

Internet Financial Reporting: Analysis of Literature on Evolution Reporting Corporations in the Industry 4.0 Era

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ABSTRACT

Objective: Study this aim to analyze systematically the development of Internet Financial Reporting (IFR), factors that influence its implementation, as well as the impact on the market company. **Method:** Approach Systematic Literature Review (SLR) is used with follow PRISMA 2020 guide, which includes stages of identification, screening, assessment of eligibility, and inclusion. Of the 563 articles identified, 36 studies fulfil criteria and were analyzed further. Study data extracted using framework analysis, thematic, and cluster analysis to identify patterns and relationships between the draft. **Results:** Research results show three main. First, IFR determinants include characteristics of the company (size, profitability, leverage, liquidity), governance of companies, intellectual capital, and pressure institutions that have a significant to level IFR disclosure. Second, the implementation and quality of IFR varies widely between companies and countries, influenced by infrastructure technology, capabilities, source of power, human beings, and the equipment used for the information. Third, IFR has a proven positive impact positive to mark company through improving transparency, reducing information asymmetry, and providing a reinforcement signal to investors, even though a number of studies find an impact that is not significant. **Novelty:** In a way, research This conclude that IFR is an instrument strategic in increase the quality of disclosure of companies and market perception of the company. These results give contribution for academics, practitioners, and regulators in understanding IFR dynamics as well as directing further development study furthermore.

INTRODUCTION

Development technology information has brought significant changes in the way companies convey information to stakeholders' interests. One of them is innovation. This is Internet Financial Reporting (IFR), namely the practice of financial reports and information companies via the internet. IFR is considered able to increase transparency, accountability, and efficient delivery of information, especially for investors who need it fast, precise, and wide access to the company's financial condition.

Globally, various studies show that IFR is not only a means distribution information, but also has the potential to influence market company, financial performance, and market response. [1] found that performance, carbon, and financial performance are interrelated and influence market company, while [2] identified that factors like company, profitability, leverage, and auditor type become determinant main IFR practices. This finding confirms that IFR can be viewed as part of the mechanism signal from the mechanism signal company to the market. In addition, the study [3] shows that intellectual capital, as intangible assets, plays an important role in increasing profitability and the value of the company, which can ultimately be reflected in the quality of reporting companies, including IFR.

Research in various developing countries, such as Egypt, Uganda, and Jordan, also shows that level IFR adoption is influenced by factors institutional, characteristics of the company, board quality, to level development technology [4], [5], [6]. However, the level of implementation of IFR in developing countries tends not to be optimal, so that it provides room for further research about determinant and the impact to mark company.

In Indonesia, IFR is also becoming developing research topics rapid. Various studies nationally show that financial performance, profitability, leverage, liquidity, size company, and governance company own relatedness with level IFR disclosures and mark company. [7] found that IFR is capable strengthen connection positive connection between financial performance and value companies, while other studies [8], [9] show that IFR has a significant influence on improvement mark companies in Indonesia.

However, not all studies provide consistent results. Several studies, [10] and [11], found that not all financial variables have an effect to decision companies use IFR. This inconsistency shows that IFR is not only influenced by internal company factors, but also by external factors like regulation, development technology, pressure isomorphic, as well as modern investor preferences.

See various international research results and nationally, visible that IFR has potential for forming an image and values company. However, variations in research results show the existence of space to examine in more depth what factors influence IFR, how IFR impacts the value company, as well as How emerging market context like Indonesia influences connection Therefore, this literature review is important to provide understanding comprehensive about development IFR research, research gaps, and further research directions.

International Literature Review

This section summarizes and compares IFR research and digital reporting practices in various countries.

a) Determinant Adoption of Internet Financial Reporting

Several studies have highlighted the driving factors companies adopt for IFR.

1) Company Size, Profitability, Leverage, Auditor Type

[2] shows that company, profitability, leverage, and auditor type have a positive effect on IFR. The effect is moderated by the environmental institutions, such as investor protection, culture, and economic development.

2) Board Performance & Isomorphic Forces

[5] reveals that IFR is greatly influenced by the role of the supervisory board and the power of isomorphic, especially the coercive pressure from the regulator.

3) Intellectual Capital & Isomorphic Forces

Bananuka's study confirms that intellectual capital and strength isomorphic are significant predictors of IFR in companies' financial services in developing countries [12].

4) Conditions in Developing Countries

[6] noted that in Jordan, IFR is influenced by the size of the company, leverage, the age of the company, and concentration of ownership, with a significant variation between companies.

b) Practices and Their Use

a. Perspective Users

[4] found that users are generally satisfied with digital infrastructure, but hard copy reports remain the main source of information. IFR is considered to improve the quality of financial reports.

b. Social Media Disclosure & Internet Coverage

Xiang & Birt stated that internet reporting and social media strategy are related to financial performance, the company, as well as ESG scores [1].

c) Impact of IFR on Company Value & Performance

a. Carbon Performance & Value Transmission

Fortune Double (2021) shows the connection between performance carbon, financial performance, and IFR as channel transmission.

b. Intellectual Capital & Financial Performance

[3] found that intellectual capital increases the value company and profitability, which are relevant to digital reporting that focuses on intangible assets.

