

# **Integrated Reporting Practices: A Comparative Analysis of Indian Industries**

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## **Abstract:**

Over the past few years, there have been mounting pressures on corporate reporting, leading to an ever-increasing number of reports. All of these pressures made it more difficult for users to navigate disclosures and find relevant information. One way to overcome those barriers is through integrated reporting (IR). This research paper focused on BSE-listed Indian five-sector (Bank, Chemical, and Software, Mining, and Food procedure) companies; applications of integrated reporting content in their annual reports. The data was obtained from a firm 100-year observation sample of 20 companies on the Bombay Stock Exchange in the period 2017-18 to 2021-22. For the analysis of the data, we used content analysis, descriptive statistics, and one way ANOVA. After the analysis, we found that the Indian sector (Bank, Chemical, Software, Mining, and Food procedure) overall content of integrated reporting of 84.71% in its annual reports. We found the average IRI score to be 0.8471 and the IR gap to be 0.1529. The current format of the annual report was performing at its maximum integrated reporting and disclosure index, but they needed to fulfill the IR GAP. A distinct element for those performed poorly (labour practices and decent work indicators, environmental, society). BSE-listed companies in the Indian sector of the BSE are required to publish their annual report using the integrated reporting approach.

## **Keywords**

IIRC, Integrated Reporting, BSE, IRI and India.

## **Introduction:**

The integrated reporting concepts can provide companies with a useful framework when considering how to best disclose

environmental, social, and governance matters that they have decided to report. Companies can also improve their access to capital and get structural business benefits from integrated thinking. Integrated reporting was a concept created to better clarify the broad range of measures organisations take to contribute to their long-term value and role in society.

At its heart is the proposition that value is increasingly determined by factors other than financial performance, such as dependence on the environment, social standing, human capital skills, and others. This value creation concept is the backbone. Reporting requirements have varied and evolved differently in different jurisdictions. This has significantly increased the compliance burden for an increasing number of organisations reporting in more than one jurisdiction and made it difficult to compare the performance of organisations across jurisdictions.

Today, an organisation creates value not only for its shareholders but also for society as a sustainable strategy. This concept requires organisations to make key decisions, trade-offs, and sacrifices in their business models. For example, an organisation may have to sacrifice financial capital to invest in human capital capable of achieving this goal in order to reduce its reliance on natural capital.

An organisation may be challenged with a choice between protecting its financial capital in the future and growing its profit potential in the long term. These decisions, if significant, should be set out in integrated reporting and

defined in the organisation's value creation objectives.

This approach goes beyond the value reflected in the annual financial statements and includes the creation of intangible value and the impact of a business activity on stakeholders as a whole. It also includes a result, or at least a description, of how these result impacts influence long term stakeholder value.

**(The IIRC, 2011)** The current organisational reporting model was designed, but there have been important changes in the way business is organised, how the organisation creates value, and the context in which business operates. These important changes are correlated, and the impacts of these changes are as follows:

1. Globalization,
2. Making policy activity in the world in response to "financial, governance, and other crises",
3. high level expectations of business transparency and accountability,
4. Actual and possible resource limits
5. population growth, and
6. Environmental

Against this background, the type of information that is needed to assess the past and current performance of organisations and their future resilience is much broader than that provided for by the existing business reporting model. While there has been more information provided, key disclosure gaps remain. Reports are already long and are getting longer. But, because reporting has broken down into distinct, disconnected strands, the critical correlation between strategy, governance, and operations, as well as financial and non-financial performance, is not presented properly. To meet the increasing demand for a wide set of information from markets, regulators, and civil society, a framework is required that can motivate the upcoming evolution of reporting and reflect this growing complexity. Such a framework needs to bring together the diverse but currently disconnected strands of reporting into a coherent, integrated whole and demonstrate an organisation's ability to create value now and in the future.

The IIRC is developing an International Integrated Reporting Framework that will facilitate the development of reporting over the coming decades. The main objective of the IIRF is to give organisations the right direction on how to communicate the wide set of information requirements of their stakeholders and get the organisation's next-year vision in a clear, concise, connected, and comparable format. That will enable those corporations, their investors, and others to make better short- and long-term decisions.

The beginning concentrates on report-making by larger organisations and on the requirements of their investors. The Framework will help elicit consistent reporting by organisations, provide broad parameters for policymakers and regulators, and provide a focus for the same reporting standards.

### **Review of Literature:**

**Sriani & Agustia (2020)** in this research authors investigated the effect of voluntary integrated reporting on information asymmetry in European and Asian firms. They examined a sample of 94 organizations that published integrated reports in 2016. The research found no significant relationship between the quality of integrated reporting and the asymmetry of information captured by spread. Additionally, the effect of organization size as a moderator variable was not observed in this relationship.

