Drivers of the Integrated Business Model towards firm financial performance: MCCG 2017's 30% Women Board of Directors

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ABSTRACT

This analysis aims to determine the effect of Integrated Business Model disclosures in the Integrated Report or Annual Report across the top 30 Malaysian PLCs, moderated by the participation of 30% of Women Board of Directors as suggested by the MCCG 2017. The study pursues the purposeful sampling approach accompanied by statistical analysis, multiple linear regression, and quantitative research analysis extracted from previous research combined with the review of annual reports and integrated reports to investigate the Integrated Business Model disclosures amongst the top 30 Malaysian PLCs. The development of a new Woman Board of Directors Content-Scoring Index will recognise the top 30 Malaysian PLCs' optimal practices that would be advantageous to the researchers and industry players outside the top 30 PLCs. This analysis is a comprehensive examination of extensive empirical trends in Integrated Business Model disclosures published across the Integrated Report and the top 30 Malaysian PLCs' Annual Reports in contexts of uniqueness.

KEYWORDS – Corporate Governance, Integrated Report, Annual Report, Business Model, Women Board of Directors

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1. INTRODUCTION

Governance means leadership which is essential in all quoted companies. This research emphasizes governance practices and includes the structure needed to manage the company to the next level (Kanagaretnam et al., 2007; Haniffa & Hudaib, 2006; Cadbury Report,1992). Corporate governance was defined by Denis and McConnell (2003) as processes that encourage directors to work in line with the interests of shareholders, thereby improving the shareholders' overall quality.

These governance structures can be narrowly categorized internally and externally. External processes, for instance, included the justice system (Denis & McConnell, 2003). Observations of the internal governance structures that are the subject of this study include the composition of the board (Haniffa & Hudaib, 2006), compensation systems (Donaldson & Davis, 1991), the judgement call process, and the execution of choices made (Abeysekera, 2013).

In several organisations, particularly multinational institutions, where the shareholders and directors are segregated, the Board of Directors is assumed to be accountable for good governance (Cadbury Report, 1992). The IIRC's Integrated Reporting <IR> structure (International Integrated Reporting Council, 2013) describes those responsible for governance is defined as: "The individual(s) or organization(s) (the executive board or the corporate custodian) charged

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with overseeing the overall corporate strategy of the respective firm has obligatory and custodianship roles."

The attributes of senior leadership in terms of demographics affect their choices and thus impact the decisions made by the corporations they run. This is because demographic factors are correlated with multiple neural bases, beliefs, and expectations that affect the board of directors' judgement. Senior leadership will have broader generational diversity, impact the management team's judgement call cycle, and contribute positively towards excellent results (Marimuthu and Kolandaisamy, 2009).

The firm's value proposition is its method of translating resources, through its business operations, into products and services that strive to achieve the strategic objectives and targets of the company to generate value over the immediate and the long term (International Integrated Reporting Council, 2013). The integrated report outlines the business strategy, including the key inputs; business activities; outputs; and outcomes (International Integrated Reporting Council, 2013).

2. Problem Statement

Malaysia has been confronted with macroenvironmental threats in the form of the decline in oil price, China's economic downturn, and the drawdown of foreign money continuously (Saleem, 2015). However, Malaysia is not alone in meeting these global economic problems, and many other nations have also faced similar difficulties.

Investor interest has been severely undermined amid the best attempts of government bodies, policymakers, and several other institutions to reinforce other regulatory mechanisms intended to inculcate investor faith in financial markets. Corporate entities and board members are under more substantial investor pressures than it has ever been, not only for their financial performance but how they handle their climate change, social and corporate governance issues at the regulatory level.

Paul Druckman, the Chief Executive Officer of the International Integrated Reporting Council, visited Malaysia in 2014 and was highly dissatisfied with the general standard of the implementation and practices of Integrated Reporting among public listed companies on Bursa Malaysia (Pricewaterhouse-Coopers, 2014). Furthermore has been reported that the low take-up of Integrated Reporting in 2014 across Malaysia was a significant disappointment. This isn't just because of a shortage of local firms adopting the system, but also because neither of the major Malaysian companies was interested in developing the Malaysian edition of the Integrated Reporting framework (PricewaterhouseCoopers, 2014).

The business model is an effective medium to capture, imagine, interact, and appreciate an organization's business processes (Osterwalder, 2004). It provides a forum to assess, examine, and contrast the company's profitability and improve strategic decision-making by alleviating the design, preparation, modification, and execution of strategic direction (Sukhari and de Villiers, 2018; Osterwalder, 2004). Formulated management models enable businesses to adapt quickly to the changing business climate, strengthen the coordination of strategy, business policy, and technological capacity to remain sustainable through continuous invention to improvise the overall operations (Sukhari and de Villiers, 2018; Osterwalder, 2004).

Stakeholders must have a thorough understanding of the company's business model and its strategies, regulations, policies, corporate governance, successes, and opportunities (Sukhari and de Villiers, 2018; Topazio, 2013). The corporate reports of companies portray business models in different ways worldwide, and 63% of the initial research analysis revealed a clear correlation between the business model and a business's capacity to produce sales and boost liquidity efficiency (Topazio, 2013). Furthermore, Robertson and Samy (2015) examined the shortcomings of existing reporting standards and suggest no specific links between details about financial and non-financial dimensions of an organisation as currently, most organisations do not practice firmwide integrated thinking.

As per the market standpoint, PwC Malaysia's 2015 survey of the top 50 publicly listed corporations in Malaysia on their execution of the business model shows that fewer than 50% of the businesses in the study used the term 'business model' in their corporate disclosures in which, the vast of the masses did not include any significant benefits in terms of adding quality invention practices within their organisations (PwC, 2015).

A minority of organisations could describe specific contributions from their company operations beyond just explanations of what their firms do. The results of this analysis on the adoption of the business model include that 44 percent use the term 'business model', and of those who published their business model, 14% discussed it in a strategic sense, and 12% described it about their company's value generation. 12% used visuals to describe their business model, 2% offered a detailed explanation of their strategic edge areas, and 2% said that variations in the various components of the business models were clarified (PwC, 2015).

Should an organisation is not quick enough in its day-to-day processes, it should consider looking at what are the challenges to the mechanization of its operations which incorporates the demands of the process together with the technological systems. If organisations are insufficient, they can look at the relationship between individuals and systems that have caused the ineffective operations to occur continuously. If organisations are not generating new value, they should look at what they are currently struggling to invent better than their competitors, in which the engagement between people and technologies could be one of the major causes. Therefore, there is a need to incorporate the Technology aspect as one of the independent variables to determine whether or not organisations are congruent with the technical progress.

The strategic actions of senior executives in a business will bring significant success for the company. In the case of the Board of Directors, heterogeneity stimulates greater imagination, ingenuity, and thoughtful decision-making, which expects a strategic outcome, significantly affecting top executive (Zahra and Pearce, 1989) as the board members are the most significant players, accountable for the oversight position in the monitoring of the shareholders (Hambrick, 1996).

Research suggests that increasing plurality on the composition of the corporate executives can be beneficial to the company in terms of the attainment of vital resources (Pfeffer & Salancik, 1978) and, where public policy is concerned, advantages at the pivotal level are closely related to the diverse upper management (Eisendardt & Bougeois, 1988). The inclusion of work environment heterogeneity among top executives enhances the business's efficiency in terms of its commitments (Siciliano, 1996). Zander (1993) further emphasizes that efforts must be taken to use the top executives' talents to their maximum extent.

This analysis aims to decide if the Integrated Business Model is the factor of a company's economic success rates and motivated by the MCCG 2017 - 50 percent Autonomous Board of Directors.