National Literature Review

IFR research in Indonesia shows significant developments with a focus on determinants of IFR adoption and its impact to mark company.

1) Determinants of IFR in Indonesia

a. Company Size, Profitability, Leverage

Nova [10] stated that only size is influential for companies against IFR in the sector property, while leverage and profitability do not.

b. Ratios and IFR

[13] found that activity and liquidity influence the quality of the company's IFR automation.

c. Public Ownership, Profitability & Transparency Information

[14] show that IFR strengthens the influence of public ownership on transparency information.

2) Impact of IFR on Company Value

Several studies confirm that IFR's contribution to increasing the value of the company.

a. IFR as a Moderation Relationship between Financial Performance and Company Value

[7] stated that IFR strengthens the influence of financial performance against mark company.

b. IFR and Company Value Directly

[8] prove that IFR has a positive effect positive to mark company 2016–2020 period.

c. IFR and Capital Market Response

Kusmawati found that IFR does not have a significant effect on the capital market response, different from disclosure information on significant profits [13].

d. IFR & Website Disclosure

[9] stated that IFR has a positive to mark company, however, non-financial website disclosures are even more influential and negative.

RESEARCH METHOD

1) Types and Approaches of Research

This research is a *Systematic Literature Review* (SLR) conducted to identify, evaluate, and synthesize previous research results about *Internet Financial Reporting (IFR)*, factors that influence its implementation, as well as the impact to mark company. The research approach refers to PRISMA 2020 (*Preferred Reporting Items for Systematic Reviews and Meta-Analyses*), which provides guidelines structured in the selection process literature in a transparent and replicable manner. The SLR approach was chosen Because capable give description comprehensive to consistency, differences, and development of IFR research globally and internationally.

2) Research Data Sources

Data used is secondary data in the form of journal articles obtained from various scientific databases, national and international, including:

- a. Scopus.
- b. Web of Science.
- c. ScienceDirect.
- d. Emerald Insight.
- e. SpringerLink.
- f. Google Scholar.
- g. DOAJ.
- h. Garuda/Garba Portal Digital Reference.
- i. University repository (if relevant).

Articles used include empirical research both internationally and nationally regarding IFR, factors influencing IFR, quality disclosure, and its relationship with mark company.

3) Search Strategy Literature

Search article done by using the following keyword combination:

- a) "Internet Financial Reporting".
- b) "Corporate Internet Reporting".
- c) "Firm Value".
- d) "Financial Performance".
- e) "Disclosure".
- f) "Determinants of IFR".

Use of Boolean operators:

("internet financial reporting" OR "corporate internet reporting")

AND ("firm value" OR "company value" OR "performance")

AND (determinants OR factors OR disclosure)

The search is not limited by year of publication, so that all IFR research developments can be analyzed.

4) Criteria Inclusion and Exclusion

1. Criteria Inclusion

Articles included in the research must fulfil the following criteria:

- a. It is scientific journal articles (national/international).
- b. Discussing IFR, IFR determinants, IFR quality, or its impact to mark company.
- c. Using empirical research methods (quantitative, qualitative, or mixed-method).
- d. Available in full-text format.
- e. Written in Indonesian or English.

2. Criteria Exclusion

Article issued if:

- a. Not relevant to the IFR topic or the value of the company.
- b. Not available text complete.
- c. It is an editorial, commentary, short report, or non-research article.
- d. Not listed a clear research methodology.
- e. It is a duplication of other publications.

5) Selection Process Literature (PRISMA)

Selection of literature done through four stage main according to PRISMA 2020:

1. Identification

- a. Total articles found: 563 articles.
- b. Duplicate articles deleted: 153 articles.

2. Screening

- a. Remaining articles: 410 articles.
- b. Filtered based on title and abstract.
- c. Article is not relevant, issued: 317 articles.

3. Eligibility

- a. Full-text articles evaluated: 93 articles.
- b. The article does not meet the requirements. Eligibility: 57 articles.

4. Inclusion

Articles used in the analysis: 36 articles.

6) Data collection technique

Data collected through:

- a. Download article from scientific databases,
- b. Recording (author, year, journal, method, variables),
- c. Extraction-related research results: ifr determinants, ifr quality, and value of the company.

Data was later encoded using the thematic approach analysis.

7) Data Analysis Techniques

The study used three technique analysis:

a) Analysis Thematic Analysis

Referring to Braun & Clarke, the analysis was done through six stages:

1. Data familiarization.
2. Compilation code beginning.

3. Search theme.
4. Review theme.
5. Naming theme.
6. Reporting results.

Findings produce three theme big:

- (1) IFR determinants,
- (2) Implementation and quality of IFR,
- (3) The impact of IFR on mark company.

b) Analysis Cluster Analysis

Used to identify connectedness between themes and build the structure of the IFR relationship with other variables. Analysis results show three main:

1. IFR Determinants.
2. IFR Implementation.
3. Impact of IFR.

Dendograms are used to visualize connection the.

c) Synthesis Narrative (Narrative Synthesis)

Synthesis done to:

1. Compare findings between studies,
2. identify pattern general and inconsistencies,
3. formulate an interpretation comprehensive to all over literature.

