

The Effect of Integrated Reporting Practices on Financial Performance of Malaysian Public Listed Companies

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ABSTRACT

This study aims to examine the integrated reporting practices of the public listed companies in Malaysia. In addition, this study also examined the effect of integrated reporting practices on the financial performance of the public listed companies in Malaysia. The integrated reporting practices were examined based on five content elements of the integrated reporting framework. Using content analysis on the annual reports of 80 public listed companies from 15 industries on the main board of Bursa Malaysia, this study shows that governance, risk and opportunities, and performance disclosure have a significant relationship with financial performance, whereas business model and strategic and resources allocation disclosure do not have any significant relationship with financial performance. The results from this study could give practitioners an idea of how public listed companies currently practice IR in their annual reports. The findings of this study contribute knowledge to the academics, stakeholders of companies, and preparers of annual integrated reports.

Keywords: Integrated reporting, Public listed companies, Governance, Risk and opportunities, Disclosure.

INTRODUCTION

The annual report is one of the communication channels between management and company stakeholders. In the annual report, management presents information on the company's operations for the current and previous fiscal years. However, the details presented by the companies do not reveal the full scope of the business activities that the shareholders and other stakeholders ought to know. The contents of the traditional annual reports presented by companies are unable to help the stakeholders to forecast the companies' long-term financial success due to the lack of necessary information. In addition, when stakeholders look for non-financial information, such as environmental, social, and governance information, the reports still lack sufficient non-financial information. They are unable to see the value creation from non-financial perspectives. This is a sign that the traditional annual report has some loopholes in addressing the demands of all stakeholders.

The main weaknesses of the traditional annual report pointed out by the Institute of Chartered Accountants in England and Wales or ICAEW [1] are the inability to address the expectations of consumers sufficiently, emphasis on past evidence and metrics rather than on non-financial indicators of potential financial success, focus on reliable asset calculation rather than intangible assets and expertise that underpin the performance of a modern company, focus on aggregated statistics, focus on the short-term strategy, and the presence of a discrepancy between the data kept by management and the details accessible to investors. As a result of this circumstance, Malaysian companies have reacted positively to the implementation of integrated reporting (IR). Various organizations, including the Malaysian Institute of Accountants (MIA), have joined forces with Bursa Malaysia and the Malaysian Security Commission to urge Malaysian companies to incorporate IR into their

annual reports. According to PWC [2], several companies have already provided information in accordance with the IR framework during the early phases of IR's implementation, but they have not met all IR requirements. Darus, et al. [3] mentioned that companies that apply IR from the beginning have demonstrated their ability to attract long-term capital and finance from investors. As a result, it encourages research to be done to evaluate the amount of information disclosure depending on the IR content elements and the influence of this disclosure on company financial performance.

According to Eccles, et al. [4], public listed companies that disclosed information following the IR content elements showed an improvement in their financial performance. Results from Othman, et al. [5] demonstrated a positive relationship between the disclosure of IR content elements and financial performance. The current study, which examined the relationship between content element disclosure and financial success in 2019, drew its foundation from these studies. Therefore, this study aims to determine the level of integrated reporting practices of the public listed companies in Malaysia. Subsequently, this study aims to examine the effect of the integrated reporting practices on the financial performance of Malaysian public listed companies. The findings of this study can shed some light on preparers by providing feedback on how much information disclosed in integrated reporting affects a company's performance. The next section, Section 2, provides the literature review relevant to this study. Section 3 explains the research design, while Section 4 presents the results and discussion. The last section, Section 5, concludes this study.

LITERATURE REVIEW

The International Integrated Reporting Council (IIRC) developed the integrated reporting (IR) system as a voluntary standard, aiming for global implementation as a comprehensive unified publication. The IIRC's long-term objective is for organisations that submit annual reports to do so in compliance with the new structure. IIRC [6] defined IR as "a process founded on integrated thinking that results in a periodic integrated report by an organisation about value creation over time and related communications regarding aspects of value creation. An IR is a concise communication about how an organisation's strategy, governance, performance, and prospects, in the context of its external environment, lead to the creation of value in the short, medium, and long term". According to Abeysekera [7], IR was also defined in a previous study as 'integrative' reporting where stakeholders can be presented with details relevant to the company's operational activities. This definition is reinforced by Lee and Yeo [8], as combining core elements of corporate reporting, such as financial, environmental, sustainable growth, and governance, into a holistic report will offer a comprehensive view of the company's engagement and responsibility to its stakeholders. A reform in the reporting system has been introduced to help businesses to properly recognise the current reporting process, covering both financial and non-financial information. Lee and Yeo [8] also indicated that IR is in keeping with the new reporting structure. Joshi [9] posited that IR should also be used as a tool to improve the way organisations perceive, prepare, and communicate the results of their business activities in a single report.

In IR, the economic, societal, governance, and environmental implications are discussed, and companies should explain how the governance system has utilised its tools to recognise and address these impacts, integrating them into the policy of the enterprise. This explanation is necessary to Singh, et al. [10] because the goal of IR is to improve transparency and stewardship of tangible and intangible resources and to foster awareness of their interdependencies. The purpose of IR is to illustrate to investors how a company produces value over time. Stakeholders can obtain greater visibility into the financial and non-financial information revealed using IR. In addition, Hoque [11] mentioned that IR also offers greater accountability on different subjects, such as sustainable development. IR is advocated by IIRC [6] to help those stakeholders involved in the potential of the company to build value over time for workers, consumers, lawmakers, authorities, and decision-makers.

