



THE INFLUENCE OF TECHNOLOGICAL FACTORS ON THE INTERNET FINANCIAL REPORTING IN THE LIBYAN BANKING SECTOR: MODERATING EFFECT OF CORPORATE GOVERNANCE

Saad Mohamed Abdullah Lihniash¹ⁱ,
Ibrahim Mohammed Massoud Egdair²,
Sohail Ahmed³

¹Department of Accounting,
Management & Science University,
Malaysia

²Sabha University,
Libya

³Faculty of Business Management,
University Technology MARA,
West Malaysia, Malaysia

Abstract:

For several decades, a lot of research has been carried out on the quality, methods and significance of internet financial reporting. However, most of the prior studies on IFR were declined towards exploratory and descriptive methods. Hence, the studies failed to explained technology factors empirically in terms of technology resources, human resources and users' readiness towards IFR. Therefore, this study empirically examines the influence of technological factors on the IFR with the moderating effect of corporate governance. Data were collected from the users of internet financial reporting using clustered and simple random sampling. Meanwhile, 212 questionnaires were retrieved that represent 53% response rate. The data were analysed using Structural Equation Modelling (PLS-SEM). The findings showed that technology factors (users' readiness, technology and human resources) have statistically significant relationship with internet financial reporting of Libyan Banking Sector. This indicates that users' readiness, human resources and technology resources are the predictor for internet financial reporting. Base on the moderating effect, it was revealed that corporate governance only moderates the relationship between users' readiness and internet financial reporting. The results of our survey indicate continued progress in the area of corporate reporting over the Internet. Almost all the companies considered in this study have a section within their Website, which is used to present financial information. The study recommend that stakeholders must consider the factors analyzed in this study for more effective use of internet financial reporting most especially in Libyan Banking Sector.

ⁱ Correspondence: email alh75saad23@gmail.com

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1. Introduction

In the modern business environment, the primary aim of financial reporting (FR) is to gather the financial information that are useful for stakeholders (such as: investors, creditors, lenders, and other users) for making decisions about providing resources to the firms (Al-Shammari, 2013). Rapid growth and developments of information and communication technology had led many firms in several countries to consider the effect of the internet on the dissemination and delivery of business information. These demands had resulted in the evolution of the financial reporting moving from traditional methods of printing based to the modern internet-based reporting (Marlim & Panggabean, 2018; Al-Htaybat, 2011). The development of technology makes a revolution in achieve information around the world (Rahadi & Rahmi, 2019; Shiri et al., 2013). Several firms have realised the positive effects associated with internet financial reporting (Wati, 2019; Poon et al., 2003). Companies that are adopting the internet for accounting and financial information presentation can have a lot of benefit over additional costs by providing financial report through their website (Khan, 2016).

Meanwhile, the issue of internet financial reporting is fast becoming the standard in developed nations, but very few prior researches have focused on internet financial reporting in the developing countries. Also, Rahadi and Rahmi (2019) and Valentinetti and Rea (2012), the internet usage have improved for dissemination of corporate information and it is seen as the globalization process and the system of economic digitalisation. Hence, disclosure of financial reporting represents continuing improvement of traditional methods of reporting to the digitalisation methods. This includes paper based in terms of supplying timely data; speed and lower cost in obtaining information on firms. The paper based financial reporting are minimal in useful now in terms of reliability and timeliness as the whole world are rely on information and communication technologies (Andrikopoulos et al., 2013; Ojah & Mokoteli, 2012). This prompt many firms in Libya and around the world to be motivated to practice internet financial information to meet the needs of the users in a timely and reliable manner (Amin & Mohammed, 2016).

Studies on the internet financial reporting (IFR) classified on the two generation as described by Al-Htaybat (2011). Prior research has emphasised on the IFR studies for several decades. Several studies have indicated the factors that affecting the internet financial reporting around the world. This factors includes technological resources (Lihniash, Egdair, & Ahmed, 2019); user's readiness (Ali, Khan, Mardani, Zavadskas, & Kaklauskas, 2017); corporate governance (Ariff, Bin-Ghanem, & Hashim, 2018); human resources (Marlim & Panggabean, 2018; Khan & Ismail, 2017) among others. However,

few of prior studies have focused on the relationship between technological factor (such as technology resources, users' readiness, human resources) and internet financial reporting specifically in developing countries of the world such as Libya.

As stated from the previous studies above, the unexpected global financial scandal in the 2008 which the Libyan is not exempted prompt companies in Libyan to pay more attention to improve their ability in the area of technology, human factor and user's readiness to improve the usage of internet financial reporting (Lihniash, Egdair, & Ahmed, 2019). Arising from the issues identified above, the primary objective of this study is to examine the effect of technology factors on the internet financial reporting in the Libyan Banking Sectors with the moderating effect of corporate governance practice.

The specific research objectives are posed as follows:

- 1) To assess the impact of technology resources on the internet financial reporting of Libyan Banking Sectors.
- 2) To determine the influence human resources on the internet financial reporting of Libyan Banking Sectors.
- 3) To examine the effect of user's readiness on the internet financial reporting of Libyan Banking Sectors.
- 4) To evaluate the moderating effect of corporate governance on the relationship between technology factors and internet financial reporting of Libyan Banking Sectors.

