Macrothink Institute™

Business Management and Strategy
ISSN 2157-6068
2021, Vol. 12, No. 2

# The Integrated Business Model's Contributory Role Towards Financial Performance: Women Directors' One Third Presence

Dayana Mastura Baharudin

Department of Accounting, School of Management

Universiti Sains Malaysia

Minden, 11800, Penang, Malaysia

Department of Management and Humanities,

Faculty of Science and Information Technology,

Universiti Teknologi PETRONAS, 32610, Seri Iskandar, Perak, Malaysia

Maran Marimuthu

Department of Management and Humanities

Faculty of Science and Information Technology

Universiti Teknologi PETRONAS, 32610, Seri Iskandar, Perak, Malaysia

Suhaily Shahimi

Department of Accountancy, Faculty of Business and Accountancy

Universiti Malaya, 50603, Kuala Lumpur, Malaysia

Received: May 6, 2021 Accepted: May 18, 2021 Published: June 5, 2021

doi:10.5296/bms.v12i2.18584 URL: https://doi.org/10.5296/bms.v12i2.18584

**Abstract**

The goal of this study is to see how consolidated business model exposures in the Integrated Report or Annual Report affect the top 30 Malaysian PLCs, moderated by the MCCG 2017 recommendation of including 30% of women on the board of directors.

In order to analyze the Integrated Business Model exposures among the top 30 Malaysian PLCs, the study uses a purposeful sampling technique coupled with predictive analysis, multiple regression analysis, and quantitative analysis derived from previous studies, as well as a summary of annual reports and integrated reports.

The construction of a new Female Governing Board Content-Scoring Index will identify the best policies of the top 30 Malaysian PLCs, which will benefit both researchers and business players outside of the top 30.

This research is a systematic study of detailed methodological developments in Integrated Business Model disclosures reported through the Integrated Report and Annual Reports of the top 30 Malaysian PLCs, in terms of uniqueness.

In conclusion, with regards to the acceptance of the Integrated Business Model , the results show significance in terms of Return on Assets which reflects internal top management's acceptance, which is also in congruence with the significance shown in terms of Return on Equity which reflects external investors and shareholders' acceptance, and finally are also symmetrical to the significance results shown in terms of TobinsQ which reflects the market participants.

**Keywords:** Governance, Integrated Reporting, Business Model, Women Directors

## I. Introduction

Governance refers to the importance of leadership in all publicly traded firms. The focus of this study is on governance principles, as well as the process required to take a business to new heights (Kanagaretnam, Lobo and Whalen, 2007; Haniffa and Hudaib, 2006; Cadbury Report, 1992). Denis and McConnell (2003) described corporate governance as "processes that enable directors to act in the best interests of shareholders, thus increasing the overall quality of shareholders."

Internally and publicly, all governance systems can be divided into two categories. The judicial system, for example, was an external mechanism (Denis and McConnell, 2003). The structure of the committee (Haniffa and Hudaib, 2006), pay schemes (Donaldson & Davis, 1991), the judgment call mechanism, and the implementation of choices taken are all aspects of the strong internal control processes that are the focus of this report (Abeysekera, 2013).

The Board of Directors is held responsible for good governance in many organizations, especially international entities, where investors and managers are separated (Cadbury Report, 1992). The International Integrated Reporting Council's (IIRC) Integrated Reporting framework (International Integrated Reporting Council, 2011, 2013, 2017) defines those responsible for governance as "the individual(s) or organization(s) tasked with managing the corporate overall strategy of the respective company which has mandatory and custodianship functions."

Senior leadership's personality profile has an influence on the future they create and, as a result, on the decisions taken by the companies they lead. That is because socioeconomic influences are linked to a variety of neuronal bases, attitudes, and preferences that influence the board of directors' decisions. Senior leadership can be more generationally diverse, which have an effect on the management team's judgment call, and the ability to respond to outstanding outcomes (Marimuthu and Kolandaisamy, 2009). The firm's value proposition is its strategy of converting capital into goods and services that aim to meet the company's corporate goals and priorities in order to maximize value in the short and medium haul as well as the long term by its commercial activities (International Integrated Reporting Council, 2011, 2013, 2017). The consolidated report lays out the company's policy, covering main inputs, operations, outputs, and results (International Integrated Reporting Council, 2011,2013, 2017).

## 2. Problem Statement

Malaysia has indeed been constantly faced with global sustainability threats such as the drop in oil prices, China's economic slowdown, and the withdrawal of foreign funds (Saleem, 2015). Nevertheless, Malaysia isn't the only one dealing with global fiscal matters; several other countries have faced similar challenges.

In the best efforts of government agencies, regulators, and a variety of other organizations to strengthen regulatory frameworks aimed at instilling consumer confidence in capital markets, shareholder interest has been seriously harmed. Investor scrutiny on corporate institutions and board members is higher than it has ever been, not just for their financial efficiency, but also on how they manage climate change, socioeconomic, and corporate governance challenges at the legislative level.

In 2014, Paul Druckman, the Chief Executive Officer of the International Integrated Reporting Council, visited Malaysia and expressed his dissatisfaction with the general quality of Integrated Reporting implementation and practices by public listed companies on Bursa Malaysia (PricewaterhouseCoopers, 2014). Furthermore, the poor adoption of Integrated Reporting in Malaysia in 2014 was a big disappointment, according to the survey. This is due not only to a lack of local businesses implementing the scheme, but also to the fact that none of the big Malaysian corporations was involved in developing a Malaysian version of the Integrated Reporting Structure (PricewaterhouseCoopers, 2014).

The business model is an important tool for capturing, imagining, interacting with, and appreciating an organization's business processes (Osterwalder and Pigneur, 2010). It facilitates the assessment, review, and comparison of a company's profitability, as well as strategic decision-making, by easing the design, planning, modification, and execution of strategic strategy (Sukhari and de Villiers, 2019; Osterwalder and Pigneur, 2010). Constructed governance models enable companies to rapidly respond to evolving market climates, enhance the integration of strategies, company policies, and technical capability, and remain competitive by constant innovation to improve overall operations (Sukhari and de Villiers, 2019; Osterwalder and Pigneur, 2010).

