Content Analysis of Integrated Reporting in Malaysia

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Abstract: - The aim of integrated reporting is to provide a holistic view of an organization's performance and value creation. This comprehensive reporting framework contains financial, economic, environmental, social, and governance aspects. In Malaysia, the adoption of integrated reporting shows the organization's involvement in promoting accountability and transparency in corporate reporting. By using the Malaysian top 100 publicly listed companies (PLCs), this study gauges the practices of integrated reporting disclosure, explicitly investigating the integration of the content elements recommended by the International Integrated Reporting Council (IIRC) Framework. The examination of the integrated reports of the sample of Malaysian PLCs is done via a content analysis approach. Sampling from 2018 – 2020 data, this study is beneficial to contribute to the current body of literature on integrated reporting by shedding light on the ongoing practices of PLCs in Malaysia. This study has implications not only in advancing knowledge but also increases reporting practices within business and economics environments. Additionally, it adds valuable insights to the ongoing discussions surrounding corporate transparency and accountability. Furthermore, the study will present recommendations for enhancing the content of integrated reports, ultimately strengthening the reliability and utility of the disclosed information. These recommendations can be used by regulators, standard-setting bodies, and companies to further develop and refine integrated reporting practices in Malaysia.

Key-Words: - Integrated reporting, Content analysis, Transparency, Voluntary, Performance, Environmental, Social, Governance, Business, Economic.

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1 Introduction

The substantial changes and complexity of the business and economic environment in recent years, such as large regional and global financial crises, unemployment rates, employee welfare, fraud, climate change, and global warming, demand an increase in financial and non-financial information transparency. Traditional corporate financial reporting is unable to adapt to these advancements due to various constraints and drawbacks including the absence of non-financial information, short-termism, lack of coherence, and complexity, [1]. Consequently, there have been demands for reporting on corporate social responsibility and any additional information that may impact company performance, [2]. However, companies are under intense external pressure to explain their interactions with non-financial issues, [3]. Hence, they are more likely to voluntarily disclose information on corporate, social, and environmental issues in the form of stand-alone sustainability reports.

Diverse parties such as regulators, investors, standard-setters, companies, and other stakeholders have recognized the significance of integrated reporting. This is because, when evaluating an organization's prospects and risks, they comprehend that depending solely on financial performance is not sufficient. Accordingly, it is necessary to have a reporting framework that presents a holistic and practical prospect on an organization's performance and value creation. The notion of integrated reporting notably arose, with the establishment of the International Integrated Reporting Council (IIRC) in 2010 to drive integrated reporting worldwide. The IIRC describes integrated reporting as a broad process of communicating value creation through continuing integrated reporting. Leading IIRC is the International Integrated Reporting Framework (IIRF), which is an essential resource for understanding the fundamental principles and critical apparatus of integrated reporting.

Unlike traditional corporate reporting, integrated reporting incorporates a distinct set of information. This includes environmental, social, and governance (ESG) factors. Besides, integrated reporting also includes the organization's relationships with its stakeholders. Generally, the goal of integrated reporting is for organizations to showcase the association between financial and non-financial performance metrics. By assessing how the organizations handle their resources, relationships, and risks as well as their overall performance, governance, and strategy, the integrated reporting supports their capability to create value in the short, medium, and long term, [4]. Eventually, as pointed out by IIRC, integrated reporting is to provide stakeholders with a meaningful and thorough insight into the organization's performance, activities, and impacts, allowing them to make well-informed decisions.

The IIRC introduced an innovative integrated reporting (IR) Framework in December 2013, to enhance the adoption of integrated reporting globally. The comprehensive guide of IR Framework poses constructive visions, especially to organizations to make the integrated reporting realizable. The IIRF contains seven parameters that cover the current strategies and future expectations of companies, involving risks and opportunities, governance, stakeholder relationships, performance, and value creation. Moreover, the IIRF entails eight disclosure content elements, which include an organizational overview, external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook, and preparation and presentation basis.

Integrated reporting has grown in its widespread adoption. Furthermore, integrated reporting is highly valued as an instrument for showcasing business models, risk management capabilities, long-term sustainability, and commitment to sustainable development. Additionally, integrated reporting enables organizations to make more informed decisions, promotes transparency, and permits stakeholders to evaluate their capabilities and assess the organization's overall performance, [5], [6].

In Malaysia, integrated reporting has obtained notable traction. This is because stakeholders recognize the value of implementing thorough and more transparent reporting. In addition, the Malaysian government, regulatory bodies, and industry associations have vigorously encouraged the implementation of integrated reporting, in exertion to strengthen accountability, corporate governance, and sustainability initiatives. The Malaysian Code on Corporate Governance has been established by the Securities Commission of Malaysia, urging listed companies to hold integrated reporting to enhance their governance and transparency, [7]. Also, the Malaysian Institute of Accountants (MIA) has keenly promoted and encouraged organizations to adopt integrated reporting. For instance, regulatory bodies have performed numerous initiatives to educate, inform, and assist organizations in their integrated reporting efforts. Currently, integrated reporting is a voluntary practice in Malaysia. Various Malaysian organizations have begun implementing integrated reporting as part of their commitment to sustainable development and responsible business practices, [8].