2. Internet Financial Reporting (IFR)

Various scholars define internet financial reporting in different ways (Lihniash, Egdair, & Ahmed, 2019; Dolinsek, Tominc, & Lutar Skerbinjek, 2014; Khan and Ismail, 2012; Hanifa & Ab. Rashid, 2005; Chan & Wickramasinghe, 2006; Momany & Al-Shorman, 2006; FASB, 2000; Debreceeny et al., 2002). According to Dolinsek et al. (2014). Internet financial reporting (IFR) is the distribution of corporate financial and performance information using internet technologies such as the World Wide Web. In addition, it is referring to the disclosure of financial statement through Internet in a company's website. As stated by Narsa and Pratiwi (2012), the use of the internet is causing financial reporting becomes faster and easier, so it can be accessed by anyone, anytime and anywhere. IFR helps companies in facilitating dissemination of information regarding the company's advantage. The existence of IFR make company able to provide information accurately to the users of financial statements, particularly investors. Investors will be more interested in the financial reporting of the company that owns the information clearly, accurately and on time (Wati, 2019; Lihniash, Egdair, & Ahmed, 2019). This means that with the application of IFR within the corporate organization as a communication medium in delivering a complete company information to the public, particularly investors. Hence, the investors will be more interested in the financial reporting of the company that owns the information timely, clearly, and accurately. Therefore, the higher the level of disclosure of information in quantity or transparency,

then the greater the impact of the disclosure is against the decision of the investors (Rahadi & Rahmi, 2019; Narsa & Pratiwi, 2012).

In addition, as stated by Stoel et al. (2012), most corporate organization specifically Banking Sectors have started to adopt internet financial reporting with the rapid advance information technology. Although internet financial reporting are wider issues to study, the implementation is different around the world in terms of technological development, and tendency to use the internet for financial reporting purposes and influenced by the accounting system in each and every countries (Alali & Romero, 2012). Lihniash, Egdair, and Ahmed (2019) indicated that technology resources and human resources are some of the factors which have contributed to corporate adoption of internet financial reporting. Furthermore, the internet financial reporting promotes transparency about information disclosure which enhances managerial decisions and the congruency of investors and other stakeholders in the making decision making process (Marlim & Panggabean, 2018; Ariff, Bin-Ghanem, & Hashim, 2018). Alali and Romero (2012) revealed that there are some benefits of the internet for financial reporting such as speed, flexibility, dynamism and its cheapness. It has become effective by promoting the use of hyperlinks and search engines. Also, it is another way of examining information which will influence their decision-making process based on the information disclose and reports current situations.

As stated by Lihniash et al. (2019) and Ali Khan et al. (2013), technology factors dimension is an important factor to influence the effectiveness of IFR as the items of IFR will assists in determine the importance and usefulness of IFR in Libya. In addition, there are several motivations in engaging IFR in Libya which are an increase in the transparency of disseminating company information, increased use of the internet in terms of promotion and the creation of a good brand name as well as the practice of good corporate governance (Kiew & Salleh, 2011).

According to Lihniash et al. (2019), the discussion with reference to banking sectors has some common characteristics that unite their assessment in terms of the corporate sector. There are many relationships between the three factors technological, human resources and users' readiness factors considered. It is important to combine these factors to define their significance in this study. Therefore, this study explore a research framework regarding the corporate governance as a moderating effect of technological factors and internet financial reporting of Libyan Banking Sectors, to provide useful information to the users, and its conceptual framework indicates that the preparation of financial reports should provide useful information to investors, creditors, and others (Wati, 2019; Lihniash et al., 2019; Marlim & Panggabean, 2018; Khan & Ismail, 2017). The research framework that explain the relationship between corporate governance, technology resources, human resources and user's readiness indicated in the Figure 1 below:

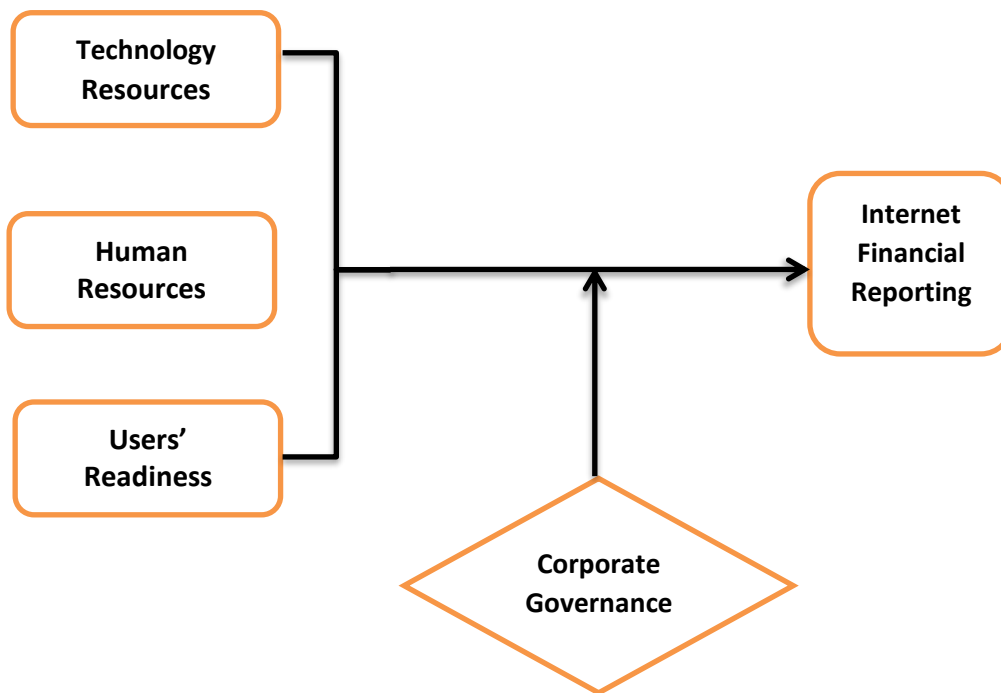


Figure 1: Research Framework on the Relationship between Technology Factor and Internet Financial Reporting in the Banking Sector

2.1 Technology Resources and Internet Financial Reporting

Information technology resource has made significant benefits for accounting departments. IT networks and computer systems have shortened the lead-time needed by accountants to prepare and present financial information to management and stakeholders for the quick, timely and accurate decisions (Lihniash, Egdair, & Ahmed, 2019). This made a biggest impact for the accounting profession on the ability of the companies to use computerized system to track and record financial statement (Wati, 2019). It is also allowing the firms to create individual financial report quickly and easily for investors and management decision making; and improved the overall efficiency and accuracy of the information (Ghasemi et al., 2011). Hence, improved reporting eventually allows investors to determine if a company is a good investment for growth opportunities and has the potential to be a high-value company.

In addition, the technology makes the boundary between all countries disappear (Sanad, Al-Sartawi, & Musleh, 2016). Internet technology has revolutionized the growing number of companies to disclose their financial activities by using website (Jones & Xiao, 2004). Based on the company usually exposes the activity via online such as financial reporting, corporate governance, corporate social responsibility (Gallego-Alvarez, Rodriguez-Domínguez & Garcia-Sanchez, 2011), strategic information, and timeliness, interactivity with the user, navigability and web structure (Gallego-Alvarez, et al., 2012). The Internet is also absorbing, especially with regards to presentation, disclosure and financial reporting (Arafa, 2012). The previous literatures on the level of Libya from the adoption of a rare, generalized and technology, and provide historical and political

broad-based information (Twati, 2014; Twati, & Gammack, 2006) found historical writings in various mass organizations and online resources, and the provision of adoption of relevant technical information in Libya. Based on the description, the proposed hypothesis is:

H₁: There is a significant relationship between technology resources and internet financial reporting in Libyan Banking Sectors.

2.2 Human Resources and Internet Financial Reporting

Measurement of internet financial reporting with the human resources index will make financial reporting be transparent so that to encourage managers to reduce the earnings management practices. Ease of information obtained will make financial information more reliable for parties using financial reports (Hunton et al., 2006). Investor confidence in the information given by the company affects the estimation of risk and determination of the desired rate of return investors (Core et al., 2014; Ming & Ming, 2014). Based on the description, the proposed hypothesis is:

H₂: There is a significant relationship between human resources and internet financial reporting in Libyan Banking Sectors.

2.3 Users' Readiness and Internet Financial Reporting

The study examines the user's readiness of corporate annual reports towards many perspectives of internet financial reporting. Previous studies have been examined the attitudes and perceptions of users of financial reports compared them to selected aspect of internet financial reporting provided by Banking Sectors in Libya. Hence, this is among the first study to evaluate and compare the aspect of internet financial reporting of various users in Libya. Mohd Isa (2006) revealed that perspectives and readiness of users of annual report (such as: business owners, academicians, share brokers, graduate) which are related to financial statement, accounting information, knowledge for using information in the company's annual report. The academicians were selected as one of the groups of corporate annual users due to the responsibility of system of accounting education (Mishekary & Saudagaran, 2005). In addition, auditors also categorized as users of users of financial information for finalized the company performance (Wati, 2019). Whereas, managers responsible for using the accounting information due to daily decision making which influence the business process (Moghadam et al., 2013). Finally, students also categorized as users of financial information due to their background and academic specialization (Lihniash et al., 2019; Marlim & Panggabean, 2018). Therefore, the readiness of the selected users mentioned above are very essential to the corporate financial annual reports in terms of knowledge and attitude for using financial information. Hence, the study examines the influence of users' readiness on internet financial reporting in the Libya Banking Sectors.

H₃: There is a significant relationship between users' readiness and internet financial reporting in Libyan Banking Sectors.