3. Research objectives

The goals of this research are:

1. To examine the effect of reporting transparency of the Integrated Business Model in achieving their company's financial success among the top 30 Malaysian public listed corporations.

2. To assess if the female board presence among the top 30 Malaysian public listed firms at 30 percent or more has enhanced the relationship between the integrated business model and the corporation's overall profitability.

4. Research Questions

1. Would the Integrated Business Model's transparent reporting yield more significant financial results for the top 30 Malaysian public limited corporations?

2. Is the MCCG 2017 – 30 percent female board presence's position enhanced the relationship between the integrated business model and its overall profitability across the top 30 Malaysian corporations?

5. Literature Review

A related report contains the 8 Content Elements related to one another and is not equally unique; Entity background and the surrounding world - How much does the entity do, and what are the conditions in which it functions?: Governance - Is the institution's governance system structured so that it enables it to generate value in the quick, mid, to longerterm?; Business model - Does the entity operate on a business framework?; Threats and possibilities -What are the particular threats and possibilities that impact the company's ability to build net worth over the short, average, and extended term, and how is the organisation handling them?; 1.Policy and wealth distribution - Where does the company aim to go and how does it plan to achieve it; Firm Performance -To what degree has the organisation accomplished its targeted goals for the duration and what are the consequences in terms of impact on the capitals; Perspective - What obstacles and difficulties are the organisation likely to face in implementing its targeted goals, and what are the possible ramifications for its corporate model and future successes?; and Source of Reporting - How is the company deciding what is contained in the consolidated analysis, and how are those elements calculated or given a value?

At the heart of the enterprise is the paradigm that relies on different sources to transform resources, operating as a corporation (products, services, byproducts, and waste). The institution's actions create impacts on the end-result and the back to the source. A company's business activities' capability to adjust changes (in input supply, quality, and price) may influence the long-term survival of the entity(International Integrated Reporting Council, 2013).

Numerous accounting failures and legal and regulatory problems in the year 1999 - 2000 due to bribery and inadequate mechanisms of management have raised the issue of the integrity of companies and especially the governance (Tariq & Abbas, 2013; Larsson, 2009). The economic meltdown led to a rise in governance practices, primarily successful hazard administration and transparency procedures (Ntim et al., 2013). One consequence is that governance codes have increased in volume across the world. Over the years (Abbas & Tariq, 2013). The need for regulatory reporting occurs mainly in organisations where the position of capital provider and director are divided.

Senior executive traits, such as age and ethnicity, affect how issues are addressed and the measures undertaken by entities. The connection derives from population characteristics and how people make choices at the highest leadership level. By way of having larger multiculturalism, senior executive participants may make a significant impact by shaping the judgment process across the board and the board committees (Marimuthu and Kolandaisamy, 2009).

Therefore, senior executives' aggressive conduct at the organization can be favourably linked to the company's success. In the case of Board members, heterogeneity improves greater imagination, ingenuity, and better planning and policy, which is why this study assumes a relative competitive outcome, particularly about the corporate executives, as directors are the essential players, directors are often accountable for the monitoring position of investors (Hambrick, 1996).

Studies suggest that demographic structure across corporate executives can be valuable to the firm in terms of the purchase of valuable resources (Pfeffer & Salancik, 1978) and, where business ethics are involved, benefits at the competitive level are near related to the diverse upper management (Eisendardt & Bougeois, 1988). Vocational uniqueness between senior executives is positively associated with productivity in socioeconomic relationships (Siciliano, 1996). Zander (1993) discusses the importance of involving senior executives in all facets of the decision-making process. The Malaysian Corporate governance Code 2017 (MCCG 2017) mandates that in its Principle A, the executive assignments and executive leaders are not dependent on gender, knowledge, skill, age, ethnicity, cultural context, or political affiliation. Moreover, in Principle A, note 4.1 of the Article, the management discloses its policy on women's equality, goals, and measures to accomplish its goals. According to Paragraph 4.5, more influential organisations would have at least 30% females on their Board members (Malaysian Securities Commission, 2017).

Furthermore, this is significantly greater than the Malaysia Code of Corporate Governance 2012 (MCCG 2012), which did not address the 30% female board of directors.

Technology: Cloud-Based Corporate Inventory Control

Enterprise resource planning (ERP) refers to an application that helps people handle daily operations and corporate practices such as finance, ordering, task governance, strategic planning, and other operations. A complete ERP suite lets a company prepare, schedule, forecast, and disclose financial performance. ERP systems bind together various company operations, eliminating data replication and allowing processes to operate more effectively. Through gathering transaction-oriented information from different channels, enterprise systems create a single point of actuality for all of the organization's data. Today, ERP systems are essential for handling and organizing thousands of companies across all sectors (Oracle, 2019).

ERP applications are implemented in a single infrastructure environment with standard data structures. The easiest way to ensure that the organization's knowledge is compatible is to standardise on a shared collection of meanings and recollections. These critical structures are linked by company operations powered by processes through business units, linking frameworks, and the individuals who use them. ERP is how change is brought about by incorporating individuals, systems, and technology through a modern enterprise (Oracle, 2019).

ERP is an integral aspect of today's corporate climate. Company information and procedures are centralised into ERP frameworks which can optimize business processes and improve operational efficiency leading towards tremendous overall business benefits. Examples of particular market advantages include more efficient intelligence collection, lowered operating costs, and more effective business activities.

Accentuated communication through users exchanging data; in agreements, requests, and procurement orders; Increased efficiency from a shared user interface through multiple company roles and excellently workflows; Seamless architecture from the backroom toward the front end, with all business operations having identical aesthetic; Enhanced customer rates through a mainstream consumer environment and configuration; Lower risk from better data security and accounting procedures; Reduced maintenance and expenditures through standardized and streamlined frameworks (Oracle, 2019).

6. Theoretical Framework

Underpinning theory - Stakeholder Theory

Stakeholders of a corporation are another source of reporting and control different reports of reporting. Increased stakeholder pressure and corporate stakeholder awareness were found to affect the type of disclosed non-financial information. A corporate report can be used as a tool to involve stakeholders and address issues posed by stakeholders. Several businesses provided their investors with nonfinancial information that they said was valuable (Freeman, 1984).

Lens philosophy - Theory of the agencies

According to Jensen and Meckling (1976), the agency association is created when the staff, who are the managers, assigned by the shareholder, who is the owner of the company, can make decisions on behalf of the owner. Owing to asymmetric information between employers and staff, workplace issues typically arise. Transparency of non-financial documents helps the managers and marginalised owners to have a fair understanding of their priorities (Luk and Yap, 2017; Frias-Aceituno et al., 2012).

7. Proposed Conceptual Framework

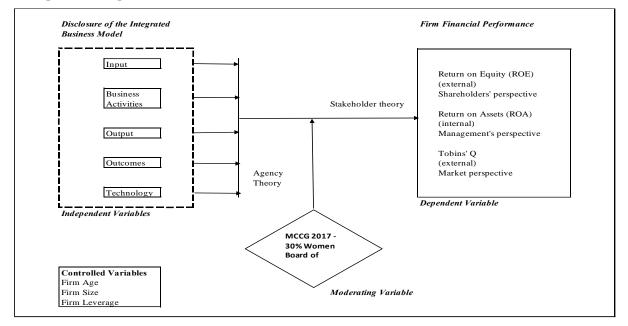


Figure 1: Conceptual Framework

Independent Variable 1 to 4: Integrated Business Model (International Integrated Reporting Council, 2013)

Independent Variable 1: Input

Independent Variable 2: Business Activities

Independent Variable 3: Output

Independent Variable 4: Outcomes

Independent Variable 5: Industrial Revolution 4.0 (Forbes, 2019)

Independent Variable 5: Technology

Interacting Variable – MCCG 2017 : 30% or more Women Board of Directors

Board selection is a central element in the board's management duties. The leadership team should have the appropriate number of individuals and the required demographics. For example, board members should have a combination of males and females.