[9], assert that the IR Framework provides a principle-based approach to guide corporate reporting practices rather than introducing a list of standard disclosure items and does not specify the minimal levels at which certain types of information should be disclosed. Therefore, it can be observed that integrated reports, including those that claim to adhere to the IR Framework, may exhibit differences in the level of detail provided about organizations' narratives on value creation. Given the growing interest in integrated reporting in Malaysia, it is essential to determine the extent to which Malaysian publicly listed companies are incorporating the IIRC's recommended key content elements. Content elements present a guide to information included in integrated reports and are linked to each other. The IR Framework highlights eight content elements: organizational overview and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook, the basis of preparation, and presentation. By the IR Framework, organizations need to use the content elements to explain their unique value-creation stories by presenting the connections between those elements. There was no similar study undertaken on the Malaysian PLCs. Consequently, the purpose of

this study is to evaluate the content elements of integrated reporting in Malaysia. To attain this objective, the investigation will be guided by the following research questions:

1. To what extent do Malaysian PLCs incorporate into their integrated reports the main content elements recommended by the IIRC?
2. How do Malaysian PLCs present their organizational overview, governance structure, business model, strategy and resource allocation, performance indicators, risks and opportunities, and future outlook in their integrated reports?

To provide answers to the research questions, the following list of research objectives was developed for this study:

1. To determine the extent to which Malaysian PLCs incorporate the key content elements recommended by the IIRC in their integrated reports.
2. To examine how Malaysian PLCs present various content elements, such as organizational overview, governance structure, business model, strategy and resource allocation, performance indicators, risks and opportunities, and future outlook in their integrated reports.
3. To contribute to a better understanding of the current state of integrated reporting PLCs in Malaysia and identify areas for improvement in reporting practices.

This study provides valuable insights into the disclosure literature by investigating the extent to which listed companies include integrated reporting information (such as content elements) in their annual reports, specifically utilizing the IIRC Framework. By using content analysis and a specially developed checklist based on the IIRC Framework, this study contributes to a deeper understanding of integrated reporting practices. The method of in-depth reading and coding used in the analysis not only improves the quantity but also the quality of integrated reporting data. Interestingly, the study reveals that governance is the most commonly reported element, suggesting its critical role in promoting accountability and transparency, which are closely linked to a company's value creation. These findings have significant implications for companies seeking to enhance their disclosure practices.

The subsequent sections of the study are structured in the following manner. Section 2 reviews the literature that includes the overview of integrated reporting, integrated reporting in Malaysia, and integrated reporting disclosure practices. Section 3 describes the research methodology. Section 4 provides research results and analysis. The study concludes with Section 5.

2 Literature Review

2.1 Overview of Integrated Reporting

Traditional business reporting models consist of separate annual reports, environmental reports, and social reports, [10]. These reports are typically restricted to shareholders and fund providers and serve distinct purposes, [11]. Current reporting approaches are widely criticized for being lengthy and complex as well as their limited emphasis on the financial dimensions of corporate performance, [12]. The provided information lacks comprehensiveness in its coverage of business activities. According to [13], traditional reporting shows a lack of capability and transparency to engage with stakeholders successfully. The point of having traditional reporting is to emphasize the analysis and evaluation of an organization's past and current performance. As traditional reporting primarily emphasizes short-term and retrospective performance, it may not offer adequate information for users who are involved in decision-making processes, [14]. In contrast, there is a group of stakeholders who support the combination of both financial and non-financial information in a consolidated report, [15], [16].

Furthermore, traditional reporting is criticized due to its insufficient disclosure of risk and uncertainty in financial statements, [17]. Moreover, traditional reporting is inadequate to fulfill the varied information requirements of stakeholders especially on the non-financial information, [18]. Therefore, organizations present differently in terms of environmental and sustainability reporting, corporate social responsibility reporting, and triple-bottom line reporting. The lack of standardization of guidelines for non-financial information disclosure poses substantial challenges for investors to compare and assess the performance of different companies, [19]. Furthermore, the lack of guidelines standardization reduces the reliability and magnitude of the information provided, [20]. Besides, it is quite tough for organizations to prioritize each stakeholder when disclosing information.

Additionally, the global financial crisis of 2007 to 2009, which triggered the establishment of the IIRC and the development of the integrated reporting (IR) Framework, is a means to restore trust and financial stability in capital markets, [21]. This IR Framework, which is a guideline for integrated reporting, expediates the company to combine all reporting concerns and performance indicators for stakeholders. Furthermore, the IR Framework which consists of guiding principles, content elements, and guiding principles for assurance and internal control, provides direction and assists organizations to produce an integrated report that could efficiently communicate their narrative of value creation.

The main objective of integrated reporting is to effectively communicate all-inclusive of an organization's governance, strategy, risks, performance, and prospects succinctly. This communication in the context of the external environment will lead to the value creation of an organization in the short, medium, and long term. Consequently, integrated reporting extends the reporting of information settings and provides a wider view of an organization than the present or traditional reporting model, [22], [23]. By gathering all appropriate information in integrated reporting, organizations can communicate their narratives of core activities, strategy, and performance, allowing information users to make more informed decisions, [24].

The IR Framework is a comprehensive document that is based on fundamental ideas and encompasses fundamental concepts, guiding principles, and content elements. The IR Framework emphasizes the inclusion of all resources utilized by organisations for value creation throughout their operational duration, rather than solely focusing on financial capital, [25]. According to [25], the value-creation processes are influenced by the external environment, created through relationships with stakeholders, and dependent on various resources. Hence, the concept of integrated reporting emphasizes the importance of comprehensive and multidimensional reporting that effectively conveys the factors that influence the value of an organization over some time, [26].

The seven guiding principles serve as the foundation for the development and presentation of an integrated report. The key factors encompassed in this framework are strategic focus and future orientation, connectivity of information, stakeholder relationships, materiality, conciseness, reliability and completeness, consistency and comparability, and materiality. The guidelines emphasize the ability of an organization to create value over the short, medium, and long term, [27], [28]. Therefore, integrated reporting encourages accountants to think longer term about their business, how they create value, and for whom, [29].

Finally, content elements serve as a guide to the information contained in integrated reports and are interrelated. The IR Framework encompasses eight key content elements, namely: organizational overview and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook, the basis of preparation, and presentation. Under the IR Framework, organisations are obligated to adopt these content elements to illustrate their unique value-creation stories by presenting the interrelationships among these elements. In this sense, it is possible to consider the business model, which is known as "the core of the organization", as the first and most significant aspect when evaluating a company's value-creation story.