8) Validity and Credibility of Data

Validity guarded through:

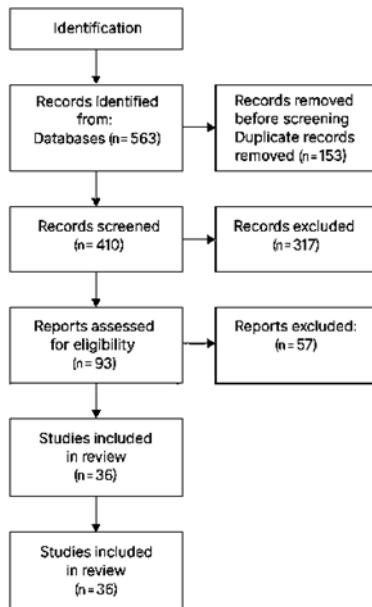
- 1) Use of scientific databases is reputable,
- 2) Procedure selection transparent prism,
- 3) Verification of cross findings between studies,
- 4) Recording systematically through thematic coding.

RESULTS AND DISCUSSION

Results

Research Design

This research uses a systematic literature review (SLR) approach, which follows the PRISMA 2020 guide. This approach is used to identify, evaluate, and synthesize previous research findings related to *Internet Financial Reporting (IFR)*, the factors IFR determinants, and their impacts to mark company. The purpose of SLR is to obtain a comprehensive about development of IFR research in general, international and national.

**Figure 1.** Research Design.

PRISMA (*Preferred Reporting Items for Systematic Reviews and Meta-Analyses*) Flow Diagram depicts the stages of selecting studies in a systematic way, starting from the identification beginning until the final determination of article inclusion in the study. This diagram shows four stage Main: Identification, Screening, Eligibility, and Inclusion.

1. Identification Stage

Initially, a total of 563 articles were identified through the database. This number is the overall potential number of articles relevant with research topic. Next, done deletion duplication, so: 153 articles deleted, because of duplication before the screening process.

After this elimination, there are 410 articles remaining to enter the screening stage.

2. Screening Stage

At this stage, all 410 articles were filtered based on:

- 1) Relevance title,
- 2) Compliance abstract,
- 3) Research themes related to internet financial reporting (ifr), value company, or factor determinant disclosure.

Screening results show: 317 articles removed, because they are irrelevant to the topic or are outside the scope of the study.

So that leaves: 93 articles to be assessed its eligibility.

3. Stage (Feasibility)

At this stage, 93 articles were evaluated based on:

- 1) Full-text availability,
- 2) Compliance research methods,
- 3) Quality academic,
- 4) Relevance deep with the purpose of the literature review.

From the results evaluation: 57 articles were excluded because it does not meet the requirements of the eligibility, such as inappropriate methods, irrelevant data, or low research quality.

So that leaves: 36 articles that actually fulfil the criteria.

4. Inclusion Stage

Stage end shows that 36 articles were finally included in the systematic review. These articles are used as a base formation:

- 1) analysis thematic,
- 2) cluster analysis,
- 3) synthesis of literature,
- 4) and the preparation framework theoretical research.

The PRISMA diagram confirms that the selection process was done in a transparent and systematic manner to ensure that only studies of high quality and relevance were included in the study.

Table 1. PRISMA Number Summary.

Stage	Amount
Identified	563
Duplicate removed	153
Screened	410
Excluded (screening)	317
Full-text assessed	93
Excluded (eligibility)	57
Included in review	36

Search Strategy Literature

Search process done in a systematic manner through several academic databases, international and national, such as:

- a) Scopus.
- b) Web of Science.
- c) Science Direct.
- d) Emerald Insight.
- e) Springer Link.
- f) Google Scholar.
- g) Garuda/Portal Indonesia.

Keywords search formulated using Boolean operators:

Keywords main:

- “*Internet Financial Reporting.*”
- “*Corporate Internet Reporting.*”
- “*Firm Value.*”
- “*Financial Performance.*”

Example search string:

(“internet financial reporting” OR “corporate internet reporting”), (“firm value” OR “company value” OR “performance”) and (determinants OR factors OR disclosure). Search done for the article speaking English and Indonesian, with the year range not limited, so that all IFR research developments can be analyzed.

Criteria Inclusion and Exclusion

a. Criteria Inclusion

Articles included if they fulfil:

1. In the form of journal articles, scientific, or academic research reports.
2. Discussing IFR, IFR determinants, IFR quality, or its impact on the market company.
3. Using the method empirical (quantitative/qualitative/mixed methods).
4. Full text available.
5. Written in English or Indonesian.

b. Criteria Exclusion

Article issued if:

1. Not relevant to the IFR topic or value company.
2. Only in the form of commentary, editorial, or non-research paper.
3. not available.
4. Duplication from the same article in different databases.
5. Research data cannot be verified or does not have a clear methodology.

