirical studies indicate that factors such as individual needs, values, past experiences as well as social attributes are all important in determining the acceptance, usefulness and reliability of online accounting information. By synthesizing two behavioural theories in the area of technology (technology acceptance model and the innovation diffusion theory), this study hypothesized that behavioural factors such as compatibility, social pressures, perceived usefulness and perceived ease of use determine stakeholders' attitude towards the use of online accounting information. The study further hypothesized that stakeholders' attitude towards online accounting information influences their actual use.

By identifying with the philosophical assumptions of the positivists, this study adopted the quantitative research approach by testing theories and developing specific research hypotheses and questions. The survey method of inquiry was used to collect data. The survey instrument used was based on existing multi-item scale based on prior studies adapted to suit the context of this study. Respondents were required to score each item on a Likert scale with anchors ranging from 1 to 7. 435 questionnaires were administered and 175 were returned and duly coded.

This study adopted the structural equation modelling, specifically the partial least squares approach to evaluate the research model. This technique was adopted since this study seeks to explain the behaviour of stakeholders on the use of online accounting information. Again, the study has a

relatively small sample size which does not meet the criteria for the co-variance based structural equation modelling. Based on the partial least squares method, the validity and reliability of the measurement indicators were assessed, hypotheses were tested and the overall structural model was also examined for its predictive abilities. The model was also examined for mediating relationships among the constructs.

A number of interesting perspectives emerged from the findings of this study. By conceptualizing the technology acceptance model and the innovation diffusion theory, this study finds that stakeholders' compatibility with online accounting information as well as pressures from social networks significantly affect their attitude towards use. The study, thus, demonstrates that while promoting the use of the internet for providing accounting information, there is the need to take into consideration compatibility of stakeholders' needs, experiences and preferences with the information provided online. The results from this study also found support for the need to extend the technology acceptance model to include social and organizational factors.

The results further reveal that though stakeholders find online accounting information useful, their perceptions about its usefulness may not hold if the information online is not compatible with their needs and preferences. In this study, the relationship between compatibility and perceived usefulness yielded a positive and statistically significant effect, confirming that compatibility is an important factor in determining stakeholders' use of online accounting information.

The findings of the study further highlight the need to revisit and examine the construct "perceived ease of use" in the technology acceptance model especially for the adoption and use of internet-based studies. The results from this study indicate that perceived ease of use does not play a significant role in stakeholders' use of online accounting information. Thus, there was no

significant relationship between perceived ease of use and perceived usefulness as well as between perceived ease of use and attitude towards use. This implies that stakeholders' perceptions about the usefulness of online accounting information are not determined by how easy it is to use the information since they are already familiar with it.

5.2.1 Implications of Findings

The findings of this study provide some important implications for corporate reporting on the internet, not only for organizations that provide accounting information on corporate websites but users as well. The results from this study clearly indicate that stakeholders in the business environment in Ghana generally have a positive attitude towards corporate reporting on the internet. They perceive that it is relevant to their job, saves time and will rely on it for their business information needs. The following are some implications for this study;

First, the results from this study clearly demonstrate that compatibility has a significant positive effect on stakeholders' use of online accounting information. Providers of accounting information on corporate websites should provide information that is compatible with users' business information need and past experiences by ensuring that the information provided is timely, reliable and transparent. Given that users rely largely on companies in order to take investment decision, businesses should take advantage of the platform provided by the internet to attract potential investors (both foreign and local investors). For instance, a financial institution (corporate lender) as part of taking a decision whether or not to grant credit to an organization should be able to rely on the information (financial and non-financial) provided on a company's website. This study further emphasizes that academic researchers should not underestimate the importance of compatibility in determining the adoption and use of online accounting information from the perspective of an emerging economy.

Second, though stakeholders perceive online accounting information as generally useful, such perception is influenced by its compatibility with their needs; implying that no matter how useful online accounting information is perceived, if it does not fit well with users' business information needs and past experiences they may not use it. This study emphasizes that academic researchers should not underestimate the importance of compatibility in determining the adoption and use of a technology from the perspective of an emerging economy.

