Digital Reporting Practices Among Malaysian Local Authorities

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Abstract: Using 109 Malaysian local authorities as the sample, this paper examines the type and extent of financial information disclosed digitally. This study further examines whether council size, performance and social obligation affect digital reporting. The results show that 64.2% maintain websites and out of this, 15.7% local authorities provide some disclosure on financial statements digitally. The results also show that performance and social obligation do influence the digital reporting practices among the local authorities. Further investigations reveal that lack of information technology facilities, inadequate specialised staff and lack of enforcement are among the factors deterring local authorities to disclose their financial information digitally. The results increase the body of knowledge by providing a continuous insight on the type and extent of information disclosed digitally by the Malaysian local authorities.

Keywords: digital reporting, local authorities, government, websites, Malaysia

1. Introduction

Apart from maintaining law and order, the basic role of a government is to provide education, health and basic facilities to the public. This role, however, has expanded to cover a wider scope of public's demands. Billions of Malaysian Ringgit (MYR) have been collected in the form of taxation and other revenues and were used to inject in various projects and programs in line with the development of the country. The enormous spending of public funds has led the public to demand from the government greater transparency and accountability in their decision-making. To meet this demand, the government has to find ways to improve their reporting quality. One of the ways is the introduction of the Multimedia Super Corridor (MSC). The MSC is a project created by the government to speed up the process of the nation in becoming a developed country by the year 2020. Various investments in other related high information technology (IT) were also invested.

The government has invested in information technology (IT) in realisation of its importance towards achieving the country's plans to become an industrialised nation by the year 2020. Under the 7th Malaysia Plan (1996-2000), about RM2.3 billion was allocated to the ministries and agencies to invest in IT-related programs and projects (Jabatan Perdana Menteri, 1995). Several states announced IT plans to complement the development of the MSC. For example, Selangor state has set up the Selangor Networking and the Web homepage for its various agencies which would link the state administration and all government departments and agencies with every business organisation, office, factory, school and home in the state. Johor state announced the establishment of Johor Information Infrastructure (JII) costing RM30 million, the first state to set up such a system in order to provide the public with a more efficient information service. Such steps would improve the quality of services in daily transactions (Cheah, 1999).

The government has also outlined digital services as one of the government's seven flagships to improve the operations, processes and communications to the public. The local authorities that are more technologically advanced have started to offer various digital facilities to the public. Such facilities are aimed to improve the service quality of the local authorities which of consequence would provide greater convenience to the public. In year 2003, eleven out of 144 local authorities have taken a step ahead by providing online application systems, such as e-complaints, e-assessment, e-licensing, e-compound, e-submission, e-rental, e-business and e- community, in place. These 11 councils are ahead of others in terms of their leadership and revenue with some of the councils earning a gross income of RM100 million a year in comparison with the others (RM2 million). However, the numbers of local authorities not providing web-sites are still considerably high. According to the Local Government Department Director General, Datuk Mohamed Saib, a total of 41 local authorities do not have websites. If they do have websites, their websites would be of no use to the public (The Star, 8 July 2003). The unavailability of web-sites is considered inefficient (Kasim and Sani, 1997) as in today's environment there is an increasing need for the service provider to design services according to clients' need (Alcock, 1996). Kushairi (1997) noted that the importance for the

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government to be client-focused by looking at ways to listen to clients and acquiring their feedback to improve their services.

Apart from the online services, the government has also encourages its local authorities to provide digital reporting. Digital reporting serves as an effective communication tool as it enhances the accountability of the government (Laswad et al., 2005). However, at present, what is mandatory by the government on its local authorities is hard copy financial report which includes government policies and performance to all interest groups. Digital reporting is still voluntary. It is important, however, that the local authorities adopt digital reporting since they have a high responsibility to provide maximum interactions with the public. Further, they play the managerial role of urban environments and would be expected to have the closest relationship with the communities, namely, the stakeholders (Laswad et al., 2005). Therefore and arguably, it is also important for the local authorities to improve the quality of their reporting medium to the communities. Since studies in the digital reporting literature have provide evidence on the importance and success of disseminating financial reporting through the web, it is expected that the Malaysian local authorities (MLA) have similar practices via websites as a means of communication to the public.

