Academic Researchers' Opinions about Internet Financial Reporting for Research Purposes: The Case of Egypt

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Abstract: The objective of this research is an attempt to explore the opinions of academic researchers in Egypt regarding the usability and usefulness of Internet Financial Reporting (IFR) as a source of getting information for research purposes. The study employs the survey questionnaire of 200 possible participants of academic researchers in Egypt, 125 received responses were analyzed. The results of the descriptive statistics indicate that there is a strong agreement among the researchers on IFR being accessible, useable and considered an important and useful source of getting information at any time and from anywhere for research purposes. On the other hand, there is a great difference among researchers regarding the level of the overall design of IFR in Egypt as they cannot rely only on IFR as a source of information for research purposes. They also stated that the hard copy reports is still preferable than internet financial report. The results of the factor analysis show that the usability dimension of IFR has three main components; output features, processing features and input features. The most important factor is the output features of IFR information which is a logical result because this is the part that researchers interact most with it and accordingly perceived its value in conduct of the research. Also, the factor analysis has classified usefulness dimension of IFR into two main factors; quality features and service features. The results indicate that the quality factor is most significant and the service features came second. This result is quite logical because perceived quality of IFR information that influences the quality of the research analysis is more important than the service features determining the effectiveness and efficiency of delivering such information.

1. Introduction

The financial reporting disclosure developed from the traditional printed annual reports to the Internet Financial Reporting (IFR) to meet various users' needs. So, IFR is a modern technology which has been introduced in the area of financial reporting (Moradi *et al.,* 2001). IFR considers an alternative to disclose information voluntarily that is not needed by regulatory bodies (Ettredge *et al.,* 2002). The Internet as a medium of communication and disclosure is considered more cost effective, faster, flexible in format and accessible to all types of users nationally and globally (Kelton and Yang, 2008;Al-Htaybat, 2011). So, Chan and Wickramasinghe (2006) mentioned that the Internet Financial Reporting will replace printed financial reports as the increasing number of companies having their own websites to provide financial information and communicate with all stakeholders in the context of accounting. However, the use of standard technology for IFR practice is found to be different among countries (Oyelere *et al.,* 2003).

Any change in the communication system will have an impact on both the supply of financial reporting (companies) and the demand for financial reporting (users). Although, the increasing amounts of research over the last decade related to the concept of internet financial reporting, there are a few researches about the

users' opinions regarding the role of internet financial reporting in practices. Therefore, Quagli and Riva (2005) stated that there is a very few prior researches deal with internet financial reporting from the demand point of view and focused on the attitudes and preferences of users of Internet Financial Reporting.

Most of the studies done on IFR in Egypt are in a descriptive form which covers only the current practices of Egyptian companies relating to IFR (Mohamed, 2002; Metwaly, 2003; El-Dayasty, 2004). Other type of studies examined empirically the key determinant factors that influence IFR (Tawfik, 2000; Ezat and El-Masry, 2008; Aly *et al.,* 2010). Although various IFR studies had been carried out, there is not any study investigated the demand side of IFR information in Egypt. So, this study will investigate the opinions of academic researchers as users of IFR in Egypt from two sides; perceived usability and perceived usefulness as done by Gahani (2009b) and Al-Htaybat *et al.* (2011). Therefore, a survey of academic researchers as users of IFR information was undertaken to examine their opinions regarding the usability and usefulness of IFR as a source of getting information in Egypt for research purposes. To the best of my knowledge, there is no study examining the demand side of IFR in Egypt. Consequently, this study is the first to explore this issue.

The accounting essence of this research is implied in several aspects:

1- Highlighting the support of the disclosure dimension in augmenting academic researchers as evident in the scope and amount of IFR data made available to academic researchers.

2- The overriding accounting features of most IFR data items in terms of origin and analysis.

3- The sampling units were defined as academic researchers contributing mainly to accounting and finance frontiers and advance issues. Thus, the research demonstrates the IFR based scientific advantages to accounting research any others.

4- Tackling the dimensions of usability and usefulness for academic research purposes are supposed to produce new research agenda, processes and methodologies with different context of accounting research.

This study is organized as follows; literature review will be discussed in the next section. Next the research methodology used will be discussed followed by the findings of this study. Finally, the conclusion will be presented.

2. Literature Review:

The internet has a great impact on corporate reporting which makes companies increase their information dissemination on their websites to different stakeholders (Fisher *et al.,* 2004; Abdelsalam *et al.,* 2007). The Internet Financial Reporting (IFR) has attracted many researchers to test the potential usefulness of internet for business reporting (Lybaert, 2002). The previous studies of IFR can be classified into three types; descriptive, comparative and explanatory (Abdelsalam *et al.,* 2007; Boubaker *et al.,* 2012).