2.4 Corporate Governance as a Moderating effect of Technological Factor and Internet Financial Reporting

Corporate governance (CG) is refer to as the association between stakeholders (shareholders, CEO, management and employees) in determining the performance of the companies (Dolinsek, Tominc, & Lutar Skerbinjek, 2014; Al-Motrafi, 2008, Monks & Minow, 2011). In Libya, medium and large firms are usually public or private companies. The ownership of the public companies is more dispersed that the private companies. It was indicated that investors who only own small percent of the company's shares have limited power to information about the company. It can be also assumed that these investors will use the internet to get the information from the company because data from other sources are more difficult to get (Dolinsek et al., 2014; Marston & Polei, 2004). Hence, in relationship with the theory of corporate governance, the influence of the ownership concentration and legal structure on internet financial reporting factor has been examined in terms of technology, human resources and users' readiness.

Meanwhile, the adventure of technology makes border among all nations disappear (Sanad, Al-Sartawi, & Musleh, 2016). Also, the internet technology has revolutionized the rising and improving number of firms to report their financial activities by adopting website (Jones & Xiao, 2004). As a result, the companies always exposes the activity through online medium such as corporate governance, financial reporting, interactivity with the users, corporate social responsibility, navigability, strategic information and web structure (Gallego-Alvarez, Rodriguez-Dominguez, & Garcia-Sanchez, 2011). This is also absorbed in the area of presentation, financial reporting and disclosure (Arafa, 2012). Based on the empirical studies mentioned above, the study examines the moderating effect of corporate governance on the relationship between technological factors and internet financial reporting in the Libyan Banking Sectors. The proposed hypotheses are as follows:

H₄: Corporate governance moderate the relationship between technology resource and internet financial reporting of Libyan Banking Sectors.

H₅: Corporate governance moderate the relationship between human resource and internet financial reporting of Libyan Banking Sectors.

H₆: Corporate governance moderate the relationship between user's readiness and internet financial reporting of Libyan Banking Sectors.

3. Materials and Methods

This study examines the influence of technology factor on internet financial reporting in Libyan Banking Sectors. Few prior studies have been examined the technology factors (such as technology and human resource; user's readiness; and corporate governance) and attitude and perception of user of corporate annual report in Libya. The study used the cross-sectional design method and survey method. This study collected the required data through questionnaire survey which request the respondents to technological factors towards internet financial reporting in the Banking Sectors in Libya. In total, 400

questionnaires were administered to the target respondents. Out of which, 212 questionnaires were received that represent 53% response rate. In addition, 18 questionnaires were removed due to the ineligibility, incompleteness and outliers. Hence, 194(48.5%) questionnaire considered as usable questionnaires and considered as the effective response rate. As suggested by Linus (2001), the 30% is considered as acceptable response rate for any analysis in the social science study. All the instrument for the measurement of this study were adapted from the prior studies. The dependent variable instrument of internet financial reporting was adapted from (Lihniash et al., 2019; Dolinsek et al., 2014) with 10 items. The independent variables instrument of technology resources (Lihniash et al., 2019; Sanad et al., 2016) with 9 items; human resource adapted from (Lihniash et al., 2019; Hunton et al., 2006) with 8 items; users' readiness adapted from (Lihniash et al., 2019; Isa, 2006) with 10 items; and finally, corporate governance adapted from (Dolinsek et al., 2014; Monks & Minow, 2011) with 7 items. This target respondents are the users of corporate annual report (such as business owners, share brokers, academicians, graduate and other public users). All the items were measured on 5 points Likert scale ranging from strongly disagree (1) to strongly agree (5) on the average result to the ordinal values for all five variables.

4. Result and Discussion

4.1 Response Rate

Table 1 shows the summary of the number of questionnaires administered and the number of questionnaires returned. A total number of 400 questionnaires were administered to respondents, while 212 respondents representing 53% response rate were returned (Tabachnick & Fidell, 2013). Out of which 18 questionnaires were removed due to incompleteness and outliers. Therefore, the 194 (48.5%) questionnaires were subjected for further analysis.

Table 1: Summary of Response Rate

Detail	Copies Rate (%)
Questionnaire Distributed	400 100
Questionnaire Returned	212 53
Questionnaire Removed	18 4.5
Questionnaire Valid for Further Analysis	194 48.5

4.2 Assessing Model Fit

Figure 2 below, presents the examined measurement of the model. Data analyzed through structural equation model revealed the fitness of the model. By threshold of the PLS-SEM, the composite reliability should be greater than 0.7 and average variance expectation should be greater than 0.5 (Hair, et al., 2014). The model shows that indicators (loadings) of variables. Some items are not loaded as they don't meet the benchmark. This led the researcher to discard such indicators and the final measurement model is as shown below.