**Iredele (2019)** this study focused on comparing the quality of integrated reporting among South African listed companies and associated factors. The data was collected from the annual reports of 20 companies listed on the Johannesburg Stock Exchange from 2013 to 2017. The research revealed a significant relationship between the quality of integrated reporting and the length of the integrated reports. The study also identified that firm size, profitability, and board size influenced the quality level of integrated reporting.

**Mishra (2019)** author examined the scenario of integrated reporting in India, emphasizing the importance of integrated reporting to consolidate various standalone reports. The study suggested that Indian companies should embrace integrated reporting to improve reporting practices and transparency.

**Doni & Fortuna (2018)** the authors explored

the adoption of integrated reporting as a new business reporting model in JSE-listed mining companies. The research highlighted the applicability of King III governance principles to entities, providing insights into governance choices and practices related to integrated reporting.

**Vesty, Ren, & Sophia (2018)** this research aimed to gain practical insights into a senior manager's engagement with integrated reporting. Through in-depth interviews, the authors found that ambiguity in integrated reporting did not necessarily indicate challenges in operationalizing the reporting process.

**Steenkamp (2018)** this study focused on materiality issues disclosed in integrated reporting and the process of determining materiality. The research identified common material issues related to customers, employees, sustainable performance, and the environment, providing guidelines for effective disclosure in integrated reporting.

**McNally & Maroun (2018)** this study identified specific logics of resistance to adopting integrated reporting, emphasizing the need for understanding preparers' views and mindsets to successfully implement new reporting systems.

**Romolini, Gori, & Fissi (2017)** the authors explored integrated reporting trends from 2013 and identified possible development paths for the future. The research employed qualitative methodologies to examine the dynamics of integrated reporting.

**Bratu (2017)** the author analyzed European companies' integrated reports published in 2015 to assess compliance with the IIRC's framework guidelines. The research found that high-ranking companies scored well in presenting relevant information with a clear structure and description of the value creation process.

**Menicucci (2017)** this study investigated the effect of business characteristics on forward-looking information within integrated reporting. The research used content analysis on 282 integrated reports and identified a significant relationship between forward-looking information, firm size, and profitability.

**Havlova (2015)** this research focused on reporting changes in business reports after the introduction of integrated reporting. The study found that the adoption of integrated reporting led to reduced reports by public entities, with listed entities benefiting the most from integrated reporting.

**Abeysekra (2013)** this article emphasized that integrated reporting facilitates consistent and high-quality financial and non-financial information for stakeholders. Transparency, accountability, and leadership are considered fundamental pillars of integrated reporting.

The reviewed research studies demonstrate the growing interest in integrated reporting practices across different regions and industries. While some studies highlight the benefits and significance of integrated reporting, others delve into challenges and variations in its implementation. Overall, integrated reporting appears to be a promising tool for enhancing corporate transparency, governance, and stakeholder communication. As the landscape of corporate reporting continues to evolve, further research will likely contribute to a deeper understanding of the impact and relevance of integrated reporting in various contexts.

### **Research Gap:**

The existing literature reveals a scarcity of research focused on integrated reporting within the Indian context. The content and presentation of a company's annual report are critical factors in enhancing its value for diverse stakeholders. However, the extent to which Indian companies include integrated reporting in their annual reports remains a subject of ongoing discussion. The present study aims to address this gap and make a modest contribution by investigating the implementation of integrated reporting in select Indian companies and sectors. By exploring the application of integrated reporting and identifying disparities in its practices, this research seeks to shed light on the overall landscape of integrated reporting in the Indian business environment.

### **Objectives:**

The present research is proposed to meet the following objectives:

1. To examine the extent of integrated reporting practices in selected Indian companies.
2. To compare and analyze the application of integrated reporting across different industries in India.
3. To identify any variations in the level of disclosure of integrated reporting content among the selected BSE-listed companies.

### **Research Methodology:**

#### **Hypotheses**

In the light of the above objectives following hypothesis will be tested.

H01 There is no significant difference in the level of disclosure of integrated reporting content within select five sectors of BSE listed companies.

H02 There is no significant difference in the level of disclosure of integrated reporting content in select BSE listed banking companies.

H03 There is no significant difference in the level of disclosure of integrated reporting content in select BSE listed chemical companies.

H04 There is no significant difference in the level of disclosure of integrated reporting content in select BSE listed software companies.

H05 There is no significant difference in the level of disclosure of integrated reporting content in select BSE listed mining companies.

H06 There is no significant difference in the level of disclosure of integrated reporting content in select BSE listed food procedure companies.

#### **Discloser index**

In order to test the hypothesis of the present research, the discloser index was calculated on the basis of each companies' presence (or absence) of the content of integrated reporting published by the International Integrated Reporting Council in 2013. Mandatory information used in integrated reporting content

must be publicly available either on the company's or the BSE websites.