This study examines the type and extent of financial information disclosed digitally by the local authorities in Malaysia. This study further examines whether size, performance and social obligation influence digital reporting. The remainder of this paper is structured as follows. The next section provides the literature review. Section 3 provides information on MLA. Section 4 presents the framework and hypotheses. Section 5 presents the research design. The results are presented in section 6. Section 7 provides the discussion and the last section concludes this paper.

2. Literature review

The web is a communication tool used as a platform to communicate to users effectively and efficiently (Xiao et al. 2002). For the preparers, digital reporting provides huge benefits which include reducing firm's information dissemination cost; communicating with unidentifiable information consumers and providing supplementary reports in addition to hard-copy (Marston and Robson, 1997; Ashbaugh et al., 1999; Trites, 1999; Bagshaw, 2000; Ettredge et al. 2001; Xiao et al. 2002; Wagenhofer, 2003). For the stakeholders, they could access corporate internal and external information in a single visit to corporate websites thereby lowering monitoring costs, reduce cognitive effort and allow interchangeable and manipulation of data for analyses purposes (Trites, 1999; Ashbaugh et al., 1999; Bagshaw, 2000; Debreceny et al., 2002; Allam and Lymer, 2003). Digital reporting has been extensively researched in the past decade (Lymer and Tallberg, 1997; Ashbaugh et al, 1999; Lymer, 1999; Bagshaw, 2000; Oyelere et al, 2003; Smith, 2003; Fisher et al., 2004; Hodge and Pronk, 2006).

The advancement of digital environment has lead to the emergence of digital reporting literature. Digital reporting has been extensively researched in the past decade focusing on both preparers and users of financial reports (such as Lymer and Tallberg, 1997; Ashbaugh et al., 1999; Lymer, 1999; Anderson, 2000; Oyelere et al., 2003; Smith, 2003; Fisher et al., 2004; Hodge and Pronk, 2006). This literature identifies a number of issues including the important factors that lead organisations to adopt digital reporting (Ashbaugh et al., 1999; Craven and Marston, 1999; Deller et al., 1999; Anderson, 2000; Allam and Lymer, 2003; Oyelere et al., 2003; Laswad et al., 2005), and the extent of information provided via the web (Allam and Lymer, 2003; Smith, 2003; Fisher et al., 2004). Most of the studies focused on the private sectors.

The link between digital reporting and public sectors has also been examined although the numbers are limited (such as Said et al., 2001; Laswad et al., 2005). These studies examined the number of public sector bodies that practice digital reporting and the factors that lead public sectors to practice digital reporting. Said et al. (2001) examined the number of local authorities that practice digital reporting. They found that only a small percentage of the local authorities practice digital reporting. The results of their study are mainly descriptive describing the numbers of government bodies practicing digital reporting.

Other studies that examined the link between digital reporting and public sectors are mostly conducted in the developed countries. For example; Laswad et al. (2005) examined the factors that may lead the New Zealand government bodies to adopt digital reporting. Six variables associated with voluntary disclosure are examined: political competition, size, leverage, Municipal wealth, press visibility, and type of local authority. Their results indicate that leverage, Municipal wealth, press visibility, and type of council are associated with the digital financial reporting practices of local authorities in New Zealand. However, Laswad et al.'s study is conducted in the context of a developed county, New Zealand. This issue has yet to be thoroughly examined in a developing country such as Malaysia. The results of such study in the context of developed countries may not be similar to those in the developing countries. The lack of such study motivates this study to examine this issue. The results of this study would increase the body of knowledge by providing a continuous insight on the type and extent of information disclosed digitally by the MLA.