<u>Dependent Variable – Profitability of the Top 30</u> Corporations (determined by the Return on Equity, Return on Assets and Tobin's Q)

Return on equity (ROE) is what a company produces for its shareholders, and ROE is classified as net profit divided by the book value of shareholder's equity. Stockholders' interest contains the capital valuation, and both of these reserves will be used to directly pay owners (Richard, Devinney, Yip, and Johnson, 2009).

Numerous metrics, including return on assets (ROA), ROE, Tobin's Q; market to book value ratio (MBVR) (Sarkar & Sarkar, 2000), return on employed capital, and operating profit margin, have been used in the majority prior research to measure organizational value.

These include accounting-based indicators of performance like ROA and ROE and market-based indicators like Tobin's Q and MBVR. The accounting metrics are focused on the historical financial statements, while the industry indicators are expected future returns. If ROA is the best predictor of a firm's success, it only calculates the efficiency with which profits are produced. The Tobin's Q ratio defines a company's valuation compared to its capital. Thus, the retail worth of a commodity represents the replacement cost. The Tobin's q ratio is a measure made famous by Nobel laureate James Tobin of Yale University, who predicted that the aggregate valuation of firms on the stock exchange should equate to these firms' replacement costs.

Although it is often credited with being developed by Tobin, this relationship was first introduced in an academic publication by Kaldor in 1966. It is noted that the Tobin's Q formula is calculated as, "The aggregate value of the company divided by the total asset value of the firm. Tobin's Q will help determine how businesses conceptualise and incorporate the business plan (Chaudhuri, Kumbhakar, and Sundaram, 2016).

Control Variables

The three variables that will take firm age, firm scale, and leverage are used in this analysis. Firm size is one of the considerations that generally describes an interconnected reporting adoption partnership between environmental transparency and firm results.

Since significant businesses will be under pressure from the media, they are probable and required to issue their Annual Report, Sustainability Report, and Integrated Report.

The improved control in governance practices would contribute to the improvement of the company's valuation. As a company expands and grows, the size and age also rise. As a result, the size and age both need to be regulated.

Excessive leverage may have severe detrimental consequences upon a company and its owners. Conversely, if business operations can achieve a higher yield than the cost of borrowing it pays on its bonds, then the borrowing has a positive impact on economic growth and profitability. Notwithstanding that financial leverage is out of balance, financing write-downs or worse will ensue. Too few loans may also pose a host of issues. Unwillingness to loan may mean that the company has rigid earnings growth. Consequently, in an attempt to stabilise the performance, the third coefficient value used in this analysis is the degree of debt, which will vary according to the top 30 Malaysian companies.

8. Hypotheses of the Study

Hypothesis 1: The divulgences of Input would significantly positively affect business profitability by Return on Equity, Return on Assets, and Tobin's Q.

Hypothesis 2: The divulgences of Business Activities are expected to have an important positive effect on corporate performance using Return on Equity, Return on Assets and Tobin's Q proxies.

Hypothesis 3: Output divulgences would significantly impact corporate performance using the proxies of Return on Equity, Return on Assets and Tobin's Q.

Hypothesis 4: The divulgences of Outcome will significantly positively affect corporate performance using the proxies of Return on Equity, Return on Assets and Tobin's Q.

Hypothesis 5: Technology divulgences will significantly positively affect corporate performance using Return on Equity, Return on Assets and Tobin's Q as proxies. Hypothesis 6: The Malaysian Corporate Governance Code 2017– 30 percent Women Board of Directors has a positive and substantial persisting effect in the relationship between the Return on Equity, Return on Assets and Tobin's Q and the Integrated Business Model consisting of Input, Business Activities, Output, Outcomes, and Technology.

9. Proposed Models for Future Scientific Research

In light of these factors, and with the purposes of this research, the following models of potential scientific study are formulated below:

Model 1 to Model 5:

 $FP = \beta 0 + \beta 1 + \dots + \beta 6AGE + \beta 7SIZE + \beta 8LEV + \epsilon it$

Are represented by;

FP = Firm Financial Performance as proxied by the Return on Equity, Return on Investment, and Tobin's Q to calculate accounting efficiency of the top 30 Malaysian PLCs..

SIZE = Firm's size (controlled variable)

AGE = Firm's age (controlled variable)

LEV = Firm's leverage (controlled variable)

εit = Error term

Model 6:

 $FP = \beta 0 + \beta 1INP + \beta 2(INP x WBOD) \dots + \beta 11SIZE + \beta 12AGE + \beta 13LEV + \epsilon it$

INP = Input

WBOD = MCCG 2017 – 30% or more Women Board of Directors (Moderator variable)

10. Scope, Methodology and Operationalization of Variables

A selected review of the Top 30 Malaysian quoted firms ranked through market capitalisation has been analysed as per the published corporate reports in which the accumulated data was captured from the year 2016 to the year 2018. This research introduces a descriptive statistical analysis and regression analysis to analyse published corporate reports. Female empowerment within the corporate executives was evaluated through the Malaysian Code of Corporate Governance 2017's Note 4.5 – at least 30% of the board members should be women, and for large corporations, a large proportion of the board should be female. The sampling obtained was based on at least 30 percent of women's presence throughout the board. The content interpretation was a prevalent diagnostic tool and the most commonly used mechanism for accounting transparency in corporate reporting research (Zahid and Ghazali, 2015; Boesso and Kumar, 2007). Content research can be performed either through qualitative and quantitative measures. Quantitative information analysis is has been held in higher esteem as the most accurate data analysis within corporate reporting studies. (Zahid and Ghazali, 2015; Day and Woodward, 2009). This evaluation has been built from the quantitative content analysis method set out by prior best practice research.

The data coding approach will be organised around patterns, terms, phrases, verbs, and related objects contained in the data (Nilsson,2016; Collins and Hussey, 2014). A ranking system may help assess to what degree people claim to have the components published. The ranking method considered in the previous studies which used content analysis and

11. Results and Findings

came to the conclusion that a certain number of points would be the most acceptable in which Wang, Song, and Yao (2013) used a 3-point ranking method while Larsson and Ringholm (2014) and Eccles and Serafeim (2014) used a 4-point ranking method. Boiral (2013), Setia et al (2015) have used the 2-point ranking method. This research has utilised a 5-point ranking system similar to a previous study by Nilsson (2016), distinguished from it by additionally involving more firms in the dataset. Consequently, the proposed analysis has introduced a ranking index based on the International Integrated Reporting Framework published in 2013 to determine disclosures of the Integrated Business Model from the year 2013 onwards.

The research is useful to the listed entities as it helps them better understand the value of organising and compiling useful information for interested parties and operational management strategy to maintain credibility in the minds of the shareholders and investors.