The level of disclosure in integrated reporting of sample BSE-listed companies was measured by the Integrated Reporting Index (IRI). For this, annual reports were analysed and assigned a "1" when content was disclosed in the report and a "0" when the content was not disclosed in the report. IRIs was calculated using the following formula:

$$IRI = 1$$

$$Di/N = TS/M \text{ Where}$$

Di= 1 if the content is exposed; 0 if content is not disclosed  
N = sum of number of content

$$TS = \text{Total score}$$

$$M = \text{Maximum marks required}$$

Thus, the expected maximum score for each sample of a sector was 107, as there were 107 items of disclosure. The expected maximum IRI score was "1" with a minimum of "0". A higher level of IRI was suggested by a sector with a sample of 1 as such or close to the score; otherwise, a score of "0" or closer to it suggested adopting a lower level of the concept. Conversely, an integrated reporting gap (IR gap) was calculated using the following formula in line with Boulicki (2011) and Lipunga (2014):

$$IR \text{ Gap} = 1 - IRI$$

Since the expected maximum score is 1, the IR interval is obtained by subtracting the actual IR score from 1 (Bulickey, 2011). As a result, the IR gap is close to zero, which is a better level of IR in the business reports of the sample sector companies.

#### **Sample Selection**

For this present research, sample companies have been selected from five industry sectors (banking, chemical, software, mining, and food procedures) of 20 companies (each sector comprises 4 companies) of the Bombay Stock Exchange (BSE). Companies are sampled on the basis of their market capitalization over the four-year period from 2017-2018 to 2021-22. The following companies have been selected for the study.

**Table No.1: Sample Companies and Sector**

Name of the Sector	Name of the Companies
<b>Bank</b>	Bank of Baroda (BOB) Bank of India (BOI) Punjab National Bank (PNB) State Bank of India (SBI)
<b>Chemical</b>	Aarti India Gujarat fluorochemicals limited (GUJ) Pidilite Tata chemicals United Phosphorus Limited (UPL)
<b>Software</b>	HCL Infosys TCS WIPRO
<b>Mining</b>	Coal India Gujrat MineralsVedanta NMDC
<b>Food Procedure</b>	BritaniaHAP Nestle Zyduss wellness

### Data Collection and Analysis

For this research, data has been collected through the company's own website or the BSE website, and various published annual reports of individual companies have been taken. For further analysis of the data, statistical techniques used were content analysis, average, variance, and one-way ANOVA.

### Development of the content used in the integrated reporting

The content of the integrated reporting for this study takes full insight from the GRI 3 Checklist 2013, published by the IIRC for integrated reporting. These were ideal for this study as they were all based on the IIRC's GRI 3 checklist's 11 main contents (Table 1) and 107 sub-contents of that main content.

Below table shows 11 main contents of integrated reporting according to GRI 3 checklist published by International Integrated Reporting Council (IIRC) in the year 2013. Out of the 11 main topics, environmental content held the maximum of 20 subtopics for the integrated reporting disclosure, while strategy and analysis content held the minimum of two subtopics for the integrated reporting.

**Table No. 2 Integrated reporting main content and number of sub content**

Sr. No.	Integrated Reporting main content	Number of sub content
1	Strategy and analysis	2
2	Profile	10
3	Parameters	13
4	Governance, Commitment and Engagement	17
5	Management approach	6
6	Economic	7
7	Environmental	20
8	Labour practices and Decent work indicator	10
9	Human rights	6
10	Society	11
11	Product responsibility	5

**Source: Own Compilation**

### Results and Discussion:

The results of the analysis of the data are provided in this section. The sample begins by presenting the results and discussion of annual reports of companies and the types of narrative reports contained within their frequencies.

### Integrated Reporting Index Score

This study uses three IR score levels to present the results of the analysis:

1. Sector-wise IRI score
2. Average IRI score of sectors, and
3. Content-wise IRI score of sample companies

As already mentioned, IRI reflects a higher level of 1, whereas the IR gap should be closer to 0 for a better IR gap. The average IRI score for the sample sector companies was 0.8471. Accordingly, the average score suggests that on average, 84.71 percent of IR contents were actually used in the annual report of the selected sample sector. The average score indicates some progress by a sample of selected publicly listed companies towards adopting the IR philosophy in presenting their annual reports.