The earlier studies on IFR are descriptive to provide evidence on IFR practices by listed companies. Some studies investigated whether the companies have websites or not and whether these companies offer specific financial information on their websites (Poon *et al.,* 2003; Lodhia *et al.,* 2004; Al-Htaybat and Napier, 2006). Other descriptive studies measured presentation and content of IFR on companies' websites using a disclosure checklist or index which contains different types of information either financial or non-financial to ease searching for information. Also they examined company characteristics as explanatory factors of the differences between companies' IFR. Some of these studies have been applied in either one country (Davey and Homkajohn, 2004; Gowthorpe, 2004; Moses *et al.,* 2007; Almilia and Budisusetyo, 2008; Mohamed *et al.,* 2009; Al-Hayale, 2010; Agyei-Mensah, 2012; Ali Khan and Ismail, 2012) or in more than one country (Bonson *et al.,* 2000; Smith and Pierce, 2005). However, a little number of researches was done to study the factors that affect companies to practice IFR (Chan and Wickramasinghe, 2006).

According to the descriptive studies, we can conclude that the level of internet financial reporting is classified into the content dimension and presentation dimension. As Ali Khan and Ismail (2011) mentioned that there are a few reasons for the usage of content and presentation dimensions. These reasons are as follows:

1- These dimensions are the most frequently used in previous studies (Debreceny *et al.,* 2002; Kelton and Yang, 2008; Aly *et al.,* 2010).

2- Previous studies have shown that content and presentation dimensions format for Internet Financial Reporting could ensure transparency in the reports (Hodge *et al.,* 2004; Kelton and Yang, 2005).

3- The format for presentation could prepare the ground for a more transparent disclosure by improving on readability, easy access, simple to understand financial information, helping in obtaining fast information, dealing with how the information is presented (Xiao *et al.,* 2004) and could improve on timeliness and increase the frequency of report, could improve on confirmation by connecting with various sources like hyperlink (Debreceny *et al.,* 2002).

4- The content dimension is able to show the type of information reported through the company's website (Lybaert, 2002; Xiao *et al.,* 2004).

On the other hand, little number of studies examined the demand side in the field of internet financial reporting or the users' opinions about the importance of internet financial reporting as a source of getting information for decision making. Some studies examined users' opinions of the actual information given by IFR and whether such information had an impact on their decision-making or not. Other type of studies investigated users' opinions of the different forms of reporting used in IFR.

There are some empirical studies related to the demand part (users) in the field of Internet Financial Reporting examined users' opinions of the impact of actual information given by IFR on their decision making. At the first, Ettredge *et al.* (1999) tested the relationship between some corporate website features and users' characteristics. They analyzed the online financial information of companies by comparing companies that aim sophisticated users with companies that aim less sophisticated users. They found that sophisticated user led to a more extensive online data such as the full annual report, whereas the less sophisticated user was provided with summarized financial information such as a summary of the annual report. They concluded that the users guided companies' online financial reporting.

Debrecency *et al.* (2001) identified 61 attributes for IFR, ranking them and undertaken a pilot test using the Web as a survey tool. They found that participants rated the traditional content of annual reports higher than forward-looking information. Also they ranked traditional static attributes higher than dynamic

attributes. On the other hand, hyperlinks and other navigation aids such as tables of content were preferred and downloading files was relatively low ratings.

Gowthorpe (2004) examined the demand for online financial information users' needs through 20 interviews with finance directors of UK small listed companies. He concentrated on the method used by corporate managers to assess the information needs of their stakeholders and the extent these needs could be addressed through website disclosure. The author found that stakeholder requirements were assessed by the corporate managers using their experience unsystematically then build the online information content. This study concluded that the dialogue between companies and stakeholders had not yet been changed as companies talk but don't listen.

Khadaroo (2005) investigated the Internet Financial Reporting (IFR) practices of companies in Malaysia for the purpose of exploring their auditing implications. The author suggests that the problem is the lack of auditing IFR, so leaving auditors with little control over contents and changes made to audited information. The author concluded that IFR should be standardized to protect users and improve credibility and reliability of financial information.

Hodge and Pronk (2006) examined whether professional and non-professional investors use different online quarterly financial information when making investment decision, and whether there was a direct relationship between the information they were using and the investors' familiarity with the investment (i.e., whether they are evaluating a current investment or searching a new investment). They concluded that professional users prefer to use the published financial statements in PDF formatted quarterly reports and tend to rely on the financial statements compared to non-professional investors who prefer the results in HTML formatted reports.

Ali Khan and Ismail (2011) examined the items which are important in Internet Financial Reporting from the view of corporate annual report users. The study employed the survey questionnaires containing significant items that should be listed under IFR checklist. The results showed that the content dimension covers annual report of current year, income statement of past year, balance sheet of current year, English version of annual report and cash flow statement of current year as the most important items in the current year. On the other hand, the presentation dimension covers other five items which are the length of time taken to download the company's website, PDF annual report format, link to homepage, hyperlinks to financial analysis and the existence of hyperlinks inside the annual report.