Max	Min	. Dev.	Std.	Mean	Obs	Variable
.7685301	1341395	57033	.135	.1088935	90	ROA
4.43647	3178069	05041	. 800	.4038231	90	ROE
1989.027	.1498351	. 7823	491.	231.7248	90	TOBINSQ
1	.1666667	98467	. 309	.5111111	90	IBMINPUT
.8571429	.1428571	61255	. 206	.5269841	90	IBMBUSACT
. 75	.5	36915	. 093	.7083333	90	IBMOUTP
.7777778	. 3333333	81258	.08	. 637037	90	IBMOUTC
1	0	24623	. 2	.2066667	90	IBMTECH
. 75	.125	47836	.14	.3388889	90	WBOD
7.873219	4.223823	50765	1.15	6.563721	90	SIZE
2.025306	. 60206	62348	.256	1.517241	90	AGE

Table 1: Descriptive Statistics

LEVERAGE	90	1.771405	2.213987	.0477658	10.24621
YEAR					
2017	90	. 3333333	.4740455	0	1
2018	90	. 3333333	.4740455	0	1
firm					
AXIATA GR	90	.0333333	.1805111	0	1
BRITISH A	90	.0333333	.1805111	0	1
DIALOG GR	90	.0333333	.1805111	0	1
DIGI.COM	90	.0333333	.1805111	0	1
GAMUDA BE	90	.0333333	.1805111	0	1
GENTING B	90	.0333333	.1805111	0	1
GENTING M	90	.0333333	.1805111	0	1
HAP SENG	90	.0333333	.1805111	0	1
IHH HEALT	90	.0333333	.1805111	0	1
IJM CORPO	90	.0333333	.1805111	0	1
IOI CORPO	90	.0333333	.1805111	0	1
KUALA LUM	90	.0333333	.1805111	0	1
MALAYSIA	90	.0333333	.1805111	0	1
MAXIS BHD	90	.0333333	.1805111	0	1
MISC BHD	90	.0333333	.1805111	o	1
NESTLE (M	90	.0333333	.1805111	0	1
PETRONAS	90	.0333333	.1805111	0	1
PETRONAS	90	.0333333	.1805111	0	1
PETRONAS	90	.0333333	.1805111	0	1
PPB GROUP	90	.0333333	.1805111	0	1
PRESS MET	90	.0333333	.1805111	0	1
SAPURA EN	90	.0333333	.1805111	0	1
SIME DARB	90	.0333333	.1805111	0	1
TELEKOM M	90	.0333333	.1805111	0	1
U.					
TENAGA NA	90	.0333333	.1805111	0	1
UMW HOLDI	90	.0333333	.1805111	ō	ī
WESTPORTS.	90	.0333333	.1805111	ő	1
	0.0000000				
YTL CORPO	90	.0333333	.1805111	0	1
YTL POWER	90	.0333333	.1805111	0	1

Level of disclosures / practices

Table 1 reports the mean value of Integrated Business Model - Output disclosure of 70.83, which is the highest among the five components of the Integrated Business Model in which the second-ranked mean value is the Integrated Business Model - Outcome at 63.70 and the lowest in the Integrated Business Model - Technology at 20.67. However, the mean values indicated are moderate at an average of 50% of total disclosures across all types of Integrated Business Models. The top 30 Malaysian PLCs on Bursa Malaysia reflect that they are focused on increasing their public reputation by disclosing more on the OUTPUT and OUTCOME. demonstrating their achievements over the years to the shareholders and stakeholders. These disclosures do not dramatically increase over the years as companies do not drastically change their policies but incrementally over the years in which, therefore, the disclosure changes from year on year are not drastically different or may not change at all.

Frequency of disclosures

The highest disclosed Integrated Business Model component is the Input which mainly includes the Integrated Reporting's 6 Capitals which is not unusual for the Top 30 Malaysian PLCs based on market capitalization as the best PLCs would want to disclose to the shareholder and stakeholders that they have implemented the 6 capitals of the Integrated Reporting framework. Over the years, there are no expected drastic changes in disclosing the maximum number of disclosures for the Integrated Business Models' five elements. This indicates a terrible sign for the Top 30 Malaysian PLCs in which they are dealing with stakeholders operating at a global level and needs to be more transparent of the 5 elements of the Integrated Business Model.

	ROA	ROE	TOBINSQ	IBMINPUT	IBMBUS~T	IBMOUTP	IBMOUTC	IBMTECH	WBOD
ROA	1.0000								
ROE	0.7178	1.0000							
TOBINSQ	-0.0974	-0.1584	1.0000						
IBMINPUT	-0.0856	-0.1307	0.2112	1.0000					
IBMBUSACT	0.1486	-0.1272	-0.0553	0.2047	1.0000				
IBMOUTP	0.1017	-0.0161	-0.4656	0.1613	0.4017	1.0000			
IBMOUTC	0.0657	0.0761	-0.2896	0.2446	0.4955	0.5739	1.0000		
IBMTECH	0.0734	0.1277	-0.1387	0.2445	0.1324	0.1583	0.4592	1.0000	
WBOD	0.2460	0.4074	-0.0500	0.2797	0.2694	0.1183	0.3646	0.0607	1.0000
SIZE	-0.0876	0.0115	-0.8343	-0.1782	0.0991	0.5962	0.2959	0.1361	-0.0431
AGE	-0.0918	-0.0941	-0.0288	-0.0149	0.3776	0.1055	-0.0406	-0.1885	0.0551
LEVERAGE	0.3484	0.8276	-0.1905	-0.0947	-0.2288	-0.1517	0.1242	0.3154	0.3124

Table 2: Pearson Correlation Analysis

In this study, ROA, ROE, and Tobins Q are used to measure the firm performance based on the management's perspective-taking an internal outlook, and the ROE is used to measure the firm performance based on the shareholder's perspective-taking an external outlook. Further that Tobin's Q will measure the market perspective.

Table 2 shows a significant negative relationship between Tobin's Q and all the elements of the Integrated Business Model, which may indicate that the Integrated Business Model disclosures are not favourable towards the market participants. This is a stark comparison towards the correlation with the ROA and ROE, which may reflect a better acceptance of the Integrated Business Model disclosures in terms of top internal management (ROA) and the external shareholders (ROE).

Regression Analysis

Multiple linear regression was conducted to analyse with the first and second research goals in which to test the effect of transparency magnitude of the publication of the Integrated Business Models' impact on the profitability of the Top 30 Malaysian quoted firms in which the resultants are shown as per Table 3 to Table 11.

Table 3: Pooled Ordinary Least Squares (POLS) – Return on Assets (ROA)

Source	SS	df	MS	Number of ol	os =	90
				F(14, 75)	=	4.07
Model	.70804092	14	.050574351		=	0.0000
Residual	.930928768	75	.012412384		-	0.4320
100 mg 100	and the second second second second second		and a second	- Adj R-square	ed =	0.3260
Total	1.63896969	89	.01841539	Root MSE	=	.11141
ROA	Coef.	Std. Err.	t	P> t [95%	Conf.	Interval]
IBMINPUT	.0003415	.1237411	0.00	0.998246	1635	.2468465
IBMBUSACT	.0005016	.1824689	0.00	0.998362	9952	.3639984
IBMOUTP	5560178	.6338243	-0.88	0.383 -1.81	8661	.7066251
IBMOUTC	.7564852	. 573426	1.32	0.19138	5838	1.898808
IBMTECH	.0114718	.1323504	0.09	0.931252	1837	.2751273
WBOD	1394872	1.042087	-0.13	0.894 -2.21	5431	1.936456
AGE	1576291	.0569509	-2.77	0.007271	0812	044177
SIZE	0417203	.0159485	-2.62	0.011073	4914	0099493
LEVERAGE	.0448384	.0100466	4.46	0.000 .024	8247	.0648522
Int1	2415046	.3150292	-0.77	0.44686	9075	.3860657
Int2	1.009914	.5746982	1.76	0.083134	9431	2.154772
Int3	3.851261	1.706886	2.26	0.027 .450	9688	7.251553
Int4	-4.653005	1.912846	-2.43	0.017 -8.4	6359	8424197
Int5	.0084098	.4203153	0.02	0.984828	9013	.8457208
_cons	.4485371	.3216879	1.39	0.167192	2981	1.089372