2.2 Integrated Reporting in Malaysia

In Malaysia, the development of integrated reporting has been significantly influenced by international trends, especially in sustainable business practices. This is augmented by the demands for transparency from stakeholders. Malaysia is committed to fostering accountable corporate behavior, therefore, the IR Framework is used as a vital reference for organizations looking to adopt a holistic and unified reporting approach. The IR Framework highlights the connection of financial, environmental, social, and governance aspects. Accordingly, the IR Framework improved understanding, exposure, and awareness among the corporate community in Malaysia, with regard to the advantages of integrated reporting

The growing global focus on sustainability and the embrace of ESG principles has sparked a surge in expectations for Malaysian businesses to be transparent and informative in their interactions with stakeholders, particularly investors, [30]. As investors become more mindful of the significance of non-financial data in assessing a company's prospects and risk management, the pressure intensifies for companies to provide comprehensive disclosures. This increased demand for transparency and sustainability reporting encouraged businesses to consider integrated reporting as a viable approach to fulfill stakeholder expectations, [31]. Malaysia, being actively engaged in global sustainability and reporting initiatives, has adopted integrated reporting as a strategy to improve corporate accountability, transparency, and sustainable practices.

The implementation of integrated reporting is greatly aided by regulatory and professional accounting organizations, as they play crucial roles in its execution. Specifically, the Securities Commission (SC) and the Malaysian Institute of Accountants (MIA) have played a pivotal role in promoting and supporting integrated reporting to promote integrated thinking among Malaysian firms, [32]. The establishment of the Integrated Reporting Steering Committee (IRSC) under the MIA on 18 December 2014 was initiated based on the recommendation of the Securities Commission Malaysia. The IRSC consists of industry representatives, namely incorporating individuals from the accounting and auditing professions, [33]. The primary objective of this committee is to enhance the level of awareness and promote the adoption of integrated reporting practices in Malaysia. Meanwhile, to encourage integrated reporting adoption, the SC incorporated integrated reporting in the annual reports into the Malaysian Code on Corporate Governance (MCCG) in 2017. Furthermore, by stakeholder theory, organizationthe management of the organisation must improve and strengthen communication channels with its stakeholders.

Bursa Malaysia also plays a significant role in promoting integrated reporting by requiring companies to disclose a narrative statement of their economic, environmental, and social risks and opportunities in their annual reports and by placing greater emphasis on the materiality, governance, and management aspects of organisations, [34]. The third edition of the Corporate Governance Guide issued by Bursa Malaysia in 2017 identifies the motivations for Malaysian companies adopting integrated reporting, the application steps, and the anticipated outcome. It was issued for users to gain a better understanding of corporate governance practices inserted in the governance code, [35]. In this context, Bursa Malaysia adopted integrated reporting in its 2016 annual report and began to develop a strategic corporate reporting approach. It enhanced integrated reporting disclosures in its 2017 annual report and released its first annual integrated report for the financial year 2018. This initiative is regarded as a platform aimed at promoting the adoption of the integrated reporting practice among other Malaysian companies.

According to the International Integrated Reporting Council, [36], a study conducted in 2018 revealed that 100 Malaysian-listed firms have prepared integrated reports, [37]. Subsequently, [38], announced that in 2019, the number of Malaysian companies adopting integrated reporting had increased to 105. Consequently, Malaysia has aligned itself with other nations in terms of regulatory compliance with the IIRF. These nations include South Africa, China, Singapore, Brazil, Japan, New Zealand, Luxembourg, India, and the United Kingdom, [36].

2.3 Integrated Reporting Disclosure Practice

Presently, the global acceptance of integrated reporting implementation is predominantly regarded as a voluntary practice, except South Africa and Brazil, [39]. According to a survey conducted by KPMG in 2017, there was a significant increase in the adoption of the IR framework and issuance of integrated reports by companies across several nations between 2015 and 2017, despite the voluntary nature of such disclosures. Meanwhile, a survey by PwC in 2018 conducted among the top 50 Malaysian listed companies revealed a significant increase since 2015 in the disclosure of certain key content elements (particularly risks and opportunities, governance and strategy, and resource allocation), indicating greater awareness and improvement in the quality of information published in integrated reporting. Furthermore, the Corporate Governance Monitor 2020 reports an increase in the number of publicly listed Companies (PLCs) adopting integrated reporting. According to the [33], the number of PLCs that implemented integrated reporting in 2019 was 105, which represents an increase compared to the 97 PLCs that adopted integrated reporting in 2018.

In their comparative study spanning South Africa and Europe, [40], uncovered valuable insights into the impact of voluntary and mandatory systems on disclosure practices. They found that although voluntary systems incline higher levels of disclosure, mandatory systems are more effective in steering disclosure. Likewise, in a study by [41], it was anticipated that the inconsistency in the level of disclosure may be due to a lack of agreed standards, including ineffective enforcement mechanisms for additional reporting guidelines. When it comes to integrated reporting, companies are allowed to use judgment to make informed choices, granting flexibility in their practices.

Currently, in academic research, integrated reporting topics such as disclosure, practices, and influential factors have gained large interest. Notably, researchers have explored the extent of voluntary integrated reporting disclosure, [42], [43], [44]. For example, [42], made an index or checklist, as a means of measurement, based on the IR Framework to indicate the integrated reporting disclosure level. The study on the relationship between integrated reporting and the valuation of South African companies indicates a positive correlation between company valuation and integrated reporting disclosures. [45], examine the integrated reporting of the top 50 European companies in Europe. The results provide evidence that the disclosure satisfies the requirements of stakeholders, thereby supporting the legitimacy of companies.