According to IIRC [6], "the primary purpose of an integrated report is to explain to providers of financial capital how an organisation creates value over time. It, therefore, contains relevant information, both financial and otherwise. An integrated report benefits all stakeholders interested in an organisation's ability to create value over time, including employees, customers, suppliers, business partners, local communities, legislators, regulators, and policy makers. These days, IR is a more comprehensive perspective of a company that is evolving away from ethical or sustainability reporting. By definitions by IIRC [6], it seeks to provide a

straightforward and succinct representation of how a company produces value by connecting the different capitals, prospects, business models, development plans, and challenges to potential economic benefit over the short, medium, and long term. The statements by IIRC, as cited by Lee and Yeo [8], indicate that the main users of integrated reports are the providers of financial capital, as they will gain benefits from knowing the value received in the short, medium, and long term.

To ensure all parties would gain benefit from this report, Busco, et al. [12] had emphasised that the IIRC sets a mission to establish an internationally agreed IR framework that puts, next to each other, financial, environmental, social, and governance information in a straightforward, coherent, reliable, and comparative format to help companies make sustainable choices and to allow shareholders and other stakeholders to know how the company currently works. Through IR, the appropriate financial and non-financial information would be published, and the expectation raised by the stakeholders would be fulfilled. The IR framework by IIRC [6] focuses on reporting formats that would allow consumers of the report to have a holistic perspective, which is a simultaneous view of the connections and repercussions of environmental, social, financial, and governance-related activities. According to the IR framework, the preparation of an integrated report is divided into two parts. The first part comprises seven guiding concepts that drive the report's content and the accessibility of the information in the integrated report. Strategic emphasis and future direction, information connectivity, stakeholder relationships, materiality, conciseness, reliability, completeness, consistency, and comparability are the guiding principles. The content components are the second part of the framework. There are eight content elements of the IR framework. The content elements are company overview and external environment, governance, business model, risk and opportunities, strategy and resources allocation, performance, outlook, and basis of preparation and presentation.

For the first content element, company overview and external environment, studies have shown that effective IR identifies the organisation's mission and vision and provides essential context by identifying matters, such as the organisation's culture, ethics, values, ownership, strategic options, principle activities, markets, products and services, competitive landscape, marketing position, and key quantitative information, such as the organisation's revenue, number of employees, and number of countries in which the organisation operates. Also, PWC [2] emphasised that the external environment should be described in the context of legal, commercial, social, environmental, and political issues. These results are consistent with the research by KPMG in 2018 via King and Hopkins [13], as this element includes any significant factors that impact the external environment of the company as well.

The second content element is governance. The rationale behind governance needs to be included in the IR and should explain how an organisation is moving beyond the compliance mindset and provide meaningful insights into the corporate activities. PWC [2] asserted that the organisation's governance structure should be linked to its ability to create value in the short, medium, and long term. This result is consistent with Bebchuk, et al. [14] as well as Jakpar, et al. [15], which showed that governance must highlight the details on the company's leadership structure, the skills and experience of its board and executive management, and the diversity of members in the board. According to Toit, et al. [16], the balance between members on boards with a variety of skill sets would help companies to achieve their objectives.

In an annual report and an integrated annual report, IIRC [6] emphasised that transparency of the governance element has become mandatory in certain jurisdictions, where a strong corporate governance structure facilitates the development of a company's value, offers details related to decision-making, leadership, and ethical impact on the usage of resources, the composition of the board, and the diversity of companies. Bebchuk, et al. [14] have found that a company with a strong degree of governance has increased financial output and stock value compared to a poorly governed company. These results suggest that governance would have a substantial effect on the financial performance of companies, contributing to the first hypothesis as follows:

H1: There is a significant effect of governance disclosure on the financial performance of public listed companies in Malaysia.

The third content element is the business model. An organisation's business model is its system of transformation of inputs, through its business activities, into outputs and outcomes that aim to fulfil the organisation's strategic purpose and create value over the short, medium, and long term. PWC [2] showed that reporting on the business model has consistently proven to be one of the areas where the most effective communication has been achieved. Another research by ICAEW [1] as well as Boonlua and Phankasem [17] supported this statement, as a business model is able to deliver to the readers of annual reports the flow of the company and how the company was able to process the six capitals, that is, financial capital, manufactured capital, human capital, intellectual capital, natural capital, and social capital, to produce outputs and outcomes.

PwC [18] cited the Financial Reporting Council (FRC) in defining a business model as "how an entity generates or preserves value over the longer term," highlighting its significance as a key disclosure element in corporate reporting. Similarly, the International Integrated Reporting Council (IIRC) identifies the business model as a core component of integrated reporting, conceptualising it as the process through which organisations convert inputs into outputs via their business activities. According to the IIRC [6], the outcomes of these processes are aligned with strategic objectives and are intended to facilitate value creation across short-, medium-, and long-term horizons. PwC's 2016 study [18] further argued that enhanced business model reporting may accelerate future developments in corporate disclosure. The study also noted that investors increasingly demand more comprehensive insights into business models to inform their decisions. The decisions would in turn, directly affect corporate cash flows and financial performance. Therefore, the following hypothesis was derived as follows:

H2: There is a significant effect of business model disclosure on the financial performance of public listed companies in Malaysia.

The fourth content element is risks and opportunities. An integrated report identifies the key risks and opportunities that are specific to the organisation, including those that relate to the organisation's effect on, and the continued availability, quality, and affordability of, relevant capitals in the short, medium, and long term. PWC [2] also revealed that most of the companies surveyed showed potential for risk reporting and integrating it into other areas of the report. In support of this view, MIA-ACCA [19] as well as King and Hopkins [13] emphasised that the ability to link the issues relating to risks and opportunities with other elements across the report helps the readers to understand how well managers articulate the risks and gain a competitive advantage from the situation currently faced by the company.