3. Malaysian Local Authorities (MLA)

The Malaysian government is being structured into three-tier government: federal, state government and local authorities. In general, the Malaysian Local Authorities (MLA) are under the jurisdiction of the state governments. The president known as the *Yang Di-Pertua* headed the MLA.

In total, there are 144 local authorities in Malaysia. The MLA consists of 9 City Councils, 34 Municipal Councils and 101 District Councils. MLAs have the power to collect taxes and to create laws and rules as well as granting licenses and permits for any trade in their areas (Said et al., 2001). MLAs also has the responsibility to safeguard public health and sanitation and management, environmental protection and building control, social and economic development and general maintenance functions of urban infrastructure within its jurisdiction (Said et al., 2001).

The executive powers lie with the mayors in city councils, and presidents in municipal and district councils. The state governments, elected every five years, appoint mayors, presidents and all councillors. These appointments are for three-year renewable terms. The council decision-making process is through a committee structure determined by the local authority.

Under the MLA, there are 3 types of organisations. There are City, Municipal, and District council. All these organisations perform the same functions. The functions can be divided into two. The first function is the provision of basic services which covers the maintenance of local community and this includes businesses. The second function relates to the regulating the use of land use and business activity within the administrative area (Hazman, 2006).

A city council refers to a local authority if the population exceeds 500,000 people and the collection of the annual revenue is more than RM100 million. City councils are led by mayors. A local authority is known as the municipal council if the population is not less than 150,000 and the annual revenue collection is more than RM20m. A municipal council is led by a president. On the other hand, a local authority is known as a district council if the population is less than 150,000 and the collection of annual revenue is less than RM20m (Hazman, 2006). A district council is also led by a president.

In summary, being the government's lowest tier, MLAs have a high responsibility to provide maximum interactions and communication with the public. MLAs are the managers of urban environments and therefore, are expected to have the closest relationship with the communities, namely, the stakeholders. Hence, it is important for MLAs to continuously improve their reporting quality to the stakeholders.

4. Framework and hypotheses

4.1 Framework

This section presents the framework of this study. The framework is based on Laswad et al. (2005) with few modifications. This study limits its factors to only three variables: size, performance and social obligation. Political competition and press visibility are excluded in this study due to the difference in the mayor selection procedure. In Malaysia, the mayors are often elected by the Ministry whereas in New Zealand, mayors are often elected by the public. As such, most local authorities do not emphasise the importance of press visibility in Malaysia. Figure 1 illustrates the framework that underpins this study. The framework suggests 3 factors (council size, performance and social obligation) that may influence local authorities to practice digital reporting.

Studies in the digital reporting literature have examined the effect of size on firm's decision to practice digital reporting (Petravick and Gillet, 1996; Lymer and Tallberg, 1997; Marston and Leow, 1998). The results of these studies show that firm's size does influence a firm to practice digital reporting. Larger firms with greater shareholder dispersal were found to be more likely to have corporate websites and to disclose financial information (Marston and Leow, 1998;, Ashbaugh et al. 1999, Craven and Marston, 1999; Pirchegger and Wagenhofer, 1999). It is likely that similar results would appear in the public sector. Therefore, size of a local authority is the first independent variable.

Studies examining the factors influencing private firms to disseminate financial information voluntarily have argued that managers are more forthcoming with information when the firm is performing well than when it is performing poorly (Lang and Lundholm, 1993). However, whether this factor could influence the public sector to practice a technology such as the digital reporting has yet to be thoroughly examined. Therefore, the performance is the second independent variable.