Interested parties must have a clear view of the company's operations and tactics, as well as the company's rules and procedures, corporate governance, achievements, and prospects (Sukhari and de Villiers, 2019; Topazio, 2013). Business models are depicted in various forms in corporate reports around the world, and 63 percent of previous study showed an explicit association between both the business model and a company's ability to generate revenue and improve liquidity performance (Topazio, 2013). Moreover, Robertson and Samy (2015) investigated the limitations of established reporting requirements and concluded that there are no clear connections among information regarding an organization's financial and non-financial aspects so most companies do not conduct corporation-wide comprehensive think-tank and thought.

According to PwC Malaysia's 2015 study of the 50 largest public companies in Malaysia on their business strategy implementation, less than half of the companies in the research used the phrase "business model" in their financial reports, with the vast majority not including any substantial advantages in order to add value towards current reporting practices (PricewaterhouseCoopers, 2014).

Just a small percentage of companies were able to identify specific contributions from their activities beyond simple descriptions of what they do. According to the findings of this study on business model acceptance, 44 percent of respondents use the word "business model," and 14 percent of those who shared their business model mentioned it in a strategic context, and 12 percent defined it in terms of their company's value creation. 12 percent used graphics to explain their business model, 2 percent included a clear description of their areas of competitive advantage, and 2 percent stated that differences portrayed in the business model elements were explained (PricewaterhouseCoopers, 2014).

Should an organization's day-to-day activities are not moving quickly enough, it should understand what obstacles there are when there is a need to mechanise their procedures, and to combine the system's expectations with the technological structures. If an organization's effectiveness is insufficient, it should examine the relationships between people and processes that have resulted in unsuccessful operations happening on a regular basis. If companies aren't creating fresh value, they could look at what they're trying to invent differently than their rivals, and one of the big reasons may be a lack of interaction with people and technology. As a result, it is necessary to include the technological element as an additional factor in order to decide whether or not organizations are in sync with technological change.

Top executives' management decisions would have a direct impact on the company's growth. In the context of the Board of Directors, variability encourages greater creativity, ingenuity, and careful decision-making, resulting in a competitive results, especially impacting top executives (Zahra and Pearce, 1989), as members of the board are the most important actors, responsible for the advisory capacity of shareholder monitoring (Hambrick, Cho and Chen, 1996).

According to research, increasing the diversity in corporate executive representation will benefit the company in terms of obtaining critical capital (Pfeffer and Salancik, 1978), and in terms of public policy, advantages at the strategic level are closely linked to the diverse upper management (Eisenhardt and Bougeois, 1988). Top executives who are used to a variety of job environments are more efficient in terms of meeting their obligations (Siciliano, 1996); Kogut and Zander (1993) goes on to say that top executives' skills should be used to the fullest degree possible.

The aim of this study is to see if the Integrated Business Model contributes to the company's economic performance, as suggested by the MCCG 2017 – One Third Woman Board of Directors.

## 3. Research Objectives

1. To investigate the impact of the Integrated Business Model's reporting disclosure on the financial performance of the top 30 Malaysian publicly traded companies.

2. Determine if the inclusion of 30 percent or more woman board members in the top 30 Malaysian public listed companies has improved the connection between both the consolidated business model and financial performance.

## 4. Research Questions

1. Should the Integrated Business Model's reporting results in better financial performance for Malaysia's top 30 public limited companies?

2. Has the MCCG 2017 – 30 percent female board representation improved the connection between both the integrated business model and the business's profit margins among Malaysia's top 30 companies?

## 5. Literature Review

The 8 Content Elements that are similar to one another but not similarly unique make up an integrated reporting structure. History of the entity and its surroundings - What can the organization do and under what circumstances does it function? Is the organization's governing scheme designed in such a way that it allows it to produce value in the short, medium, and long term? Is the entity's business model based on a financial framework? Dangers and opportunities - What are the specific threats and opportunities that affect the organization's potential to develop net worth over the short, medium, and long term, and how is the company dealing with them? Policy and asset distribution - What is the company's goal and how is it going to get there? Firm Performance - To what extent has the organization achieved its long-term objectives, and what are the implications in terms of capital impact? Perspective - What challenges and problems is the organization expected to face in achieving its objectives, and what are the implications for the company's business model and future successes? in addition Source of Disclosure - How does the business decide what can be included in the combined review, and how are such elements measured or assigned a value?

The model that depends on diverse outlets to convert energy and resources, functioning as an organization, is at the core of the business (products, services, by-products and waste). The decisions of the institution have an effect on the final outcome of the integrated business model. The willingness of a company's market operations to adapt to improvements (in input availability, efficiency, and price) may have an impact on the entity's long-term sustainability (International Integrated Reporting Council, 2011, 2013, 2017).

In the years 1999-2000, several accounting irregularities and legislative or regulatory issues arose as a result of fraud and ineffective management processes, raising concerns about corporate ethics and, in particular, governance (Tariq and Abbas, 2013); The economic downturn prompted a greater focus on governance processes, particularly effective risk management and disclosure protocols (Ntim, Lindop and Thomas, 2013). One result has been a growth in the number of governance codes around the world over time (Abbas and Tariq, 2013). Legislative reporting requirements mostly in organizations where the roles of capital provider and director are segregated in totality.

Age and race of senior executives have an impact on how problems are handled and the actions taken by organizations. The connection is based on demographic variables and how people make decisions at the highest levels of government. Senior executive participants can have a substantial effect by influencing the decision-making process around the board and board committees as a result of their greater multiculturalism (Marimuthu and Kolandaisamy, 2009).

As a result, the company's success can be positively correlated to the hostile behavior of senior management. Variability enhances creative thinking, innovation, and improved planning and policy in the case of Board members, which is why this research believes a competitive advantage outcome, especially for company leaders, as directors are the most prominent people, and directors are often responsible for the centralised control of shareholders (Hambrick, Cho and Chen, 1996).