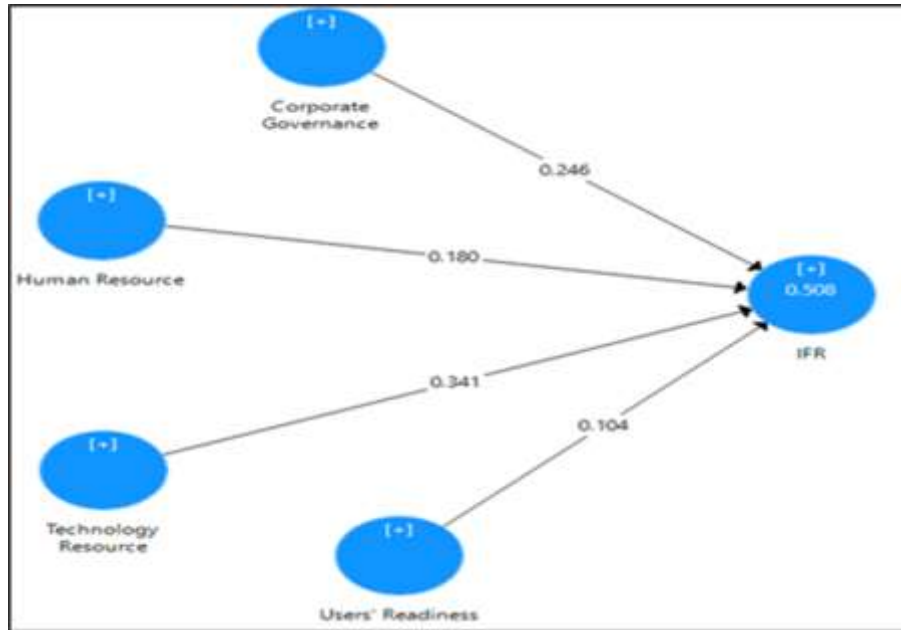


Figure 2: Measurement Model (Algorithms results)

4.3 Validity of the Research Instrument

Validity is the accuracy of a measure or the extent to which a score is accurately and truthfully represent the concept of a construct (Zikmund *et al.*, 2013). Likewise, Sekaran and Bougie (2013) defined validity analysis as a test or assessment of how efficient a research instrument that is developed measures a particular construct it intended to measure. To determine the internal consistency reliability and validity of all the constructs of this study, Cronbach alpha, composite reliability (CR) and average variance extracted (AVE) as suggested by Garson (2016) were calculated using PLS-SEM algorithm as shown in Table 2 below.

Table 2: Construct Reliability and Validity

Constructs	Composite Reliability	AVE	R Square
Corporate Governance (CG)	0.863	0.570	
Human Resources (HR)	0.926	0.612	
Internet Financial Reporting	0.891	0.508	0.508
Technology Resources (TR)	0.910	0.540	
Users Readiness (UR)	0.884	0.525	

Source: Field Survey (2020) Computed Using PLS 3 Software.

From the table above, CR and AVE of all constructs as computed were above the threshold of 0.7 and 0.5, respectively as suggested by (Hair *et al.* 2014). Therefore, it is established that all the construct was really measured by the selected indicators which confirmed the validity and reliability of the research instrument.

Table 3: Discriminant Validity

Constructs	CG	HR	IFR	TR	UR
Corporate Governance (CG)	0.755				
Human Resources (HR)	0.406	0.782			
Internet Financial Reporting	0.532	0.584	0.713		
Technology Resources (TR)	0.484	0.743	0.649	0.735	
Users Readiness (UR)	0.455	0.492	0.487	0.537	0.724

Note: The bolded diagonal numbers represent the square root of the AVE of each construct.

Table 3 presents the result of discriminant validity. The numbers that are bolded represent the square root of AVE of each latent variable and are higher than their correlation with other latent variable as can be observed in the table. The square root of AVE is greater than the correlations among the constructs, as suggested by Fornell-Larcker criterion. This means that the requirement that a construct should be absolutely unique and also capture phenomena not represented by other constructs in the model is confirmed (Hair et al., 2014).

4.4 Bootstrapping Analysis

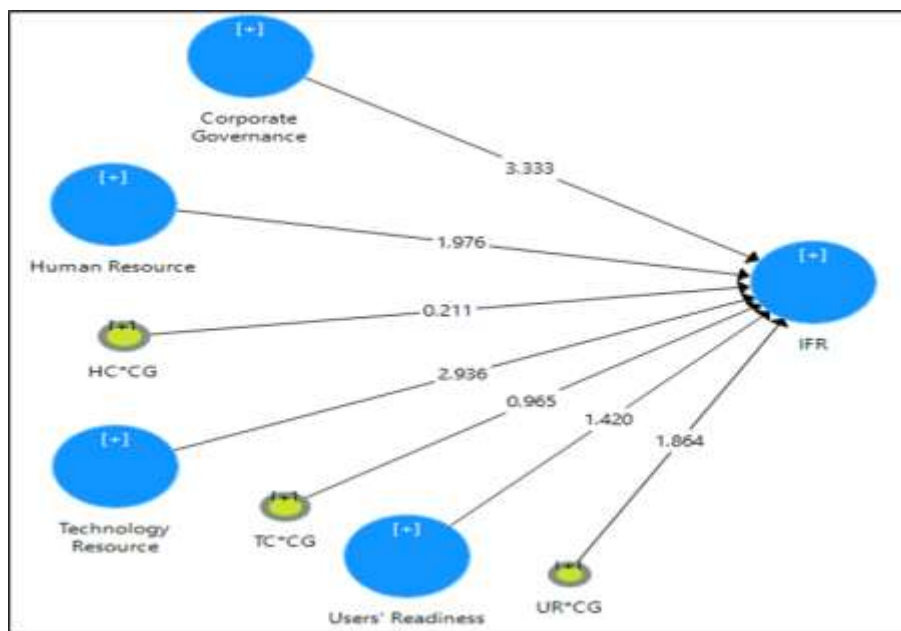


Figure 3: Structural Model (Bootstrapping Result @ 5000)

It is important to carry out a bootstrapping analysis to determine the effect of technology factors on internet financial reporting in the Libyan Banking Sector. Bootstrapping was done by using 5,000 subsamples using 194 cases. Based on the result, figure 3 is presented which shows how the magnitude and significance of the structural paths are consistent.