Risks are commonly considered as something that is harmful to an organisation. If this risk is properly managed, it can be beneficial to the organisation in the long run. According to Luk and Yap [20], if the mindset of risks as harmful is changed, companies might be able to develop new market opportunities, which, in turn, contribute to short-term and long-term profitability. IIRC [6] iterated that an integrated report describes important risks and opportunities that are unique to a company, including those relating to the influence of the organisation on, and the continued availability, efficiency, and affordability of, the relevant resources in the short, medium, and long term. An analysis undertaken by Ernst and Young released in 2013 has shown that more advanced risk assessment activities and disclosures are favourably related to higher profitability. It was also emphasised by IIRC [6] that when risk management is effective, the financial position of the organisation would undoubtedly improve because of the company's ability to disperse limited resources across several portfolios. Disclosure of risks and opportunities allows management to make good judgement about how to handle their investment and commitment and indirectly influence the financial performance of the company. Based on these statements, the third hypothesis was established as follows:

H3: There is a significant effect of risks and opportunities disclosure on the financial performance of public listed companies in Malaysia.

The fifth content element is strategy and resource allocation. PWC [2] had mentioned that an organisation's short-, medium-, and long-term strategic goals, as well as a blueprint for assigning resources to achieve the strategy and measuring the strategy's performance in the short, medium, and long term, should all be included in the well-designed research. Additionally, Kılıç and Kuzey [21]; as well as Beske, et al. [22] showed that strategy and resource allocations should be linked to operational risks and opportunities for the company to

have a clear long-term strategic vision. The strategy and allocation of capital are often included in the IR elements since a company usually discloses its strategy targets for the short, medium, and long term; the policies to be implemented to achieve the strategic objectives; and the resource distribution method to be utilised for the execution of the strategy as described by IIRC [6]. Strategic planning is extremely essential for the business, since it can decide the success and survival of the organisation. Luk and Yap [20] posited that the longevity of the business influences the financial results, as an investor is more attracted to invest in a company that he believes would survive in the long term. Therefore, the fourth hypothesis formulated is as follows:

H4: There is a significant effect of strategy and resource allocation disclosure on the financial performance of public listed companies in Malaysia.

The sixth content element is performance. According to IIRD [6], performance is one of the components in IR that demonstrates key performance indicators (KPI) that incorporate financial indicators with the ‘what?’ or narratives that describe the economic consequences of the major impact on other capitals and other causal interactions that could be used to illustrate the connectivity of financial performance to performance in other capitals. It was also mentioned by IIRC [6] that disclosure of performance applies to the degree to which the company has accomplished its strategic objectives or KPIs throughout the period. An integrated report contains both qualitative and quantitative information on a company's performance. According to a PWC [2] study in 2014, 77% of the respondents believed that they could enhance reporting on these issues, yet only 10% of the reporters were able to effectively communicate their overall success to customers. Additionally, MIA-ACCA [19] mentioned that the performance should indicate the present levels of financial and non-financial performance to serve as a benchmark for monitoring the progress towards achieving management's strategic objectives.

The concept provided by the IIRC demonstrates that, when a business succeeds in attaining the KPIs set by it, it allows current and prospective investors to see the successes of the company. It would directly encourage additional funding and help businesses boost their financial performance. These points were also reinforced by the previous studies, as it is also believed that shareholders are more directly impacted by the openness of the company in the announcement of results owing to the immediate effects on its capital. Since stakeholders are concerned with the long-term sustainability of a company as a means of maintaining the integrity of their partnership, Aerts, et al. [23] highlighted that the knowledge needs of the stakeholders would represent the aspects of corporate success that are near to their priorities and encompass both financial and non-financial performance metrics. Thus, the last hypothesis formulated is as follows:

H5: There is a significant effect of performance disclosure on the financial performance of public listed companies in Malaysia.

The seventh content element is outlook. An integrated report often highlights the projected growth through time, delivers the information, produces a clear and transparent evaluation of the company's beliefs about the external environment, and analyses the influence on the organisation. As a result, PWC [2] posited that IR would display the organisation's ability to deal with pressing concerns and possible risks. Since an outlook helps readers form their own views on the future of the company, KPMG [24] had emphasised that it would enable readers to understand the company's objective holistically and relate it again with the company's future target.

The eighth content element is the basis of preparation and presentation. The methodology used to prepare and present the paper is outlined in IR. It includes a summary of the organisation's materiality assessment procedure, the discretion of the reporting limit, and how it was established. According to PWC [2], it also provides an overview of the major processes and methodologies utilised to measure or test material concerns. KPMG [24] added that it also includes a detailed explanation of the board's and management's approach and application for identifying relevant concerns.

For this study, five content elements were chosen, namely governance, business model, risks and opportunities, strategy and resources allocation, and performance. These five content elements were chosen because,

according to Luk and Yap [20], among the eight content elements of IR, the five content elements chosen showed a significant effect on financial performance when disclosed. This result is consistent with Eccles et al. [4], where they chose these five content elements to measure the quality of the information provided in annual reports that affect the financial performance of companies.