According to prior studies, demographic structure of corporate executives can be beneficial to the company in terms of purchasing productive capital and gains at the strategic level which are closely linked to the diversity of upper management (Pfeffer and Salancik, 1978). (Eisenhardt and Bougeois, 1988). In terms of socioeconomic interactions, senior executives' vocational individuality are favorably correlated with competitiveness (Siciliano, 1996). Senior executives should be involved in all aspects of the decision-making process, according to Kogut and Zander (1993).

According to Principle A of the Malaysian Corporate Governance Code 2017 (MCCG 2017), corporate appointments and executive leaders are not based on gender, experience, ability, age, race, cultural background, or political affiliation. Furthermore, the management should disclose its policy on women empowerment, its priorities, and the steps to be taken to achieve those goals in Principle A, as per notice 4.1 of the MCCG 2017 – 30 percent Women Board of Directors. According to paragraph 4.5, larger organizations should have at least 30 percent women on their boards of directors (Securities Commission Malaysia, 2017).

Moreover, the Malaysia Code of Corporate Governance 2012 (MCCG 2012) did not discuss the 30 percent women on the executive board, which was substantially significant in comparison.

**Cloud-based corporate inventory control is a cutting-edge technology**

Enterprise resource planning (ERP) is a software program that assists individuals in managing everyday activities and business practices such as finance, purchasing, administration, and strategy development. A comprehensive ERP package enables a business to plan, schedule, estimate, and report on its financial results. ERP systems connects the company's various activities, reducing data duplication and allowing processes to run more efficiently. Enterprise networks provide a central source of actuality for all of the organization's data by collecting transaction-oriented data from various sources. ERP programs are also critical for managing and coordinating huge numbers of businesses in a variety of industries (Oracle, 2020).

ERP systems are deployed with common data structures in a single infrastructure setting. Standardizing on a shared list of definitions and recollections is the only way to guarantee that the knowledge included in the organization is consistent. Company activities, driven by processes, connect both of these main systems by business units, connecting mechanisms, and the people who use them. ERP is the process of bringing about change through the integration of people, processes, and technologies in a modern business (Oracle, 2020).

ERP is a necessary component of today's business environment. ERP frameworks centralize company knowledge and operations, allowing them to optimize management processes and increase operating performance, resulting in significant total business benefits. More robust information gathering, reduced operating costs, and more profitable corporate practices are only a few examples of industry advantages.

Users sharing data has emphasized cooperation in negotiations, demands, and acquisition orders. Enhanced productivity thanks to a shared user interface, various business functions, and well-designed workflows; All corporate activities have the same aesthetic, with a cohesive design from the back office to the front end. Increased customer retention thanks to a consumer-friendly atmosphere and arrangement; Better computer security and accounting procedures reduce risk; Standardized and structured set-up result in lower upkeep and costs (Oracle, 2020).

## 6. Theoretical Framework

### Stakeholder Theory is the foundational element theory

Stakeholders of a company have authority over various reports. The type of non-financial information revealed was found to be affected by heightened consumer scrutiny and institutional stockholder misunderstanding. A business report should be used to engage stakeholders and to discuss questions raised by investors. Several stakeholders have offered non-financial knowledge which proved valuable (Freeman, Harrison, Wicks, Parmar and De Colle, 1984).

### Theory of the agencies in scope

According to Jensen and Meckling (1976), an agency relationship is formed when employees, known as managers, are given the authority to make decisions on behalf of the company's owner, the shareholder. Work environment problems are often caused by asymmetry in knowledge amongst employers and employees. Non-financial data clarity aids administrators and marginalized owners in getting a clear picture of their goals (Luk and Yap, 2017; Frias-Aceituno et al., 2012).

## 7. Proposed Conceptual Framework

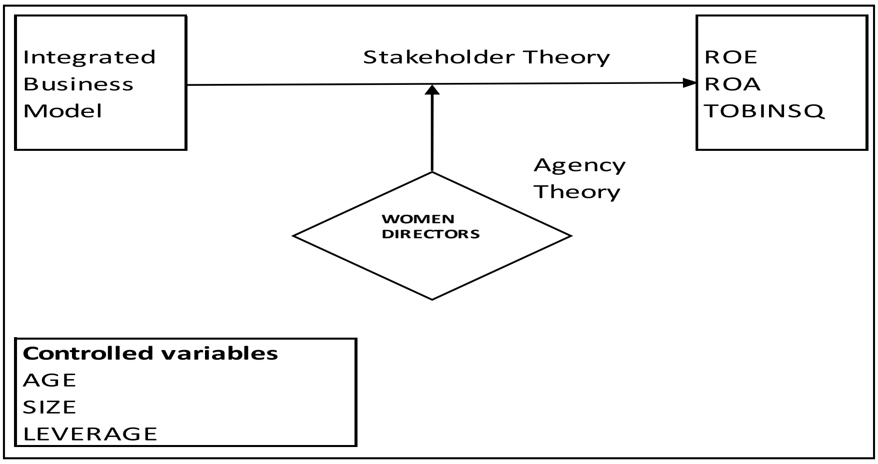


Figure 1. Conceptual Framework

**Independent Variable: Integrated Business Model (International Integrated Reporting Council, 2013)**

The Independent Variable is represented by the Input, followed by Business Activities, Output, Outcomes and Technology.

**Moderator Variable: One Third or more Women Board of Directors**

The board's oversight responsibilities include board composition. The executive committee should be made up of the right number of people with the right characteristics. Members of the board of directors, for example, can be a mix of men and women. In this research, the aim is to determine the number of women board of directors in which the ideal number is one third.