On the other hand, other studies investigated the users' opinions of the different forms of IFR. Hodge (2001) investigated whether firms can affect investors'

perceptions of their financial reports by hyperlinking audited financial statements to unaudited information. The results indicated that firms can influence investors' perceptions by hyperlinking unaudited information and misclassification of audited or unaudited financial information may mislead the investors. Also, the results suggested that a simple disclosure rule reduces this influence.

Dull *et al.* (2003) examined the effect of different presentation formats on users' judgments by studying the effect of hypertext links on users' decisions and predictions, the amount of information assessed and the time used to make decisions. Using two test companies (one small, one large), the results revealed that there is no difference when using financial statements prepared with or without hypertext links for the large company. For the small company, significant difference was found in predictions the amount of information accessed and the time to make decisions. So, the use of hypertext links in financial statements may affect users' judgment processes.

Beattie and Pratt (2003) examined the users' perceptions and demand perspective. They investigated all groups involved in corporate internet financial reporting including expert users, non-expert users, preparers and auditors. They looked at users' perceptions of desirable additional information to be provided online and the ability to easily move information if provided in different formats. They concluded that increasing of IFR were favorable, the specific navigation tools and formats were considered useful. Also, the different groups prefer different formats which require more attention for the needs of users.

Hodge *et al*. (2004) examined whether XBRL as a search engine (Extensible Business Reporting Language) helps non-professional financial statements users to acquire and use related financial information for making an investment decision. The results indicated that many users do not access this technology, but the users who access are better able to acquire and use information. The authors concluded that this search-facilitating technology aids financial statements users by improving the transparency of firms' financial statement information and managers' choices for reporting that information. So, the results showed that wide publicity about the benefits of using IFR as a medium of getting financial reporting may be needed to induce financial statements users to access this technology.

Ghani *et al.* (2009b) examined public accounting practitioners' points of view of three reporting formats used for internet financial reporting; PDF (Portable Document Format), HTML (Hypertext Markup Language) and XBRL. They determined two aspects of users' perceptions; perceived usefulness and perceived ease of use and examined the link between these users'

perceptions, their preferred reporting format and the accuracy of their decision for which IFR was used. They concluded that perceptions of ease of use was similar for all three reporting formats, however users' perception of usefulness among the reporting formats differ significantly which was positive linked with their decision accuracy for HTML and XBRL but not for PDF.

Al-Htaybat *et al.* (2011) investigated the perceptions of users regarding IFR practices in Jordon. They used a questionnaire survey four different user-groups to investigate their perceptions regarding the usefulness and usability of IFR as a source of information in Jordon. The results showed that there was a strong agreement among the respondents on IFR being useable, accessible and available any time and from anywhere as a source of information for users' decision making. However, users' perceptions regarding usefulness of IFR in decision making significantly differed. They determined economic factors such as the cost of having internet access and the cost of printing accounting information as two concerns regarding the future of IFR in Jordon. They also clarified that the traditional copy of the annual reports is still preferable source of accounting information.

Ali Khan and Ismail (2012b) investigated some issues related to IFR. Among these issues, they examined the perceptions of the users of corporate annual report on the various aspects of IFR and also examined the perceptions of advantages and problems in using IFR in Malaysia. The results revealed that there are three benefits to the users who depend on IFR to collect financial information; increasing timeliness and efficiency in obtaining financial information, making investment decision process easier and faster, and providing information for companies inexpensively.

The Internet Financial Reporting (IFR) studies have less consideration in Egypt. There have been a number of studies conducted in regard to IFR in Egypt. Most of studies related to the Egyptian environment are considered descriptive and comparative explained only the current practices of Egyptian companies related to IFR. Mohamed (2002) examined the dissemination of information on companies' websites by comparing three active stock exchanges in Egypt, Kuwait and Saudi Arabia. He concluded that most companies use the Internet as an advertising medium rather than a medium for disseminating financial information. Metwaly (2003) surveyed 140 Egyptian companies to give evidence for using the Internet as a disclosure tool for financial reporting. He stated that the number of companies which have websites and disclose financial information is slightly low. Also, El-Dyasty (2004) compare the top 100 listed Egyptian companies with the top 100 listed US companies to determine the current practices of Egyptian companies. The results

indicated that there are significant differences between the Egyptian and US companies related to the practices of Internet Financial Reporting.

On the other hand, there are some studies investigated the key determinants of IFR in Egypt. Tawfik (2000) examined the current practices of IFR disclosure by 58 Egyptian banks. The results indicated that there is a significant difference between banks that have websites and use them to disclose financial information and those banks that have no IFR practices. Also, the results revealed that the IFR disclosure increases by the bank size and ownership structure.

Ezat and El-Masry (2008) investigated the key determinants of IFR timeliness by the most active 50 listed Egyptian companies. The results indicated that large services companies with high liquidity levels, a large percentage of independent directors and a large number of board members increase the timeliness of IFR. Also, the findings indicated that IFR timeliness associated with leverage and profitability.