Research Design

Sample Selection

The Financial Times Stock Exchange (FTSE) Bursa Malaysia Top 100 Index companies, as reported on the Bursa Malaysia website, served as the study's population. This population was chosen because they meet the definition of large companies according to the Malaysian Code of Corporate Governance (MCCG) 2017. MCCG 2017 para. 2.6 identifies large companies as:

Companies on the FTSE Bursa Malaysia Top 100 Index; or Companies with market capitalisation of RM2 billion and above, at the start of the companies' financial year.

With sufficient resources and stakeholders from various backgrounds, these companies are certainly among the first to prepare their annual reports in the integrated reporting (IR) format. This reporting is to fulfil its various stakeholders' demands and expectations, among others. By selecting large companies, an analysis could be carried out into how large companies are taking serious steps to implement IR in their annual reports and satisfy the requirements set out in MCCG 2017.

From a population of the top 100 companies listed in Bursa Malaysia, some companies were selected as the sample to represent the whole population. According to Sekaran and Bougie [25], a sample may be described as a population subset. It consists of some of the representatives chosen from it. Sekaran and Bougie [25] also mentioned that, for a population of 100 companies, 80 companies would be the required number of sample units. This number is significant for this study, as the rule of thumb by Sekaran and Bougie [25] for sufficient sample collection is between 30 and 500, which is acceptable for most studies. A purposive sampling technique selected this group of 80 companies for inclusion. Each industry has a representative company that practices IR in their annual reports. The Thomson Reuters Eikon software categorised the selected companies to represent more than 15 different industries in Malaysia.

Research Instrument

The primary source of documents for this study was the annual reports, so downloading them from the companies' websites was the most appropriate data collection method. The websites of public listed companies consistently provide their stakeholders with the latest information. Therefore, obtaining the most recent annual reports, which are easily transferable in the form of a Portable Document Format (PDF), was straightforward. In pdf format, one could easily access the information about the disclosure of the IR elements in this study, as well as the return on assets (ROA) and return on equity (ROE). Apart from published annual reports, data on the sample companies were also acquired from the Eikon database stream. Using the Eikon database stream, this study was able to classify the sample of companies into various industries. As a result, Bursa Malaysia's top 100 companies were separated into 15 different industries.

Data Collection

This study gathered data from secondary sources. The data collection was carried out by gaining access to the public companies that are listed on the FTSE Bursa Malaysia Top 100 Index through the Bursa Malaysia's website. On the website, visitors could access the annual reports for individual companies. Businesses generate these easily accessible, widely publicised, and lawfully generated documents, making them a reputable and authentic source for everyone to assess. Apart from Bursa Malaysia, each company's website includes a link to its annual report and other non-financial information. Financial data on the top 100 public listed companies were also obtained for this study through the Eikon database stream, which gives complete financial data for analysis.

Content analysis is the appropriate analysis for the obtained secondary data, allowing for the identification of trends in documented communications. Eccles, et al. [4]; as well as Luk, et al. [26] extensively adopted this approach in their studies. Content analysis is the process of gathering data from various sources, such as a collection of printed documents (e.g., books, newspapers, and journals). The content analysis also encompasses the analysis of data gathered from oral and visual sources, speeches and interviews, online materials, social media messages, images, and videos. This study adopted and adapted the research instrument developed by Lee and Yeo [27]. Lee and Yeo [27] identified and classified five major content elements: governance, business model, risks and opportunities, strategy and resource allocation, and performance. Each element contained five questions, which give a total of 25 questions to test and evaluate the disclosure of the IR elements. The number of questions was equally distributed within the main content elements since all the questions established by Lee and Yeo [27] are focused on the specifications of the IIRC in the IR framework.

In terms of scoring, this study used the scoring items and scales developed by Eccles, et al. [4]. This scoring method was used for content analysis in many previous studies and was adopted as a criterion for the determination of the number of points. This method of scoring was intended to measure the amount of information disclosed by the companies for each element stated earlier. In Malaysia, the preparation of an annual report in accordance with the IR framework is still voluntary. Hence, this scoring method was the most appropriate method to address the objectives of this study, where it enabled this researcher to evaluate the degree to which the companies reported the relevant information according to the IR framework. Furthermore, the scoring system adopted also helped this researcher to gauge the amount of disclosure of the information and compare it with what has been proposed by the IR framework. This Integrated Reporting Score (IRSCORE) focused on the integrated details presented by the companies in their annual reports. Referring to Eccles, et al. [4], this study used the four-point score system as shown in Table 1.

Table 1. The Four-point System for Scoring Items

	Scoring System
0 Points	No relevant disclosure
1 Points	Low disclosure
2 Points	Moderate disclosure
3 Points	High Disclosure

Source: Eccles, et al. [4]

For each question, a raw score ranging from 0 (no relevant disclosure with IR framework) to 3 (high disclosure with IR framework) is provided. If the companies have no or very little disclosure of information in relation to the IR element, the query would then have a score of 0. A lengthy and exhaustive annual report would award the query a score of 3 for a high degree of information disclosure. Based on the procedures for rating, the minimum IRSCORE is 0, and the highest IR score is 75. A low score indicates that most companies listed on Bursa Malaysia either do not disclose information or disclose it in a limited manner that aligns with the IR framework's guidelines. Companies with a high overall score indicate that they have published relevant information in their annual reports, adhering to the guidelines proposed by the IR framework.

RESULTS

Descriptive Statistics

Table 2 provides the list of selected companies alphabetically by industry. The total number of companies in each industry is between three and seven, with the financial, industrial machinery, materials, and equipment industries having the fewest at three companies each, and banking, property and real estate investment trusts, and other industries having the most at seven companies each. This data distribution demonstrates that each sector included in Bursa Malaysia's top 100 list has an equal number of public listed companies.