A study by [44], using content analysis to investigate the quality of the integrated reporting disclosure of Italian companies indicates that the extent of disclosure differs across various corporate sectors. In addition, the organizational overview and external environment, risks and opportunities, strategy and resource allocation, governance, and performance disclosed the most information. The level of compliance is low for the business model, outlook, basis of preparation, and presentation. In a study of eight companies that track the European financial sector, [46], examine 2015 annual reports and provide evidence that performance, organizational overview and business model, governance, strategy, and resource allocation were well disclosed. Similar to [44], the result also implies that Outlook receives a low level of disclosure. [47], studied the extent of disclosures in integrated reporting in Poland and discovered that high disclosure levels are documented for organizational overview and external environment, governance, risks and opportunities, and outlook. Consistent with earlier studies, [44], [46], this result also reports the lowest disclosures for business models and strategy and resource allocation. Meanwhile, a study by [48], conducted on the top 50 PLCs in Malaysia, revealed that governance and organizational overview and external environment are highly disclosed. However, the disclosure levels were found to be significantly lower for business model, risk and opportunities, strategies and resource allocation, basis of preparation and presentation.

Although integrated reporting in Southeast Asia is still in its infancy, some governments, notably Malaysia, Indonesia, and Singapore, have made noteworthy efforts to put integrated reporting into practice. Following the release of the IIRC framework, these countries have already started their integrated reporting journey, [49], [50], [51]. The researchers developed an integrated reporting checklist based on the IIRC framework in their investigations, wherein a sample of Malaysian and Singaporean PLCs was examined. The objective was to assess the presence of integrated reporting-related elements within the annual reports of these businesses. They discovered that some integrated reporting elements are present in the annual reports of both countries' companies; however, each country focuses on different integrated reporting elements.

A study conducted by [52], indicates that the size of a company in Malaysia has a significant influence on the extent of integrated reporting practices in Malaysia. In addition, the study conducted by [53], revealed a positive relationship between the size of a company and the size of the audit firm in Malaysian real estate companies. [54], utilized the IR index as a tool to evaluate the extent of integrated reporting disclosure across the top 50 Malaysian PLCs over the period from 2012 to 2015. It has been established that Malaysian PLCs have recorded a percentage of over 50% for all content elements. The findings indicated that these companies need to put in more effort to develop effective integrated reporting practices.

Finally, the lack of connectivity among the content elements due to poor narrative flow and the limited use of diagrams and maps, the presence of an informative gap in certain content element areas and an inadequate description of the business model, and internal auditing, completeness of information, and limited third-party verification all have an impact on the level of IR disclosures, [55]. Furthermore, although companies declare the implementation of the IR Framework, implementation is only partial. [48], in their study indicated that there were only six out of 50 PLCs that had adopted all the eight content elements listed in the IR Framework. The study suggested that it may be attributed to the insufficient allocation of resources necessary for the successful implementation of integrated reporting within the organization.

3 Research Method and Design

3.1 Sample Selection

The initial sample of this study comprises the top 100 companies listed on the Main Market of Bursa Malaysia from 2018 to 2020. This time range was chosen since the amended MCCG 2017 included suggestions for encouraging large companies to implement integrated reporting practices based on an internationally recognized framework, [56]. Moreover, this period provides the most recent data, increasing the relevance of the research for the interested parties. Data related to integrated reporting is manually collected from multiple sources of secondary data, which include the annual reports, integrated reports, and sustainability reports of the sample companies downloaded. Table 1 shows the sample companies used in this study.

Table 1. Sample distribution across the sector

Industry	2018	2019	2020	Total
Construction	2	2	2	6
Consumer Product & Services	19	19	19	57
Energy	3	3	3	9
Financial Services	13	13	13	39
Health Care	7	7	7	21
Industrial Product & Services	13	13	13	39
Plantation	5	5	5	15
Property	5	5	5	15
REIT	3	3	3	9
Technology	11	11	11	33
Telecommunications & Media	6	6	6	18
Transportation & Logistic	4	4	4	12
Utilities	4	4	4	12
Total	**95**	**95**	**95**	**285**

3.2 Data Collection

This study employed content analysis as the research instrument. The technique was chosen to analyze the quantity and quality of data from companies that published annual reports by reading the text in depth and applying appropriate codes to describe and analyze them, [57], [58], [59]. This approach has been used in many prior studies for measuring the quality of disclosure of financial and non-financial information, [59], [60]. Furthermore, [61], highlighted that disclosure quality provides a more realistic picture of disclosure rather than disclosure quantity because helps users of annual reports make rational decisions. In this respect, all narrative sections of the annual reports and stand-alone reports (i.e., chairman's statement, directors' report, operating review, discussion, and analysis) were examined.

This study adopted an integrated reporting score established by [42] and known as IRSCORE to calculate the IR disclosure quality score. Due to the absence of theoretical guidance on how to measure integrated reporting disclosure on how to weigh in generating an aggregated integrated reporting score, a multidimensional index was developed based on the IIRF, comprising the framework's content elements to determine the integrated reporting disclosure level. Hence, this study follows, [42], who construct a composite IR index by assigning equal importance (and thus equal weights) to each of the eight content element items in the IR Framework. Specifically, the variable IRSCORE is the equally weighted average of the following content elements for each company and each year in this sample: (1) Organizational overview and external environment; (2) Governance; (3) Business model; (4) Risks and opportunities; (5) Strategy and resource allocation; (6) Performance; (7) Outlook; and (8) Basis of preparation and presentation. As detailed in Table 2 (Appendix), each content element comprises sub-elements to assess the quality of the IR disclosure.