Third, the non-significant relationship between ease of use and stakeholders' attitude towards online accounting information generally could be interpreted to mean that when people become familiar with the use of a particular technology, how easy it is to use does not affect their perceptions about its usefulness thereby attitude. Accordingly, the findings show that a positive attitude towards the use of accounting information on a corporate website is not determined by how easy it is to use or retrieve it. Within the context of this study, companies mostly have their audited annual reports (as well other non-audited information) uploaded onto their websites. These reports are usually the soft version of the hard copies circulated to stakeholders. Hence, the innovation of hoisting or accessing such information from a company's website may not be a significant factor for stakeholders' use of online accounting information. Rather, it is the relevance and timeliness of such information that is critical to their use.

Finally, the empirical findings from this study suggest that strengthening stakeholder social connections (such as among superiors, colleagues etc.) could enhance the use of corporates on companies' websites. This implies that users such as analysts, corporate lenders etc. are encouraged to use online accounting information if colleagues are using it and superiors require it to be used.

5.3 Contributions of the Study

This study makes some important contributions to the financial reporting literature. Specifically, the study adds to existing literature on corporate internet reporting by explaining from a behavioural perspective factors that influence stakeholders' use of online accounting information. The contributions of this study are discussed as follows:

This study is one of the first to demonstrate that technology and behavioural theories such as the technology acceptance model and the innovation diffusion theory applied in the context of web disclosure predicts or explains peoples' attitude towards the use of online accounting information. Thus, stakeholders' adoption and use of accounting information on corporate websites is a function of their behavioural beliefs and attitudes. With several calls in literature to extend the technology acceptance model to improve its predictive abilities (Turner et al., 2010), this study provides a theoretical framework for further studies into the attitudes of stakeholders towards corporate web reporting.

Additionally, this study extends technology acceptance research by examining the antecedents of peoples' attitude towards the use of online accounting information. Most technology acceptance studies have only considered perceived usefulness and perceived ease of use as the factors that determine the acceptance and use technology. The findings from this study demonstrate that the compatibility of online accounting information with stakeholders' needs and past experiences as well as the influence from social connections (social pressures) are also important determinants of their attitude (whether positive or negative) that should not be ignored in academic research. This could improve the direction of corporate reporting on the internet. Consequently, this study provides empirical support for the argument that perceived usefulness and perceived ease of use

are not the only factors that determine the acceptance and use of technology as suggested by the technology acceptance model.

The study further contributes to literature by highlighting the need to consider other factors when examining the acceptance and use of a particular technology especially when users are familiar with similar technology. Though prior studies have shown that peoples' perceptions about how easy it is to use a particular technology are important in determining its acceptance (Tung et al., 2008), this study documents that perceived ease of use is less critical in determining stakeholders' use of online accounting information. Thus, the acceptance and use of accounting information on corporate websites are not determined by the perception of how easy it is to use.

In terms of methodological contributions, this study employed the use of structural equation modelling, specifically the partial least squares, unlike other studies that made/make use of regression-based analysis. Using structural equation modelling allowed for hypotheses testing, evaluating the measurement model as well as undertaking a factor analysis all in the same model, simultaneously assessing direct, indirect and total effect mediation. It also has features that reduced errors in the study and improved the quality of constructs in the research model by identifying and removing weak measurement indicators.

5.4 Practical Implications of the Study

Findings of this study have several implications for the security market, accounting practice and management of firms in Ghana. As the study's findings suggest, users generally find online reporting useful and informative and hence, management could take advantage of this important platform to communicate with its stakeholders in a timelier fashion with less effort. In particular, information such as reports and agenda for the annual general meeting could be communicated via

companies' websites and also when properly developed, shareholders could be afforded the opportunity to follow proceedings of annual general meetings on websites. This will enhance communication between management and shareholders.

