SMART GOVERNANCE MATRIX (SGM) AND CORRUPTION RISK IN MALAYSIA

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ABSTRACT

Corruption is seen as one of the essential issue to the development of a proficient government in light of the fact that it is an "indication that something has happened in the management of the organization ". Better approach to address this issue is through coupling up the effort on controlling corruption with the consideration on great governance viewpoints. Therefore, this study aims to test the Smart Governance Matrix (SGM) elements in order to establish a commitment towards corruption control activities through assessment of corruption risk. This study adopted quantitative research design to test the Smart Governance Matrix consisting of five governance elements with the corruption risk. Closed-ended questionnaires were distributed to 64 Integrity Officers and 61% responded questionnaires were received. The unit of analysis was the government agencies, federal departments, statutory bodies and government linked companies in Malaysia. This study found that the enterprise governance model (EGM) and human governance model (HGM) have a significant relationship with the corruption risk. This study addresses insight to the improvement of the governance environment as the proposed tool to measure corruption comprehensively is the corruption risk assessment that can be used to detect red flags of corruption in the organizations. These two elements may contribute to the controlling corruption initiatives.

Key words: Smart Governance Matrix (SGM), corruption risk assessment.

Introduction

Corruption is a result of poor administration or governance which arises when an individual or organization has monopoly power over a good or service, discretion over making decisions, limited accountability and integrity, and high pressure. With four more years remaining for Malaysia to be announced as the developing country, the corruption level is still a thorn in the flesh. According to Datuk Akhbar Satar, the president of TI-Malaysia, "Every year, we lose 5% of our GDP to corruption". Thus, based on this statement, it can be noted that corruption is a serious problem. The CPI Index 2014 reveals that Malaysia is at the 50th place out of 175 countries around the world. Additionally, the Malaysian Corruption Barometer 2014 found that the incidence of bribery and corruption in 2014 in Malaysia is higher compared to 2013. The related parties should take an intensive effort in order to control corruption. The lack of transparency, integrity and accountability in the public sphere, no less than governance issues in the private sector, is something that must engage all citizens of a free and democratic society (Islam and Ismail, 2011).

In recent years, corporate governance has emerged as a major policy concern for many developing countries in order to combat corruption. Transparency International (TI) declared that a strong corporate governance systems as a vital component of company efforts to reinforce the right incentives and practices to address the corruption practices (Yusoff, Murniati, & Greyziliu, 2012). Governance is a set of processes, policies, laws and institutions affecting the way a country, society and organization is directed, administered and monitored. Good and fair governance promote accountability, integrity and strengthen confidence in government and management administration. Studies have shown that low corporate governance standards raise the cost of capital, lower the operating performance of industry and hinder the flow of investment. Good governance is regarded as anti-corruption whereby authority and its institutions are accountable, effective and efficient, transparent and fair.
As part of the Malaysian government drives to fight corruption, this study aims to examine the relationship between SGM elements and corruption risk. Besides, this study provides new insights to the Malaysian government for improvements in the realising the national vision to be a developed country and achieving a high income nation.

Literature Review

Smart Governance Matrix

The governance system is a framework which is required in light of the thought that people working in the organizations are toward oneself interest and willing to do anything to further their own enthusiasm to attain their desires (Arjoon, 2011). OECD looks at governance from a broad perspective, based on the principle that efficient delivery of services is just one aspect of governments' tasks.

Government is responsible to a substantial degree for efficiency in the public sector as public policies play an essential role in shaping competitiveness and growth through its share of government employment for instance by tax policy, through spending on areas such as education, research and development or infrastructure and through economic regulation (Mimicopoulos, 2006). Therefore, in order to deal with these obligations, good governance system in need to be implemented.

Good governance is associated with the present and future needs of the organization which practice reasonability in policy setting and decision making by considering the comfort of the stakeholder (Bullivant, Burgess, Corbett-Nolan, & Godfrey, 2012). Numerous good governance indicators need to be considered so that a wide coverage governance element incorporating the best governance indicator is produced. Thus, this study aims to propose the Smart Governance Matrix (SGM) in order to meet the requirement of good governance.