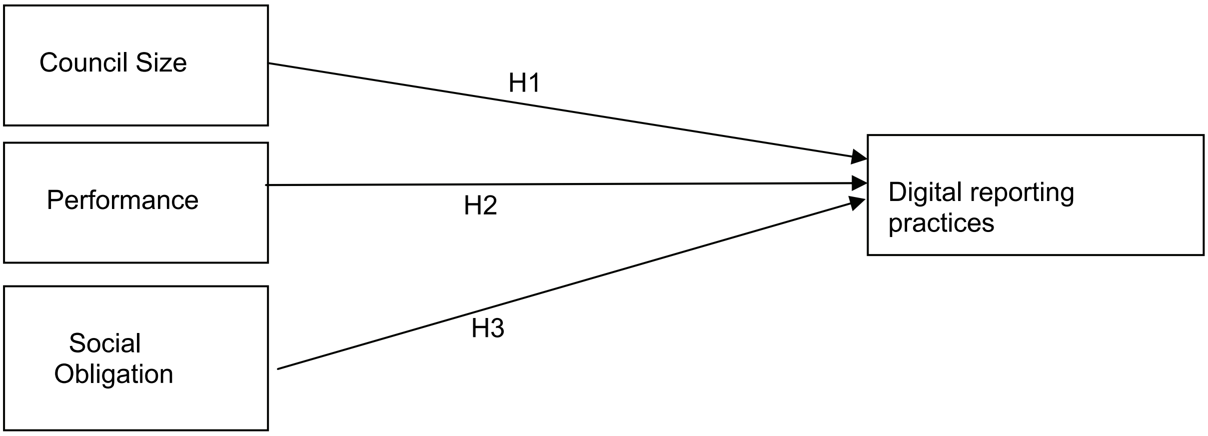

Figure 1: Research framework

Laswad et al. (2005) have examined whether social obligation could influence public sector to practice digital reporting. They used the amount of expenditure spent for development as proxy to reflect the level of social obligation by the local authorities. Their study was conducted in a developed country, New Zealand. This study used this variable to represent the third independent variable in the context of a developing country, Malaysia.

Digital reporting practice is the dependent variable. Previous studies such as Said et al. (2001) showed some evidence that the local authorities in Malaysia do practice digital reporting. However, their study is limited to descriptive nature showing the numbers of public sectors that practice digital reporting. Their study did not include examining the possible factors that may influence local authorities to adopt digital reporting.

4.2 Hypotheses

This section develops the hypotheses relating to the factors that may affect Malaysian local authorities' to disclose financial information via the web. Three hypotheses are developed representing 3 variables, namely, council size, performance and social obligation. The hypotheses are discussed in the following sections:

4.2.1 Council size

Due to higher agency costs, larger firms have higher information asymmetry between managers and shareholders. They tend to disclose more information compared to smaller firms in order to reduce these costs (Firth, 1979; Chow and Wong-Boren, 1987; Debreceny and Gray, 2001). Similarly, Pirchegger and Wagenhofer (1999) argues that dissemination via the web is likely to be largely related to council size as it is likely to be a cost effective means of satisfying the political manager's voluntary disclosure incentives for information production. Barber (1983) argues that the number and magnitude of wealth transfers administered by political agents may increase competition for public office. Increasing political competition makes it more costly for incumbent political agents to ignore pre-election agreement with supporting voters (or interest group), so political agents have an incentive to bear greater monitoring costs by supplying more information with demonstrate their execution of pre-election promises. As a consequence, the benefits of disclosure over the web are likely to be increasing with size. Therefore, the first hypothesis is;

H1: There is a positive association between council size and digital financial reporting.

4.2.2 Performance

Christiaens (1991) argued that “Municipal wealth’ should be positively associated with increase in disclosure because it provides a signal of management quality. Christiaens used ‘own revenue per capita’ as a proxy for ‘Municipal wealth’. Poorer performing firms may avoid using voluntary disclosure techniques, such as digital reporting, preferring instead to restrict access to accounting information to more determined users (Lang and Lundholm, 1993; Craven and Marston, 1999). Hence:

H2: There is a positive association between local authorities’ performance and the digital financial reporting