4.5 Test of Hypotheses

Table 4 presents the path coefficient which indicates the Beta Value, Standard Error, Adjusted R Square and Decision Rule of hypotheses tested in the study.

Table 5: Effect Size on Both Direct and Indirect relationship

	Hypotheses	Beta	SE	T Value	P Values
H ₁	Technology Resource -> IFR	0.301	0.103	2.936**	0.002
H ₂	Human Resource -> IFR	0.183	0.093	1.976**	0.025
H ₃	Users' Readiness -> IFR	0.148	0.061	2.420**	0.019
H ₄	TC*CG -> IFR	-0.080	0.082	0.965	0.169
H ₅	HC*CG -> IFR	0.015	0.072	0.211	0.416
H ₆	UR*CG -> IFR	-0.098	0.053	1.864**	0.033
	Corporate Governance -> IFR	0.186	0.056	3.333**	0.001

Note: *** p< 0.01; **p< 0.05; *p <0.1

Table 4 above shows that technology resources has T-value of 2.936** with the corresponding beta coefficient of 0.301. This means technology resources has positive and significant effect on internet financial reporting in the Libyan Banking Sector. Therefore, the result of the hypothesis was supported which assumes that technology resources has significant effect on internet financial reporting in the Libyan Banking Sector. In addition, the Table 4 also revealed that human resources have T-value of 1.976** with the corresponding beta coefficient of 0.226. This means human resources has positive and significant effect on internet financial reporting in the Libyan Banking Sector. Therefore, the result of the hypothesis was supported which assumes that human resources has significant effect on internet financial reporting in the Libyan Banking Sector. Finally, Table 4 above shows that User's readiness has T-value of 2.420** with the corresponding beta coefficient of 0.148. This means User's readiness has positive and significant effect on internet financial reporting in the Libyan Banking Sector. Therefore, from the result of the direct effect above, it was revealed that all hypotheses H₁, H₂, and H₃ were supported.

Meanwhile, the Table 4 indicated the result of the moderating effect of corporate governance on the relationship between users' readiness and internet financial reporting in the Libyan Banking Sector as T-value of 1.864 with the corresponding beta coefficient of 0.098. This means corporate governance moderate the relationship between users' readiness and internet financial reporting in the Libyan Banking Sector. However, the moderating effect of corporate governance on the relationship between technology resources and internet financial reporting in the Libyan Banking Sector banks as T-value of 0.965 with the corresponding beta coefficient of -0.080. This means corporate governance did not moderate the relationship between technology resources and internet financial reporting in the Libyan Banking Sector banks. Also, the moderating effect of corporate governance on the relationship between human resources and internet financial reporting in the Libyan Banking Sector banks as T-value of 0.965 with the corresponding beta coefficient of -0.080. This means corporate governance did not moderate the relationship between human resources and internet financial reporting in the Libyan Banking Sector banks. Therefore, from the result of the moderating effect

above, it was revealed that the hypothesis H₆ was supported, whereas the hypotheses H₄ and H₅ were rejected.

4.6 Effect Size

It is important to assess the effect size for the relationships between technology resources, technology resources, users' readiness and corporate governance on internet financial reporting in the Libyan Banking Sector. The result is presented in Table 5.

Table 5: Effect Size on Direct and Indirect Relationship

Constructs	Effect Size (f ²)	Predictive Relevance (Q ²)	Decision
Corporate Governance (CG)	0.09		Small
Human Resources (HR)	0.03		Small
Technology Resources (TR)	0.09		Small
Users Readiness (UR)	0.02		
Internet Financial Reporting		.257	

Source: Field Survey, 2019.

Table 5 shows the effect size computed as the increase in *R*-squared of the latent variable to which the path is connected, relative to the latent variable's proportion of unexplained variance (Chin, 1998). *R*-square change is the change in *R*² when a causal factor is removed from the model. The *f*-square coefficient is constructed according to Cohen, (1988) and Ringle, and Henseler (2007) as (*R*²_{original} – *R*²_{omitted}) / (1-*R*²_{original}). Effect size of each constructs is technology resources (0.09); human resources (0.03); users' readiness (0.01) and corporate governance (0.09). The rule of thumb according to Cohen (1988) is that values of 0.02, 0.15 and 0.35 are said to be weak, effects respectively. Therefore, looking at the *f*² as shown in the table 5 above, technology resources; human resources; users' readiness and corporate governance have small effect on internet financial reporting in the Libyan Banking Sector banks. Finally, the result of the predictive relevance indicated 0.257. This indicates that the model of this study has a good predictive relevance.