SGM outlines five governance models such as Enterprise Governance Model (EGM), Corporate Governance Model (CGM), IT Governance Model (ITGM), Data Governance (DGM) and Human Governance Model (HGM). This matrix is a holistic and comprehensive governance initiative which covers every aspect of management starting from planning the organization direction, implementing the decision and evaluating the performance. Table 1 describes the importance of each governance models.

Table 1: The Importance of Each Governance Model of SGM

Smart Governance Matrix (SGM)	Importance	References
1. Enterprise Governance Model (EGM)	EGM provides an integrated framework to help organizations to focus on the value creating drivers that move the business forward and the need to ensure adequate control and oversight. It outlines several enterprise governance capabilities such as strengthening the Investment Planning Processes (IPP) which enable to drive shareholder value through improved operations and execution.	Lees (2007)
2. Corporate Governance Model (CGM)	CGM is based on the principles of transparency and stability needed to increase growth and create value. It is the responsibility of the Board of Directors to define general company strategic policies and guidelines to evaluate the plans and projects submitted by the Executive Board and to make sure the results are achieved.	KPMG (2013)
3. IT Governance Model (ITGM)	ITGM supports critical business functions and processes by build-up competitive advantage through ensuring management effectiveness in handling a complex technology. It enables the organization to respond quickly and safely to business needs.	Gerrard (2010)
4. Data Governance Model (DGM)	DGM improve the data quality by assigning a team responsible for data's accuracy, accessibility, consistency and completeness by employing current system for tracking and improving enterprise data, such as Six Sigma, and tools for data mapping, profiling, cleansing and monitoring.	Loshin (2013)
5. Human Governance Model (HGM)	HGM take into consideration of human well-being and interest in making decision. It brings back the original intention of the corporation, homing on values that should be upheld during decision making.	Ahmad (2009)

Institutional Factors

There are several measurements of institutional components that empower corruption risk in the organization including the monopoly power of the Board and the level of discretion board need to practice (Ali & Isse, 2002). If the board members themselves portrayed the above unethical behaviour, it will triggers the action of their subordinates to perform the same behaviour (threshold effect occur when an individual choose to participate into a behaviour where the numbers of other individual commit are greater). Therefore, serious attention is needed to improve the quality of the EGM to ensure the Board members demonstrate strong commitment to the mission and values of the organization (Lees, 2007). Based on this argument, the hypothesis developed is:

> *Hypothesis 1: There is a significant relationship between the quality of Enterprise Governance Model (EGM) and the level of corruption risk.*

Besides, the institutional factors of corruption are the rules of the game in a society which describes as the humanly devised constraints that shape human interaction (Knack & Keefer, 1995).The major role of institutions is to reduce any risk and uncertainty by establishing a stable structure for human interaction such as framework, organizations codes of conducts and norms of behaviour. Thus, improving data governance quality is one of those timeless things which can provide value on keep on track those organizations formal rules and information that may be used to detect any risk related to corruption mismanagement (Power & Street, 2013).Based on this argument, the hypothesis developed is:

> *Hypothesis 2: There is a significant relationship between the quality of Data Governance Model (DGM) and the level of corruption risk.*

Other than that, there is also 'corruption of greed' practised by well adequately-paid public servants who have senior positions. They have enough income to live on, but want to get more because they are in a position to do so and because it is seen as a natural activity for those in power. Given the power of these staff to determine their working environment, computerised information systems are unlikely to be allowed to have much impact unless imposed by a very strong external agency (Wu, 2011). Therefore, organization IT management require a more holistic vision of corruption control these issues. Based on this argument, the hypothesis developed is:

> *Hypothesis 3: There is a significant relationship between the quality of IT Governance Model (ITGM) and the level of corruption risk.*

Economic Factors

One of the economic elements which triggers corruption depends to the size of the government or organization (Dreher, Kotsogiannis & McCorriston, 2007). The significant size of the organization governance encourages the officials to some degree of discretion in the monitoring aspect and hence increases the risk of corruption (Tanzi, 1998). Therefore, it is vital to adjust the size of the organization with the economic ability in the organization in order to ensure there is no chance of the employees to commit corruption. Based on this argument, the hypothesis developed is:

> *Hypothesis 4: There is a significant relationship between the quality of Corporate Governance Model (CGM) and the level of corruption risk.*