**Figure: 1 Sector wise IR score and Average IRI Score of Sector**

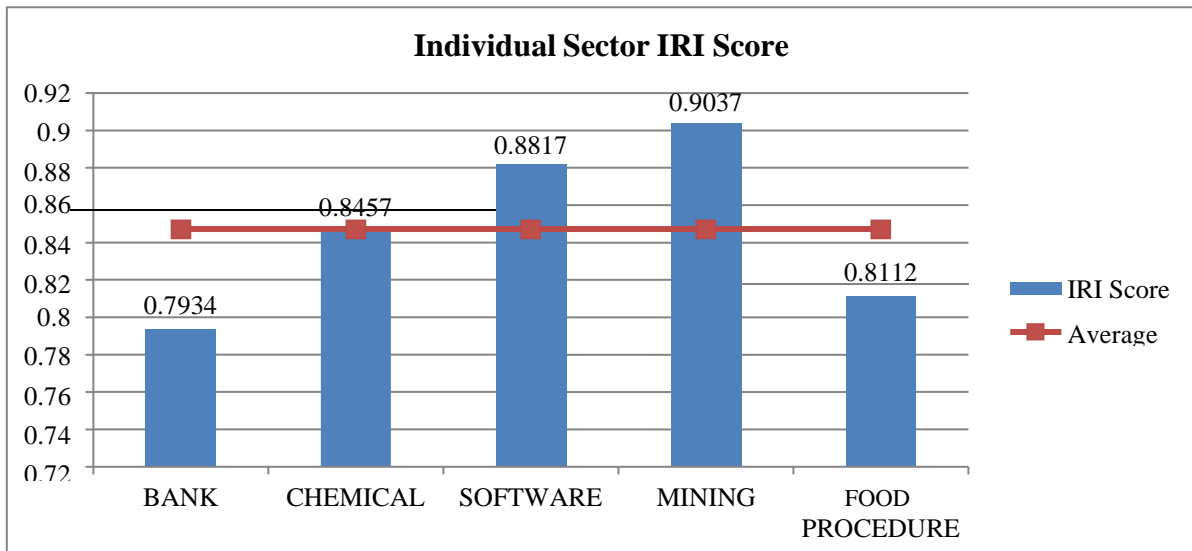


Figure 1 shows IRIs that were not scored precisely 1 by any of the sectors and found that 100% (n = 5) of the content on the integrated reporting content was in the annual report. The mining sector received the highest IRI score of 0.9037, indicating that the sector used 90.37% (n=1) of the integrated reporting content in presenting their annual report. This sector had a 0.096 and worst.152 IR gap, respectively. Conversely, the lowest IRI was scored at 0.793 by the banking sector, which used only 79.34% (n = 1) of the content of integrated reporting in presenting its annual report. The banking sector had a 0.207 IR gap.

Furthermore, Figure 1 shows that all 5 sectors revealed at least 84.71% of the content of the integrated reporting in presenting their annual reports. The total IR score for the sample sector companies was 0.8471, as reflected by the mean score. Accordingly, the score suggested that on average, 84.71% of the content of the integrated reporting was actually presented in their annual reports. The overall score indicates some progress by sector companies towards adopting all the content of the integrated reporting philosophy in presenting their annual reports. Conversely, it revealed a large average IR gap of 0.152 that must be filled in the direction of achieving full IR. Further considering that the IR disclosure framework adopted by the study was as broad as the IIRC framework The difference is probably not as wide if it can be used later. This further indicates that slightly more publicity work is needed to encourage IR in India.

**Content-wise IRI score of sample companies**

The score suggests that all the companies in the sample attempted to provide some information about their operating environment, making a statement that they are complying with the relevant regulatory instruments and reporting financial performance beyond the disclosure required by accounting and companies. Some analysis of the situation is provided, as is standard. Figure 2 shows that all the sample companies included the first content (strategy and analysis) of integrated reporting in presenting their annual reports.