Table 2. List of Companies Categorised by Industry

No.	Industry	Number of companies
1	Banking	7
2	Construction	6
3	Diversified Industry	4
4	Financial	3
5	Energy Infrastructure & Power Producers	6
6	Fishing & Farming	6
7	Food Processing	4
8	Oil & Gas	6
9	Healthcare & Medical Equipment	6
10	Industrial Machinery, Materials, & Equipment	3
11	Property & Real Estate Investment Trusts	7
12	Semiconductor Equipment	5
13	Transportation	4
14	Media & Telecommunications	6
15	Other industries	7
		80

The descriptive statistics in Table 3 show that the minimum value for the ROA and ROE are -0.013 (-1.3%) and -0.064 (-6.4%), respectively. These values indicate that, within the sample of the Malaysian public listed companies, some of them were making losses. Besides, the mean of the ROA is 6.32%, while the mean of the ROE is 18.0%.

Table 3. Descriptive Statistics for All Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	80	-0.013	0.293	0.0632	0.05952
ROE	80	-0.064	2.150	0.1802	0.31548
Governance	80	0.80	2.80	1.8550	0.60878
Business Model	80	0.40	3.00	1.8925	0.78139
Risks and Opportunities	80	0.40	3.00	1.9375	0.84350
Strategy & Resource Allocation	80	0.60	3.00	1.9850	0.75826
Performance	80	0.20	3.00	1.8175	0.81579

From Table 3, it can be concluded that the average disclosure for all the independent variables is almost similar, at a range from 1.8 to 1.9, showing a moderate disclosure based on the four-point scoring system. On average, the business model, risks and opportunities, strategy and resource allocation, and governance all exhibit higher levels of disclosure than any other company. Performance, however, has a mean score of 1.8175, indicating that it has the lowest level of disclosure among the five IR content elements.

Reliability Analysis

The study used Cronbach's Alpha analysis to determine the reliability of the collected data. Cronbach's alpha is one of the metrics used to determine the degree to which items on a scale measure the same underlying dimension. This study uses Cronbach's Alpha to evaluate the disclosure of IR content elements in the annual reports. Table 4 presents the Cronbach's Alpha coefficients for all five independent variables in this study. The higher score implies higher reliability in the measurement scale. Hair, et al. [28] accept a reliability score of 0.70 as the minimum value. Therefore, the reliability results presented in Table 4.2 are acceptable since the reliability coefficients of all variables are over 0.70.

Table 4. Reliability Analysis Results

Variables	Cronbach's Alpha	Number of items
	(n=80)	
Governance	0.911	5
Business Model	0.956	5
Risks and Opportunities	0.942	5
Strategy & Resource Allocation	0.964	5
Performance	0.945	5

Pearson Correlation

Correlation analysis is a statistical technique that is used to determine whether there is a link between the variables and the direction and strength of that relationship. The correlation coefficient is the outcome of the correlation computation and has a value between +1 and -1. If two variables are perfectly positively correlated, the coefficient will be +1, whereas if they are perfectly negatively correlated, the value would be -1. If there is no linear relationship at all, the coefficient will be 0, indicating that if one variable varies, the other will remain constant. It is also used to check the multicollinearity issue between the independent variables, which are governance (G), business model (BM), risks and opportunities (RO), strategy and business resources (SR), and performance (P).

Table 5. Pearson Correlation Matrix

	ROA	ROE	G	BM	RO	SR	P
ROA	1.000						
ROE	.487**	1.000					
G	-.264*	-.034	1.000				
BM	-.201	.102	.761**	1.000			
RO	-.286*	.082	.785**	.852**	1.000		
SR	-.173	.112	.807**	.883**	.842**	1.000	
P	-.245*	.050	.808**	.902**	.865**	.901**	1.000

*. Correlation is significant at the 0.05 level (2-tailed) **. Correlation is significant at the 0.01 level (2-tailed)

Table 5 displays the correlation analysis results between the IR elements and financial performance of companies, as represented by return on assets and return on equity. The results demonstrate that there is a negative correlation between governance (G) and ROA at the 5% significance level; the r value is -0.264 with p significant at 0.05. There is also a negative correlation between risks and opportunities (RO) and ROA at the 5% significance level; the r value is -0.286 with p significant at 0.05. Table 5 further shows that there is a negative correlation between performance (P) and ROA at the 5% significant level; the r value is -0.245 with p significant at 0.05. Other than that, there are no significant correlations between the dependent and independent variables. The results in Table 5 also show that there isn't a problem with multicollinearity. This is because, besides SR and P and BM and P, no other pair of independent variables has a correlation coefficient value greater than 0.90 or less than -0.90, which means they are highly related to each other. According to Hair, et al. [28], the coefficient value should not be greater than 0.9 or lesser than -0.90 to avoid a multicollinearity problem.

Tolerance and Variance Inflation Factor (VIF) Values

Multicollinearity can be assessed by examining the values for Tolerance and Variance Inflation Factor (VIF). If the tolerance value is small, it suggests that the dependent variable is nearly a perfect linear combination of the existing independent variables in the equation, indicating no need to add it to the regression equation. All variables involved in the linear relationship should have a small tolerance value.

VIF values that exceed 10 are often regarded as indicating multicollinearity, but in weaker models, values above 2.5 may be a cause for concern. The result demonstrates that all the independent variables' tolerance values are over 0.1, and the VIF of all independent variables is within the range of 1 to 10. According to Hair, et al. [28], these values would indicate that a multicollinearity issue is not present.