Desoky (2009) examined the IFR practice by 88 of the most active Egyptian listed companies in Egyptian Stock exchange and investigated some company characteristics as determinants of such practice. The results revealed that only 57 companies have accessible websites and 45 companies provide financial information in their websites. The results also showed that some company's characteristics including size, profitability, foreign listing and ownership structure are significantly positive associated with IFR while legal form is significantly negatively associated.

Aly *et al.* (2010) investigated the extent of IFR for the top 100 Egyptian listed companies using a checklist containing 90 items to determine the main factors that may have an impact on IFR. The findings showed that profitability, foreign listing and industrial sector including communications and financial services are the main factors affecting the content and presentation of IFR in Egypt.

Depending on the previous studies, we can conclude that there is no study investigated the users' opinions about the usability and usefulness of internet financial reporting practices in Egypt. There are different user-groups of corporate annual report such as financial analysts, academics, bank credit officers, auditors, graduates and other public users. The users have essential knowledge on how to use information provided by the annual report. Therefore, IFR as a medium of disclosure and communication has a strong impact on different categories of users. Therefore, this study aims to explore the academic researchers' opinions in Egypt of the usability and usefulness of IFR for research purposes.

3. Research Objectives:

The main objective of this study is to investigate the opinions of the academic's researchers including post

graduate students researchers and professional researchers in Egypt about the usefulness and usability of Internet Financial Reporting (IFR) practices as a medium of providing information for research purposes. This study follows Ghani *et al.* (2009b) and Al-Htaybat *et al.* (2011) who divided the users' opinions regarding IFR into two groups: perceived usability and perceived usefulness. The perceived usability represents the academic researchers' views about the ease of access, the ease of information search and eases of use the web applications. On the other hand, Perceived usefulness represents the academic researchers' views on the value of information given by IFR for research purposes.

In order to achieve the study's objective, we will answer the following questions related to the academic researchers' opinions of the usefulness and usability of Internet Financial Reporting as a medium of getting information for research purposes.

Question One: How does the IFR information satisfy the academic researchers' needs for research purposes in Egypt?

Question Two: To what extent can academic researchers adapt IFR information for their specific research agenda?

So, the following null hypotheses are stated:

Hypothesis One: The value added of the usability of IFR information for research purposes in Egypt is determined by the output, processing and input features of this information.

Hypothesis Two: The value added of the usefulness of IFR information for research purposes in Egypt is determined by the quality and service features of this information.

4. Research Methodology:

This research has relied on a number of methodological plans and tools to achieve the research objectives. This has included the research design, the research sampling plan, measurement and data collection and data analysis and interpretation.

4.1 Research Design:

This research has relied on two main research designs. First, an exploratory research design through analysis of available secondary data concerning IFR access and structure, qualitative research with some researchers involved in using IFR data and review of relevant literature on IFR for research and other purposes. The second research design is a conclusive descriptive aiming to reach generalized conclusion on the usability and usefulness of IFR for accounting, finance and other business research purposes.

4.2 Sampling Design and Plan:

The sampling unit for this research was defined as the academics, post graduate students or professional researchers who might use IFR data to achieve the research purposes in the areas of accounting, finance and other possibly related business areas. Academics

were chosen as a user for corporate report in this study because they were considered to be responsible for accounting education geared towards meeting the country's need for professional accounting (Mishekary &Saudagaran, 2005). Post graduate students and the professional researchers are believed to be corporate annual report users because of the nature of their academic specialization (Mohd Isa, 2006). Also they use the internet intensively, they have very unique purposes. In addition to, IFR might be prepared and interpreted in a totally differentiated ways by academic researchers. So, the population will be the sum of all active researchers with the above profile employed by Egyptian organizations such as business schools at universities, financial institutions, public and private research agencies and regulatory bodies.

It is understandable that no sampling frame would be available for such population. Accordingly, a sampling guide based on prior knowledge of the researchers is used. A sample size of 200 was determined as appropriate due to its consistency with the relatively limited size of population, variation of the IFR suitability for academic and professional business research, adequacy for subsequent analysis, homogeneity of population along with time and budget limitations. A non-random snowball sample was drawn from the population due to limited access to the population and the lack of the sampling frame.

4.3 Measurement and Data collection:

This research has devised two main methods for collecting its data for research hypotheses development and testing:

1- Semi structured in-depth interviews conducted with 20 sampling units to explore the concepts, underlying dimensions and constructs of usefulness and usability of Internet Financial Reporting (IFR) for research purposes.