90)s =	per of ob	Numb	MS	df	SS	Source
29.07	=	1, 75)	F(14				
0.0000	-	> F	Prob	3.43971041	14	48.1559457	Model
	=	quared	R-sq	.118344785	75	8.87585886	Residual
0.8153	ed =	R-square	Adj				
. 34401	=	E MSE	Root	.640806793	89	57.0318045	Total
Interval]	Conf.	[95%	P> t	t	Std. Err.	Coef.	ROE
1.026928	806	4953	0.489	0.70	.382086	.2657737	IBMINPUT
1.941715	845	3030	0.150	1.45	.5634247	.8193151	IBMBUSACT
4262241	3762	-8.223	0.030	-2.21	1.957113	-4.324993	IBMOUTP
4.90303	465	-2.151	0.440	0.78	1.770616	1.375782	IBMOUTC
.8684124	3104	7598	0.895	0.13	.4086695	.054301	IBMTECH
. 4694458	5069	-12.35	0.069	-1.85	3.21774	-5.94062	WBOD
.0038103	3207	6968	0.052	-1.97	.1758522	3465052	AGE
.0061145	898	1900	0.066	-1.87	.0492455	0919877	SIZE
. 3943928	965	. 270	0.000	10.72	.0310216	.3325947	LEVERAGE
. 4201063	5498	-3.455	0.123	-1.56	.9727422	-1.517696	Intl
2.377986	2159	-4.692	0.516	-0.65	1.774544	-1.157086	Int2
31.0069	0816	10.00	0.000	3.89	5.270497	20.50753	Int3
1.878586	5394	-21.65	0.098	-1.67	5.906457	-9.887679	Int4
1.866366	1506	-3.304	0.581	-0.55	1.297843	71907	Int5
4.315948	261	. 3584	0.021	2.35	.993303	2.337187	_cons

Table 4: Pooled Ordinary Least Squares (POLS) – Return on Equity (ROE)

Table 5: Pooled Ordinary Least Squares (POLS) – TOBIN'S Q

90	r of obs =	Numb	MS	df	SS	Source
14.93	75) =	F(14				
0.0000	> F =	Prob	1131546.92	14	15841656.8	Model
0.7360	ared =	R-sq	75773.0667	75	5682980	Residual
0.6867	-squared =	Adj				
275.27	MSE =	Root	241849.852	89	21524636.8	Total
Interval]	[95% Conf.	P> t	t	Std. Err.	Coef.	TOBINSQ
679.4531	-538.6543	0.819	0.23	305.7342	70.39937	IBMINPUT
1189.059	-607.1647	0.521	0.65	450.8362	290.947	IBMBUSACT
6084.416	-154.948	0.062	1.89	1566.025	2964.734	IBMOUTP
139.3082	-5505.496	0.062	-1.89	1416.796	-2683.094	IBMOUTC
896.9333	-405.9236	0.455	0.75	327.0055	245.5049	IBMTECH
6753.368	-3504.931	0.530	0.63	2574.742	1624.218	WBOD
314.8981	-245.7267	0.807	0.25	140.7118	34.58569	AGE
-290.7372	-447.7342	0.000	-9.37	39.40485	-369.2357	SIZE
18.10045	-80.79779	0.211	-1.26	24.82258	-31.34867	LEVERAGE
1715.625	-1385.522	0.833	0.21	778.3602	165.0516	Int1
1869.688	-3787.639	0.502	-0.68	1419.939	-958.9754	Int2
165.3997	-16637.18	0.055	-1.95	4217.3	-8235.892	Int3
16860.43	-1969.622	0.119	1.58	4726.176	7445.404	Int4
1087.9	-3049.683	0.348	-0.94	1038.497	-980.8914	Int5
3630.377	463.6825	0.012	2.58	794.8123	2047.03	_cons

Table 6: Fixed Effect Model (FEM) - ROA

'ixed-effects Group variable		ression		Number of Number of		90 30
					-	50
l-sq:	= 0.3732			Obs per o		-
within = between =					min = avg =	3 3.0
overall =					max =	3.0
				F(12,48)	=	2.38
corr(u_i, Xb)	= -0.8902			Prob > F	=	0.0167
			1020303 102030			
ROA	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
IBMINPUT	0053027	.0533221	-0.10	0.921	112514	.1019085
IBMBUSACT	1947241	.2742678	-0.71	0.481	7461763	.3567282
IBMOUTP	0	(omitted)				
IBMOUTC	0 .149415	(omitted) .1512227	0.99	0.328	1546386	.4534686
IBMTECH WBOD	1206301	.5437143	-0.22	0.825	-1.213841	. 9725807
AGE	5496698	.188879	-2.91	0.005	9294365	1699031
SIZE	165913	.0655474	-2.53	0.015	2977048	0341211
LEVERAGE	0290523	.0124647	-2.33	0.024	0541143	0039904
Int1	.02719	.1245913	0.22	0.828	2233177	.2776976
a						
Int2	.3502388	.3125946	1.12	0.268	2782748	. 978752
Int3	8052132	.8003314	-1.01	0.319	-2.414387	.803960
Int4	.7468065	1.1337	0.66	0.513	-1.53265	3.02626
Int5	2201555	.2929414	-0.75	0.456	8091536	. 368842
_cons	2.174261	.5675439	3.83	0.000	1.033138	
	.29769856					
sigma u						
sigma_u sigma e	.02837691					

F test that all $u_i=0$: F(29, 48) = 39.14

Prob > F = 0.0000

Table 7: Fixed Effect Model (FEM) – ROE

note: IBMOUTP omitted because of collinearity note: IBMOUTC omitted because of collinearity

Fixed-effects (within) regression Group variable: firm	Number of obs Number of groups	=	90 30
R-sq:	Obs per group:		
within = 0.5227	min	=	3
between = 0.0985	avg	=	3.0
overall = 0.1011	max	=	3
	F(12,48)	=	4.38
corr(u_i, Xb) = -0.6377	Prob > F	=	0.0001

Interval	[95% Conf.	P> t	t	Std. Err.	Coef.	ROE
. 2890382	4381754	0.682	-0.41	.1808418	0745686	IBMINPUT
1.074702	-2.665797	0.397	-0.86	.9301787	7955473	IBMBUSACT
				(omitted)	0	IBMOUTP
				(omitted)	0	IBMOUTC
.9271312	-1.135263	0.840	-0.20	.5128715	1040661	IBMTECH
4.530055	-2.885191	0.658	0.45	1.844006	.8224318	WBOD
1279599	-1.021904	0.013	-2.59	.2223038	5749317	SIZE
1577489	-2.733705	0.029	-2.26	.6405829	-1.445727	AGE
.2646437	.0946485	0.000	4.25	.042274	.1796461	LEVERAGE
1.094508	604684	0.565	0.58	.4225512	.2449122	Intl
4.831375	.5681696	0.014	2.55	1.060164	2.699772	Int2
3.958192	-6.95683	0.583	-0.55	2.714323	-1.499319	Int3
4.92938	-10.53217	0.470	-0.73	3.844941	-2.801392	Int4
2.444576	-1.550596	0.655	0.45	.9935103	.4469901	Int5
10.52045	2.780209	0.001	3.46	1.924824	6.650327	_cons
					.99223353	sigma u
					.09624023	sigma e
	oui)	nce due t	of variar	(fraction	.99067994	rho