Table 6. Tolerance and Variance Inflation Factor (VIF) Results

Variables	Tolerance	VIF
(1) DV (ROA)	0.297	3.362
(2) DV (ROE)	0.148	6.762
(3) x_1 (Governance)	0.203	4.933
(4) x_2 (Business Model)	0.144	6.923
(5) x_3 (Risks and Opportunities)	0.119	8.425
(6) x_4 (Strategy & Resource Allocation)	0.963	1.038
(7) x_5 (Performance)	0.297	3.362

Multiple Linear Regression

The data's normality must be examined to see if the data gathered are normally distributed before the connection between the dependent and independent variables could be assessed using correlation and regression analyses. Depending on the normality or non-normality of the measured data, the relevant analytical measures for the studies may be determined. To test for the normality in the data distribution of each variable in this study, the values of skewness and kurtosis served as the reference values. According to Sekaran and Bougie [25], when data are normally distributed, the values of both skewness and kurtosis must be closer to zero.

Table 7. Shapiro-Wilk, Skewness, and Kurtosis Tests of Normality

	Shapiro-Wilk	Skewness	Kurtosis
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	Statistic	df	Sig.		
ROA	0.826	80	0.000	1.841	4.135
ROE	0.442	80	0.000	4.700	24.504
Governance	0.940	80	0.001	-0.006	-0.983
Business Model	0.939	80	0.001	-0.140	-1.157
Risks and Opportunities	0.913	80	0.000	-0.171	-1.232
Strategy & Resource Allocation	0.900	80	0.000	0.002	-1.400
Performance	0.935	80	0.000	-0.072	-1.248

Table 7 presents the results of the Shapiro-Wilk, Skewness, and Kurtosis tests. The Shapiro-Wilk test is more appropriate for small sample sizes (< 50 units), but it can also handle sample sizes as large as 2000 units. For this reason, this study used the Shapiro-Wilk test as a numerical means of assessing normality. Based on the results, all the variables have a significant value of less than 0.05, denoting that they do not have a normal distribution.

Table 8. Results of the Shapiro Wilk Test of Normality

Variable	Hypothesis	Sig	Decision Rule	Conclusion
ROA	H ₀ : The distribution of ROA is normal. H ₁ : The distribution of ROA is not normal.	0.000	<T _{0.05}	The distribution is not normal.
ROE	H ₀ : The distribution of ROE is normal. H ₁ : The distribution of ROE is not normal.	0.000	< T _{0.05}	The distribution is not normal.
Governance	H ₀ : The distribution of Governance is normal. H ₁ : The distribution of Governance is not normal.	0.001	< T _{0.05}	The distribution is not normal.
Business Model	H ₀ : The distribution of Business Model is normal. H ₁ : The distribution of Business Model is not normal.	0.001	< T _{0.05}	The distribution is not normal.
Risks and Opportunities	H ₀ : The distribution of Risks and Opportunities is normal. H ₁ : The distribution of Risks and Opportunities is not normal.	0.000	< T _{0.05}	The distribution is not normal.
Strategy & Resource Allocation	H ₀ : The distribution of Strategy & Resource Allocation is normal. H ₁ : The distribution of Strategy & Resource Allocation is not normal.	0.000	< T _{0.05}	The distribution is not normal.

Performance	<p>H_0: The distribution of Performance is normal.</p> <p>H_1: The distribution of Performance is not normal.</p>	0.000	$< T_{0.05}$	The distribution is not normal.
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The tests of skewness and kurtosis are another way of checking the normality and presence of outliers of the data. According to Hair, et al. [28], when the skewness is between the range of -2 to +2 and the kurtosis is between -7 to +7, the data is considered normally distributed. Table 8's skewness and kurtosis values show that the mean scores for governance, business model, risks and opportunities, strategy and resource allocation, and performance follow a normal distribution. However, the sample size surpasses 30, indicating a substantial data set, leading to the assumption of normality. Therefore, Table 8 above indicates a normal distribution of the data for all variables within the acceptable threshold, except for ROE.

From Table 9, the model summary shows a low R^2 value, which is less than 60%. A high R^2 value signifies the extent to which the predictor can explain the variation in the response variable (dependent variable). In this case, the independent variables explain 49.7% of the variation in the ROA. Meanwhile, for the ROE, the R^2 value shows a slightly lower percentage of 33.5%. Based on the ANOVA results, the p-value of less than 0.05 indicates that the model is significant only for the ROA as the dependent variable. Given that the p-value exceeds 0.05, the regression model with ROE as the dependent variable is not statistically significant in relation to the independent variables.

Table 9. Model Coefficients for the Multiple Linear Regression

Independent Variable	ROA		ROE	
	β	Sig.	β	Sig.
Constant	0.062	0.009	0.050	0.707
x_1 (Governance)	-0.017	0.348	-0.172	0.105
x_2 (Business Model)	0.003	0.867	0.047	0.687
x_3 (Risks and Opportunities)	-0.020	0.213	0.066	0.472
x_4 (Strategy and Resource Allocation)	0.024	0.266	0.140	0.252
x_5 (Performance)	-0.011	0.611	-0.090	0.471
R	0.497		0.335	
R^2	0.247		0.112	
Adj R^2	0.186		0.039	
Durbin-Watson	2.201		2.303	
P - value (ANOVA)	0.002		0.179	

The Durbin-Watson statistics in Table 9 lie in the range 0 to 4. A value of 2—or nearly 2—indicates that there is no first-order autocorrelation. An acceptable range is 1.50 to 2.50. Since the Durbin-Watson values for the models are within this range, it can be concluded that there is no autocorrelation. Although no significant relationship is found between the other variables, a positive relationship exists between the business model ($\beta = 0.003$), strategy, resource allocation ($\beta = 0.024$), and ROA.