2- A structured questionnaire distributed to a large and representative sample to test the hypotheses empirically and measure the usability and usefulness of IFR information for research purposes in Egypt. The questionnaire distributed and completed by personal interviews which guaranties a very high response rate (around 72.5%). Also, personal interviews were the data collections mode adopted by the researcher due to the novice and sophisticated topics and structure of the questionnaire. The questionnaire was designed mainly in the form of interval management scale using five- point Likert scale where (5) referred to strongly agree and (1) strongly disagree for measuring the usability and usefulness of IFR as absolute attitudes of researchers. This part depends on the review of previous studies such as Khadaroo (2005), Ghani *et al.* (2009 a,b), and Al-Htaybat *et al.* (2011).

On the other hand, nominal scaling was used to measure the relevant demographic profile of

researchers in terms of gender, age group, level of education and business specialization area. With a view toward obtaining 125 completed and valid questionnaires, 200 questionnaires were distributed with the expected response rate around 80%. 145 questionnaires were returned and the initial response rate is 72.5%. Of these 20 questionnaires were excluded for various editing reasons (e.g. unanswered questions, missing pages and illegible sampling units) provided a sample of 125, giving a final response rate of 62.5%.

4.4 Data Analysis and Research Findings:

Descriptive statistics were adapted to profile and descriptive sample data. Cronbach Alpha for testing internal consistency reliability of used scales. Common Factor Analysis for testing Construct validity of used scales and testing the hypotheses.

Results of Descriptive Statistics:

Table (1) displays details obtained from 125 respondents involved in this study. Out of 125 respondents 57 were males (45.6%) and 68 were females (54.4%). In terms of age, 40 aged less than 30 years (32%), 42 respondents aged between 31-40 years (33.6%), 29 respondents between the ages 41-50 (23.2%), and 14 respondents aged above 50 years (11.2%). Related to academic qualifications, 22 respondents are bachelor holders (17.6%), 40 are master holders (32%), and 63 PhD holders (50.4). In terms of academic specialization, 84 respondents majored in accounting (67.2%), 32 respondents focused in the areas of business administration (25.6%), 6 respondents majored in insurance (4.8%) and 3 respondents majored in actuarial (2.4%).

Table (1) Profile of Respondent (Users, n= 125)

Demographic	Item	Frequency	Percentage
Gender	Male	57	45.6
	Female	68	54.4
Age	< 30 years	40	32
	31 – 40 years	42	33.6
	41 – 50 years	29	23.2
	Above 50 years	14	11.2
Academic Qualification	Bachelor Degree	22	17.6
	Master Degree	40	32
	PhD	63	50.4
Majoring	Accounting	84	67.2
	Business Administration	32	25.6
	Insurance	6	4.8
	Actuarial	3	2.4

The second part of the questionnaire, the academic researchers were asked about the usability of IFR information for research purposes. A summary of the participants' responses is presented in Table (2).

Table (2) Descriptive Statistics for Academic Researchers' Opinions on the Usability of IFR

Statements of Usability	Mean	Std. Deviation	Coefficient of Variation	Rank
1- IFR is easy to access for research purposes.	4.06	0.78	19.20	5
2- Links for data provided through IFR are very clear and understandable to use for research purposes.	3.63	0.62	16.96	2
3- It is easy for an academic researcher to become skilful in using IFR format.	3.86	0.68	17.34	3
4- It is easy to search, find and read the data via IFR for research purposes.	3.77	0.67	17.88	4
5- The overall layout structure and format of IFR is very easy to use in research analysis.	3.67	0.77	20.97	7
6- The navigation tools of IFR are available and easy to use for research purposes (search engine, hypertext, map of contents and indexes).	3.34	0.88	26.36	9
7- The speed of access to any research data in IFR is satisfactory.	3.64	0.86	23.51	8
8- The cost of having internet in order to access IFR research facilities and printing any data is reasonable.	4.07	0.83	20.25	6
9- It is easy to identify audited and non-audited research data provided by IFR.	2.78	1.01	36.09	10
10- Overall design of IFR in Egypt for research purposes is at an acceptable level.	2.61	1.02	39.23	11
11- It is more preferable to read an internet financial report than a hard copy reports as for as research agenda is concerned.	2.92	1.27	43.41	12
12- Further training will improve my performance in using the IFR for research purposes.	4.20	0.63	15.32	1
Total	3.54	0.44	12.39	----

According to descriptive statistics given in Table (2), it can be concluded that the academic researchers'

opinions about usability of IFR information for research purposes in Egypt differ significantly where respondents attached an average mean of usability ranging from 2.6 being the lowest to 4.09 being the highest for each of the given usability statements. This means that there is a strong agreement among respondents on IFR being a useable, accessible and clear source of getting information for research purposes in Egypt for research purposes. The statements are ranked according to coefficient of variation where it takes into consideration both standard deviation and mean. The results reveal that the most five homogeneous statements are statements No.12, 2, 3, 4, and 1 with coefficient of variation (15.32%), (16.96%), (17.34%), (17.88%) and (19.20%) respectively. This result is considered logic in Egypt because Egyptian companies are using easy, clear and basic electronic formats such as PDF for IFR information.