5. Conclusions and Recommendations

This current study dealt with the empirical studies on the understanding of internet financial reporting and their factors with the moderating effect of corporate governance in the Libyan Banking Sectors. The importance of understanding corporate governance factor added to the proposed model on the internet financial reporting. 212 data were collected from the target respondents through questionnaires survey. Furthermore, the data were analyzed via partial least square-structural equation modelling. The result of the study revealed that four out of the six hypotheses have significant effect on internet financial reporting. It was indicated that technology factor in terms of human and technology resources, and users' readiness directly influence the internet financial

reporting in the Libyan financial sectors. In addition, the results of our survey indicate continued progress in the area of corporate reporting over the Internet. Almost all the companies considered in this study have a section within their Website, which is used to present financial information of some type. Companies are taking advantage of emerging technologies in order to reach investors in a more efficient, cost effective manner.

The study recommends for the future researcher to use the sample of the entire companies in the Libyan stock exchange in order to analyses critical factors that affect the internet financial reporting for the generalization of the study. The current study is considered as one of the initial research papers in the area of internet financial reporting and thus it provides some contributions. It is hope that the research findings will spark future studies related to IFR research. As mentioned earlier, there is a need to further improve financial reporting disclosure and standardization must be made to have specific rules that can minimize some IFR issues. Also, the future research is expected to be able to use the research observation period that is longer in order to provide an overview of the condition that will be most appropriate. Meanwhile, some of the implication is that the required expertise from the company need to keep information updated to be of use and the concern over security of information. Finally, security problems are the disadvantages of placing financial information on the internet.

References

- Alali, F., & Romero, S. (2012). The use of the Internet for corporate reporting in the Mercosur (Southern common market): The Argentina case. *Advances in Accounting*, 28(1), 157-167.
- Al-Htaybat, K. (2011). Corporate Online Reporting in 2010: A Case Study in Jordan, *Journal of Financial Reporting & Accounting*, 9(1), 5-26.
- Ali Khan, M. N. A., Bajaher, M. S. A., & Ismail, N. A. (2017). Internet Financial Reporting by Saudi Listed Companies. *Journal of Muamalat and Islamic Finance Research*, 4(1), 105-128.
- Ali, A., Chen, T. Y., & Radhakrishnan, S. (2007). Corporate disclosures by family firms. *Journal of Accounting and Economics*, 44(1-2), 238-286.
- Ali, M. N. A., Khan, I. N. A., Mardani, A., Zavadskas, E. K., & Kaklauskas, A. (2017). Empirical research of users' opinions on selected aspects in internet financial reporting. *Economics and Management*.
- Al-Motrafi, K. A. (2013). Internet financial reporting in Saudi Arabia, PhD thesis, Aston University, Birmingham.
- Al-Shammari, B. (2013). Determinants of internet financial reporting by listed companies on the Kuwait Stock Exchange, *Journal of International Business and Economics*, 7 (1), 162-178.

- Andrikopoulos, A. (2007). Financial reporting practices on the internet: the case of companies listed in the Cyprus Stock Exchange. Working paper, University of the Aegean, Greece.
- Arafa, I. (2012). Evaluating the Impact of Institutional Logic on the Corporate Internet Reporting by Egyptian Listed Companies. Aston University.
- Ariff, A. M., Bin-Ghanem, H. O., & Hashim, H. A. (2018). Corporate ownership, internet penetration and Internet Financial reporting: evidence from the Gulf Cooperation Council countries. *AJBA*, 11(1), 185-227.
- Chan, W. K. & Wickramasinghe, N. (2006). Using the Internet for Financial Disclosure: The Australian Experience, *International Journal Electronic Finance*, 2(1), 118-150.
- Chin, W. W. (1998a). Issues and opinion on structural equation modeling. *MIS Quarterly*, 22, 1, VII-XVI.
- Cohen, J. (1988). *Statistics Power Analysis for the Behavioral Sciences*, (2nd ed). New Jersey: Lawrence Erlbaum Associates.
- Core, J. E., Hail, L. and Verdi, R. S. (2014). Mandatory disclosure quality, inside ownership, and cost of capital, *European Accounting Review*, Vol. 24 No.1, pp. 1-29.
- Debreceny, R., Gray, G. L., & Rahman, A. (2003). The determinants of Internet financial reporting. *Journal of accounting and public policy*, 21(4), 371-394.
- Dolinsek, T., Tominc, P., & Lutar Skerbinjek, A. (2014). *The determinants of internet financial reporting in Slovenia. Online Information Review*, 38(7), 842–860.
- FASB. (2000). Business Reporting Research Project: Electronic Distribution of Business Reporting Information, Steering Committee Report Series, Financial Accounting Standards Board.
- Gallego Alvarez, I., María García Sánchez, I., & Rodríguez Domínguez, L. (2008). Voluntary and compulsory information disclosed online: The effect of industry concentration and other explanatory factors. *Online Information Review*, 32(5), 596-622.
- Ghasemi, M., et al. (2011). The Impact of Information Technology (IT) on Modern Accounting Systems. *Procedia Social and Behavioral Sciences*, 28, 112-116.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)* (1st ed.). Los Angeles: Sage.
- Haniffa, M. H. & Ab. Rashid, H. (2004). The Determinants of Voluntary Disclosures in Malaysia: The Case of Internet Financial Reporting, Paper presented at International Business Management Conference 2004, Kuantan, Pahang, December 6-7.
- Hunton, J. E., Libby, R. and Mazza, C. L. (2006), Financial reporting transparency and earnings management, *The Accounting Review*, Vol. 81 No.1, pp. 135-157.
- Jones, M. J., & Xiao, J. Z. (2004). *Financial reporting on the Internet by 2010: a consensus view*. Paper presented at the Accounting Forum.