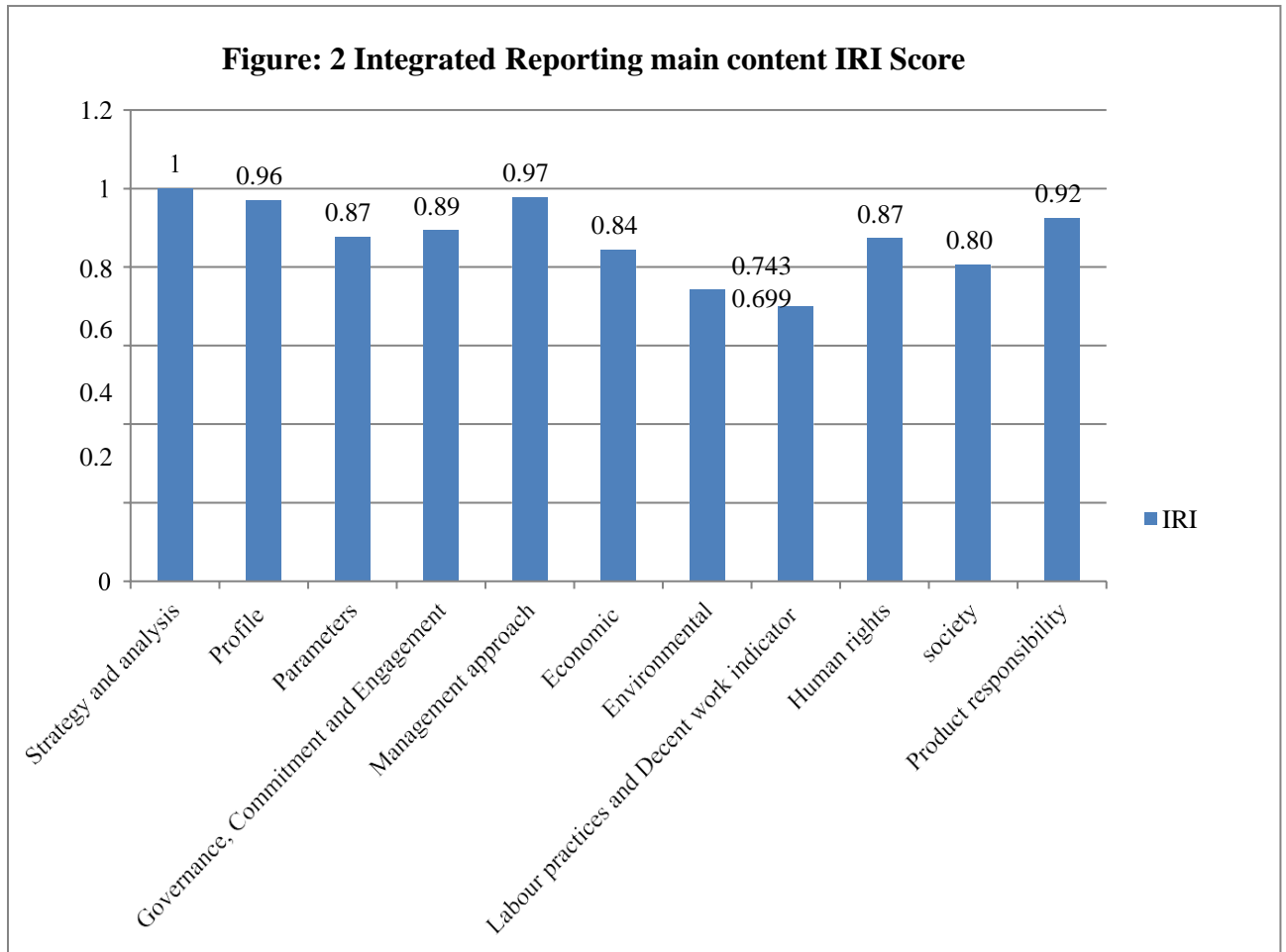


Figure 2 also shows that the lowest score of 0.699 is related to labour practices and decent work indicators, which are used less in the annual reports of all sample companies but are more important in the integrated reporting presented. It should be noted that labour practices and decent work indicators appear to play an important role. The average main content used by sector companies scored 0.8733. On the basis of the average score of 4, content was less used by sector companies (economic, environmental, labour practices, decent work indicators, and social). That score suggests that improvement in the use of integrated reporting content is required to present these 4 topics (economic, environmental, labour practices, decent work indicators, and social) in their annual report.

**Table No. 3 integrated reporting content used by selected sector score shows in percentile**

Sr. No.	Integrated Reporting main content	Name of Sector				
		Bank	Chemical	Software	Mining	Food Procedure
1	Strategy and analysis	100	100	100	100	100
2	Profile	100	96	100	97	91.5
3	Parameters	83.07	88.46	87.69	91.92	87.30
4	Governance, Commitment and Engagement	80.29	91.17	92.64	92.05	90.58
5	Management approach	91.66	100	100	100	97.5
6	Economic	92.14	80.71	84.28	85.71	79.28
7	Environmental	58	76.75	82.5	88	66.25
8	Labour practices and Decent work indicator	71.5	73	66.5	78	60.5
9	Human rights	72.5	82.5	94.16	90	97.5
10	Society	80.90	71.81	88.18	94.54	68.18
11	Product responsibility	90	95	96	84	97

**Source: Own Compilation**

Above table 3 shows that BSE-listed selected sector companies do not follow whole integrated reporting disclosures. After data analysis and content analysis, we found that only strategy and analysis content was used 100% in all sample companies. Only banking and software companies used 100% of the profile content in their annual reports. No selected sector used 100% content of parameters; mining companies used the highest content, 91.92%. No selected sector used 100% of the content of governance; commitment and engagement software companies used the highest content (92.64%). No selected sector used 100% content; economic banking companies used the highest content (92.14%). No selected sector used 100% content; environmental mining companies used the highest content (92.64%). No selected sector used 100% content of labour practices and decent work indicators. mining companies used the highest content at 78%. No selected sector used 100% content of human rights. Food-procedure companies used the highest content, 97.5%. No selected sector used 100% of the content of society; mining companies used the highest content (94.54%). No selected sector used 100% content for product responsibility; food procedure companies used the highest content at 97%. Only three sectors (chemical, software, and mining) used 100% content in their annual reports. Above analysis suggested that more improvement was required to adopt integrated reporting in selected sample companies.