Cultural Factors

A psychological influences of individuals by considering the internal facts that some individuals are "naturally evil" and able to take or give bribe and the external factors such as the individual's relationship to a group is important to be highlighted (Voskanyan, 2000). Therefore, human governance is one of the critical qualities need to focused on keeping in mind the end goal to develop moral culture that integrates integrity to produce great human capital (Dreher et al., 2007). Based on this argument, the hypothesis developed is:

> *Hypothesis 5: There is a significant relationship between the quality of Human Governance Model (HGM) and the level of corruption risk.*

Gaps in the Literature

The questions of how can corruption be assessed is among various considerations associated with any serious academic inquiry regarding corruption (Noor, 2009). It is believed that assessing corruption is the perception-based data which relies on the true level of corruption in any country. In fact, the founder of the Corruption Perception Index (CPI), Dr. Lambsdorff is of the stand that corruption can be assessed through the data on corruption that are based on subjective perceptions and expertise and it is considered to be good indicators of real levels of corruption (Hawthorne, 2013).

Nevertheless, a study by Heywood (2014) believed that corruption cannot be assessed solely through the perceptions data. The study questioned about how to assess something that is largely hidden by its very nature. It was explained that there are a few criteria to consider in assessing corruption such as first, evaluating the scale of the issue in terms of its extent, location and trends. Second, identify whether there are any clear patterns and third, identify the explanatory variables that will lead to the understanding of why and where the corruption occurs. In short, it is concluded that assessing corruption is essential in order to ascertain the corruption control initiatives as well as helping the researchers to measure the effectiveness of the initiatives. Still, it is reminded that there are numerous attempts to assess corruption which can lead to ambiguity to decide which attempts is the best attempt in assessing corruption (Sampson, 2010).

Up to date, the World Bank is the organisation that has developed the broadest and most elaborated set of governance policies aimed at controlling corruption. Fukuyama (2013) defined governance as the process of decision-making and the process by which decisions are implemented. The Organisation for Economic Co-operation and Development (OECD) recognizes that analysis of public management reforms has been hampered by the lack of good-quality comparative information.

Although there is a significant growth in broad measures of "governance", most of these data are based on subjective assessments and have little relevance for public management. There are few terms and definitions applied consistently, further undermining public administration debate (Oman & Arndt, 2013). Since the 1990s, development researchers and practitioners have focused on "good governance" as a means of achieving development and a development objective itself.

Thus, based on the gaps found in the literature, this study is carried out to fill the gaps as well as providing new method on controlling and combatting corruption.

Corruption Risk Assessment

Risk assessment is a systematic process to identify and evaluate events comprising possible risks and opportunities which may affect the achievement of objectives. Such events can be identified in the external environment such as economic trends or within organization's internal environment such as people, process and infrastructure. When these events intersect with an organization's objectives or can be predicted to do so, they become risks. Risk is therefore defined as "the possibility that an event will occur and adversely affect the achievement of objectives" (Atkinson & Jourdan, 2008).

While organizations have been conducting risk assessments for years, many still find it is challenging to extract their real value. The linkage of risk assessment to drive shareholder values and key objectives has sometimes been lost. Risk assessments can be directed by regulatory demands for example, anti-money laundering, Basel II and Sarbanes-Oxley which compliance with all required formalized risk assessments and focuses on processes such as monitoring of client accounts, operational risk management and internal control over financial reporting (UN Global Compact, 2013).

Due to the complex chain in implementing the corruption risk assessment in the organization, this study proposed a simpler corruption assessments tool which outlines policy, integrity, accountability, transparency and monitoring as the main indicator. Planning and executing policy is the first stage in any management of the organization. Policy reveals the Board's intention to cultivate the best practice culture in combatting corruption. The implementation of policy will reduce the risk of corruption in the organization (Cottons Centre, 2011). One of the questions in the questionnaire is "Clear policies and guidelines are provided to staff members in dealing with any conflict of interest." This question requires the organization to identify various conflict of areas, any form of briberies and ways to encounter each issues (OECD, 2013).