4.2.3 Social obligation

Laswad et al. (2005) have used the amount of expenditure spent for development as proxy to the level of social obligation by local authorities. This study is also interested to examine whether social obligation affect the method of disclosure of financial information. The web is a cost effective tool for disseminating such information simultaneously to many individuals over large geographical distances (Bagshaw, 2000; Debreceny et al., 2002). Hence,

H3: There is a positive association between local authorities’ social obligation and digital financial reporting

5. Research design

5.1 Research objectives

This study focuses on digital reporting practices of the Malaysian local authorities. Specifically, this study aims to examine:

- The type and extent of financial information disclosed digitally.
- The factors that influence digital reporting practices among the local authorities.
- The reasons for those local authorities not practicing digital reporting.

This study aims to achieve these objectives by way of content analysis and interviews.

5.2 Sample

A list of local authorities in Malaysia and their website addresses were identified through the webpage of the Ministry of Housing and Local Government (MHLG). There are 144 local authorities in Malaysia. Local authorities whose addresses were not available on this websites were contacted via telephone to obtain their website addresses, if any. Based on the availability of financial data, 109 Local authorities were chosen as the study sample of which 7 are City councils, 17 are Municipal councils, and 85 are District councils. For the purpose of this study, the Federal Territories’ councils were included and treated as City councils due to their similarity in terms of size and function. The remaining 35 local authorities’ financial data were not able to be collected despite various phone calls and emails. These local authorities were therefore excluded from this study.

5.3 Data collection

The data collection was done through reviewing the availability of any financial and non-financial information disclosed digitally. The search of the financial and non-financial information is based on Said et al. (2001). In the context of this study, financial information refers to any information related to financial reports, financial highlights, and annual monetary plans. Those authorities with financial information on their websites are categorized as ‘Digital reporting authorities’ or those without financial information are categorised as ‘Non-Digital reporting authorities’.

The financial information content was divided into 4 categories: annual report only, financial highlights only, annual plan only and a combination of the items mentioned earlier. The non-financial content of the websites were reviewed and the items disclosed were systematically placed into 17 categories based on the study. The 17 categories include: (1) Introduction, profile, background and history; (2) Services, facilities and function; (3) Mission, vision and objective; (4) Organization chart; (5)

Complains, feedback and suggestion; (6) Mascot, logo, official flower and flag; (7) YDP and mayor statements; (8) Event calendar and planning; (9) Others; (10) Laws, enforcement and procedure; (11) Tourism information and interesting places; (12) Tender and licences information; (13) Quality programs; (14) Administrative, personnel, management and board of directors; (15) Accomplishment and current development project; (16) Information technology and initiative information and (17) Industrial opportunities and incentives.

The identification of the items in this study was conducted by the researchers by browsing through the websites of the sample chosen. Each item was analysed to determine the suitability of the item in respective categories. In cases where the term of an item was not specifically stated under the 17 categories, one of the researchers attempted to best match the item into the most related category. The second researcher then verified the item to determine the suitability of the item in the respective categories.

Short interview sessions were also conducted to determine the reasons why certain local authorities chose not to practice digital reporting. The interviews were conducted with the representatives of the local authorities. Local authorities whom financial information was not available in their websites in Peninsular Malaysia at the time this study was conducted were divided into four zones (North, South, East and West). Local authorities of Sabah and Sarawak are not included due to cost constraints. One council from each zone was identified using 'snowballing effect' and were contacted via telephone A total of 4 unstructured interviews were conducted with 2 representatives of 2 local councils of the Northern region and the Southern region. Such purpose is to allow the interviewees to freely provide their opinions on why their organisations practice digital reporting.

6. Results

6.1 Descriptive statistics

Table 1 presents the descriptive statistics. Table 1 shows that out of 109 samples taken for this study, 70 (64.2%) of the local authorities maintain websites and 39 (35.8%) Local authorities do not. These 39 local authorities are either without website or with incomplete websites. Table 1 also shows that 8 (80.0%) out of 10 City councils maintain websites and 15 (68.2%) out of 22 Municipal councils operate websites. Whilst at the District council level, 47 (60.2%) of the 78 councils do so.