Selection Process (PRISMA Stages)

The selection article is done through four main sections:

1) Identification

- a) Total articles identified from the entire database: 563 studies.
- b) Duplicate articles removed: 153 studies.

Articles entered the screening stage: 410 studies.

2) Screening

- a) Filtering based on title, abstract, and relevance methodological.
- b) Articles excluded: 317 studies, due to irrelevance with IFR, the value of the company, or a factor affecting its value.

Articles entering the eligibility stage: 93 studies.

3) Eligibility

- a) Full-text of 93 articles assessed from suitability methods, research context, variables, and data quality.
- b) Excluded articles: 57 studies, because they did not meet the criteria for standard eligibility.

The article meets the criteria for inclusion: 36 studies.

4) Inclusion. Total studies included in the systematic review: 36 studies (international & national).

Studies this is what then further analyzed in thematic analysis, cluster analysis, and synthesis of literature.

Evaluation Study Quality (Quality Assessment)

Evaluation quality is done using the following criteria:

Rated aspect:

1. Clarity of research purposes.
2. Quality methodology.
3. Validity and reliability of data.
4. Transparency technique analysis.
5. Compliance results with the objective.
6. Research contributions.

Every article is given scores using a scale of 0-2:

Score	Category
0	Does not meet the
1	Enough fulfil
2	Fulfil well

Articles with a minimum score ≥ 6 (out of a total of 12) were included in the review.

Data Synthesis and Analysis

Studies that meet the requirements are analyzed using:

1. Thematic Analysis (Braun & Clarke).
2. Cluster Analysis.
3. Visualization (PRISMA diagram, dendrogram, thematic map).

This process produces three main:

1. IFR Determinants.
2. IFR implementation & quality.
3. The impact of IFR on Market Company.

PRISMA Flow Summary (Textual Version)

Identification:

1. Records identified: 563.
2. Duplicate removed: 153.

Screening:

1. Records screened: 410.
2. Records excluded: 317.

Eligibility:

1. Reports assessed: 93.
2. Reports excluded: 57.

Included:

1. Studies included in review: 36

Narrative Synthesis

Synthesis. This narrative is done to summarize various analyzed research findings through the PRISMA approach, including 36 studies that met the inclusion criteria. The result is presented in three main areas: (1) factor IFR determinants, (2) implementation and quality of IFR, and (3) the impact of IFR on market company and transparency

information. The third theme shows consistent pattern but also shows variations according to country context, industry, and research methodology.

1. Theme 1: Determinants of Internet Financial Reporting (IFR)

The review results show that the characteristics of the company are the most dominant determinant in IFR adoption. Variables like size, company, profitability, leverage, and liquidity appear repeatedly as driving factors, and companies are more open in disclosing information via the internet. Larger companies that have strong financial performance tend to use IFR as a means of communication externally to build credibility and increase investor confidence.

Findings from international research, [2] and national research like [10] is consistent and show that the size of the company is the most stable variable that influences the level of IFR disclosure. Profitability was also found have a significant influence in many studies because more profitable companies have greater incentives to deliver information positive to the public.

Apart from internal factors, the governance company (governance) becomes another important factor. Studies by [5] and [4] show that role board strategy, board independence, and auditor quality have an effect on adoption and completeness of IFR. Companies with better governance tend to have higher transparency.

Furthermore, several studies have highlighted the role of isomorphic forces or pressure institutional pressure from regulators, the accounting profession, as well as practice imitation (mimesis) of company big found participate push IFR implementation, especially in developing countries such as Uganda, Egypt, and Jordan.

2. Theme 2: IFR Implementation and Quality

The second theme focuses on how the company presents IFR and the extent to which the quality of reporting. The studies in the review found that IFR implementation varies greatly, both between countries and between industries.

developing countries like Egypt and Jordan show that IFR usage has increased; however, the disclosure is still limited. Factors such as the availability of internet infrastructure, the capacity of the technology company, and the expertise of the source Power man become obstacles in delivering quality information.

National research, such as [7], [15], and [13] emphasized that Still Lots companies that have not optimized IFR, especially related to:

- a) Completeness of financial report content,
- b) Accuracy time publications,
- c) Feature website technology, and
- d) Support user (user support).

This shows that even though IFR is getting general applied, quality implementation is not yet uniform and still needs improvements so that the information presented is truly relevant and reliable.

3. Theme 3: Impact of IFR on Corporate Value and Transparency Information

Synthesis findings studies show that IFR generally has a positive to mark company, both measured with Tobin's Q, stock returns, and investor perception. IFR increases

access to information, reduce asymmetry information, and strengthen signal positive about the performance of the company.

Some Indonesian studies, such as [8], [9], and [7] show that the use of IFR increases the value company as investors respond positive greater openness. In fact, IFR was found capable moderate connection between financial performance and the value of the company, thus strengthening the influence of profitability to improvement mark company.