Also, as the results demonstrate the attitude of users towards online accounting information is largely influenced by factors such as the usefulness and how compatible the online information is to their needs. Since attitude is an important predictor of actual use, an understanding of the factors that promote a positive attitude of various stakeholders towards web-based reporting is critical in promoting actual use of web-based report of companies. Thus, managers of companies must thoroughly consider system compatibility and the usefulness of the online information to users when designing their websites as these are key in promoting the use of online accounting information among stakeholders.

To regulators of the stock market, findings of this study also provide some valuable insights into the perception of the reporting behaviour of firms by the key stakeholders of the firms that they regulate. Given that the stakeholders of most of the sampled firms have a positive attitude towards online provision of accounting information, the regulators of listed firms such as the Security and Exchange Commission, the Ghana Stock Exchange, etc could take advantage of this positive attitudes of users to encourage or through some legislations mandate companies to increase both relational and informational capacities of their websites thereby improving transparency on the stock market.

5.5 Limitations of the Study

In spite of the significant contributions this study makes to academic research, the findings are subject to some limitations which can be improved upon in future research. First, this study found that the use of accounting information on corporate websites is quite widespread among the various stakeholders. However, the value or benefits of providing or accessing information via this reporting medium cannot be ascertained. Using measures of effectiveness and productivity to determine the impact of stakeholders' use of online accounting information on work performance, investment and/or business decision could provide a valuable contribution to corporate internet reporting research.

Second, accounting information provided on corporate websites remains at the discretion of management. It is voluntary and unregulated, thus, raising concerns about the quality and reliability of such information. Such concerns may affect the acceptance and use of this reporting practice. However, this study did not consider whether stakeholders' attitude towards the use of online accounting information is affected by their perceptions about its quality and reliability.

Third, while the study provides some valuable insights on web-based reporting from a developing country's perspective, it was conducted in a setting where the level of technological advancement is still at its infantile stage and internet penetration is generally far below (27.8% of the population) the acceptable penetration rate of 50% and above. Thus, the low level of technological advancement could have some implications on the study findings. Hence, caution must be taken in generalizing the results of this study especially to countries with relatively more advanced technology.

Fourth, the cross-sectional nature of the study only tests for the existence of a relationship among the study constructs but does not in any way establish a causal relationship. Thus, causal claims cannot be inferred from the analysis.

Due to the above limitation of the study and also based on the fact that survey research is usually not without shortcomings, the results of this study should be interpreted with caution. Nonetheless, the findings from this study offer an insightful explanation of stakeholders' attitude towards online accounting information from the perspective of an emerging economy, hence providing some value-addition.

5.6 Suggestions for Future Research

Based on the findings of the study and the limitations identified above, the following avenues are proposed for future research. First, this study recommends that future studies should consider measuring the values or benefits of using online accounting information. This is because the use of technology is believed to enhance work practices (e.g. by increasing productivity). For instance, corporate internet reporting could enhance the quality and timeliness of corporate information. Thus, it will be interesting to know how stakeholders' perceptions about the value of online accounting information will affect their attitude towards the use of online accounting information.

Second, considering that the provision of online accounting information is at the discretion of management and it is unregulated, stakeholders' perceptions about its reliability could affect its use. Accordingly, future studies should consider such impact on attitude towards use.

Finally, future studies could explore the possibility of a qualitative study to gain an in-depth understanding of stakeholders' use of online accounting information. Interviewing stakeholders such as users, management as well as regulatory bodies could provide a detailed and broader perspective of their perceptions about accounting information on corporate websites.