**Financial performance of the Top 30 Corporations (determined by Return on Equity, Return on Assets, and Tobin's Q) is a dependent variable**

Return on equity (ROE) is the amount of benefit a corporation generates for its owners. ROE is calculated by dividing net profit by the book value of the company's equity. The capital value is included in the stockholders' equity, and both of these reserves can be used to pay shareholders directly (Richard, Devinney, Yip and Johnson, 2009). The bulk of prior literature has used a variety of indices to calculate corporate value, including return on assets (ROA), return on equity (ROE), Tobin's Q; business to book value ratio (MBVR) (Sarkar & Sarkar, 2009), return on employed stock, and operating profit margin. Accounting-based success metrics like ROA and ROE, as well as market-based indicators like Tobin's Q and MBVR, are among them. Accounting metrics are concerned with past financial accounts, while industry forecasts are concerned with future returns. If ROA is the best indicator of a company's performance, it just accounts for the efficiency at which profits are produced. The Tobin's Q ratio is a measure of a company's worth in relation to its resources. As a result, a commodity's market value reflects the replacement expense. The Tobin's Q ratio is a metric made popular by Yale University Nobel Laureate James Tobin, who estimated that the net value of companies listed on the stock market should equal their replacement costs. While Tobin is often credited with inventing the ratio, it was Kaldor who first published it in a scientific journal in 1966. The Tobin's Q formula is determined as "the aggregate value of the enterprise measured by the overall asset value of the firm." Tobin's Q will assist companies in determining how they conceptualize and incorporate their business plans (Chaudhuri, Kumbhakar, and Sundaram, 2016).

**Controlled Variables**

The three parameters that will take the form of firm age, firm size, and leverage are used in this study. Firm scale is one of the factors that typically defines an intertwined monitoring adoption relationship between environmental accountability and firm performance. Since major companies may be under scrutiny from the media, so they are probable and expected to release their Annual Report, Sustainability Report and Integrated Report annually. The strengthened oversight of governance processes would lead to the enhancement of the company's valuation. When an organization expands and evolves, the size and age also increase. As a consequence, the size and age both need to be monitored.

Excessive leverage can have severe adverse effects upon an organization and its owners. Conversely, if a company activities are capable of earning a higher yield than the cost of borrowing it spends on its notes, then the borrowing has a favorable effect on economic

Business Management and Strategy
ISSN 2157-6068
2021, Vol. 12, No. 2

performance and profitability. Notwithstanding the financial leverage are out of control, funding write-downs or worse will ensue. Too little loans can also face a number of problems. Unwillingness to obtain loans can mean that the business really has rigid earnings performance. Consequently, in attempt to stabilise the results, the third coefficient value that will be used in this study is the degree of debt, which would differ according to the top 30 Malaysian firms.

## 8. Hypotheses of the Study

Hypothesis 1: Utilizing the proxies of Return on Equity, Return on Assets, and Tobin's Q, the disclosure of Input will have a significant positive impact on market profitability.

Hypothesis 2: Utilizing the proxies of Return on Equity, Return on Assets, and Tobin's Q proxies, it is anticipated that the disclosure of Business Activities would have a significant positive impact on corporate results.

Hypothesis 3: Utilizing the proxies of Return on Equity, Return on Assets, and Tobin's Q, production disclosures will have a significant positive effect on corporate results.

Hypothesis 4: Utilizing the proxies of Return on Equity, Return on Assets, and Tobin's Q, the disclosures of Outcome would have a substantial positive impact on corporate results.

Hypothesis 5: Utilizing the proxies of Return on Equity, Return on Assets, and Tobin's Q as substitutes, technology disclosures would have a substantial positive impact on corporate results.

Hypothesis 6: The Malaysian Corporate Governance Code 2017–30% Women Board of Directors has a positive and long-lasting impact on the relationship between Return on Equity, Return on Assets, and Tobin's Q, with the Integrated Business Model, which includes Input, Business Activities, Output, Outcomes, and Technology.

## 9. Models for Prospective Scientific Research

**Model 1 to 5:**

**FP = β0 + β1 +…… + β6AGE + β7SIZE + β8LEV + εit**

As depicted by;

FP = The top 30 Malaysian PLCs' financial performance, as measured by return on equity, return on investment, and Tobin's Q, was used to calculate accounting effectiveness.

SIZE = Firm size

AGE = Firm age

LEV = Firm leverage

εit = Error term

**Model 6:**

**FP = β0 + β1INPT + β2(INPT x WBD) …..+ β11SIZE + β12AGE + β13LEV + εit**

INPT = Input

WBD = MCCG 2017 – One Third or more Women Board of Directors

## 10. Context, Method and Conceptualizations

An analysis of the Top 30 Malaysian quoted companies, measured by market capitalization, was conducted using information from past corporate reports from 2016 to 2018. To analyze the contents of the financial and non-financial reports, this study uses descriptive statistical analysis and regression analysis. The Malaysian Code of Corporate Governance 2017's Note 4.5 – at least 30 percent of the board members should be women, and for major companies, a large proportion of the board should be female – was used to assess female representation among corporate executives. The sample collected was based on the participation of at least 30 percent women around the board. In corporate reporting analysis, content description was a popular diagnostic technique as well as the most widely used method for accounting disclosure (Zahid and Ghazali, 2015; Boesso and Kumar, 2007). Content analysis should be done using both qualitative and quantitative methods. Within business reporting research, quantitative knowledge processing has been held in higher regard as the most reliable data analysis. (Day and Woodward, 2009; Zahid and Ghazali, 2015). The quantitative content analysis approach, as described by prior best practice studies, was used to construct this assessment.

The data coding strategy would be organized around the data's patterns, words, sentences, verbs, and associated objects (Nilsson,2016; Collins and Hussey, 2014). To determine the extent to which appear to have the components written, a rating system may be used. Wang, Song, and Yao (2013) used a 3-point ranking system, while Larsson and Ringholm (2014) and Eccles and Serafeim (2014) used a 4-point ranking method. Previous research that used content analysis and came to the conclusion that a certain number of points would be the most appropriate used a 4-point ranking method. The 2-point ranking system has been used by Boiral (2013) and Setia et al (2015). This analysis, like a previous study by Nilsson (2016), used a 5-point ranking system, but it differed from it in that it had more companies in the dataset. As a result, the proposed study also included a ranking index based on the International Integrated Reporting Framework, which was released in 2013, to assess Integrated Business Model disclosures beginning in 2013.

The study is beneficial to publicly traded companies because it lets them better appreciate the importance of organizing and gathering valuable knowledge for interested parties, as well as the management of organizational strategy to retain integrity in the eyes of stockholders.