On the other hand, the most three heterogeneous statements are statements No.9, 10 and 11 with coefficient of variation (36.09%), (39.23%) and (43.41%) respectively. There are some differences in the academic researchers' responses for identifying audited and un-audited research data provided by IFR. This result is consistent with Hodge (2001) and Xiao *et al.* (2002 and 2005) who confirmed that Internet companies can influence users' perceptions by providing a hyperlink from audited financial information to un-audited information. Also, the academic researchers in Egypt are not satisfied with the overall design of online reporting in Egypt. At last, the academic researchers in Egypt preferred reading the traditional hard copy than to read an Internet financial report. This is consistent with Xiao *et al.* (2005) and Al-Htaybat *et al.* (2011) who stated that although the change of the medium of disseminating information from the hard copy to electronic media, the traditional annual report will remain the most preferable.

Regarding statement number 8, the results show that there is an agreement among respondents about the cost of having internet facilities for research purposes is considered a reasonable cost. This result is inconsistent with Xiao *et al.* (2002) who stated that the cost is one of the barriers to change printed reporting to online reporting for companies. But for academic researchers in Egypt as a user of IFR for research purposes, the cost is not considered a barrier to use IFR because most of them have an access to Internet.

While the value of total weighted mean for usability dimension is (3.54) with coefficient of variation (12.39%), therefore we have agree direction on IFR being a useable, accessible and clear source of getting information by academic researchers in Egypt for research purposes with a reasonable cost.

In the third part of the questionnaire, the academic researchers were asked to indicate to what extent IFR is useful for research purposes in Egypt. A summary of the respondents' response is presented in Table (3). According to descriptive statistics in Table (3) we can conclude that the most five homogeneous statements are statements No.2, 1, 10, 9, and 5 with coefficient of variation (15.44%), (16.06%), (18.54%), (18.69%), and (21.05%) respectively. This means that there is no statistically difference in users' perceptions regarding the usefulness of IFR information for research purposes. As they believed that IFR as a medium of collecting data for research purposes enables them to make better grounded research, to access published information quickly, to get information at any time and from anywhere which make them confident in using IFR information for research purposes.

The results also indicate that the most four heterogeneous statements are statements No.7, 5, 4, and 6 with coefficient of variation (26.94%), (27.31%), (28.56%), and (43.65%) respectively. This means that there is a significant difference among the academic researchers in Egypt regarding the relevance and adequacy of information included in IFR for research purposes. Therefore, they do not rely exclusively on IFR as only source for getting information.

While the value of total weighted mean for usability dimension is (3.68) with coefficient of variation (16.58%), therefore we have agree direction on IFR being a useful source of getting information by academic researchers in Egypt for research purposes.

Table (3) Descriptive Statistics for Academic Researchers' Opinions on the Usefulness of IFR

Statements of Usefulness	Mean	Std. Deviation	Coefficient of Variation	Rank
1- IFR enables accessing information for my research purposes more quickly.	4.14	0.66	16.06	2
2- IFR as a communication system enables me to make better grounded research.	4.06	0.63	15.44	1
3- IFR format and structure allows me to gather more data for my research tasks.	3.65	0.94	25.88	7
4- IFR contains relevant data for research tasks (up-to-date data and events).	3.54	1.01	28.56	10
5- IFR reporting format allows me to gather more sufficient data for research purposes.	3.53	0.96	27.31	9
6- I do not rely on other sources of data as I can rely	2.83	1.24	43.65	11

exclusively on IFR for my research interests.				
7- IFR contains adequate data for my research analysis.	3.32	0.89	26.94	8
8- I am confident in using IFR data for my research.	3.64	0.77	21.05	5
9- IFR is providing data readily available from anywhere for research use.	3.78	0.71	18.69	4
10- Using IFR facilities any time enables me to be more efficient for research resources.	3.89	0.72	18.54	3
11- Overall, I find IFR is a useful source of data for research processes.	4.09	0.95	23.25	6
Total	3.68	0.61	16.58	----

Results of Reliability and Validity Tests:

The reliability tests of the used measurement scales for usability and usefulness of IFR information through the use of Cronbach's Alpha for multi item scales for measuring both main variables. The usability dimension according to Table (4) achieved a Cronbach's Alpha coefficient of 0.826 while the usefulness dimension achieved a Cronbach's Alpha coefficient of 0.897 that exceed recommended value of 0.70 as indicated by Table (4), which clearly reflects a very high degree of internal consistency reliability. This implies that the used measurement scales expressed the reality and magnitude of differences between the sampling units representing different categories of researchers according to specialization, gender, level of education and age group. As far as, usability and usefulness of IFR information is concerned for different research purposes. The total Cronbach's Alpha coefficient is even higher at 0.901 as also indicated by Table (4) which reflects that the level of internal consistency reliability is quiet satisfactory for insuring the used scales expressed the real differences among sampling units between the two main dimensions, i.e., usability and usefulness. This high indicator of total internal consistency reliability shows that the scale also highlights the differences between the various categories of researchers according to the same above classification criteria as far as the comparison between the perceived usability and usefulness levels of IFR information for research purposes is concerned.