A raw score ranging from 0 (non-compliance with the IR> framework) to 5 (high conformance with the IR> framework) is assigned to each question. If a company has no or little information on a question in an element in the annual report, then the question would obtain a score of 0. On the other hand, if information related to a question of an element is extensive, then the question would have a score of 5. Based on the scoring procedures, the minimum IRSCORE is 0 and the maximum IRSCORE is 200. In other words, if a company receives a score of 5 for all queries in all elements, its total score is 200. Similarly, if a company does not provide any integrated reporting-related information in any of the queries or elements, the company will receive a score of 0. Hence, a higher IRSCORE indicates higher quality integrated reporting by the IR framework and guiding principles. The weight of each content element's score is summarized in Table 3.

Table 3. Weight score for content elements

Item	Major Content Element	The Weight of Each Element In The Score
CE1	Organizational overview and external environment	0 - 25
CE2	Governance	0 - 20
CE3	Business Model	0 - 25
CE4	Risk and Opportunities	0 - 25
CE5	Strategy and Resource Allocation	0 - 20
CE6	Performance	0 - 30
CE7	Future Outlook	0 - 25
CE8	Basis of preparation and presentation	0 - 30
	Total	**200**

4 Result and Analysis

The results of the present study are presented in Table 4, Table 5, Table 6, Table 7, Table 8, Table 9, Table 10, Table 11 and Table 12. The tables' objective is to facilitate the analysis of content element disclosure by categories and items.

4.1 Content Element Analysis by Categories

Table 4 and Table 5 provide a detailed breakdown of each content element score developed along with their minimum, maximum, and mean scores obtained. Companies that included nearly all required content elements for an integrated reporting framework in their annual reports contributed to the high reporting scores. The analysis revealed that the IR content element with the highest average disclosure score is the CE2-Governance disclosure content element, resulting in the highest mean score of 18.723%. Comparatively, the lowest average disclosure percentage score is CE7-Future Outlook with a mean score of 13.206%. This suggests that sample PLCs place less emphasis on CE7-Future outlook disclosure. In general, all content elements received disclosure scores that were above average.

Table 4. Descriptive statistics for individual IR content elements score

	Content Element	**N**	**Min**	**Max**	**Mean**	**Sd**
CE1	Organizational overview and external environment	285	5.00	25.00	14.9649	4.95122
CE2	Governance	285	14.00	25.00	18.7228	4.53201
CE3	Business Model	285	4.17	25.00	14.7924	7.25293
CE4	Risk and Opportunities	285	1.25	25.00	14.4474	7.13547
CE5	Strategy and Resource Allocation	285	8.00	25.00	14.9789	6.01110
CE6	Performance	285	9.00	25.00	15.0702	6.15658
CE7	Future Outlook	285	5.00	25.00	13.2061	6.66577
CE8	Basis of preparation and presentation	285	7.00	25.00	15.5684	6.55580

Table 5. The Average Content Element for the Year 2018-2020

Content Element		N	2018			2019			2020		
			Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
CE1	Organizational overview and external environment	95	5.00	22.50	14.1491	5.00	24.17	14.8947	6.67	25.00	15.8509
CE2	Governance	95	14.00	25.00	17.9684	14.00	25.00	18.6737	14.00	25.00	19.5263
CE3	Business Model	95	4.17	25.00	13.4825	4.17	25.00	14.6842	4.17	25.00	16.2105
CE4	Risk and Opportunities	95	1.25	25.00	12.8816	1.25	25.00	14.3158	3.75	25.00	16.1447
CE5	Strategy and Resource Allocation	95	8.00	25.00	13.8526	8.00	25.00	14.8526	8.00	25.00	16.2316
CE6	Performance	95	9.00	25.00	14.1053	9.00	25.00	15.0105	9.00	25.00	16.0947
CE7	Future Outlook	95	5.00	25.00	12.0658	5.00	25.00	13.3026	5.00	25.00	14.2500
CE8	Basis of preparation and presentation	95	7.00	25.00	14.1158	7.00	25.00	15.5053	7.00	25.00	17.0842

Table 6. Average Score of CE1-Organisational overview and external environment score

	Content Element	N	2018	2019	2020
CE1	**Organizational overview and external environment**				
CE1.1	Purpose, mission, and vision statement	95	1.947	2.079	2.211
CE1.2	Ownership and operating structure	95	3.035	3.096	3.211
CE1.3	Principal activities, competitive and market positioning	95	2.781	2.877	3.053
CE1.4	Quantitative information	95	2.842	2.912	3.035
CE1.5	Significant factors affecting the external environment	95	1.719	1.921	2.096
CE1.6	Environmental challenges	95	1.789	2.009	2.228
			14.114	**14.895**	**15.833**

CE8-Basis of preparation received the second highest average mean score with 15.568%, followed by CE6-Performance with a mean score of 15.070% and CE5-Strategy and resource allocation with a mean score of 14.97%. Moreover, the findings revealed that the remaining content elements, namely CE-Organizational overview and external environment, CE3-Business model, and CE4-Risks and opportunities, all received above-average scores in the range of 14.447% to 14.4.792%.

The CE2-Governance obtained the highest overall content element score, which implies that IR and corporate governance practices are closely related. Besides, governance is the most commonly reported content element, which is not surprising given that this element existed before the establishment of ISO 26000 and GRI G4, [48]. Furthermore, good governance is heavily emphasized in Malaysian corporate reporting. As a result, governance appears to be thoroughly disclosed in the majority of Malaysian PLC annual reports.

In contrast, the CE7-Future Outlook with the lowest mean score indicated that companies do not invest much time in the disclosure of this content element. This result is consistent with that of [24], who also discovered that the level of disclosure for this content element has the lowest score. Companies may refrain from disclosing forward-looking information out of concern for the potential adverse impact such disclosures could have on their competitive position, [62]. For example, disclosing forward-looking information may increase indirect costs associated with the sharing of proprietary information that competitors could use, [63].