## 11. Results and Findings

Table 1. Descriptive Statistics

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| roa | 90 | .109 | .136 | -.134 | .769 |
| roe | 90 | .404 | .801 | -.318 | 4.436 |
| tobinsq | 90 | 231.725 | 491.782 | .15 | 1989.027 |
| ibminput | 90 | .511 | .31 | .167 | 1 |
| ibmbusact | 90 | .527 | .206 | .143 | .857 |
| ibmoutp | 90 | .708 | .094 | .5 | .75 |
| ibmoutc | 90 | .637 | .081 | .333 | .778 |
| ibmtech | 90 | .207 | .246 | 0 | 1 |
| wbod | 90 | .339 | .148 | .125 | .75 |
| size | 90 | 6.564 | 1.151 | 4.224 | 7.873 |
| age | 90 | 1.517 | .256 | .602 | 2.025 |
| leverage | 90 | 1.771 | 2.214 | .048 | 10.246 |

Business Management and Strategy
ISSN 2157-6068
2021, Vol. 12, No. 2

**The extent to which disclosures and activities are made**

Table 1 shows that the Integrated Business Model - Output Disclosure has a mean value of 70.83, which is the largest of the five elements of the Integrated Business Model. The Integrated Business Model – Outcome has a mean value of 63.70, and the Integrated Business Model – Technology has a mean value of 20.67. The mean values, on the other hand, are modest, accounting for around half of all overall disclosures in all forms of Integrated Business Models. The top 30 Malaysian PLCs listed on Bursa Malaysia show that they are committed to improving their public image by sharing more information about their Performance and Outcome, which shows their successes over time to shareholders and stakeholders. These results do not significantly escalate over time and businesses may not change their practices in a sweeping way but more gradually over time, so the reporting updates year on year are not significant or may not increase in anyway.

**Disclosures are made on a regular basis.**

The largest disclosed Integrated Business Model aspect is Input, which mostly involves the Integrated Reporting framework's 6 Capitals. This is not surprising for the Top 30 Malaysian PLCs based on market capitalization, as the strongest PLCs will like to reveal to their shareholders and customers that they have applied the Integrated Reporting framework's 6 Capitals. There are no significant improvements anticipated in the largest amount of disclosures for the five components of the Integrated Business Models over time. This is a really poor sign for the Top 30 Malaysian PLCs because they are working with multinational partners and need to be more open about the five components of the Integrated Business Model.

Table 2. Pearson Correlation Analysis

| Variables | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) roa | 1.000 | | | | | | | | | | | |
| (2) roe | 0.718 | 1.000 | | | | | | | | | | |
| (3) tobinsq | -0.097 | -0.158 | 1.000 | | | | | | | | | |
| (4) ibminput | -0.086 | -0.131 | 0.211 | 1.000 | | | | | | | | |
| (5) ibmbusact | 0.149 | -0.127 | -0.055 | 0.205 | 1.000 | | | | | | | |
| (6) ibmoutp | 0.102 | -0.016 | -0.466 | 0.161 | 0.402 | 1.000 | | | | | | |
| (7) ibmoutc | 0.066 | 0.076 | -0.290 | 0.245 | 0.495 | 0.574 | 1.000 | | | | | |
| (8) ibmtech | 0.073 | 0.128 | -0.139 | 0.244 | 0.132 | 0.158 | 0.459 | 1.000 | | | | |
| (9) wbod | 0.246 | 0.407 | -0.050 | 0.280 | 0.269 | 0.118 | 0.365 | 0.061 | 1.000 | | | |
| (10) size | -0.088 | 0.012 | -0.834 | -0.178 | 0.099 | 0.596 | 0.296 | 0.136 | -0.043 | 1.000 | | |
| (11) age | -0.092 | -0.094 | -0.029 | -0.015 | 0.378 | 0.105 | -0.041 | -0.188 | 0.055 | 0.035 | 1.000 | |
| (12) leverage | 0.348 | 0.828 | -0.190 | -0.095 | -0.229 | -0.152 | 0.124 | 0.315 | 0.312 | 0.099 | -0.175 | 1.000 |

In this analysis, ROA, ROE, and Tobins Q are used to measure firm expectation and perception of leadership, with an inner view in terms of ROA, and ROE is used to measure firm performance from the perspective of shareholders, with an external outlook. Tobin's Q can also be used to assess the market's viewpoint.

Table 2 indicates that Tobin's Q and all aspects of the Integrated Business Model have a strong negative association, which may mean that the Integrated Business Model disclosures are not favorable to market players. This is a stark contrast to the association of ROA and ROE, which may indicate greater acceptance of the Integrated Business Model disclosures by inner upper management (ROA) and external shareholders (ROE).

**Analysis of Regression**

Multiple regression model was used to measure the influence of openness intensity of the release of the Integrated Business Models on the performance of the Top 30 Malaysian listed companies with the results shown in Tables 3 to 5.

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

| roa | Coef. | St.Err. | t-value | p-value | [95% Conf | Interval] | Sig |
|---|---|---|---|---|---|---|---|
| ibminput | 0 | .124 | 0.00 | .998 | -.246 | .247 | |
| ibmbusact | .001 | .182 | 0.00 | .998 | -.363 | .364 | |
| ibmoutp | -.556 | .634 | -0.88 | .383 | -1.819 | .707 | |
| ibmoutc | .756 | .573 | 1.32 | .191 | -.386 | 1.899 | |
| ibmtech | .011 | .132 | 0.09 | .931 | -.252 | .275 | |
| wbod | -.139 | 1.042 | -0.13 | .894 | -2.215 | 1.936 | |
| size | -.042 | .016 | -2.62 | .011 | -.073 | -.01 | ** |
| age | -.158 | .057 | -2.77 | .007 | -.271 | -.044 | *** |
| leverage | .045 | .01 | 4.46 | 0 | .025 | .065 | *** |
| Int1 | -.242 | .315 | -0.77 | .446 | -.869 | .386 | |
| Int2 | 1.01 | .575 | 1.76 | .083 | -.135 | 2.155 | * |
| Int3 | 3.851 | 1.707 | 2.26 | .027 | .451 | 7.252 | ** |
| Int4 | -4.653 | 1.913 | -2.43 | .017 | -8.464 | -.842 | ** |
| Int5 | .008 | .42 | 0.02 | .984 | -.829 | .846 | |
| Constant | .449 | .322 | 1.39 | .167 | -.192 | 1.089 | |

| | | | |
|---|---|---|---|
| Mean dependent var | 0.109 | SD dependent var | 0.136 |
| R-squared | 0.432 | Number of obs | 90.000 |
| F-test | 4.075 | Prob > F | 0.000 |
| Akaike crit. (AIC) | -126.015 | Bayesian crit. (BIC) | -88.518 |