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Table 8: Fixed Effect Model (FEM) – TOBIN'S Q

	y a v	MI) = IODIN				
						note: IBMOUTP note: IBMOUTC
9 3		Number of Number of		ression	. 이 이 이 이 이 있는 것이 이 것은 것이 있다	Fixed-effects Group variable
	roup.	Obs per gr				R-sq:
	min =	opp ber år			0.2631	
3.	avg =				0.6364	between =
	max =				0.6129	overall =
1.4	. –	F(12,48)				
0.186	=	Prob > F			= -0.9374	corr(u_i, Xb)
Interval	[95% Conf.	P> t	t	Std. Err.	Coef.	TOBINSQ
314.730	-260.9523	0.852 -	0.19	143.1596	26.88933	IBMINPUT
1815.74	-1145.339	0.651 -	0.46	736.356	335.2039	IBMBUSACT
				(omitted)	0	IBMOUTP
				(omitted)	0	IBMOUTC
772.547	-860.103		-0.11	406.0038	-43.77767	IBMTECH
-1443.74	-7313.862		-3.00	1459.768 175.9821	-4378.801	WBOD
660.79 1034.85	-46.87531 -1004.348		1.74 0.03	507.1037	306.9604 15.25265	SIZE AGE
52.9170	-81.656	0.670	-0.43	33.46532	-14.36947	LEVERAGE
505.019	-840.1101		-0.50	334.5037	-167.5454	Int1
843.658	-2531.216		-1.01	839.2562	-843.7788	Int2
5478.21	-3162.428		0.54	2148.735	1157.894	Int3
12236.5	-3.21589	0.050	2.01	3043.766	6116.685	Int4
1278.	-1884.493		-0.39	786.4912	-303.1462	Int5
1169.27	-4958.118	0.220 -	-1.24	1523.746	-1894.422	_cons
					873.65411	
					76.186523	sigma_u sigma_e
· = 0.0000		ce due to u_		(fraction o		rho F test that al
· = 0.0000	Prob > F		5	, 48) = 34.1	l u_i=0: F(29	
	Prob > F		5	, 48) = 34.1 9: Random E	l u_i=0: F(29 Table	F test that al
r = 0.0000 9 3	Prob > F OA		5	, 48) = 34.1 9: Random E	l u_i=0: F(29 Table s GLS regress	
9	Prob > F OA cobs = groups =	el (REM) - RO Number of Number of	5	, 48) = 34.1 9: Random E	l u_i=0: F(29 Table s GLS regress	F test that al Random-effects Group variable
9 3	Prob > F OA cobs = groups = group:	el(REM)-RO	5	, 48) = 34.1 9: Random E	l u_i=0: F(29 Table s GLS regress e: firm	F test that al Random-effects Group variable R-sq:
9 3	Prob > F OA cobs = groups = group: min =	el (REM) - RO Number of Number of	5	, 48) = 34.1 9: Random E	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777	F test that al Random-effects Group variable R-sq: within =
9 3 3.	Prob > F OA cobs = groups = group: min = avg =	el (REM) - RO Number of Number of	5	, 48) = 34.1 9: Random E	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776	F test that al Random-effects Group variable R-sq: within = between =
9 3 3.	Prob > F OA cobs = groups = min = avg = max =	e l (REM) - RO Number of Number of Obs per gr	5	, 48) = 34.1 9: Random E	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776	F test that al Random-effects Group variable R-sq: within =
9 3 3.	Prob > F OA cobs = groups = group: min = avg = max = c(14) =	el (REM) - RO Number of Number of	5	, 48) = 34.1 9: Random E ion	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776	F test that al Random-effects Group variable R-sq: within = between =
9 3 3. 11.5 0.640	Prob > F OA cobs = groups = group: min = avg = max = c(14) =	el (REM) - RO Number of Number of Obs per gr Wald chi2(5	, 48) = 34.1 9: Random E ion	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797	F test that al Random-effects Group variable R-sq: within = between = overall =
9 3 3. 11.5 0.640 Interval	Prob > F OA cobs = groups = group: min = avg = max = c(14) = hi2 = [95% Conf.	El (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z	5 ffect Mode	<pre>, 48) = 34.1 9: Random E ion d) Std. Err.</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume Coef.	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA
9 3 3. 11.5 0.640 Interval .121296	<pre>Prob > F OA tops = tops =</pre>	el(REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 -	5 ffect Mode 	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume Coef. .0251453	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT
9 3 3. 11.5 0.640 Interval .121296 .35388	<pre>Prob > F OA f obs = f groups = group: min = avg = max = f(14) = f(2) = f(2)</pre>	el (REM) - RO Number of Number of Obs per gr Wald chi2 (Prob > chi P> z 0.608 - 0.845 -	5 ffect Mode 2 0.51 0.20	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume Coef. .0251453 .0321514	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT
3. 11.5 0.640 Interval .121296 .35388 1.73972	Prob > F OA cobs = groups = group: min = avg = max = c(14) = i12 = [95% Conf. 0710058 25062	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.845 - 0.143</pre>	5 ffect Mode z 0.51 0.20 1.47	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume Coef. .0251453 .0321514 .7445519	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTP
3. 11.5 0.640 Interval .121296 .35388 1.73972 .507033	Prob > F OA obs = groups = group: min = avg = max = 2(14) = 12 = [95% Conf. 0710058 2895852 25062 -1.657313	<pre></pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume Coef. .0251453 .0321514 .7445519 5751398	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTP IBMOUTC
3. 11.5 0.640 Interval .121296 .35388 1.73972 .507033 .365731	Prob > F OA cobs = cgroups = group: min = avg = max = c(14) = 12 = [95% Conf. 0710058 2895852 25062 57313 165234	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.143 0.298 - 0.459</pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395 .1354529</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume Coef. .0251453 .0321514 .7445519 5751398 .1002487	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTP IBMOUTC IBMTECH
3. 11.5 0.640 Interval .121296 .35386 1.73972 .507033 .365731 .659163	<pre>Prob > F OA OA OA OB OB</pre>	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.845 - 0.143 0.298 - 0.459 0.422 -</pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74 -0.80	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395 .1354529 .5701193</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTC IBMCUTC IBMCUTC IBMCUTC IBMECH WBOD
11.5 0.640 Interval .121290 .35388 1.73972 .50703 .365733 .659163 .006330	<pre>Prob > F OA OA obs = groups = groups min = avg = max = 2(14) = 12 = [95% Conf0710058289585225062 -1.657313165234 -1.5756630994813</pre>	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.845 - 0.143 0.298 - 0.459 0.459 0.422 - 0.084 - </pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74 -0.80 -1.73	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395 .1354529 .5701193 .0269932</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume) Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495 0465755	<pre>r test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTP IBMOUTC IBMOUTC IBMTECH WBOD SIZE</pre>
3. 11.5 0.640 Interval .121290 .35386 1.73972 .507033 .365733 .659163 .006330 .04308	Prob > F OA obs = groups = group: min = avg = max = (14) = i2 = [95% Conf. 0710058 2895852 25062 -1.657313 165234 -1.575663 0994813 3454742	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.845 - 0.143 0.298 - 0.459 0.422 - 0.084 - 0.127 - </pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74 -0.80 -1.73 -1.53	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395 .1354529 .5701193 .0269932 .0991244</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume) Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495 0465755 151194	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTP IBMOUTC IBMTECH WBOD SIZE AGE
3. 11.5 0.640 Interval .121290 .35388 1.73972 .50703 .3659163 .00633 .043080 .043080 .022919	Prob > F OA obs = groups = groups = min = avg = max = (14) = i12 = [95% Conf. 0710058 2895852 25062 -1.657313 165234 165234 575663 3454742 0145312	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.143 0.298 - 0.143 0.298 - 0.459 0.422 - 0.084 - 0.127 - 0.661 - </pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74 -0.80 -1.73 -1.53 0.44	<pre>, 48) = 34.1 9: Random E ion d) std. Err0490576 .1641543 .5077501 .5521395 .1354529 .5701193 .0269932 .0991244 .0095539</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume) Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495 0465755 151194 .0041941	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTC IBMTECH WBOD SIZE AGE LEVERAGE
3. 11.9 0.640 Interval .121290 .35388 1.73972 .50703 .3659163 .00633 .006308 .04308 .022919 .153032	<pre>Prob > F OA OA OB OB</pre>	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.845 - 0.143 0.298 - 0.459 0.422 - 0.084 - 0.127 - 0.661 - 0.472 -</pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74 -0.80 -1.73 -1.53 0.44 -0.72	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395 .1354529 .5701193 .0269932 .0991244 .0095539 .1233312</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495 045755 151194 .0041941 0886918	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMEUSACT IBMOUTC IBMECH WBOD SIZE AGE LEVERAGE Int1
3. 11.9 0.640 Interval .121296 .35386 1.73972 .507033 .3659163 .006330 .04308 .022919 .153032 .804040	Prob > F OA cobs = groups = group: min = avg = max = continue (95% Conf. 0710058 2895852 25062 55663 0994813 3454742 0145312 3304166 4005082	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.845 - 0.143 0.298 - 0.459 0.422 - 0.084 - 0.127 - 0.661 - 0.472 - 0.511 - </pre>	5 ffect Mode 0.51 0.20 1.47 -1.04 0.74 -0.80 -1.73 -1.53 0.44 -0.72 0.66	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395 .1354529 .5701193 .0269932 .0991244 .0095539 .123312 .3072884</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495 0465755 151194 .0041941 0886918 .2017661	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTC IBMOUTC IBMOUTC IBMTECH WBOD SIZE AGE LEVERAGE Int1 Int2
3. 11.5 0.640 Interval .121296 .35386 1.73972 .507033 .365733 .659163 .006330 .043086 .022919 .105032 .804040 1.16968	<pre>Prob > F OA OA</pre>	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.845 - 0.143 0.298 - 0.459 0.422 - 0.084 - 0.127 - 0.661 - 0.472 - 0.511 - 0.546 - </pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74 -0.80 -1.73 -1.53 0.44 -0.72 0.66 -0.60	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395 .1354529 .5701193 .0269932 .0991244 .0095539 .123312 .3072884 .8622982</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume) Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495 0465755 151194 .0041941 0886918 .2017661 5203922	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTP IBMOUTC IBMOUTC IBMOUTC IBMTECH WBOD SIZE AGE LEVERAGE Int1 Int2 Int3
3. 11.5 0.640 Interval .121296 .35386 1.73972 .507033 .365713 .06330 .043086 .022919 .153032 .804040 1.16966 3.36239	<pre>Prob > F OA OA</pre>	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.845 - 0.143 0.298 - 0.459 0.459 0.422 - 0.084 - 0.127 - 0.661 - 0.472 - 0.511 - 0.546 - 0.288</pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74 -0.80 -1.73 -1.53 0.44 -0.72 0.66 -0.60 1.06	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395 .1354529 .5701193 .0269932 .0991244 .0095539 .123312 .3072884 .8622982 1.112187</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume) Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495 0465755 151194 .0041941 0886918 .2017661 5203922 1.182548	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTC IBMTECH WBOD SIZE AGE LEVERAGE Int1 Int2 Int3 Int4
3. 11.5 0.640 Interval .121296 .35388 1.73972 .507033 .365733 .659163 .006330 .043086 .022919 .153032 .804404 1.16968 3.36239 .361230	<pre>Prob > F OA OA</pre>	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.845 - 0.143 0.298 - 0.459 0.422 - 0.084 - 0.127 - 0.661 - 0.472 - 0.511 - 0.546 - 0.288 0.491 - </pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74 -0.80 -1.73 -1.53 0.44 -0.72 0.66 -0.60	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395 .1354529 .5701193 .0269932 .0991244 .0095539 .123312 .3072884 .8622982</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume) Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495 0465755 151194 .0041941 0886918 .2017661 5203922	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTP IBMOUTC IBMOUTC IBMOUTC IBMTECH WBOD SIZE AGE LEVERAGE Int1 Int2 Int3
3. 11.5 0.640 Interval .121296 .35386 1.73972 .507033 .365733 .659163 .043086 .022919 .153032 .80404 1.16968 3.36239 .361230	Prob > F OA obs = groups = min = avg = max = (14) = i2 = [95% Conf. 0710058 2895852 25062 -1.657313 165234 165234 3454742 345472 3572726	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.143 0.298 - 0.143 0.298 - 0.143 0.298 - 0.127 - 0.661 - 0.472 - 0.511 - 0.546 - 0.288 0.491 - </pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74 -0.80 -1.73 -1.53 0.44 -0.72 0.66 -0.60 1.06 -0.69	<pre>, 48) = 34.1 9: Random E ion d) std. Err0490576 .1641543 .5077501 .5521395 .1354595 .1354595 .13545932 .0991244 .0095539 .1233312 .3072884 .8622982 1.112187 .2840621</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume) Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495 0465755 151194 .0041941 0886918 .2017661 5203922 1.182548 1955211 .4386283 .12389773	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMBUSACT IBMOUTC IBMECH WBOD SIZE AGE LEVERAGE Int1 Int2 Int3 Int4 Int5 _cons sigma_u
3. 11.5 0.640 Interval .121296 .35388	<pre>Prob > F OA OA</pre>	<pre> el (REM) - RO Number of Number of Obs per gr Wald chi2(Prob > chi P> z 0.608 - 0.143 0.298 - 0.143 0.298 - 0.143 0.298 - 0.127 - 0.661 - 0.472 - 0.511 - 0.546 - 0.288 0.491 - </pre>	5 ffect Mode 2 0.51 0.20 1.47 -1.04 0.74 -0.80 -1.73 -1.53 0.44 -0.72 0.66 -0.60 1.06 -0.69 1.33	<pre>, 48) = 34.1 9: Random E ion d) Std. Err0490576 .1641543 .5077501 .5521395 .1354529 .5701193 .0269932 .0991244 .0095539 .1233312 .3072884 .8622982 1.112187 .2840621 .3308104</pre>	l u_i=0: F(29 Table s GLS regress e: firm = 0.1777 = 0.0776 = 0.0797 = 0 (assume) Coef. .0251453 .0321514 .7445519 5751398 .1002487 4582495 0465755 151194 .0041941 0886918 .2017661 5203922 1.182548 1955211 .4386283	F test that al Random-effects Group variable R-sq: within = between = overall = corr(u_i, X) ROA IBMINPUT IBMEUSACT IBMOUTC IBMECH WBOD SIZE AGE LEVERAGE Int1 Int2 Int3 Int4 Int5 cons