Table 5 shows the breakdown of individual average content element scores from Y2018 to Y2020. The increased average mean scores for all content elements indicate that the majority of companies that adopted integrated reporting improved disclosures compared to reports that were initially published in 2018. This finding implies that many publicly traded companies have included IR in their annual reports as a result of the Malaysian Corporate Governance Code, which was introduced in 2017 by the Securities Commission Malaysia. This result is consistent with the findings of [64], who discovered a significant increase in voluntary disclosure after the implementation of the Malaysian regulatory framework. It is possible to conclude that the majority of the companies provided integrated reports with above-average evaluation of content elements.

CE2-Governance had the highest IR content element score for all three years, showing a significant increase in CE2-Governance disclosure. On contrary, CE7-Future outlook obtained the lowest score in each of the three years, indicating the need for significant improvements to this content area. This also implies that the low overall result score was caused by companies that did not use standard IR frameworks in their annual reports in a given year. In contrast, the slightly above-average scores indicate that companies that have adopted IR do not include sufficient relevant information in their published reports. It could be presumed that companies disregard some of the information and do not strictly adhere to the IR framework. Overall, most companies have partial compliance with the requirements of the IR Framework about most of the content elements.

4.2 Content Element Analysis by Items

This section provides a comprehensive analysis of each of the content element scores. The objective is to analyze each category of content element disclosures in the annual reports. It displays the proportion of content element items with the average IR disclosure scores for each category. The average score indicates that the coverage and trend of IR disclosures under each category vary based on the IR disclosure checklist scores. A raw score ranging from 0 (non-compliance with the IR> framework) to 5 (high conformance with the IR> framework) is assigned to each subcategory. If a company has no or little information on a question in an element in the annual report, then the question would obtain a score of 0. On the other hand, if information related to a question of an element is extensive, then the question would have a score of 5.

Disclosure of CE1-Organisational overview and external environment

Table 6 provides a summary of the average score for the subcategories of CE1-Organisational overview and external environment content element evaluated using selected checklist changes in the 2018-2020 period.

Most companies disclosed information about their ownership and operating structure and quantitative information and received excellent scores for these sub-content elements. In addition, good scores were received for disclosing their principal activities about employees, revenues, locations, and changes. Since the majority of this information is usually available in financial statements, it could be presumed that collecting and disclosing it is relatively simple for companies. However, based on the average scores, not all major companies have clearly defined values, missions, and visions, as well as other business cultural aspects that are included in the integrated reporting. As a result, stakeholders - such as investors and the public - may struggle to grasp the company's strategic direction and overall purpose. Furthermore, the scores for significant external environment factors and environmental challenges were the lowest, indicating that the majority of the companies do not provide market and external environment-related information. The absence of transparency of this information can be worrisome for stakeholders who heavily rely on this information to evaluate a company's ability to weather changing external circumstances with flexibility and success.

Disclosure of CE2-Governance

Changes in governance content element scores are illustrated in Table 7. CE2-Governance content elements all received above-average scores and the highest score rating. The majority of companies disclosed their board of directors' list, experience, and skills in leadership structure, and the majority of them also presented compensation policies in remuneration, incentives, and value creation, as well as procedures for strategic decisions, risk, and integrity.

Table 7. Average Score of CE2-Governance

	Content Element	N	2018	2019	2020
CE2	**Governance**				
CE2.1	Leadership structure	95	3.705	3.821	4.000
CE2.2	Specific procedures for strategic decision, risk, and integrity	95	3.642	3.768	3.947
CE2.3	Organization’s culture, ethics, and values	95	3.242	3.453	3.684
CE2.4	Promoting & enabling innovation	95	3.505	3.663	3.874
CE2.5	The link between remuneration, incentives, and value creation	95	3.874	3.979	4.147
			17.968	**18.684**	**19.653**

Table 8. Average Score of CE3-Business Model

	Content Element	N	2018	2019	2020
CE3	**Business Model**				
CE3.1	Business model description	95	2.553	2.693	2.904
CE3.2	Inputs relate to the capital	95	1.614	1.939	2.325
CE3.3	Outputs relate to products and services	95	1.930	2.246	2.561
CE3.4	The link between other elements	95	1.868	2.070	2.351
CE3.5	Identification of stakeholders and other dependents	95	3.044	3.175	3.298
CE3.6	Position within the entire value chain	95	2.421	2.561	2.749
			13.430	**14.684**	**16.187**

Table 9. Average Score of CE4- Risk and Opportunities

	Content Element	N	2018	2019	2020
CE4	**Risk and opportunities**				
CE4.1	Specific key risks and opportunities	95	3.145	3.539	4.013
CE4.2	Specific sources risks and opportunities	95	3.066	3.474	3.947
CE4.3	Assess the probability of opportunity and risks arise	95	3.474	3.750	4.197
CE4.4	Specific actions to mitigate or manage key risks	95	3.197	3.553	3.987
			12.882	**14.316**	**16.145**

Table 10. Average score of CE5- Strategy and Resource allocation

	Content Element	N	2018	2019	2020
CE5	**Strategy and resource allocation**				
CE5.1	Short, medium, and long-term objectives	95	2.484	2.716	2.958
CE5.2	Strategies to implement	95	2.726	2.968	3.263
CE5.3	Resource allocation plans	95	3.063	3.189	3.432
CE5.4	Measurement achievements	95	2.874	3.053	3.326
CE5.5	Competitive advantage for value creation	95	2.705	2.926	3.253
			13.853	**14.853**	**16.232**

According to [65], higher governance disclosure conveys more integrity and ethics information, as well as a clearer message and detailed procedure, providing stakeholders with a comprehensive understanding of the current governance status of the company. Hence, the majority of the companies disclosed their board of directors' list, experience, and skills in leadership structure, and the majority of them also presented compensation policies in remuneration, incentives, and value creation, as well as procedures for strategic decisions, risk, and integrity. Despite this, the culture, ethics, and values of the organization resulted the lowest score for this area, demonstrating that a significant part of organizations does not include this type of information in their IR. The information presented is frequently unrelated to capital's capital and/or the value creation process. Mostly, it is presented in a traditional way and by accounting rules and governance codes.