- Khan, M. N. A. A. (2016). The Practice of Internet Financial Reporting in Malaysia: Users' Perceptions. In *Regional Conference on Science, Technology and Social Sciences (RCSTSS 2014)* (pp. 687-699). Springer, Singapore.
- Khan, M. N. A. A., & Ismail, N. A. (2017). Internet Financial Reporting by Malaysian Preparers. *Terengganu International Finance and Economics Journal (TIFEJ)*, 2(2), 15-27.
- Khan, M., & Ismail, N. (2012). A Review of E-Financial Reporting Research. *Journal of Internet and E-Business Studies*, 1–16.
- Lihniash, S., Egdair, I., & Ahmed, S. (2019). The Proposed Conceptual Framework to Understand the Effect of the Technology Organization Environment (TOE) Model on Internet Financial Reporting (IFR) in Libyan Banking Sectors. *Open Journal of Business and Management*, 7(2), 339-347.
- Marlim, E., & Panggabean, R. R. (2018). Factors Affecting the Internet Financial Reporting (IFR) at Manufacturing Industry in Indonesia. In *The International Conference on Accounting and Management Science*.
- Marston, C. & Polei, A. (2004). Corporate Reporting on the Internet by German Companies, *International Journal of Accounting Information System*, 5, 285-311.
- Ming, J. and Ming, X. (2014). Disclosure level and cost of equity capital of IPO firms: evidence from Singapore, *Journal of Accounting Research*, pp. 1-20.
- Mirshekar, S. & Saudagaran, S. M. (2005). Perceptions and Characteristics of Financial Statements Users in Developing Countries: Evidence from Iran, *Journal of International Accounting, Auditing and Taxation*, 14, 33-54.
- Moghadam, H. M., Akhavansaffar, M., Bakhshaei, Z., & MirHosseini, S. Y. (2013). Effect of investment in information technology system on providing desired services of accounting information system. *Elixir International Journal*, 55A, 13268-13273.
- Mohd Isa, R. (2006). Graphical Information in Corporate Annual Report: A Survey of Users and Preparers Perception, *Journal of Financial Reporting & Accounting*, 4(1), 39- 60.
- Momany, M. T. & Al-Shorman, S. A. (2006). Web-Based Voluntary Financial Reporting of Jordanian Companies. *International Review of Business Research Papers*, 2(2), 127-139.
- Ojah, K., & Mokoaleli-Mokoteli, T. (2012). Internet financing reporting, infrastructures and corporate governance: An international analysis. *Development Finance*, 2(2), 69-83.
- Poon, P. L., Li, D., & Yu, Y. T. (2003). Internet financial reporting. *Information Systems Control Journal*, 1(1-3).
- Rahadi, F., & Rahmi, F. (2019). The Effect of Internet Financial Reporting and Voluntary Disclosure on Trading Volume Activity. In *1st Aceh Global Conference (AGC 2018)*. Atlantis Press.
- Sanad, Z. R., Al-Sartawi, A. and Musleh, M. (2016). Investigating the Relationship between Corporate Governance and Internet Financial Reporting (IFR): Evidence from Bahrain Bourse. *Jordan Journal of Business Administration*

- Sekaran, U. and Bougie, R. (2013). *Research methods for business. A skill building approach* (5th ed.). UK: John Willey.
- Shiri, M., Salehi, M., & Bigmoradi, N. (2013). Internet financial reporting: Case of Iran. *Journal of Distribution Science*, 11(3), 49-62.
- Stoel, D., Havelka, D., & Merhout, J. W. (2012). An analysis of attributes that impact information technology audit quality: a study of IT and financial audit practitioners. *International Journal of Accounting Information System*, 13(1), 60-79.
- Tabachnick, B. G. & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson Education Inc.
- Twati, J. M. (2014) The Influence of Societal Culture on the Adoption of Information Systems: The Case of Libya. *Communications of the IIMA*, 8, 1-12.
- Valentinetti, D., & Rea, M. A. (2012). IFRS taxonomy and financial reporting practices: The case of Italian listed companies. *International Journal of Accounting Information System*, 13(2), 163-180.
- Wati, Y. (2019). Internet Financial Reporting, Financial Development, and the Cost of Equity Capital: Evidence from Indonesia. In *1st International Conference on Applied Economics and Social Science (ICAESS 2019)*. Atlantis Press.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods* (9th ed.). Mason: South-Western Cengage Learning.

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