Table 1: Local authorities' maintenance of websites

Type of Local authorities	With website		Without website		Total
	Freq	% within sector	Freq	% within sector	
City council	8	77.7	2	22.3	10
Municipal council	15	68.2	7	31.8	22
District council	47	60.2	31	39.8	78
Total	70	64.2	39	35.8	109

Table 2 presents the results that show that the most frequently disclosed non-financial attributes are background, Introduction, profile and history of the local authorities. 54.6% of the 109 local authorities disclosed these attributes. This is followed by Services/Facilities and function (51.1%), Mission, Vision and Objective (41.7%), Organisation Chart (38.8%) and Complains, Feedback and Suggestion (35.2%). The least information disclosed is Industrial opportunities and incentives (0.7%).

Table 3 presents the results that show the number of local authorities that practice digital financial reporting. As can be seen from Table 3, only 11 out of 70 local authorities (15.7%) can be categorized as local authorities with digital reporting i.e. they have some financial information available on their websites. Majority of the District and Municipal councils (97.9% and 60%, respectively) are local authorities without digital reporting. The majority of the City councils are practicing digital financial reporting.

Interviews were carried out to get in-depth information on the reasons why a majority of the local authorities did not disclose financial information in their websites. Among the reasons given are the lack of specialise staff, policy constraints, lack of facilities and lack of awareness of the importance of digital reporting.

Table 2: Non-financial attributes disclosed in the Local Authorities' websites

Non financial information	Freq.	%	Ranking
Introduction, Profile, Background, History.	76	54.6	1
Services, Facilities, Function.	71	51.1	2
Mission, Vision, Objective.	58	41.7	3
Organisation Chart.	54	38.8	4
Complaints, Feedback, Suggestion.	49	35.2	5
Mascot, Logo, Official Flower, Flag.	47	33.8	6
YDP Statement, Mayor statement.	43	30.9	7
Event calendar, Planning.	41	29.5	8
Others	34	24.5	9
Laws, requirement and Procedure.	33	23.7	10
Tourism information, Interesting Places.	33	23.7	11
Tender and Licenses Information.	26	18.7	12
Quality Programs	25	18	13
Administrative, Personnel, Management, Board of Directors.	21	15.1	14
Accomplishment, Current Development Project.	21	15.1	15
Information Technology initiative information	9	6.4	16
Industrial opportunities and incentives.	1	0.7	17

Table 3: Local authorities with digital financial reporting

Type of Local authorities	Digital reporting		Non digital reporting		Total
	Freq	% within sector	Freq	% within sector	
City council	4	66.7	4	33.3	8
Municipal council	6	40	9	60.0	15
District council	1	2.1	46	97.9	47

Table 4: Financial information disclosed by Local authorities with digital reporting

Type of Local authorities	City Council		Municipal Council		District Council		Total	
	Freq	% within sector	Freq	% within sector	Freq	% within sector	Freq	% within sector
Annual report only	2	50	3	50	0	0	5	46
Financial highlight only	0	0	1	17	0	0	1	9
Annual plan only	2	50	1	17	1	100	4	36
Combination of annual report, financial highlight and annual plan	0	0	1	17	0	0	1	9
Total	4	100	6	100	1	100	11	100

The financial information of the 11 local authorities with digital reporting was analysed further to determine the types of information disclosed. Table 4 presents the results. 50% of the Municipal councils provide annual report only. For the City councils, 50% provide only annual report while the 50% provide only their annual plan. The sole District council with digital reporting shows only its annual plan. Overall, the popular types of information disclosed are provision of annual report only (46%) or annual plan only (36%).

6.2 Determinants of digital reporting practices

This section presents the results of the hypotheses developed in this study. The Binary logistic regression analysis was used to test the hypotheses. The purpose of this analysis is to determine the effect of the variables chosen in this study on the categorical variable that is the presence or absence of digital reporting practices.