Table (4) Reliability Coefficient

Dimensions	Cronbach's Alpha	Validity
1-Usability dimension	0.826	0.9088454
2-Usefulness dimension	0.897	0.9471008
Total	0.901	0.9492101

Results of Factor Analysis:

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) was used to measure sampling adequacy and appropriateness of the factor analysis. The result was an MSA score of 0.704 and 0.840 for usability and usefulness respectively, which approaches the top of this scale at 1.0, indicating a high degree of sampling adequacy. The Bartlett's Test of Sphericity was used to determine whether the original correlation matrix is an identity matrix. If the correlation coefficient value is less than 0.001, then the R-matrix is an identity matrix and the factor analysis is appropriate. The result of the Bartlett Test showed a Chi-square value of 472.946 with a df value of 66 resulting in a significant value of 0.000 for the usability and a Chi-square value of 747.786 with a df value of 55 resulting in a significant value of 0.000 for the usefulness, which is less than 0.001 and thus supporting the factor analysis as shown in Table 5.

Table (5) KMO and Bartlett's Test for Usability and Usefulness of IFR

IFR Dimensions	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
		Approx. Chi-Square	Df	Sig.
Usability	0.704	472.946	66	0.000
Usefulness	0.840	747.786	55	0.000

The factor analysis interpretations are based on the factor loading depicted by Table (6). The factor analysis has shown very high level of construct validity for measuring the underlying dimensions of the usability of IFR information with quite high factor loadings for all twelve statements except one statement which is statement No.3. The factor analysis has shown usability as having three main components as follows:

1- Factor (1) which can be labeled as output features reflecting the output quality of IFR information including the underlying dimensions of speed, audit nature, navigation availability and organization of IFR data respectively.

2- Factor (2) which can be labeled processing features of IFR information comprising the underlying dimensions of costs, ease of search, clarity and understandability and user training of IFR data respectively.

3- Factor (3) which can be labeled input features of IFR which consisting of the underlying dimensions of digitization, user friendly design and access to IFR.

According to the factor loading depicted by Table (7), the factor analysis has also indicated a very high

level of construct validity for the usefulness of IFR information as measured by this research. The factor analysis has classified the data measuring the usefulness of IFR information into two main factors as follows:

1- Factor (1) which can be labeled as the quality features of IFR information including the underlying dimensions of adequacy, comprehensiveness, relevance, incrementality, overall quality, trust and exclusivity of IFR data for research purposes respectively.

2- Factor (2) which can be labeled service features composed of the service features of IFR information composed of timing, communication, interactivity and convenience of IFR data for research purposes respectively.

Table (6) Factor Analysis of the Underlying dimensions of the Value added of the Usability of IFR Information for Research Purposes

Statements	Factors		
	Factor 1 Output Features	Factor 2 Processing Features	Factor 3 Input Features
Statement No. 7	0.844		
Statement No.9	0.792		
Statement No.6	0.758		
Statement No.5	0.735		
Statement No.8		0.647	
Statement No.4		0.580	
Statement No.2		0.547	
Statement No.12		0.532	
Statement No.11			0.811
Statement No.10			0.641
Statement No.1			0.479
Statement No.3			

Table (7) Factor Analysis of the Underlying dimensions of the Value added of the Usefulness of IFR Information for Research Purposes

Statements	Factors	
	Factor 1 Quality Features	Factor 2 Service Features
Statement No. 7	0.852	
Statement No.5	0.837	
Statement No.4	0.802	
Statement No.3	0.734	
Statement No.11	0.702	
Statement No.8	0.658	
Statement No.6	0.636	
Statement No.10		0.810
Statement No.2		0.744
Statement No.1		0.725
Statement No.9		0.646

Hypotheses Testing and Research Findings:

In order to test the two research hypotheses, the researcher has relied on the Eigen Values of the principal component analysis resulting from factor analysis conducted on the two main research variables. The output of the two hypotheses testing will be discussed respectively.

Hypothesis No.1 "The value added of the usability of IFR information for research purposes in Egypt is determined by the output, processing and input features of this information". The Eigen Value for the three main factors previously extracted by the factor analysis proved that the first factor which was labeled output features proved to be the most influential usability factor for IFR information with an Eigen Value of 3.495 followed by processing factor with a much less Eigen Value of 1.795 and finally the factor of input features with an Eigen Value of 1.530 as indicated in Table (8). This implies that this hypothesis cannot be rejected since the value added of IFR information in Egypt is clearly perceived differently by academic researchers in Egypt according to their scientific specialization, gender, level of education and age.