However, not all studies find a significant relationship. Studies such as Kusmawati & Sukarmanto noted that the quality of IFR does not always have a direct impact on market response. Some investors still rely on physical financial reports or do not look at the company website as a source of information. Variations in these results show that the impact of IFR is greatly influenced by the quality of disclosure, the industry conditions, and the culture access information in a country.

Synthesis Overall

Of the three themes mentioned, it can be concluded that:

1. Determination of IFR is a multidimensional process, influenced by internal company factors, governance, and institutional.
2. IFR implementation is not yet uniform, with different qualities between companies and countries.
3. IFR tends to increase the value of companies, especially when used consistently and with quality.
4. Transparency information is benefit main IFR, at the same time strengthening the connection between financial performance and the value of the company.

In a way, overall, IFR is functioning as a strategic tool to build market confidence and increased visibility company's visibility.

Cluster Analysis

The following cluster analysis groups themes based on the similarity concept, relationship, empirical, and co-occurrence in research. The results consist of 3 main clusters and subclusters, as is common in NVivo.

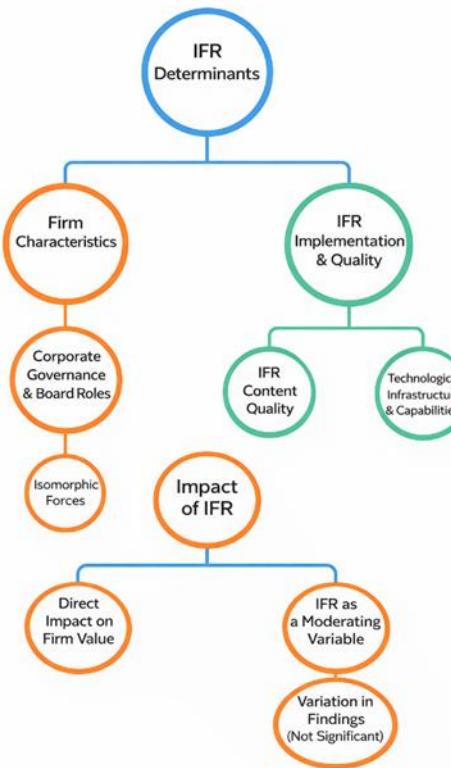


Figure 2. Cluster analysis.

1. Cluster 1: Determinants of IFR (Dominant Cluster)

Themes that have the strongest association in the literature.

Subcluster 1A – Company Characteristics

Containing the most frequent internal company variables appear as IFR determinants:

- Size of the company.
- Profitability.
- Leverage.
- Liquidity.
- Age company.
- Ownership public.

Reasons for grouping:

International and national research show that this factor is the most consistent influence on the use of IFR [2], [10], [16], [17], [7].

Subcluster 1B – Board Performance & Governance, Includes:

- Strategic role of the board.
- Supervisory role.
- Board independence.
- The role of the audit committee.
- Types of auditors.

Connection with subcluster 1A:

Good governance tends to be found in large and profitable organizations, so that both subclusters often appear together in research.

Subcluster 1C – Isomorphic Forces (Pressure Institutional)

Including:

- a) Coercive (regulation, obligation) government)
- b) Normative (profession, standards)
- c) Mimesis (imitating) other companies)

Grouping based on findings:

This factor influences the adoption of IFR, especially in developing countries such as Uganda, Egypt, and Jordan. All three are in one large cluster because everything works as the main driver of IFR.

2. Cluster 2: IFR Quality & Infrastructure Reporting

This cluster focuses on how the company implements IFR, not the factors that influence it.

Subcluster 2A – Quality IFR Disclosure

Code in subcluster:

- 1) Completeness of content.
- 2) Accuracy time.
- 3) Website technology.
- 4) User support.
- 5) Disclosure index.

Literature supporters:

Studies of Egypt, Jordan, and Indonesia are numerous measure IFR quality through an index [7], [4], [15].

Subcluster 2B – Infrastructure & Readiness Technology, Includes:

- a) Website availability.
- b) Accessibility.
- c) National internet infrastructure.
- d) HR Competence.

Reason for grouping: The quality of IFR is greatly influenced by the technology available, particularly in developing countries.

3. Cluster 3: Impact of IFR on Firm Value

This cluster consists of related themes with IFR outputs or consequences.

Subcluster 3A – Direct Impact

- 1) IFR increases the value of the company.
- 2) IFR is not significant (varies).
- 3) IFR strengthens the signal to investors.

Example study: [7], [8], [9].

Subcluster 3B – IFR as Variables Moderation

- 1) Strengthen influence profitability → value company.
- 2) Strengthen public ownership → transparency information.
- 3) Not always strengthening the variables' profitability in all contexts.

Example study: Rio [14], [7].

Subcluster 3C – Market Response

- 1) The impact of IFR on trade volume.
- 2) Investor reaction.
- 3) Differences in response across sectors are different.

Example study: Kusmawati & Sukarmanto.