Multivariate Analysis

Table 10 summarises the results of the multivariate tests. The Wilks's Lambda value shows a significant value of 0.000 ($p < 0.05$). Therefore, it can be concluded that the financial performance of Malaysian public listed companies is significantly dependent on the type of industry ($p < 0.05$).

Table 10. Multivariate Analysis Results

Effect	Variables	F	Sig.
Intercept	Pillai's Trace	150.410 ^b	0.000
	Wilks' Lambda	150.410 ^b	0.000
	Hotelling's Trace	150.410 ^b	0.000
	Roy's Largest Root	150.410 ^b	0.000
Industry	Pillai's Trace	1.551	0.000
	Wilks' Lambda	1.625	0.000
	Hotelling's Trace	1.695	0.000
	Roy's Largest Root	5.964 ^c	0.000

Table 11 shows the results to determine how the dependent variable differs for the independent variables. From the results, the type of industry has a statistically significant effect on all variables except ROE (p-value>0.05). This result aligns with the result from the regression analysis since ROE is not statistically significant in ANOVA.

Table 11. Between-Subject Effects Test Results

Effect	Variables	F	Sig.
Industry	ROA	2.570	0.005
	ROE	1.062	0.407
	Governance	2.893	0.002
	Business Model	3.048	0.001
	Risks & Opportunities	3.937	0.000
	Strategy & Resource Allocation	2.851	0.002
	Performance	3.191	0.001

DISCUSSION

The first objective of this study was to examine the level of integrated reporting (IR) practices of the public listed companies in Malaysia. As such, this study conducted a descriptive analysis to determine whether the companies disclosed information relating to the content elements of IR. Based on the results, most of the public listed companies in this study have a high disclosure of the business model, risks and opportunities, strategy and resource allocation, and governance elements of IR. Only one element, performance, is disclosed at a level between moderate and high. The study's findings indicate that public listed companies in Malaysia have already incorporated the IR framework elements into their annual reports. These results correspond to Luk and Yap [20]. The study indicates that an increasing number of public listed companies are incorporating internal reporting into their annual reports, which is a positive indicator because it enables companies to provide enough information to financial statement users. When a greater number of public listed companies incorporate internal reporting into their annual reports, small and medium enterprises can easily follow suit.

The second objective of this study was to examine the effect of the IR practices on the financial performance of Malaysian public listed companies. To study the effect of IR practices on financial performance, the Pearson correlation analysis was used to determine the strength and direction of the disclosure of the content elements of IR in annual reports and companies' financial performance. The Pearson correlation results showed a negative correlation between governance and return on assets ($r = 0.26$, $p < 0.05$), but there is no significant

correlation between governance and return on equity (ROE). Since the p-value is less than the alpha value of 0.05, hypothesis 1 (H1), which states that there is a significant effect of governance disclosure on the financial performance of public listed companies in Malaysia, is accepted. Since H1 is accepted, this study concluded that the disclosure of the governance element has a positive impact on the financial performance of companies. This result is supported by Luk and Yap [20], which revealed a positive relationship between disclosure of the governance element and financial performance. Boonlua and Phankasem [17] emphasised that companies with a high disclosure of governance show that they have more integrity, are transparent, and can deliver a clear message to the stakeholders. This disclosure could lead to high investments from existing and potential shareholders. The investors' investment decisions have a significant effect on the cash flows of the companies. Thus, they might affect the financial performance as well.

The second hypothesis of this study was that there is a significant effect of business model disclosure on the financial performance of public listed companies in Malaysia. The Pearson correlation analysis shows that there is no significant correlation between business model and financial performance represented by return on assets (ROA) and return on equity (ROE). Therefore, hypothesis 2 (H2) is rejected. The analyses that have been done in this study concluded that any disclosure on the business model element does not have an impact on the financial performance of companies. But this result is not consistent with Luk and Yap [20]. Luk and Yap's study showed that there is a significant relationship between disclosure of business model and financial performance. However, it is supported by the research conducted by PWC [2], which stated that disclosure of the business model element can attract more investors to invest in companies and drive the future growth of businesses, which, in turn, improves the companies' financial performance.

The third hypothesis in this study was that there is a significant effect of risks and opportunities disclosure on the financial performance of public listed companies in Malaysia. According to the Pearson correlation analysis, there is a negative correlation between risks and opportunities and return on assets (ROA) ($r = 0.29$, $p < 0.05$) but no significant correlation between risks and opportunities and return on equity (ROE). Since the p-value is less than the alpha value of 0.05, hypothesis 3 (H3) is accepted. The results from this study are parallel to previous studies such as Luk and Yap [20] that stated that there is a positive relationship between the risks and opportunities element and financial performance. Risks and opportunities assist in gaining new competitive advantages, and they could lead to short- and long-term profitability. Other than that, Luk and Yap [20] posited that the integration between risks, control, and compliance roles has a great influence on the companies' financial performance.

The fourth hypothesis in this study was that there is a significant effect of strategy and resource allocation disclosure on the financial performance of public listed companies in Malaysia. The results from Pearson correlation showed that there is no significant correlation between strategy and resource allocation and financial performance represented by return on assets (ROA) and return on equity (ROE). Therefore hypothesis 4 (H4) is rejected. The result is not consistent with Luk and Yap [20], which showed a significant relationship between the disclosure of strategy and resource allocation and financial performance. Strategy and resource allocation could give a clear picture of how companies utilise their resources. For a company with limited resources, the effectiveness of managing the resources would be the main attraction for the investors to investigate, as it can be a benchmark on how well companies manage their capital flow provided by investors. Thus, this is aligned with Oncioiu, et al. [29], who argued that managing capital flow effectively could contribute to profitability and improvement of financial performance.