**** p<.01, ** p<.05, * p<.1*

Overall, the results show significance in terms of Return on Assets which reflects internal top management's acceptance of the Integrated Business Model published within the Annual Reports and Integrated Reports of the top 30 publicly traded companies. However, if the components of the Integrated Business Model are analysed individually, it does not reflect significance compared to when the 5 components of the Integrated Business Model are grouped and combined together as one unit of an Integrated Business Model.

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

| roe | Coef. | St.Err. | t-value | p-value | [95% Conf | Interval] | Sig |
|---|---|---|---|---|---|---|---|
| ibminput | .266 | .382 | 0.70 | .489 | -.495 | 1.027 | |
| ibmbusact | .819 | .563 | 1.45 | .15 | -.303 | 1.942 | |
| ibmoutp | -4.325 | 1.957 | -2.21 | .03 | -8.224 | -.426 | ** |
| ibmoutc | 1.376 | 1.771 | 0.78 | .44 | -2.151 | 4.903 | |
| ibmtech | .054 | .409 | 0.13 | .895 | -.76 | .868 | |
| wbod | -5.941 | 3.218 | -1.85 | .069 | -12.351 | .469 | * |
| size | -.092 | .049 | -1.87 | .066 | -.19 | .006 | * |
| age | -.347 | .176 | -1.97 | .052 | -.697 | .004 | * |
| leverage | .333 | .031 | 10.72 | 0 | .271 | .394 | *** |
| Int1 | -1.518 | .973 | -1.56 | .123 | -3.455 | .42 | |
| Int2 | -1.157 | 1.775 | -0.65 | .516 | -4.692 | 2.378 | |
| Int3 | 20.508 | 5.27 | 3.89 | 0 | 10.008 | 31.007 | *** |
| Int4 | -9.888 | 5.906 | -1.67 | .098 | -21.654 | 1.879 | * |
| Int5 | -.719 | 1.298 | -0.55 | .581 | -3.305 | 1.866 | |
| Constant | 2.337 | .993 | 2.35 | .021 | .358 | 4.316 | ** |

| | | | |
|---|---|---|---|
| Mean dependent var | 0.404 | SD dependent var | 0.801 |
| R-squared | 0.844 | Number of obs | 90.000 |
| F-test | 29.065 | Prob > F | 0.000 |
| Akaike crit. (AIC) | 76.926 | Bayesian crit. (BIC) | 114.423 |

**** p<.01, ** p<.05, * p<.1*

Overall, the results show significance in terms of Return on Equity which reflects external investors and shareholders acceptance of the Integrated Business Model published within the Annual Reports and Integrated Reports of the top 30 publicly traded companies. However, if the components of the Integrated Business Model are analysed individually, it does not reflect significance compared to when the 5 components of the Integrated Business Model are grouped and combined together as one unit of an Integrated Business Model except for IBMOUTP and WBOD in which the external shareholders depicts that only IBMOUTP or output of the companies which consists of Products, Services, Waste and Other-by-Products in which are clearly visible and quantifiable to the external shareholders. Additionally, WBOD are Women Board of Directors which reflects the one third presence of female on board which reflects good diversity and reputation to external shareholders whilst promoting the Integrated Business Model.

Table 5. Pooled Ordinary Least Squares (POLS) – TOBIN’S Q

| tobinsq | Coef. | St.Err. | t-value | p-value | [95% Conf | Interval] | Sig |
|---|---|---|---|---|---|---|---|
| ibminput | 70.399 | 305.734 | 0.23 | .819 | -538.654 | 679.453 | |
| ibmbusact | 290.947 | 450.836 | 0.65 | .521 | -607.165 | 1189.059 | |
| ibmoutp | 2964.733 | 1566.025 | 1.89 | .062 | -154.949 | 6084.415 | * |
| ibmoutc | -2683.092 | 1416.795 | -1.89 | .062 | -5505.493 | 139.309 | * |
| ibmtech | 245.505 | 327.006 | 0.75 | .455 | -405.924 | 896.933 | |
| wbod | 1624.221 | 2574.742 | 0.63 | .53 | -3504.929 | 6753.37 | |
| size | -369.236 | 39.405 | -9.37 | 0 | -447.734 | -290.737 | *** |
| age | 34.586 | 140.712 | 0.25 | .807 | -245.727 | 314.898 | |
| leverage | -31.349 | 24.823 | -1.26 | .211 | -80.798 | 18.1 | |
| Int1 | 165.052 | 778.36 | 0.21 | .833 | -1385.521 | 1715.625 | |
| Int2 | -958.975 | 1419.939 | -0.68 | .502 | -3787.639 | 1869.688 | |
| Int3 | -8235.889 | 4217.299 | -1.95 | .055 | -16637.18 | 165.402 | * |
| Int4 | 7445.396 | 4726.174 | 1.58 | .119 | -1969.626 | 16860.417 | |
| Int5 | -980.891 | 1038.497 | -0.94 | .348 | -3049.682 | 1087.9 | |
| Constant | 2047.03 | 794.812 | 2.58 | .012 | 463.682 | 3630.377 | ** |

| | | | |
|---|---|---|---|
| Mean dependent var | 231.725 | SD dependent var | 491.782 |
| R-squared | 0.736 | Number of obs | 90.000 |
| F-test | 14.933 | Prob > F | 0.000 |
| Akaike crit. (AIC) | 1280.195 | Bayesian crit. (BIC) | 1317.692 |

*** $p<.01$, ** $p<.05$, * $p<.1$

Overall, the results show significance in terms of TobinsQ which reflects the market participants' acceptance of the Integrated Business Model published within the Annual Reports and Integrated Reports of the top 30 publicly traded companies. However, if the components of the Integrated Business Model are analysed individually, it does not reflect significance compared to when the 5 components of the Integrated Business Model are grouped and combined together as one unit of an Integrated Business Model except for IBMOUTP and IBMOUTC in which the market participants depicts that only IBMOUTP or output of the companies which consists of Products, Services, Waste and Other-by-Products in which are clearly visible and quantifiable to the market participants. Additionally, IBMOUTC consists of Customer Satisfaction, Profit/Loss, Shareholder Return, Asset Consumption, Contribution to Local Economy Through Taxes, Job Creation, Employee Development and Engagement, Improved Standard of Living and Environmental Impact in which the disclosure of these factors reflects excellent trustworthiness to the market participants whilst upholding the Integrated Business Model.