Summary of All Cluster Relationships

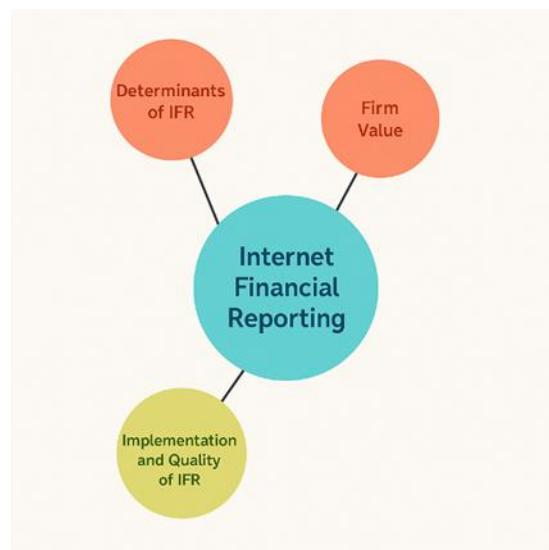


Figure 3. Thematic Map.

Visual Thematic Map Description

The thematic map image display structure of the main thing that is obtained from the thematic analysis of 36 articles submitted for review. Visualization. This shows how themes key each other, and how the overall study about *Internet Financial Reporting (IFR)* can be understood through the conceptual link between themes.

In the section in the middle of the diagram, there is one big circle colored blue with the words:

“Internet Financial Reporting” (Core Theme)

This core theme describe focus main focus of research, namely IFR as practice reporting finance internet -based which becomes the center of all discussion, analysis variables, as well as the dynamics of transparency of the company.

From this core theme, there are three circle thematic connected supporters with connecting lines (node-links), each representing a node theme. The results of the *coding* and *theme refinement* process. The third theme is:

1. Determinants of IFR (IFR Determinants)

The circle colored orange on the top left side show theme about factors that influence a company in implementing IFR. This theme includes:

- 1) characteristics of the company (size, profitability, leverage, liquidity),
- 2) governance companies and the role of the board,
- 3) pressure institutional (coercive, normative, and mimetic),

4) intellectual capital.

This theme considered as factor drivers that explain why IFR is implemented in various context industry and the country.

2. Firm Value

Circle orange on the side right on show theme about the impact of IFR on mark company. This theme includes:

- 1) how IFR improves mark company through subtraction asymmetry information,
- 2) investor response to digital openness,
- 3) IFR as mechanism signal (*signaling mechanism*),
- 4) IFR as variables moderation connection performance finance – value company.

This theme put IFR as consequences that result change market perceptions and behavior.

3. Implementation and Quality of IFR

Circle yellow greenish in parts lower show theme about how IFR is implemented, including:

- 1) Completeness content report finance,
- 2) Accuracy time publications,
- 3) Company website technology,
- 4) Accessibility and experience users,
- 5) The gap in quality between the company or country.

This theme acts as a bridge between IFR determinants and the impact of IFR on mark company.

Interpretation of Theme Maps Overall

The visual thematic map shows that:

1. IFR is the central

All discussions in literature flow from and to the IFR concept.

2. Determinants → Implementation → Firm Value

Relationship flow show:

- 1) IFR determinants influence IFR implementation/quality,
- 2) The implementation of IFR determines the size impact to mark company.

3. Third theme No Stand Alone

Every theme has its own strong conceptual:

- a) IFR determinants affect how IFR is implemented.
- b) IFR implementation mediates or moderate IFR relationship with mark company.
- c) Company values are the outcome of the second theme previously.

This is appropriate with Agency theory, Signaling theory, and Institutional Theory, which are all the same underlying IFR research.

IFR Visual Cluster Analysis Dendrogram

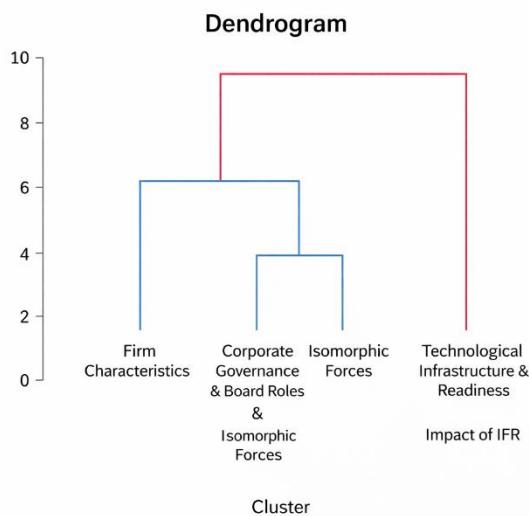


Figure 4. IFR Visual Cluster Analysis Dendrogram.

The dendrogram image shows the connection between the main things that appear from the results analysis of the literature related to *Internet Financial Reporting (IFR)*. The dendrogram map proximity conceptual between theme based on the emergence and interrelationship of ideas in previous research. In general, overall, the dendrogram produces three main clusters, namely cluster IFR determinants, cluster IFR implementation, and cluster the impact of IFR on the mark company. Here is the description:

1. Cluster First: IFR Determinant (Closest Cluster)

 closely related themes in a way conceptual:

- a) Company Characteristics (including size, profitability, leverage, liquidity).
- b) Isomorphic Board & Governance (board role, oversight, auditors, governance).