### Hypothesis testing

**H<sub>01</sub>** There is no significant difference in the level of disclosure of integrated reporting content within select five sectors of BSE listed companies.

For the above hypothesis testing, we used BSE listed five sectors (bank, chemical, software, mining, and food), four companies from each sector's annual reports, and checked the disclosure index content of each company's disclosure or not. If the company disclosed the disclosure index content, we give it a 1; if it was not disclosed in his annual report, we give it a 0. We used a selected 20 BSE listed companies disclosure index to find no significant difference in disclosure of integrated reporting within



select five sector (bank, chemical, software, mining, and food procedure) companies. For this analysis, we used a one-way ANOVA test, and the results are shown in table 4.

**Table No. 4: one way ANOVA results for first hypothesis.**

ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	0.909611111	4	0.227403	3.107424	0.015186*	2.388596
Within Groups	39.15155093	535	0.07318			
Total	40.06116204	539				

Source: Own Compilation

\*Significant at 5% level of significance

After applying a one-way ANOVA test to select five sector (bank, chemical, software, mining, and food processing) companies, we found that the p-value was 0.015186. The p-value was less than the significant level (0.05) and we rejected the null hypothesis, which means there is a significant difference in the disclosure score of integrated reporting in five sectors (banking, chemical, software, mining, and food processing) of listed companies. We found a significant difference in the disclosure of integrated reporting and disclosure index content presented in their annual report. BSE listed 5 sectors (bank, chemical, software, mining, and food procedure) companies that present maximum disclosure index content by mining companies (97.46%) and minimum disclosure index content by banking companies (86.53%) out of 107 (100%) expected maximum IRI score disclosure index content.

**H<sub>02</sub>** There is no significant difference in the level of disclosure of integrated reporting content among select BSE-listed banking companies.

For the above hypothesis testing, we used annual report data from four BSE-listed banking companies (BOB, BOI, PNB, and SBI) and checked disclosure index content from each company disclosure or not. If the company disclosed the disclosure index content, we give it a 1; if it was not disclosed in his annual report, we give it a 0. We used the disclosure index of four BSE-listed banks (BOB, BOI, PNB, and SBI) to determine whether there was a significant difference in integrated reporting disclosure among the four banks. For this analysis, we used a one-way ANOVA test, and the results are shown in table 5.

After applying a one-way ANOVA test to a sample of banking companies, we found that the p-value was 1.1015. p-value was greater than the significant level (0.05) and we accepted the null hypothesis, which means there is no significant difference in the disclosure score of integrated reporting within the BSE-listed 4 banking companies (BOB, BOI, PNB, and SBI). We found that there was no significant difference in the disclosure of integrated reporting and disclosure index content presented in their annual report.

**Table No. 5: one way ANOVA results for second hypothesis.**

ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	4.990741	3	1.66358	12.2171	1.1015	2.625748
Within Groups	58.28	428	0.136168			
Total	63.27074	431				

Source: Own Compilation

**H<sub>03</sub>** There is no significant difference in the level of disclosure of integrated reporting content among select BSE-listed chemical companies.

For the above hypothesis testing, we used BSE-listed 4 chemical companies (AARTI IND, GUJ, PIDILITE, and TATA) annual report data and checked the disclosure index content of each company's disclosure or not. If the company disclosed the disclosure index content, we give it a 1; if it was not disclosed in his annual report, we give it a 0. We used the selected 4 BSE-listed chemical companies

(AARTI IND, GUJ, PIDILITE, and TATA) disclosure index to find out whether there was a significant difference in the disclosure of integrated reporting content within the 4 chemical companies (AARTI IND, GUJ, PIDILITE, and TATA). For this analysis, we used a one-way ANOVA test, and the results are shown in table 6.

**Table No. 6: one way ANOVA results for third hypothesis.**

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.342963	3	0.44765432	4.45457103	0.004274	2.625748
Within Groups	43.01111	428	0.10049325			
Total	44.35407	431				

**Source: Own Compilation**

After applying a one-way ANOVA test to a sample of four chemical companies (AARTI IND, GUJ, PIDILITE, and TATA), we found that the p-value was 0.004274. The p-value was less than the significant level (0.05) and we rejected the null hypothesis, it means there is a significant difference in the disclosure score of integrated reporting content among 4 chemical companies (AARTI IND, GUJ, PIDILITE, and TATA). We found a significant difference in the disclosure of integrated reporting and disclosure index content presented in their annual report. BSE listed four chemical companies (AARTI IND, GUJ, PIDILITE, and TATA). Present disclosure index content is maximum by TATA companies 101 (93.70%) and minimum by GUJ companies 85 (79.44%) disclosure index content out of 107 (100%) expected maximum IRI score disclosure index content.

**H<sub>04</sub>** There is no significant difference in the level of disclosure of integrated reporting content among select BSE-listed software companies.