Disclosure of CE3-Business Model

Table 8 illustrates the change in business model scores throughout the period. According to the average score, the most disclosed item regarding a business model is the identification of stakeholders and other dependents. It can be inferred that, in general, companies are quite open about acknowledging and honoring the entities or groups that are impacted or reliant on their business operations. It is followed by a description of the business model and its position within the entire value chain. It is quite clear that companies are pleased to disclose details about their fundamental framework and positioning within the bigger picture of value creation. Meanwhile, the majority of companies did not explain how their inputs relate to capital and how their outputs relate to products and services, and they only provided a limited amount of information about the relationship between the business model and other content elements like strategy, risks, and opportunities, and performance. This lack of clarity could impede stakeholders from fully comprehending the company's resource allocation and the connection between its operations and its end products or services. Surprisingly, no company discloses all business model elements. Therefore, the rating score is lower.

Disclosure of CE4-Risks and Opportunities

Table 9 shows how scores of risks and opportunities content elements change throughout the period.

A score above average for all individual content element items indicates that the majority of companies complied with all integrated reporting guidelines for the risks and opportunities content element. However, it was discovered that the majority of companies prefer to disclose risks over opportunities. In most cases, companies disclosed a list of risks according to the accounting rules and not a discussion of the opportunities of the company. As a result, companies are unable to determine the likelihood and possible effects of both risks and opportunities. In contrast, they may withhold information regarding opportunities that could attract additional competitors or hurt the firms' competitive advantages. However, it is argued that companies are not required to disclose information that might negatively affect their competitive position. Consequently, companies may be reluctant to reveal sensitive information or information that would diminish their competitive advantage.

Disclosure of CE5- Strategy and Resource Allocation

From Table 10, companies improved the score disclosure on all items for strategy and resource allocation content elements. Nevertheless, the findings discovered that 80% of the sample companies disclosed the CE5-Strategy and resource allocation content element without a specific time frame. The content element disclosure is mostly a clear description of the strategy without any connection with the capital (resource allocation). In addition, some companies eliminate this information in their annual report, hence, resulting in the lowest average score for this item.

Disclosure of CE6- Performance

The CE6 - performance revealed that the majority of companies that adopted IR disclosed quantitative indicators, the state of key stakeholders' relationships, linkages between past and current performance, and performance indicators. The financial implications of significant effects on capital are the least disclosed items in this category. The lowest average score for capital effects indicates that the majority of companies eliminated this information. Table 11 presents the average score change throughout the period.

Table 11. Average score of CE6- Performance

	Content Element	N	2018	2019	2020
CE6	**Performance**				
CE6.1	Quantitative indicators	95	3.053	3.242	3.432
CE6.2	Effects on capitals	95	1.600	1.853	2.179
CE6.3	Key stakeholder relationships	95	3.568	3.726	3.905
CE6.4	Linkages between past and current performance	95	2.863	3.042	3.211
CE6.5	Performance indicators	95	2.989	3.147	3.368
			14.074	**15.011**	**16.095**

Table 12. Average score of CE7- Future Outlook

	Content Element	N	2018	2019	2020
CE7	**Future outlook**				
CE7.1	Challenges and uncertainties	95	3.000	3.289	3.539
CE7.2	Potential implications	95	2.632	2.974	3.224
CE7.3	Availability and affordability of capital	95	3.645	3.921	4.105
CE7.4	Potential effects on future performance	95	2.789	3.118	3.382
			12.066	**13.303**	**14.250**

Table 13. Average score of CE8- Basis of Preparation and Presentation

	Content Element	N	2018	2019	2020
CE8	**Basis of preparation and presentation**				
CE8.1	Materiality determination	95	3.000	3.221	3.495
CE8.2	Reporting boundary	95	1.358	1.884	2.400
CE8.3	Significant framework and methods	95	1.821	2.221	2.716
CE8.4	Compliance with governance rules	95	4.116	4.189	4.368
CE8.5	Disclosure of key information and material	95	3.821	3.989	4.105
			14.116	**15.505**	**17.084**

Disclosure of CE7- Future Outlook

The average score change for CE7-Future outlook throughout the period is presented in Table 12. It showed that companies that used IR were the most open about how much capital was available and how much it would cost, as well as about challenges and uncertainties. On average, potential implications and effects on future performance are low, but the score is slightly rising over time. Most companies were reluctant to reveal company-specific risks and expectations, thus the disclosures are generic. Moreover, because of future uncertainties, it may be difficult to accurately predict the future performance of a company, [66]. The potential inaccuracy of future projections decreases the incentives of companies to disclose more forward-looking information because of litigation costs, [67], [68]. Additionally, it might be assumed that current corporate reports disregarded future outlook and instead concentrated on short-term success and backward-looking information. This supports the finding established by [69], who discovered that traditional company reports primarily include backward-looking information rather than forward-looking.

Disclosure of CE8- Basis of Preparation and Presentation

Table 13 shows the average score change for CE8-Basis outlook throughout the period CE8 - basis of preparation received the highest average score from compliance with governance rules, disclosure of key information, and materiality determination. In contrast, the significant framework and methodologies received the lowest rating score. It was discovered that the majority of IR does not have a defined reporting boundary. Furthermore, reporting boundaries are frequently determined without any explanation of the method. Despite the absence of frameworks and methods in most reports, all annual reports were audited.