The assessment of integrity in the corruption risk provides management with feedback on the effectiveness of the corruption controlling effort in the organization and eventually to provides support for systemic adjustment (Public Governance Committee, 2004). For example, one of the questions in the tools is "Every decision on significant expenditures is supervised and authorised by appointed authorities." This question emphasized on the independence aspect in making decision. Decision must be made by the appointed authorities. This is because lack of independence undermined integrity and lead to inability to control corruption (UNODC, 2006).

Apart from that, accountability is another important element to be considered in the tools. Accountability describe the roles and obligations of each public officers in forming, implementing and enforcing the law, providing and allocating public goods and collecting and expending the funds (IRIS Center, 2005). The example of accountability in the questionnaire is "The internal audit department facilitates the effectiveness of internal control." This question suggests the organization to have the accountability framework in order to ensure the corruption control effort planned by the organization is implemented (UNEP, 2014).
Transparency involves dissemination of an available information that is accurate, timely and useful (GOPAC, 2005). As for the transparency, one question in the tool is about "The information permitted to be disclosed can be easily accessed by the public." This question address transparency in a way where it enable the public to know what to expect from their governments by being informed about organization actions for example, indicators concerning whether there are regulations explaining the do's and don'ts of the board and employees (Stanley, Loredo, Burger, Miles, & Saloga, 2014).

The last indicator in the tool is the monitoring. Monitoring is believed a mechanism that can control corruption. Olken (2007) emphasizes that a grass-roots participation by every members of the organization provide key monitoring data and information to enable management to provide check and balance in the corruption control efforts. The example of the grass-roots participation is demonstrated by "The organization hires a specific manager as the person in charge to whom staffs can turn for advice on any cases of corruption" asked in the tool. This question enables employees to report any corruption incidents occur to the responsible manager. This eventually provides monitoring toward the organization.

Theoretical Framework

Applied Theory

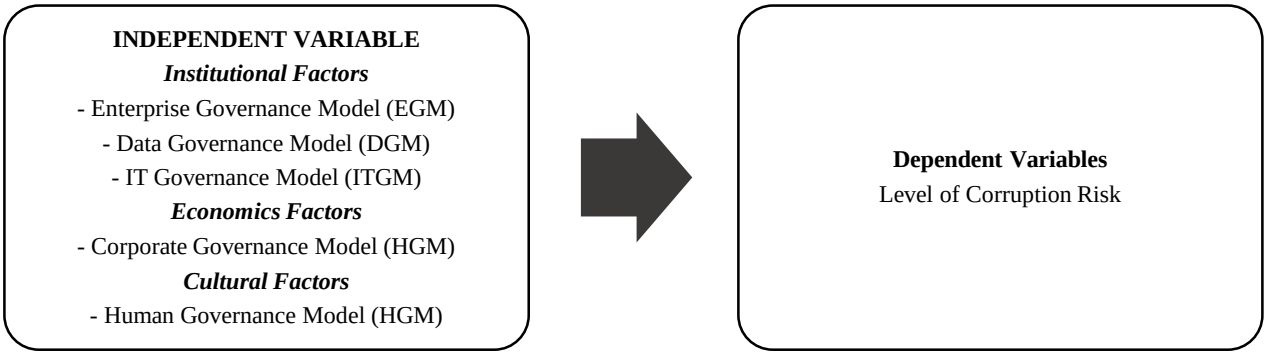
The theoretical basis for the development of the hypotheses in this study relies on the threshold model which discusses the concept of threshold effects. Granovetter's defines the term threshold with the utility function (Granovetter & Soong, 1983). Applying the definition of the threshold effects, he concludes that the threshold distribution determines the outcome of the aggregate behaviour (Granovetter & Soong, 1988).

Aidt, Dutta & Sena, (2008) affirmed that the role of governance is the determinant of corruption risk level. They clarified that a plentiful amount of empirical literatures on the causes of corruption triggers their attention to study on these causes of corruption as a determinants of corruption. Holmes (1997) believed that there are three factors of corruption which are the economics, cultural and historical factors and institutional factors.

In sum, Aidt et al., (2008 & 2005) concluded that the causes of corruption can be assumed as the determinants of the level of corruption risk. In the context of threshold model, the causes of corruption are deemed as the threshold distribution while the level

of corruption risk is deemed as the outcome of the aggregate behaviour. Figure 1 illustrates the relationship between the causes of corruption, SGM and the level of corruption risk.