 Second This theme has the shortest distance in the dendrogram, showing that a big part big literature emphasize that: *Internal company factors and governance is the most consistent determinant in explaining IFR adoption*. Both of them. Then join with the theme:

- c) Isomorphic Forces (i.e., pressure coercive, normative, and mimetic)

 This placement depicts that IFR practices are not only influenced by internal factors, but also by external factors, especially in developing countries.

2. Cluster Second: Infrastructure & Readiness Technology

 Next theme – which is in the cluster alone – is:

- a. Infrastructure & Readiness Technology

 This cluster is separate Because This variable is not always directly related to the characteristics of the company or governance, but more external condition external like:

- a) Company website quality.
- b) Ability technology information.
- c) Convenient access to information by users.

Dendrogram places this theme as a factor that complements the influence of the quality and success of IFR implementation.

3. Cluster Third: The Impact of IFR on Company Value

The IFR Impact Theme is at the furthest distance from other clusters. This shows that: *The impact of IFR is consequences or output of IFR practice, not a determinant or driver.* Therefore, its position at the end of the dendrogram confirms that:

- 1) The determinants of IFR and IFR quality are in the input/process phase,
- 2) Whereas the impact of IFR is the result. The ending is influenced by both previous clusters.

4. Hierarchical Relationship Overview (Visual Interpretation)

If explained in a narrative, the relationship between the themes in the dendrogram are as follows:

- a) the closest company characteristics to the relationship with the Board & Governance.
- b) Both of them. Then join with Isomorphic Forces as a factor institutional.
- c) After that, the cluster. This IFR determinant is connected with Infrastructure & Technology, which plays a role support IFR implementation.
- d) At the furthest position, there is the impact of IFR, which results from the combination of all previous factors.

5. Descriptive Dendrogram Conclusion

From the dendrogram, it can be concluded that:

- a) There is a very strong relationship between characteristics of companies, governance, and pressure institutions as IFR determinants.
- b) Implementation of IFR requires adequate technology, thus forming a cluster alone.
- c) The impact of IFR is the result of the end that is furthest away because it is not a determinant in one category, but rather a consequence of the whole process.

Research Gap

From the literature, there are several *research gaps*:

1. The role of ESG and digital sustainability is yet to be thoroughly tested in Indonesia.
2. There are not many studies that measure IFR quality in a general, comprehensive way (content, technology, interactivity).
3. The influence of social media & digital communication strategies is still seldom tested on the Indonesian market.
4. Lack of longitudinal study to see change IFR practices from time to time.

Discussion

This discussion describes and interprets *Systematic Literature Review (SLR)* research results about *Internet Financial Reporting (IFR)*, the factors that influence it, and the impact to mark company. After analyzing 36 articles that passed the PRISMA selection, this study produced three main factors, namely: (1) IFR determinants, (2) implementation and quality of IFR, and (3) the impact of IFR on mark company. Third theme, the form pattern consists of consistent and explainable relationships through the following discussion.

1. Determinants of IFR: Interaction of Internal, External, and Governance Factors

Analysis results show that IFR adoption is results interaction between internal company factors and external. Companies that have a larger size, high leverage, low leverage, and good liquidity are more likely to implement IFR extensively. This finding supports the theory of *agency* and *signaling*, which states that a company with good financial condition is more encouraged to send a positive signal to the market through improving transparent information.

In addition, the quality of governance of companies also appears as an important factor. The role of the board of directors, audit committee, board independence, and the presence of external auditors contribute to better IFR practices. This shows that governance not only affect obedience company's obedience to regulation, but also opens up more space for the implementation of technology information in financial disclosure.

Pressure institutions like the rule government, standards profession, as well as practice imitation to large companies (isomorphism) also strengthen decision companies to implement IFR. Thus, IFR can be viewed as practices that not only grow because of internal needs but also as results from demands for legitimacy.

2. IFR Implementation and Quality: Inequality between Companies and Countries

Another important finding is the presence of inequality in the implementation of IFR between companies and countries. Although IFR has become a global trend, the quality of disclosure Still Not yet evenly, especially in developing countries.

Various studies show that IFR is often applied only as a formality, not as a means of disclosure strategy. Quality reporting is still influenced by:

- a) Completeness report content,
- b) Accuracy of the time publication of financial reports,
- c) Sophisticated website technology,
- d) Ability source Power humans in digital data management,
- e) Adoption rate of the technology information company.

This non-uniformity occurs because lack of regulations special regarding IFR, limitations on digital infrastructure, as well as variations in levels of digital literacy between big and small. Therefore, IFR, even though in a way draft own potential big, in practice Still face challenge significant implementation.

3. Impact of IFR on Firm Value: Significant but Uneven Benefits

Majority studies show that IFR has an effect positive to mark company. The company that discloses online financial information tends to be get better response from investors. IFR can:

- 1) Lower asymmetry information,
- 2) Increase credibility company,
- 3) Strengthen connection between financial performance and value company,
- 4) Increase market confidence.