6.2.1 Council size

The first hypothesis is to test whether there is a positive association between council size and digital financial reporting. The type of local authorities was used to represent to council size. Table 5 presents the results. The results show the contribution of the factor: Council size as measured by type in local' authorities' decision to practice digital financial reporting. The results show *p*-value of 0.412, indicating that there is no sufficient evidence to support the hypothesis that council size influences the adoption of digital financial reporting. Therefore, hypothesis 1 is rejected.

Table 5: The influence of council size on digital reporting practices

		B	S.E.	Wald	Df	Sig.	Exp(B)
		Lower	Upper	Lower	Upper	Lower	Upper
Step 1(a)	Type(1)	0.667	0.813	0.673	1	0.412	1.948
	Constant	-2.674	0.731	13.379	1	0.000	0.069

6.2.2 Performance

The second hypothesis is to test whether there is a positive association between local authorities' performance and digital financial reporting. Revenue collection of the local authorities was used to represent performance. Table 6 presents the results on whether performance of the local authorities influences their adoption of digital financial reporting. The results show a *p*-value of 0.000 indicating that there is a positive association between performance of local authorities and digital financial reporting. Therefore, hypothesis 2 accepted.

Table 6: The influence of performance on digital reporting practices

		B	S.E.	Wald	df	Sig.	Exp(B)
		Lower	Upper	Lower	Upper	Lower	Upper
Step 1(a)	Revenue	0.000	0.000	14.880	1	0.000	1.000
	Constant	-3.419	0.553	38.247	1	0.000	0.033

6.2.3 Social obligation

Table 7 presents the results of testing hypothesis 3. The third hypothesis is to test whether there is a positive association between local authorities' social obligation and digital financial reporting. The expenditure spent by local authorities for development was used to represent social obligation. The results show that there is a positive association between social obligation and digital reporting practices (p=0.00) at 5% level of significance. Therefore, hypothesis 3 is accepted.

Table 7: The influence of social obligation on digital reporting practices

		B	S.E.	Wald	Df	Sig.	Exp(B)
		Lower	Upper	Lower	Upper	Lower	Upper
Step 1(a)	Expenses	0.000	0.000	17.556	1	0.000	1.000
	Constant	-3.784	0.632	35.898	1	0.000	0.023

7. Discussion

This study examines the type and extent of financial information disclosed via the web. This study further examines whether council size, performance and social obligation affect digital reporting. This study provides evidence that the factors: performance and social obligation do influence the decision of local authorities to provide financial information digital. However, the results show that council size as measured by the types of local authorities does not influence their decision to practice digital reporting. This study examines the extent of financial information disclosure in the websites of the local authorities. This study also examines the factors that affect digital reporting in the local authorities. The results show that more than half of the Local authorities practicing digital reporting. This finding shows a positive increase in comparison to Said et al. (2001) in which they reported that only 32.6% out of 120 local authorities maintained websites. This might be due to initiatives taken by the MHLG via the launching of the Smart Local Government- Government Agenda (SLGGA) program.

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The results also show that more of City and Municipal councils practice digital reporting compares to District councils. One possible reason could be that since City and Municipal councils cover a much larger geographical area, the use of Web would be potentially more beneficial for them, especially where it enhances community access to local authority information. The prevalence of website ownership among City councils may symbolise the 'urban factor' in Web usage. Such argument is consistent to Ettredge et al. (2001). Interestingly the item 'Complains, Feedback, Suggestion' shown in Table 2 is ranked fifth in this study. In the earlier study by Said et al. (2001) it was ranked 9^{th}. The increase in the percentage of local authorities having this item in their websites may be due to the launching of Smart Local Government- Government Agenda (SLGGA) program in which requires this item to be available in each of the local authorities' websites.