Table (8) Total Variance Explained for the Usability of IFR Information

Factors	Rotation Sums of Squared Loadings		
	Eigen value	% of Variance	Cumulative %
Factor 1 (Output)	3.495	29.129	29.129
Factor 2 (Processing)	1.795	14.960	44.089
Factor 3 (Input)	1.530	12.752	56.841

This means that the most important factor is the output features of IFR information which is a logical result because this is the part that researchers interact most with it and accordingly perceived its value in conduct of the research. Consequently, the processing phase is more significant than the input phase because the quality of processing the data (even if the data has some flaws) determines largely the quality of the final input. However, the quality of input is still significant because it influences the subsequent stages of processing and output. Overall, the three factors explains 57% of the variation in perceiving the usability of IFR information by Egyptian researchers as indicated by the total cumulative variance of the factor analysis of the usability dimension of IFR information as indicated in Table (8).

Hypothesis No.2 "The value added of the usefulness of IFR information for research purposes in Egypt is determined by the quality and service features of this information". The Eigen values for the factors determining the usefulness of IFR information perceived by researchers in Egypt clearly indicates that the first factor labeled the quality features of IFR information is most significant with an Eigen value of 4.246 and the service features came second with a significant difference as its Eigen Value is 2.565. Both factors explain 62% of the variation in the usefulness dimension of IFR information used by researchers in Egypt as indicated in Table (9). This means that this

hypothesis cannot be rejected since the factors extracted proved to be important determinants of the usefulness of IFR information for research purposes.

Again, this result is quite logical since it is the perceived quality of IFR information that influences the quality of the research analysis is more important than the service features determining the effectiveness and efficiency of delivering such information.

Table (9) Total Variance Explained for the Usefulness of IFR Information

Factors	Rotation Sums of Squared Loadings		
	Eigen value	% of Variance	Cumulative %
Factor 1 (Quality)	4.246	38.600	38.600
Factor 2 (service)	2.565	23.320	61.920

5. Summary and Conclusion:

The objective of this study is to provide empirical evidence on the perceptions of academic researchers in Egypt as users of IFR information on the usability and usefulness of IFR information for research purposes. The results show that there is a strong agreement among the academics regarding IFR information being a useable, accessible and an important source of getting information for research purposes in Egypt. However, they were not confident on the overall design level of IFR in Egypt and relying on it as the only source for getting information for research purposes. They also agreed that the IFR format and structure do not allow them to gather more data to make better grounded researches and the cost of having Internet in order to access IFR information and printing any data is not considered as a barrier to use IFR information. The results also reveal that there is agree direction on IFR being a useful source of getting information by academics researchers in Egypt for research purposes. On the other hand, there is a significant difference among the academic researchers in Egypt regarding the relevance and adequacy of information included in IFR for research purposes. Finally, the academics strongly agreed upon the further training will improve the performance in using the IFR information for research purposes and hence increase the usefulness from this medium.

In this study, the factor analysis was used and the usability dimension was classified as three factors. Factor one is the output features reflecting the output quality of IFR information including the underlying dimensions of speed, audit nature, navigation availability and organization of IFR data respectively. Factor two is the processing features comprising the underlying dimensions of costs, ease of search, clarity and understandability and user training of IFR data respectively. Factor three is the input features IFR which consisting of the underlying dimensions of digitization, user friendly design and access to IFR. On the other hand, the usefulness dimension was classified

as two factors. Factor one is the quality features of IFR information including the underlying dimensions of adequacy, comprehensiveness, relevance, incrementality, overall quality, trust and exclusivity of IFR data for research purposes respectively. Factor two is the service features of IFR information composed of timing, communication, interactivity and convenience of IFR data for research purposes respectively.

The overall results indicate that the value added of the usability of IFR information for research purposes in Egypt is determined by the output, processing and input features of this information. Also, the value added of the usefulness of IFR information for research purposes in Egypt is determined by the quality and service features of this information. So, the two research hypotheses cannot be rejected.

In general, in order to increase the usefulness of financial information, the Internet's flexibility need to be integrated with the information provided to facilitate navigation through the information. So, the quality of Internet-based information is affected by the accessibility, the quality and quantity of information provided. This result is consistent with Hawkes and Chatterjee (2008) who considered that the open access and constant availability of the information on the web increases the usefulness of financial information of various companies. Usefulness of IFR is not necessarily enhanced by disclosure of a wide range of information but information should be presented in such a manner that they can be accessed easily.

The results of this study must be interpreted in the light of some limitations. Firstly, the composition of the sample population is restricted to a particular class of users which included the academic researchers. So, the results may not be generalized to other type of users of IFR information. Thus, in order to determine the validity and generalisability future research needs to include other user groups such as financial analysts, investors and bank officers. Secondly, the small number of respondents, so further research must be carried out using a large number of respondents. Thirdly, this study has investigated only the perceived usability and perceived usefulness of IFR information. So, there is a need to conduct further research to test if there is a relationship between the perceived usability and the perceived usefulness of IFR information or not for decision making purposes.

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