Random-effects GLS regression

Group variable: firm

90

30

-sq: within =	0 2050			Obs per	group: min =	
between =	0.3859					3
overall =	그는 가장에 가장하는 것은 가장에 가장 것이다.				avg = max =	3.0
overall =	0.7581				max =	3
				Wald ch	i2(14) =	100.92
orr(u_i, X)	= 0 (assumed	d)		Prob >	chi2 =	0.0000
ROE	Coef.	Std. Err.	Z	P> z	[95% Conf.	Interval]
IBMINPUT	.1163656	.1722926	0.68	0.499	2213218	. 4540529
IBMBUSACT	4593687	.5350795	-0.86	0.391	-1.508105	. 5893679
IBMOUTP	2.606593	1.633233	1.60	0.110	5944842	5.807671
IBMOUTC	9039199	1.761435	-0.51	0.608	-4.35627	2.54843
IBMTECH	2056319	.4545672	-0.45	0.651	-1.096567	. 6853034
WBOD	-1.259641	2.002885	-0.63	0.529	-5.185224	2.665942
AGE	1799704	.3098547	-0.58	0.561	7872745	. 4273337
SIZE	1837624	.0831511	-2.21	0.027	3467355	0207892
LEVERAGE	.2995928	.0313734	9.55	0.000	.238102	.3610836
Int1	3729537	.4340043	-0.86	0.390	-1.223587	. 4776791
Int2	1.762798	1.076751	1.64	0.102	347596	3.873191
Int3	1.105019	3.036954	0.36	0.716	-4.847301	7.057339
Int4	8110827	3.87285	-0.21	0.834	-8.401729	6.779564
Int5	.2306548	.9764621	0.24	0.813	-1.683176	2.144485
_cons	.3689271	1.04765	0.35	0.725	-1.684428	2.422283
sigma u	.35152885					
sigma e	.09624023					
					oui)	