The last hypothesis in this study was that there is a significant effect of performance disclosure on the financial performance of public listed companies in Malaysia. The results from Pearson correlation showed that there is a negative correlation between performance and return on assets (ROA) ($r = 0.25$, $p < 0.05$) but no significant correlation between performance and return on equity (ROE). Since the p-value is less than the alpha value of 0.05, hypothesis 5 (H5) is accepted. This result is consistent with Luk and Yap [20], who stated that there is a positive relationship between performance and financial performance. This result also aligns with Man and Bogueanu-Popa [30], whereas shareholders require companies to present their financial and non-financial performance measures, the disclosure of company performance may influence investors' decisions to further invest in the companies, which, in return, would have a positive impact on financial performance.

CONCLUSION

Since the introduction of integrated reporting (IR), most companies prepared annual reports based on the traditional method, which focuses more on financial information. Due to demand from stakeholders for non-financial information, companies try to provide CSR reports and ESG reports as additional reporting to support their annual reports. Even though these two reports provide non-financial information, readers of these reports have difficulty understanding the link between financial and non-financial information. Therefore, the introduction of IR helps readers understand the value of the companies when they can link the financial information to the non-financial information. This linking could lead to more investments by the investors and indirectly affect the financial performance of the companies. In 2019, the implementation of IR was based on voluntary disclosures, and most of the public listed companies are encouraged to implement it. Therefore, this study was designed to examine the relationship between the disclosure of the IR content elements and the financial performance of 100 of Malaysia's most well-known public companies listed on Bursa Malaysia in 2019.

To achieve the objectives of this study, the content elements from the IR framework, i.e., governance, business model, risks and opportunities, strategy and resource allocation, and performance, were chosen as a measurement of disclosure. The stakeholder theory was applied in this study to support the view of the independent variables influencing financial performance. The total population identified for this research was the top 100 companies listed in FTSE Bursa Malaysia. The information was gathered from secondary data sources, such as financial documents and internet databases, for 2019.

Based on the analyses, the results indicated that most of the public listed companies had disclosed the content elements of IR in their annual reports. They showed that there was a high disclosure of the business model, risks and opportunities, strategy and resource allocation, and governance elements of IR in the annual reports, but only performance was disclosed at a level between moderate and high. This disclosure is evidence that public listed companies generally follow the IR framework in their annual reports. Other than that, the results indicate that there is a significant relationship between governance disclosure and financial performance. Thus, H1 was accepted. The result indicated that by disclosing their governance structure, the companies could increase the confidence of their investors. Therefore, the investors would be willing to invest more in the companies. This investment could be reflected by the increase in capital flow, and it directly affects the financial performance of the companies.

The results also indicated that there is no significant relationship between business model disclosure and financial performance. Thus, H2 was rejected, indicating that the business model element does not affect the financial performance of companies. The investors continuously invest in the companies regardless of the type of business model implemented. The findings also indicated that there is a significant relationship between risks and opportunities disclosure and financial performance. Thus, H3 was accepted. This outcome indicated that the companies highlighted their risks and opportunities as one important piece of information to attract the attention of investors to invest in their companies. The investors would be confident that these companies are able to mitigate their risks properly. This risk management could lead to more capital flow from investors and improve the financial performance of the companies.

The findings also showed that there is no significant relationship between strategy and resource allocation disclosure and financial performance. Thus, H4 was rejected. This rejection indicated that disclosure of information related to the strategy and allocation of resources has no effect on the companies' financial performance. This outcome could be due to other factors, which could influence the quality of financial performance. The last finding of this study is that there is a significant relationship between performance disclosure and financial performance. Thus, H5 was accepted, indicating that the disclosure of the companies' performance could give a direct message to the shareholders on how well companies are performing. The financial and non-financial performance could influence the decision-making of investors to further invest in the companies, and this decision would have a direct effect on the financial performance of the companies.

The results of this analysis were constrained to some degree in many respects. In the first instance, this study focused only on large public listed companies that are listed in the top 100 companies in Bursa Malaysia.

Therefore, the data cannot reflect the entire population of companies listed in Bursa Malaysia. As of July 2020, a total of 932 companies that consisted of various types of businesses were listed on the Bursa Malaysia website, according to their capital at the beginning of the accounting year. According to the analysis of the Security Commission's Corporate Governance Monitor 2020, a total of 105 companies adopted the IR framework in their integrated annual reports in 2019. In general, though, the 105 companies comprised large companies, medium-sized capital companies, and small capital companies. This research only yielded findings for the large companies without considering the effects of the implementation of the IR on medium-sized capital and small capital companies. The second constraint is that only five IR elements were included in this study. The five elements of governance, business model, risks and opportunities, strategy and allocation of resources, and performance were selected as a continuation to previous studies. To assess whether the businesses have adopted the IR framework established by the IIRC, all eight elements should be investigated to confirm whether each required element is reported in the companies' annual reports.

In sum, this study is beneficial for academics and educators since it conducted an evaluation of the influence of IR on the financial performance of public listed companies. The findings of this study could assist academics in determining if the way corporations disclose information in their annual reports is consistent with the international IR framework. Additionally, the findings from this study could serve as a framework for academics to conduct additional research when most public listed companies implement IR in the future.

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