## 12. Significance and Magnitude of Study

Integrated Reporting was created to optimize and generate knowledge management transparency, and it is intended to offer more intelligence linked organizational values in the 21st century via close collaboration, dialogue, and experimentation.

The study is limited to just 12 months after the implementation of the MCCG in 2017, with prospective work examining the Code's usefulness over a lengthy span of time.

In contrast, the aim of this study is to see how the MCCG 2017 is being used effectively by the top 30 publicly traded companies in terms of preserving a positive corporate profile in terms of managing diversity through the continuing recruiting of women key executive members of the board.

The study's ***theoretical importance*** would be discussed in terms of stakeholder and agency hypotheses. A stakeholder model of a financial report, according to the Stakeholder philosophy, focuses on the integrity of the integrated business model, and includes the five main components of the model.

The Agency Theory claims that explicit disclosure of the Five Elements within the Integrated Business Model will reduce tensions between directors and shareholders.

The updated female directors rating indicator's ***methodological importance*** would decide if it accurately calculates the required number of females on an executive board.

The scoring index for the Integrated Business Model, which can be used to assess the amount of exposures for Malaysian PLCs other than the top 30 PLCs from different sectors within Bursa Malaysia, is of ***functional significance***.

## 13. Verdict and Recommendations for Future Research

Ultimately, taking into account the effect of the Covid-19 pandemic on the Integrated Business Model, the research should be extended into 2020. The impact of Covid-19 on financial statements should be investigated accordingly. In addition, this review will be able to assess any early implementation of MCCG 2017 by Malaysia's top 30 publicly traded companies in order to protect corporate integrity in light of gender diversity at the board level despite the global pandemic.

**References**

Abeysekera, I. (2013) A Template for Integrated Reporting. *Journal of Intellectual Capital, 14*(2), 227-245. https://doi.org/10.1108/14691931311323869

Boesso, G., & Kumar, K. (2007). Drivers of corporate voluntary disclosure: A framework and empirical evidence from Italy and the United States. *Accounting, Auditing & Accountability Journal, 20*(2), 269-296. https://doi.org/10.1108/09513570710741028

Boiral, O. (2013). Sustainability reports as simulacra? A counter-account of A and A+ GRI reports. *Accounting, Auditing & Accountability Journal, 26*(7), 1036-1071. https://doi.org/10.1108/AAAJ-04-2012-00998

Cadbury Report. (1992), Committee on the Financial Aspects of Corporate Governance of the United Kingdom in December 1992.

Chaudhuri, K., Kumbhakar, S. C., & Sundaram, L. (2016). Estimation on firm performance from a MIMIC model. *European Journal of Operational Research, 255*, 298-307. https://doi.org/10.1016/j.ejor.2016.05.005

Collis, J., & Hussey, R. (2014). Business research, A practical guide for undergraduate and postgraduate students (4th edition). Palgrave MacMillan.

Day, R., & Woodward, T. (2009). CSR reporting and the UK financial services sector. *Journal of Applied Accounting Research, 10*(3), 159-175. https://doi.org/10.1108/09675420911006398

Denis, D. K., & McConnell, J. J. (2003). International Corproate Governance, Finance Working Paper No.05/2003, European Corporate Governance Institute.

Donaldson, L., & Davis, J. H. (1991) Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. *Australian Journal of Management, 16*(1), 49-64. https://doi.org/10.1177/031289629101600103

Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The Impact of Corporate Sustainability on Organizational Processes and Performance. *Management Science, 60*(11), 2835-2857. https://doi.org/10.2139/ssrn.1964011

Eisenhardt, K. M., & Bourgeois, L. J. (1988) Politics of Strategic Decision Making in High-Velocity Environments: Towards a Midrange Theory. *The Academy of Management Journal, 31*(4), 737-770. https://doi.org/10.2307/256337

Freeman, E. R., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (1984). Stakeholder Theory: The State of the Art, Cambridge University Press, Cambridge, UK.

Frias-Aceituno, J. V., Rodriquez-Ariza, L., Garcia-Sanchez, I. M. (2012) Explanatory Factors of Integrated Sustainability and Financial Reporting. *Business Strategy and the Environment, 23*(1), 56-72. https://doi.org/10.1002/bse.1765

Hambrick, D. C., Cho, T. S., & Chen, M. J. (1996). The Influence of Top Management Team

Heterogeneity on Firms' Competitive Moces. *Administrative Science Quarterly, 41*(4), 659-684. https://doi.org/10.2307/2393871

Haniffa, R., & Hudaib, M. (2006) Corporate Governance Structure and Performance of Malaysian Listed Companies. *Journal of Business Finance and Accounting, 33,* 7-8. September/October 2006, 1034-1062. https://doi.org/10.1111/j.1468-5957.2006.00594.x

IIRC. (2013). Business Model background paper for Integrated Reporting. Chartered Institute of Management Accountants (CIMA), IFAC & PwC. IIRC.

IIRC. (2013). Capitals backgroud paper for Integrated Reporting. Association of Chartered Certified Accountants (ACCA) & Netherlands Institute of Chartered Accountants (NBA). IIRC.

IIRC. (2013). Capitals background paper for Integrated Reporting. Association of Chartered Certified Accountants (ACCA) & Netherlands Institute of Chartered Accountants (NBA). IIRC.