Figure 1: The Relationship between Governance and Corruption Risk



Research Design

This study applied a cross-sectional study to gather information on governance and corruption from the Integrity Officer placed in government agencies, federal departments, statutory bodies and government linked companies in Malaysia. The survey instrument used for this study is a questionnaire consisted of 5-point Likert scale which was divided into 4 sections named Section A (Respondents' Demographic Profile), Section B (Corruption Risk Assessment), Section C (Smart Governance Matrix) and Section D (Respondents' General Perception). The questionnaires were distributed online and by hand to the respondents. After the data collection process completed, this study then employed Statistical Package for Social Science (SPSS) 22.0 version in order to analyse the collected data.

Empirical Results

Validity Analysis

To verify the validity of data, this study applied the Exploratory Factor Analysis (EFA) on the independent variable and dependent variable. The Kaiser-Meyer-Olkin (KMO) and the Bartlett's test of sphericity were used to verify whether the factor model was appropriate. KMO explains if the data are likely to factor well based on correlation and partial correlation (Sibanda & Pretorius, 2014). Values for the KMO measure of sampling adequacy greater than 0.5 are considered acceptable (Olawale & Garwe, 2010). While Bartlett's test of sphericity analyses whether the correlation matrix is an identity matrix, which would demonstrate that the factor model is inappropriate (Canbas, Cabuk, & Kilic, 2005) and the Eigenvalues is used to decide the number of factors to extract in the overall factor analysis. The factor with the largest eigenvalue has the most variance and the factors with small or negative eigenvalues are usually omitted from solutions (Reise, Waller, & Comrey, 2000).

Table 2: Factor Analysis for Independent Variables

Constructs	Eigenvalues	KMO	Barlett's Test Sig.
EGM	3.442	0.825	0.000
CGM	0.625		
ITGM	0.421		
DGM	0.320		
HGM	0.193		

Table 2 indicates the Kaiser-Meyer-Olkin (KMO) of 0.825 which is acceptable and the Bartlett's test of sphericity is significant at 0.000. The total Eigenvalues reveal a total of 5.001 (EGM = 3.442, CGM = 0.625, ITGM = 0.421, DGM = 0.320 and HGM = 0.193).

Table 3: Factor Analysis for Dependent Variables

Constructs	Eigenvalues	KMO	Barlett's Test Sig.
Policy	3.417	0.798	0.000
Accountability	0.719		
Transparency	0.432		
Integrity	0.262		
Monitoring	0.170		

Table 3 shows the Kaiser-Meyer-Olkin (KMO) is acceptable (0.798) and the Bartlett's test of sphericity is significant at 0.000. The total Eigenvalues reveals a total of 5.000 (Policy = 3.417, Accountability = 0.719, Transparency = 0.432, Integrity = 0.262 Monitoring = 0.170).

Descriptive Statistics Analysis

A total of 64 questionnaires have been distributed to the Integrity Officers in conducting this pilot study and 60% of the questionnaires distributed were responded (39 completed questionnaires). After conducting SPSS Preliminary Test, a total of 36 questionnaires were valid and the other 3 were missing.

Table 4: Frequencies Table for Demographic Profile

Demographic Profile		Frequency	Percent (%)
D1	Government Agency	14	38.9
	Federal Department	16	44.4
	Statutory Body	2	5.6
	Government Linked Company (GLC)	4	11.1
D2	Yes (Proceed to D3)	24	66.7
	No (Proceed to D4)	12	33.3
D3	Less than 1 year	13	36.1
	1 – 2 years	7	19.4
	2 – 3 years	2	5.6
	More than 3 years	2	5.6
	Proceed to D4	12	33.3
D4	10 years and below	5	13.9
	11 to 20 years	4	11.1
	21 to 30 years	3	8.3
	Responded to D3	24	66.7

Table 4 reports the descriptive analysis result of the demographic profile, 44.4% of the respondents were from the federal departments, 38.9% of the respondent working in the government agencies while 11.1% working government linked agencies and the balance of 5.6% was from the statutory bodies. Other than that, the analysis also stated that 66.7% (24 of 36) respondents were appointed as the Chief Executive Integrity Officers (CEiOs) whereas the remaining 33.3% (12 of 36) were the Integrity Executives. 13 from a total of 24 CeIOs mentioned that they been appointed as the CeIO less than 1 year, while 7 of them were appointed between 1 to 2 years whereas 2 of the CeIOs were appointed between 2 to 3 years and more than 3 years respectively. Besides, the analysis also shows that 13.9% of the Integrity Officers have served their organization below 10 years, 11.1% served from 11 to 20 years and 8.3% served from 21 to 30 years.