For the above hypothesis testing, we used annual report data from four BSE-listed software companies (HCL, INFOSYS, TCS, and WIPRO) and checked disclosure index content from each company disclosure or not. If the company disclosed the disclosure index content, we give it a 1; if it was not disclosed in his annual report, we give it a 0. We used the disclosure index of four BSE-listed software companies (HCL, INFOSYS, TCS, and WIPRO) to determine whether there was a significant difference in the disclosure of integrated reporting content among the four companies. For this analysis, we used a one-way ANOVA test, and the results are shown in table 7.

**Table No. 7: one way ANOVA results for forth hypothesis.**

ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	0.64546296	3	0.215154	2.79152	0.040141	2.625748
Within Groups	32.9877778	428	0.077074			
Total	33.6332407	431				

**Source: Own Compilation**

After applying a one-way ANOVA test to a sample of four software companies (HCL, INFOSYS, TCS, and WIPRO), we found that the p-value was 0.040141. The p-value was less than the significant level (0.05), and we rejected the null hypothesis, which means there is a significant difference in disclosure score of integrated reporting content with four software companies (HCL, INFOSYS, TCS, and WIPRO). We found a significant difference in the disclosure of integrated reporting disclosure index content presented in their annual report. BSE listed four software companies (HCL, INFOSYS, TCS, and WIPRO). Present disclosure index content is the maximum by INFOSYS companies at 100 (92.59%) and the minimum by HCL companies at 89 (82.23%) disclosure index content out of the 107 (100%) expected maximum IRI score disclosure index content.

**H<sub>05</sub>** There is no significant difference in the level of disclosure of integrated reporting content in select BSE-listed mining companies.

For the above hypothesis testing, we used BSE-listed 4 mining companies (COAL INDIA, GUJ MINERALS, VEDANTA, and NMDC) annual report data and checked the disclosure index content of each company's disclosure or not. If the company disclosed disclosure index content, we give 1; if it was not disclosed in his annual report, we give 0 for it. We used the selected 4 BSE-listed mining companies (COAL INDIA, GUJ MINERALS, VEDANTA, and NMDC) disclosure index to find out if there was a significant difference in the disclosure of integrated reporting content within the 4 mining companies (COAL INDIA, GUJ MINERALS, VEDANTA, and NMDC). For this analysis, we used a one-way ANOVA test, and the results are shown in Table 8.

**Table No.8: one way ANOVA results for fifth hypothesis**

ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	0.64037	3	0.213457	2.96714	0.03177	2.625748
Within Groups	30.79037	428	0.07194			
Total	31.43074	431				

**Source: Own Compilation**

After applying a one-way ANOVA test to a sample of 4 mining companies (COAL INDIA, GUJ MINERALS, VEDANTA, and NMDC), we found that the p-value was 0.0317765, which was less than the significant level (0.05), and we rejected the null hypothesis. This means there is a significant difference in the disclosure score of integrated reporting content among the 4 mining companies (COAL INDIA, GUJ MINERALS, VEDANTA, and NMDC). We found a significant difference in the disclosure of integrated reporting disclosure index content presented in their annual report. BSE listed four mining companies (Coal India, Gujarat Minerals, Vedanta, and NMDC). Present disclosure index content is the maximum by VEDANTA companies at 101 (93.70%) and the minimum by Gujarat Minerals companies at 90.6 (83.88%) disclosure index content out of the 107 (100%) expected maximum IRI score disclosure index content.

**H<sub>06</sub>** There is no significant difference in the level of disclosure of integrated reporting content in select BSE-listed food processing companies.

For the above hypothesis testing, we used the BSE-listed 4 food procedure companies (BRITANIA, HAP, NESTLE, and ZYDUSS WELLNESS) annual report data and checked whether the disclosure index content was in each company's disclosure or not. If the company disclosed disclosure index content, we give 1; if it was not disclosed in his annual report, we give 0 for it. We used the disclosure index of 4 BSE-listed food procedure companies (BRITANIA, HAP, NESTLE, and ZYDUSS WELLNESS) to find out if there was a significant difference in the disclosure of integrated reporting within the four companies (BRITANIA, HAP, NESTLE, and ZYDUSS WELLNESS). For this analysis, we used a one-way ANOVA test, and the results are shown in Table 9.

**Table No. 9: one way ANOVA results for sixth hypothesis.**

ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	0.00963	3	0.00321	0.025108	0.994616	2.625748
Within Groups	54.71778	428	0.127845			
Total	54.72741	431				

**Source: Own Compilation**

After applying a one-way ANOVA test to a sample of food processing companies, we found that the p-value was 0.994616. The p-value was greater than the significant level (0.05), and we accepted the null hypothesis, which means there is no significant difference in the disclosure score of integrated reporting within the BSE-listed 4 food procedure companies (BRITANIA, HAP, NESTLE, and ZYDUSS WELLNESS). We found no significant difference in the disclosure of integrated reporting disclosure index content presented in their annual report.