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Appendix 1: Cross Loadings

	ATU	AU	CPT	PEU	PU	SP
ATU2	**0.760**	0.549	0.503	0.439	0.486	0.495
ATU3	**0.740**	0.446	0.470	0.450	0.401	0.499
ATU4	**0.776**	0.503	0.592	0.321	0.453	0.586
ATU6	**0.851**	0.551	0.655	0.431	0.465	0.589
ATU7	**0.838**	0.510	0.574	0.342	0.532	0.563
AU1	0.554	**0.896**	0.603	0.326	0.474	0.454
AU2	0.519	**0.841**	0.452	0.263	0.402	0.340
AU3	0.519	**0.753**	0.522	0.419	0.477	0.405
AU4	0.574	**0.863**	0.546	0.311	0.435	0.459
CPT1	0.536	0.523	**0.775**	0.465	0.550	0.454
CPT2	0.570	0.530	**0.813**	0.390	0.527	0.546
CPT3	0.509	0.538	**0.748**	0.422	0.489	0.393
CPT4	0.611	0.529	**0.798**	0.486	0.509	0.442
CPT5	0.375	0.344	**0.675**	0.325	0.336	0.293
CPT6	0.583	0.427	**0.763**	0.476	0.371	0.449
CPT7	0.565	0.464	**0.771**	0.483	0.429	0.547
PEU2	0.293	0.295	0.415	**0.719**	0.436	0.309
PEU3	0.408	0.394	0.457	**0.718**	0.315	0.344
PEU4	0.374	0.208	0.470	**0.768**	0.295	0.341
PEU5	0.350	0.278	0.412	**0.777**	0.240	0.205
PEU6	0.416	0.267	0.365	**0.729**	0.250	0.267
PU1	0.467	0.503	0.483	0.285	**0.764**	0.390
PU11	0.402	0.277	0.453	0.378	**0.657**	0.469
PU12	0.513	0.426	0.522	0.397	**0.763**	0.396
PU2	0.357	0.399	0.317	0.154	**0.710**	0.295
PU3	0.283	0.231	0.304	0.193	**0.635**	0.306
SP2	0.600	0.468	0.476	0.410	0.479	**0.821**
SP3	0.468	0.263	0.385	0.354	0.316	**0.704**
SP4	0.532	0.275	0.402	0.320	0.320	**0.743**
SP5	0.569	0.486	0.494	0.267	0.508	**0.762**
SP6	0.583	0.481	0.518	0.293	0.473	**0.770**
SP7	0.383	0.256	0.345	0.199	0.296	**0.741**
SP8	0.491	0.346	0.497	0.263	0.404	**0.796**

Appendix 2: Bootstrapping Results for Hypotheses Testing

Appendix 2a: Path Coefficients

Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Error (STERR)	T Statistics (|O/STERR|)	P Values
ATU -> AU	0.646	0.649	0.064	10.104	0.000
CPT -> ATU	0.353	0.346	0.075	4.710	0.000
CPT -> PU	0.548	0.543	0.095	5.776	0.000
PEU -> ATU	0.088	0.095	0.056	1.562	0.118
PEU -> PU	0.105	0.115	0.099	1.062	0.288
PU -> ATU	0.140	0.139	0.078	1.793	0.073
SP -> ATU	0.371	0.373	0.060	6.164	0.000

Confidence Intervals

	Original Sample (O)	Sample Mean (M)	2.5%	97.5%
ATU -> AU	0.646	0.649	0.511	0.762
CPT -> ATU	0.353	0.346	0.195	0.488
CPT -> PU	0.548	0.543	0.342	0.708
PEU -> ATU	0.088	0.095	-0.016	0.209
PEU -> PU	0.105	0.115	-0.076	0.313
PU -> ATU	0.140	0.139	-0.018	0.294
SP -> ATU	0.371	0.373	0.252	0.489

Confidence Intervals Bias Corrected

	Original Sample (O)	Sample Mean (M)	Bias	2.5%	97.5%
ATU -> AU	0.646	0.649	0.003	0.524	0.769
CPT -> ATU	0.353	0.346	-0.007	0.182	0.476
CPT -> PU	0.548	0.543	-0.004	0.348	0.711
PEU -> ATU	0.088	0.095	0.007	-0.001	0.221
PEU -> PU	0.105	0.115	0.010	-0.058	0.328
PU -> ATU	0.140	0.139	-0.001	-0.022	0.293
SP -> ATU	0.371	0.373	0.002	0.257	0.494