Table 5: Descriptive Statistic for Variables

	N	Minimum	Maximum	Mean	Std. Deviation
EGM	36	1.43	5.00	3.8730	.83214
ITGM	36	2.71	5.00	4.0437	.61547
DGM	36	3.00	5.00	4.2153	.66856
CGM	36	2.00	5.00	3.7824	.74516
HGM	36	2.25	3.75	3.3889	.46076
Valid N	36				

Table 5 presents the descriptive statistics. Data governance has a mean of 4.2153 which is the highest mean among other governance model. This indicates that the quality of data governance effect the level of corruption risk significantly compare to others governance.

Correlation Analysis

The Pearson Correlation value indicates the degree of relationship between the independent variables and the dependent variables. These will explain the relationship exist in the hypothesis (Sweet, Grace-Martin, & Karen, 2012).

Table 6: Pearson Correlation Analysis

	EGM	ITGM	DGM	CGM	HGM	CRA
EGM	1					
ITGM	.666**	1				
DGM	.540**	.641**	1			
CGM	.621**	.659**	.503**	1		
HGM	.359*	.460**	.526**	.351*	1	
CRA	.581**	.546**	.612**	.426**	.606**	1

Notes:
*** Significant at the two-tailed 1% confidence level;
** Significant at the two-tailed 5% confidence level;
* Significant at the two-tailed 10% confidence level.

Table 6 indicates the correlations between the variables used has a significant relationship at the 1% and 5% confidence level which shows that the five proposed governance model are effective in explaining and determining the effect on the corruption risk.

With respect to the possible multicolinearity problems, all correlation coefficients in the IV are high (0.000 – 0.018). This suggests that there are inter-correlations between the variables. Since most of these correlations are less than 0.70, the problem regarding multicolinearity is considered not significant because any correlation between 0.40 until 0.70 is accepted (Hair, Sarstedt, Ringle, & Mena, 2012).

Reliability Analysis

Higher internal consistency is indicated when Cronbach's Alpha estimates is closer to the value1 (Shevlin, Miles, Davies, & Walker, 2000).

Table 7: Cronbach's Alpha – Overall

Cronbach's Alpha	N of Items
.963	41

Table 7 demonstrates the Cronbach's Alpha coefficient is 0.963 which proved that the survey questionnaire has high reliability and is internally consistent.

Hypotheses Testing

A linear regression analysis was conducted in order to test the hypotheses. In the analysis, independent variables (X) is known as the predictor whereas the dependent variables is known as criterion variables (Y) (Sykes, 2007). The linear regression analysis was used to assess the interaction effect of the Smart Governance Matrix (SGM) on corruption risk.

Table 8: ANOVA result of Sample (N=36)

Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	7.050	1.410	7.559	.000***
	Residual	5.596	.187		
	Total	12.646			

Notes:

*** Significant at the two-tailed 1% confidence level;
** Significant at the two-tailed 5% confidence level;
* Significant at the two-tailed 10% confidence level.

Table 8 presents the overall regression model. As shown in the table, the value of the significance is 0.000, which indicates that there is statistically significant relationship ($p<0.01$) between Smart Governance Matrix and corruption risk**.**

Table 9: Model Summary of Sample (N=36)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.666[a]	.443	.427	.45510

Table 9 represents the association between Smart Governance Matrix (SGM) as the independent variables and the dependent variable. The adjusted R square is 0.427 indicating that the model explains more than 40% of the variability and the change in level of corruption risk is the result from the Smart Governance Matrix.