Based on the analysis presented above, it can be concluded that most companies that adopted internal reporting (IR) enhanced disclosures compared to reports that were initially published in 2018. The scores are slightly above average, which means that companies that have adopted IR do not include enough relevant information in their published reports. It could be assumed that the companies do not strictly adhere to the IR framework and disregard some of the information.

5 Conclusion

Integrated reporting is a comprehensive approach to corporate reporting that goes beyond traditional financial reporting. It seeks to provide a more holistic view of a company's performance, incorporating both financial and non-financial information. Integrated reporting is used by companies to communicate their performance to stakeholders, including investors, regulators, and the public. It helps companies make informed decisions about their business strategies, risk management, and sustainability efforts. It also aids investors in evaluating a company's long-term prospects and alignment with their own ESG goals.

Several research has been conducted to evaluate Malaysian companies' adherence to IIRC framework content elements; however, few studies have been conducted in connection to disclosure level practice This study used quantitative analysis to evaluate the level of disclosure in each content element, while the qualitative analysis involved assessing the clarity, relevance, and completeness of the information provided. The IR disclosure by Malaysian top public listed companies is encouraging and the trend is increasing. Even though IR disclosure is still voluntary, companies are making an effort to make some disclosures. Disclosure on governance is the most reported element. Specifically, companies most reported on the link between remuneration, incentives, and value creation. It provides transparency into the company's executive compensation practices, allowing shareholders and the public to evaluate whether these practices are fair and justifiable. This transparency helps in building trust and credibility.

In practice, integrated reporting encourages companies to embed sustainability and responsible governance into their core business operations. It can lead to improved risk management, enhanced stakeholder relationships, and better resource allocation. Companies that embrace integrated reporting are often better positioned to adapt to changing market dynamics and investor preferences.

This study is not without its limitations. First, the quality of integrated reports can vary significantly among companies. Some reports may lack the depth and detail needed for a comprehensive analysis. Assessing the reliability and accuracy of the information presented in these reports can be challenging. Second, the findings of this study cannot be generalized since it used the Malaysian context. Other countries may have different levels of IR disclosure due to cultural, regulatory, or industry-specific differences. Future research could compare integrated reporting practices in Malaysia with those in other countries or regions, particularly in Southeast Asia or emerging economies. This could highlight similarities, differences, and potential factors influencing reporting practices.

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APPENDIX

Table 2. Integrated reporting score sheet elements

Item	<IR> Major Content Element	Elements
1	Organizational overview and external environment	1.1 The organization's purpose, mission, vision, culture, ethics, and values. 1.2 The organization's ownership and operating structure. 1.3 The organization's principal activities, products, services, markets, competitive landscape, and market positioning. 1.4 Quantitative information such as the number of employees in which the organization operates, the number of revenues in which the organization operates, and the number of countries in which the organization operates. 1.5 Significant factors affecting the external environment. Environmental challenges such as economic stability, technological changes, globalization and industry trends, market forces, societal issues, and political and regulatory environment.
2	Governance	2.1 The leadership structure of the organization including the skills and diversity. 2.2 The specific procedures used in making strategic decisions, risk management, and addressing of ethical and integrity issues. 2.3 Reflects the organization's culture, ethics, and values and the effect of capital including relationships with stakeholders. 2.4 The responsibility for promoting and enabling innovation. 2.5 The link between remuneration and incentives and value creation.
3	Business Model	3.1 The organization's business model description 3.2 Key inputs relate to the capital on which the organization depends. 3.3 Key outputs relate to products and services. 3.4 The link between the business model to other content elements such as strategy, risks and opportunities, and performance. 3.5 Identification of the stakeholders and other dependents. 3.6 The organization's position within the entire value chain.
4	Risk and Opportunities	4.1 The key risks and opportunities that are specific to the organization, including strategic, supply chain, political, financial, human resource, environmental, information technology, and reputation in the short, medium, and long term. 4.2 The specific sources of risks and opportunities. 4.3 Assess the probability that an opportunity or risk will arise and the extent of its effect. 4.4 The specific action steps organizations take to mitigate or manage key risks or create value from opportunities.
5	Strategy and Resource Allocation	5.1. The organization's short, medium, and long-term strategic objectives. 5.2. The strategies it has in place or intends to implement, to achieve those strategic objectives. 5.3. The resource allocation plans it has to implement its strategy. 5.4. How it will measure achievements and target outcomes for the short, medium, and long term. 5.5. The competitive advantage of the organization that enables it to create value in the future.
6	Performance	6.1. Quantitative indicators concerning targets, risks, and opportunities, explaining their significance, their implications, and the methods and assumptions used in compiling them. 6.2. The organization's effects (both positive and negative) on the capitals, including material effects on capitals up and down the value chain. 6.3. The state of key stakeholder relationships and how the organization has responded to key stakeholders' legitimate needs and interests. 6.4. The linkages between past and current performance, and between current performance and the organization's outlook. 6.5. Key performance indicators that combine financial measures with other components.
7	Future Outlook	7.1. Challenges and uncertainties the organization encounters in pursuing its strategy. 7.2. Potential implications for the organization's business model and future

Item	<IR> Major Content Element	Elements
		performance. 7.3. The availability and affordability of capital the organization uses (e.g., skilled labour and natural resources). 7.4. The potential effects on future performance and business model of the organization.
8	Basis of preparation and presentation	8.1 The organization's materiality determination. 8.2 The reporting boundary. 8.3 The significant frameworks and methods. 8.4 Compliance with the rules of governance. 8.5 Disclosure of key information and material.

Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

- Mazurina Mohd Ali, and Susi Handayani carried out the conceptualization, funding acquisition, investigation, supervision, and writing - the original draft.
- Erlane K Ghani, has implemented the methodology, formal analysis.
- Mariana, and Hantantri have organized resources.
- Mazurina Mohd Ali has done the writing – review & editing.

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Conflict of Interest

The authors have no conflicts of interest to declare.