Table 10: Random Effect Model (REM) - ROE

Number of obs = Number of groups =

Table 11: Random Effect Model (REM) – TOBIN'S Q

andom-effects	GLS regressi	ion		Number	of obs	-	90
roup variable	e: firm			Number	of group	os =	30
l-sq:				Obs per	group:		
within =	0.1158				I	nin =	3
between =	0.6924				ā	avg =	3.0
overall =	0.6816				I	nax =	3
				Wald ch	i2(14)		47.87
corr(u_i, X)	= 0 (assumed		Prob >	chi2	-	0.0000	
TOBINSQ	Coef.	Std. Err.	z	P> z	[95%	Conf.	Interval]
IBMINPUT	-25.35462	119.8759	-0.21	0.832	-260.3	3071	209.5978
IBMBUSACT	347.2017	398.0838	0.87	0.383	-433.0	281	1127.432
IBMOUTP	-945.5353	1228.976	-0.77	0.442	-3354	283	1463.213
IBMOUTC	-1505.04	1335.569	-1.13	0.260	-4122	708	1112.628
IBMTECH	56.51014	329.6112	0.17	0.864	-589.5	5159	702.5362
WBOD	-3886.637	1393.414	-2.79	0.005	-6617	678	-1155.59
SIZE	-266.6151	65.08396	-4.10	0.000	-394.1	1774	-139.052
AGE	-159.7909	239.4115	-0.67	0.504	-629.0	289	309.4471
LEVERAGE	-23.4217	23.19451	-1.01	0.313	-68.88	3209	22.038
Int1	-69.6943	301.4467	-0.23	0.817	-660	519	521.1304
Int2	-400.5537	750.8161	-0.53	0.594	-1872	126	1071.019
Int3	1341.933	2108.121	0.64	0.524	-2789	908	5473.773
Int4	4851.822	2715.817	1.79	0.074	-471.0	806	10174.72
Int5	-396.2281	692.8032	-0.57	0.567	-1754	097	961.6412
_cons	3753.22	799.5588	4.69	0.000	2186	.113	5320.320
sigma u	326.53798						
sigma_e	76.186523						
where I	.94837399	(fue at i	-f	nan duc d			
rho	. 9483/399	(fraction	oi varia	nce que t	LO U_1)		

Selecting the best fit amongst the Panel Data Models

POLS vs. FEM

Poolability F test was used to identify the best model compared between POLS and FEM.

In FEM regression, the following hypotheses holds:

Ho: All dummy parameters, except for the one that has been dropped, are all zero (POLS is preferred)

Ha: At least one dummy parameter is not zero (FEM is preferred as there might be heterogeneity)

The results for the Poolability F test in Stata are that **'F test that all u_i=0'** for all ROA, ROE and Tobins Q.

Therefore, we need to reject Ho and accept Ha and proceed with FEM.

POLS vs REM

FEM vs. REM

versus random effects models.

Breusch and Pagan LM test was used to test the random effect model against the Pooled OLS model.

Hausman test is usually implemented to test for fixed

Table 12: Breusch and Pagan LM Test

Breusch and Pagan Lagrangian multiplier test for random effects TOBINSQ[firm,t] = Xb + u[firm] + e[firm,t] Estimated results: Var sd = sqrt(Var) TOBINSQ 241849.9 491.7823 5804.386 76.18652 e 106627.1 326.538 u Test: Var(u) = 0chibar2(01) 62.73 0.0000 Prob > chibar2 =

Ho: Variance = 0 which is the case where the individual effects do not exist and POLS is applicable (POLS is preferred)

Ha: At least one dummy parameter is not zero (REM is preferred)

The results is '**Prob** > chibar2 = 0.0000', there we need to reject H0 and proceed with REM.

Table 13: Hausman Test

	(b) fixed	(B)	(b-B) Difference	<pre>sqrt(diag(V_b-V_B)) S.E.</pre>
ROE	.1634795	.2286172	0651377	.0381773
TOBINSQ	8.04e-06	0000405	.0000485	.0000461
IBMINPUT	.0066716	0066522	.0133238	.034661
IBMBUSACT	067362	.1533468	2207088	.2604319
IBMTECH	.1667795	.0993062	.0674733	.1259886
WBOD	2198941	0155417	2043524	.3758916
SIZE	0743901	0181343	0562558	.0719443
AGE	3134457	0899249	2235208	.1941071
LEVERAGE	0583053	0523752	0059301	.0117325
Int1	0115018	.0001381	0116399	.0715211
Int2	0843382	0079886	0763496	.2376511
Int3	5694099	7858685	.2164586	. 3919199
Int4	1.155625	.9096515	.2459733	.8237501
Int5	2907932	1336373	1571559	.2125593

Test: Ho: difference in coefficients not systematic

chi2(**13**) = (b-B)'[(V_b-V_B)^(-1)](b-B) = **30.06** Prob>chi2 = **0.0046**

Ho: REM preferred

Ha: FEM preferred

The result is that the 'Prob > chi2 = 0.0046' which is the p-value is significant.

Therefore, reject Ho and proceed with FEM.

12. Significance of Study

Integrated Reporting is developed to maximize and create strategic information disclosure and, through close cooperation, discussion and exploration, it is designed to provide more knowledge related to corporate virtues in the new millennium. The research is confined to only 12 months upon the launch of MCCG 2017, of the year 2018, where future studies could be conducted to analyse the Code's effectiveness over a more extended period.

Conversely, this research is intended to look into any efficient application of the MCCG 2017 by the top 30 quoted firms to maintain an excellent business image in the perspective of diversity management through the ongoing recruitment of female executive board.

The *theoretical significance* of the study will be examined in terms of the theories of the Stakeholder and Agency.

As per the **Stakeholder theory**, a stakeholder model of a financial report focused on the transparency of the integrated business model, including the five key components of the model.

The **Agency Theory** postulates that conflicts between the directors and owners can be lowered through the transparent reporting of the Five items within the Integrated Business Model.

The *methodological significance* would determine if the new female directors ranking indicator measures the appropriate percentage of female on an executive board.

The *practical significance* related to this study would be the scoring index for the Integrated Business Model which can be used to determine the level of disclosures for the Malaysian PLCs other than the top 30 PLCs across different industries within Bursa Malaysia.

13. CONCLUSION AND FUTURE RECOM-MENDATIONS

Finally, the study could be expanded into the year 2020, considering the impact of the Covid-19 pandemic on the Integrated Business Model. It will be useful to investigate the effects of Covid-19 on financial reporting. Additionally, this analysis would evaluate any early adoption of MCCG 2017 among the top 30 Malaysian quoted firms to preserve corporate reputation in light of board gender diversity.

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