The results, however, show that there is a no association between council size and digital financial reporting. In other words, the bigger the size of the authorities, the more likely they will disclose financial information in the websites. This finding is similar to previous studies examining factors influencing digital reporting among firms in the private sectors (Hossain et al., 1995; Debreceny, 2002; and Allam and Lymer, 2003). Similar results also appeared in Laswad et al. (2005). The result is also consistent with the findings of previous studies that performance affects firms' decision to practice digital reporting (Baber, 1983; Christiaens, 1991 and Oyelere et al., 2000). In other words, the higher the revenue collection, the more likely the local authorities are to use the web to disseminate financial information. The result supports the notion of greater scale-related benefits with disclosure on the Web, given the decreasing costs of information production and dissemination (Pirchegger and Wagenhofer, 1999; Debreceny et al., 2002).

Finally, the results show that there is an association between social obligation and digital reporting. In this study, social obligation is seen as the total expenditure spent by the local authorities for development purposes. The results indicate that local authorities with bigger amount spent on development expenses tend to disseminate financial information via their websites as compared to their counterpart that spent lesser amount on development expenditure.

This study also examines the reasons why certain local authorities are reluctant to practice digital reporting. One of the reasons given by the officers in the local authorities for not disclosing financial information on the websites is the lack of specialise staff employed to maintain the websites. Qualified staff should be employed to be responsible for the websites. Staff training on information technology would be beneficial to the improvement of digital reporting. Another reason given is the absence of policy /requirement from the higher authorities (such as Ministry of Housing and local government) or the top management of the local authorities to continuously update the websites and disclosed their annual accounts. Therefore, this study indicates the need for the Ministry of Housing and Local Government to impose a policy for all local authorities in Malaysia to have a website. Other reasons given are the lack of facilities (such as Web-ready computers and staff with IT knowledge to updating the website) and lack of awareness among the staff on the information available in their websites as well as websites of other local authorities. For that matter, they feel that whatever information in their websites is already adequate. In addition, they also believe that not many people would want to browse through their websites looking for financial information.

The findings in this study provide some indication on the accountability level among the local authorities in Malaysia. Although the results showing only a small number of local authorities disclose some financial information digitally, this is acceptable considering the fact that Malaysia is a developing country which has to aim to achieve the status of a developed country in year 2020. The move of the local authorities in providing digital reporting is an indication that they are becoming more accountable to the public (Laswad et al., 2005).

8. Conclusion

The findings in this study implicate the need for each council to be allocated with sufficient funds to continually upgrade their IT facilities. Indeed, the government's decision in launching SLGGA is a good move to ensure that the local authorities could provide a better service to the public. However, disclosing financial information is not part of the items requires to be made available in the websites. It is recommended in this study to SLGGA to be reviewed to include financial reports. The availability of these reports would enhance the transparency and accountability of the councils. That is, the picture of the large expenditure incurred by the local authorities could be made transparent since a large amount of the collections are collected from the public. Therefore, these local authorities deemed necessary to be more accountable to the public.

This study has few limitations. This research only looks at the impact of size, performance and social obligation on IFR. Future research may also include other variables such as population, debt and federal aid. The findings of these studies would assist in determining all the factors that would have an impact on Web financial reporting by the Malaysian local authorities. The information would be useful to the State and Federal government in their planning for future investment in IT.

Secondly, the results of this study are limited to a specific developing country, Malaysia. A comparison study could be made in examining the adoption of digital reporting among local authorities in Malaysia with that of neighbouring countries. This would provide an indicator of the level of sophistication of our authorities' websites as compared to our neighbours. Finally, the data of this study is limited to a certain period. It is expected that information technology becomes more sophisticated over time and the government is continuously striving to reduce the digital divide in the country.

In summary, this study provides some evidence that performance and social obligations are important determinants of digital reporting among the local authorities. Future research could be conducted to include other government agencies such as the state government agencies as well as federal government agencies. Future research could also include other variables such as social economic factor of the community which were not examined in this study.

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