### **Findings and Conclusion:**

Based on these low levels of reporting, it is clear that the Indian companies adopting IR are few. Perhaps the government needs to regulate the implementation of IR in India, but IIRC, the philosophy is that governments should not regulate IR as it should be market-driven. Therefore, perhaps governments should take the lead in adopting IR.

Overall, selected BSE-listed companies have an average composite disclosure score of 0.8471, with an IR gap of 0.1529.

- ❖ 80% of Indian sector disclosure scores for integrated reporting content are 96 or more. This includes four sectors that stand out for achieving the maximum score of 107 (banking, chemical, software, and food procedures).
- ❖ 20% of companies' disclosure scores are less than 96 but more than 89 or more. These include one sector that stands out for also achieving the maximum score of 107 (mining). This one sector was also closer to achieving the maximum score of
- ❖ Disclosure index items main content was 11 and their sub content was 107. Out of the 11 main contents of disclosure index content sampled in the Indian sector, BSE listed companies' disclosed 100% of disclosure index 1 main content (Strategy and Analysis).
- ❖ After analysing the Indian sector companies' annual data, we found that only banking and software companies disclosed 100% of the disclosure index content in their annual reports.
- ❖ After analysing the Indian sector companies' annual data, we found that only

chemical, software, and mining companies disclosed 100% of the disclosure index content in their annual reports.

- ❖ Disclosure index content of labour practises and decent work indicators is very poor presented in their annual report because that disclosure index score minimum (0.699) in all content disclosure index

The results of the analysis suggest some progress towards the implementation of IR, as indicated by an average IRI of 0.8471 and, on the other hand, a bigger IR gap of 0.2047 that needs filling. Furthermore, it was found that the IR framework is based on the Code of Corporate Governance, which contains less detailed guidance with regard to IR.

While the current annual report format meets the maximum integrated reporting disclosure index, there is a need to address the IR GAP, particularly in elements that have performed poorly, such as labor practices and decent work indicators, environmental disclosures, and societal aspects. The current format of BR reports is narrative in nature, with a few performance indicators. While this was a progressive step towards disclosure of CR in annual reports, integrated reporting in India was a distant future. The Indian sector's BSE-listed companies need to publish their annual reports under the heading of integrated reporting. The future research agenda for IR is vast and robust; therefore, qualitative and quantitative methodologies can be applied using primary and secondary data to understand, establish, and recommend the need and impact of IR to corporations and all other stakeholders in the IR ecosystem.

### **References:**

- (SAIRC), S. A. (2011). Framework For Integrated Reporting and The Integrated Report. Abeysekra, I. (2013). A Template For Integrated Reporting. *Journal Of Intellectual Capital*, 14(2), 227-245.
- Bratu, A. (2017). Empirical study regarding the integrated reporting practices in Europe. *Audit Financiar*, 15 (4(148)), 613-627.
- Doni, F., & Fortuna, f. (2018). corporate governance code in South Africa After the adoption of Integrated Reporting, Evidence

from the mining Industry. *International buissness management* , 12 (1), 68-81.

GRI, G. R. (2013). Sustainability Reporting Policies Worldwide- Today's Best Practice, Tomorrow's Amsterdam: Global Reporting Initiative.

Havlova, k. (2015). What Integrated Reporting Changed: The Case Study of Early. *science Direct* (34), 231-237.

IOD, I. o. (2009). KIng Report on Governance for South Africa.

Iredele, O. O. (2019). Examining the association between quality of integrated reports and corporate characteristics. *heliyon* , 5.

McNally, M.-A., & Maroun, W. (2018). It is not always bad news: Illustrating the potential of integrated reporting using a case study in the eco-tourism industry. *Accounting, Auditing & Accountability Journal* , 31 (5), 1319-1348.

Menicucci, E. (2017). Exploring forward-looking information in integrated reporting A multi- dimensional analysis. *Journal of Applied Accounting Research*, 19 (1), 102-121.

Mishra, N. (2019). Integrated Reporting: A Structured Analysis of Applications and Gaps in India. *taxila international journal of managment special edition*.

Romolini, A., Gori, E., & Fissi, S. (2017). exploring integrated reporting research: results and perspective. *international jurnal of accounting and financial reportin*, 7 (1).

Sriani, D., & Agustia, D. (2020, november 20). Does voluntary integrated reporting reduce information asymmetry? Evidence from Europe and Asia. *heliyon*.

Steenkamp, N. (2018). Top ten South African companies' disclosure of materiality determination process and material issues in integrated reports. *Journal of Intellectual Capita* , 19 (2), 230- 247.

Vesty, G. M., Ren, C., & sophia. (2018). Integrated reporting as a test of worth A conversation with the chairman of an integrated reporting pilot organisation. *Accounting, Auditing & Accountability Journal*, 31 (5), 146-1434.