International Integrated Reporting Council. (2011). Towards Integrated Reporting, Communicating Value in the 21st Century. IIRC.

International Integrated Reporting Council. (2013). The International Integrated Reporting <IR> Framework. IIRC.

International Integrated Reporting Council. (2017). New Malaysian Corporate Governance Code calls on companies to move towards Integrated Reporting. IIRC.

Jensen, M. C., & Meckling, W. H. (1976) Theory of the firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics, 3*(4), 305-360. https://doi.org/10.1016/0304-405X(76)90026-X

Kanagaretnam, K., Lobo, G. J., Whalen, D. J. (2007) Does Good Corporate Governance Reduce Information Asymmetry Around Quarterly Earnings Announcements. *Journal of Accounting and Public Policy, 26,* 497-552. https://doi.org/10.1016/j.jaccpubpol.2007.05.003

Kogut, B., & Zander, U. (1993). Knowledge of the firm and the Evolutionary Theory of the Multinational Corporation. *Journal of International Business Studies, 24,* 625-645. https://doi.org/10.1057/palgrave.jibs.8490248

Larsson, J., & Ringholm, L. (2014). Governance Disclosures According to IIRC's Integrated Reporting Framework – Are Annual Reports of Swedish Listed Companies in Line with the Framework? University of Gothenburg, School of Economics, Business and Law.

Luk, P. W., & Yap, K. H. A. (2017) Integrated Reporting and Financial Performance: Evidence from Malaysia. *Management and Accounting Review, 16*(2), 101-130. https://doi.org/10.24191/mar.v16i2.647

Malaysian Code of Corporate Governance. (2017). *Securities Commission Malaysia*, Kuala Lumpur, Malaysia.

Marimuthu, M., & Kolandaisamy, I. (2009) Ethnic and Gender Diversity in Boards of Directors and their Relevance to Financial Performance of Malaysian Companies. *Journal of Sustainable Development, 2*(3), 139. https://doi.org/10.5539/jsd.v2n3p139

Nilsson, A. (2016). A touch of Integrated Reporting. An exploration of large Swedish companies' compliance with the IIRC's six capital.University of Gothenburg.

Ntim, C. G., Lindop, S., & Thomas, D. (2013). Corporate Governance and Risk Reporting in South Africa: A Study of Corporate Risk Disclosure in the Pre and Post 2007/2008 Global Financial Crisis Periods. *International Review of Financial Analysis, 30,* 363-383. https://doi.org/10.1016/j.irfa.2013.07.001

Oracle. (2020). Emerging Technologies: Driving Financial and Operational Efficiency.

Osterwalder, A., & Pigneur, Y. (2010) Business Model Generation: A Handbook for Visionaries, Game Changers and Challenges, ISBN: 978-0-470-8764-1, 288.

Pfeffer, J., & Salancik, G. R. (1978). The External Control of Organisations: A Resource Dependence Perspective, University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Referene in Entrepreneurship.

Poliakine, R. (2019). Why Industry 4.0 is the Next Revolution in Business, Forbes Business Development Council, Forbes.com, 22 July 2019, https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2019/07/22/why-industry-4-0-is-the-next-revolution-in-business/?sh=384263873a9c

Pricewaterhouse Coopers. (2014). The state of Integrated Reporting in Malaysia, An Analysis of the Bursa Malaysia's top 30 companies' annual reports. Kuala Lumpur: PwC.

Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring Organisational Performance: Towards Organisational Best Practice. *Journal of Management, 3*, 718-804. https://doi.org/10.1177/0149206308330560

Robertson, F. A., & Samy, M. (2015). Factors Affecting the Diffusion of Integrated Reporting – a UK FTSE 100 perspective, Sustainability Accounting. *Management and Policy Journal*, *6*(2), 190-223. https://doi.org/10.1108/SAMPJ-07-2014-0044

Saleem, S. (2015, August). Malaysia's Economic Challenges: Implications of Ringgit's Fall. S Rajaratnam School of International Studies Commentary.

Sarkar, J., & Sarkar, S. (2009). Multiple board appointments and firm performance in emerging economies: Evidence from India. *Pacific-Basin Finance Journal*, *17*, 271-293. https://doi.org/10.1016/j.pacfin.2008.02.002

Setia, N., Abhayawansa, S., Joshi, M., & Huynh, A. V. (2015). Integrated reporting in South Africa: some initial evidence. *Sustainability Accounting*, *Management and Policy Journal*, *6*(3), 397-424. https://doi.org/10.1108/SAMPJ-03-2014-0018

Siciliano, J. I. (1996) The Relationship of Board Member Diversity to Organisational Performance. *Journal of Business Ethics*, *15*(12), 1313-1320. https://doi.org/10.1007/BF00411816

Sukhari, A., & De Villiers, C. (2019). The Influence of Integrated Reporting on Business Model and Strategy Disclosures: Business Model and Strategy Disclosures. *Australian Accounting Review*, *29*(4), 708-725. https://doi.org/10.1111/auar.12264

Tariq, Y., & Abbas, Z. (2013) Compliance and Multidimensional Firm Performance: Evaluating the Efficacy of Rule-Based Code of Corporate Governance. *Economic Modelling*, *35*, 565-575. https://doi.org/10.1016/j.econmod.2013.08.015

Topazio, N. (2013) Introduction to Integrated Reporting, Chartered Institute of Management Accountants, UK.

Wang, J., Song, L., & Yao, S. (2013). The Determinants of Corporate Social Responsibility Disclosure: Evidence from China. *Journal of Applied Business Research*, *29*(6), 1833. https://doi.org/10.19030/jabr.v29i6.8220

Zahid, M., & Ghazali, Z. (2015). Corporate sustainability practices among Malaysian REITs and property listed companies. *World Journal of Science, Technology and Sustainable Development*, *12*(2), 100-118. https://doi.org/10.1108/WJSTSD-02-2015-0008

Zahra, S., & Pearce, J. (1989). Board of Directors and Corproate Financial Performance: A Review and Integrative Model. *Journal of Management*, *15*, 291-334. https://doi.org/10.1177/014920638901500208

**Copyright**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).