Table 10: Coefficient Result (N=36)

Model		Standardized Coefficients (Beta)	Sig.
1	(Constant)		.324
	EGM	.325	**.072**
	DGM	.249	.157
	ITGM	.040	.842
	CGM	-.053	.759
	HGM	.358	**.020**

Table 10 describes the correlation coefficient for EGM to be 0.325 significant at 0.10 (0.072). The relationship between these variables is demonstrated through the fact that EGM encourage organization to have a balance weightage between governance and any risk such as corruption risk (Mcclean, Hayes, & Murphy, 2014). Thus, the first hypothesis is accepted.

The correlation coefficient for DGM is not significant (0.157). There is no significant relationship between both IV and DV because the DGM aims to minimise the confusion and error in knowledge transfer (Informatica Professional Service, 2013) so, it provide less contribution on corruption risk issues. Therefore, the second hypothesis is rejected.

The result shows that ITGM is not significant with the level of corruption risk (0.842). ITGM focus entirely on the process to improve the IT security and control to gain competitive advantage (Gerrard, 2010). It is concluded that the IT governance does not give any effect on the corruption risk. Thus, the third hypothesis is not accepted.

As for CGM, it represents that there is no significant relationship between CGM and corruption risk (0.759) because CGM urges the board to perform their stewardship function toward the shareholders and rarely consider the objective of controlling corruption (Cameron, 2014). Therefore, the fourth hypothesis is not accepted.

Finally is HGM. The result reveals the correlation coefficient of 0.358 and significant at 0.10 (0.020). This supports the relationship between the variables because HGM is capable to overcome the "blind spot" where the traditional governance such as corporate governance fails to detect (Salleh & Ahmad, 2008). Thus, the fifth hypothesis is accepted.

Conclusion

This study aims to identify the relationship between SGM and corruption risk. Based on the result, two of the models are indicated to have a significant relationship with corruption risk, EGM and HGM. EGM address the importance to consider reliable scrutiny and sustainable performance under one umbrella. It justifies what organizations need to do in order to manage risk such as corruption risk because this model suggests organizations to incorporate formal risk management approaches for instance the enterprise risk management framework (ERM) in the management process (Van der Stede, 2009). Whereas, HGM, Nik Mohd. Hasyudeen Yussuff, the President of MIA, mentioned that most of the available governance practices nowadays is becoming profit-driven and he urges the need to focus on people in the organizations because in the end, it is the people who make the decision (Accountants Today, 2009). HGM triggers the original intention of the human in practicing integrity in controlling any unfaithful behaviour such as taking bribes and committing corruption (Nasahs, 2010).

However, three of the models proposed included in the SGM are proved to have no significant relationship with the corruption risk. They are the DGM, ITGM and CGM. DGM may not have a significant relationship with the corruption risk as it focused on improving data quality. Yet, the primary causes of corruption is mainly due to the demand side of corruption such as a corrupt officials receive payment of bribes (Wu, 2005). DGM provides a little contribution in detecting the demand side of corruption. Thus, the result indicates that the relationship between data governance and corruption risk is not significant. Meanwhile, ITGM has no significant relationship with corruption risk is because it deals with how organizations manage it IT strategy with the business strategy to ensure the organizations to stay on track in achieving the objectives and in executing better approaches to evaluate IT performance (Slater, 2013). This effort does not consider to include corruption matter in the process because of the broad and critical business functions and process (De Haes & Van Grembergen, 2006). Lastly, as for CGM, the analysis demonstrates that there is no significant relationship between both CGM and corruption risk because much of the sample in this pilot test work in government agency and federal department. These organizations have no board of directors (Davies, 2000). Thus, the result shows that there is no significant relationship between CGM and corruption risk as most of the samples choose "Neutral" as the responses.

Direction for Future Research

As part of the limitation the data were collected from single respondent which is only the Certified Integrity Officer (CeIO) and a part of Integrity officer an organization, which might be a cause for possible response bias. Future study should undertake to collect data from multiple members across the organization. Besides, this study only incorporates several types of governance models in the frameworks which may not cover the whole aspect of good governance. So, future studies are suggested to explore other various governance model such as the enterprise architecture governance model and multi-stakeholder governance model and cooperate the model together in order to produce new governance to contribute into the corruption control efforts.

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