Appendix 2b: Total Effects

Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Error (STERR)	T Statistics (|O/STERR|)	P Values
ATU -> AU	0.646	0.649	0.064	10.104	0.000
CPT -> ATU	0.430	0.423	0.072	5.988	0.000
CPT -> AU	0.278	0.276	0.063	4.427	0.000
CPT -> PU	0.548	0.543	0.095	5.776	0.000
PEU -> ATU	0.103	0.110	0.060	1.721	0.085
PEU -> AU	0.066	0.071	0.037	1.772	0.076
PEU -> PU	0.105	0.115	0.099	1.062	0.288
PU -> ATU	0.140	0.139	0.078	1.793	0.073
PU -> AU	0.091	0.091	0.052	1.731	0.084
SP -> ATU	0.371	0.373	0.060	6.164	0.000
SP -> AU	0.240	0.242	0.045	5.321	0.000

Confidence Intervals

	Original Sample (O)	Sample Mean (M)	2.5%	97.5%
ATU -> AU	0.646	0.649	0.511	0.762
CPT -> ATU	0.430	0.423	0.273	0.558
CPT -> AU	0.278	0.276	0.154	0.399
CPT -> PU	0.548	0.543	0.342	0.708
PEU -> ATU	0.103	0.110	-0.005	0.230
PEU -> AU	0.066	0.071	-0.003	0.145
PEU -> PU	0.105	0.115	-0.076	0.313
PU -> ATU	0.140	0.139	-0.018	0.294
PU -> AU	0.091	0.091	-0.012	0.195
SP -> ATU	0.371	0.373	0.252	0.489
SP -> AU	0.240	0.242	0.153	0.330

Confidence Intervals Bias Corrected

	Original Sample (O)	Sample Mean (M)	Bias	2.5%	97.5%
ATU -> AU	0.646	0.649	0.003	0.524	0.769
CPT -> ATU	0.430	0.423	-0.007	0.264	0.549
CPT -> AU	0.278	0.276	-0.001	0.153	0.397
CPT -> PU	0.548	0.543	-0.004	0.348	0.711
PEU -> ATU	0.103	0.110	0.008	0.008	0.241
PEU -> AU	0.066	0.071	0.004	0.005	0.151
PEU -> PU	0.105	0.115	0.010	-0.058	0.328
PU -> ATU	0.140	0.139	-0.001	-0.022	0.293
PU -> AU	0.091	0.091	0.000	-0.012	0.194
SP -> ATU	0.371	0.373	0.002	0.257	0.494
SP -> AU	0.240	0.242	0.002	0.157	0.335

Appendix 3: Bootstrapping Mediation Results

Indirect Effects

Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Error (STERR)	T Statistics (|O/STERR|)	P Values
ATU -> AU					
CPT -> ATU					
CPT -> AU	0.225	0.222	0.058	3.903	0.000
PEU -> ATU					
PEU -> AU	0.065	0.070	0.034	1.897	0.058
PU -> ATU					
PU -> AU	0.094	0.096	0.050	1.875	0.061
SP -> ATU					
SP -> AU	0.237	0.236	0.046	5.174	0.000

Confidence Intervals

	Original Sample (O)	Sample Mean (M)	5.0%	95.0%
ATU -> AU				
CPT -> ATU				
CPT -> AU	0.225	0.222	0.129	0.318
PEU -> ATU				
PEU -> AU	0.065	0.070	0.014	0.126
PU -> ATU				
PU -> AU	0.094	0.096	0.016	0.179
SP -> ATU				

	Original Sample (O)	Sample Mean (M)	5.0%	95.0%
SP -> AU	0.237	0.236	0.163	0.314

Confidence Intervals Bias Corrected

	Original Sample (O)	Sample Mean (M)	Bias	5.0%	95.0%
ATU -> AU					
CPT -> ATU					
CPT -> AU	0.225	0.222	-0.002	0.122	0.310
PEU -> ATU					
PEU -> AU	0.065	0.070	0.005	0.023	0.135
PU -> ATU					
PU -> AU	0.094	0.096	0.002	0.018	0.181
SP -> ATU					
SP -> AU	0.237	0.236	-0.002	0.156	0.307