This finding is reinforced by research showing that IFR is working as mechanism signals, especially when information disclosed quality high and easy accessible. However

Thus, several studies report that IFR does not always have a significant impact on value company. This can happen because:

1. investors have not yet make IFR as source main information,
2. IFR quality is low so it does not provide mark plus,
3. Not yet existence standard IFR standards so that interpretation information varies.
4. behavior in emerging markets still rely more on printed reports or offline information.

With Thus, the impact of IFR on mark companies are greatly influenced by the quality implementation of the IFR itself as well pattern investor behavior in each country.

4. **Connection Third Theme: IFR Integrative Model**

Third theme each other connected and formed an integrative model:

1. Determination → IFR Implementation. Internal factors, governance, and pressure external determine how much far and how well IFR is implemented.
2. Implementation → Company Value. IFR quality becomes connector between motivation companies to be transparent and investor perception of company.
3. Determination of IFR → Company Value (through IFR). In many study, IFR plays a role as variables mediation or moderation that strengthens influence profitability to mark company.

This model shows that IFR does not stand alone, but is tool strategic linking characteristics company with market perception.

5. **Implications Theoretical**

Discussion results give contribution to theory:

- 1) Agency Theory: IFR reduces conflict agent through more transparent disclosure.
- 2) Signaling Theory: Companies use IFR to send signal positive to the market.
- 3) Institutional Theory: IFR adoption is influenced by pressure external and institutional norms.

Third theory the each other complete in explaining IFR dynamics in various context.

6. **Implications Practical**

1. Companies need to improve the quality of IFR as means of communication strategy and transparency.
2. Regulators need to consider compilation guidelines for the national IFR to be more uniform and easier to measure.

Investors need to adapt their analysis strategies to develop digital reporting.

CONCLUSION

Fundamental Finding: Based on a systematic review of 36 studies that met the PRISMA criteria, it can be concluded that Internet Financial Reporting (IFR) is instrument strategic that plays an important role in increasing transparency, accountability, and values company. Synthesis results from the literature show three main group findings main mutual related. First, the determinant of IFR is influenced by a combination of internal and external factors of the company. Internal factors such as company, profitability, leverage, liquidity, and governance (role of the board, audit quality, and

structure), ownership has proven become driver main driver of IFR adoption. External factors, such as pressure institutional (coercive, normative, and mimetic), also play an important role, especially in developing countries. Findings This confirms that IFR is not only is decision technical decision, but also part of the communication strategy and the legitimacy of the company. Third, IFR in general general give impact positive to mark company. Disclosure internet -based increase accessibility to information, reduce asymmetry information, and provide signal to investors. Some research also shows that IFR is capable strengthen connection between performance finance and a value company, so that makes IFR a mechanism for moderation. **Implication:** In a way, overall, this systematic review concludes that IFR has the potential give benefit big for companies, investors, and regulators. IFR is not only a tool delivery information, but also a strategy for building credibility and increase mark company. **Limitation:** However, there are variations in several studies that show that the impact of IFR is not always significant, which is likely due to suboptimal disclosure or investor behavior that still depends on the report's physique. **Future Research:** Second, the implementation and quality of IFR vary widely. between companies and countries. Differences are seen in the completeness of the content report, finance, accuracy, time of publication, use of technology, and website features. Most studies in developing countries show that IFR quality is still low consequence limitations, infrastructure, capabilities, technology, and not yet existence standard standard implementation of IFR. This shows that effort repair is still required for IFR to be able to function optimally as a means of modern disclosure. Research can furthermore study the role of IFR with consideration of the latest development technology, such as social media, big data integration, and XBRL-based digital reporting, so that it can give a greater understanding and a comprehensive about evolution of practice reporting modern finance.

RECOMMENDATION

Recommendation Study

1. Recommendation For Study Furthermore

Based on literature review findings, some gap research gaps still exist can explored:

a. Expand Variables Studied

Most of the studies only focus on size company, profitability, leverage, and liquidity as IFR determinants. Future studies can enter variables new like:

- a) level adoption digital technology,
- b) digital literacy management,
- c) quality of governance based technology,
- d) XBRL usage and next-generation digital reporting latest,
- e) the role of social media as IFR expansion.

This matter important For catch dynamics reporting modern finance.

b. Using More Analysis Methods Various

Almost all IFR research is of a nature quantitative regression. Research furthermore can use:

- a) *machine learning* For predict IFR adoption,
- b) *text mining* For evaluate quality website disclosure,
- c) *mixed methods* with interview management For dig motivation IFR adoption,
- d) *data panel* term long For see effectiveness of IFR in general dynamic.
- b. Analyze IFR Quality with More Index Comprehensive

Many IFR indexes are researched previously Still limited. Research upcoming can:

- a) develop IFR based index standard international,
- b) evaluate non- financial content (ESG, risk, strategy),
- c) evaluate aspect website design and user experience,
- d) combining IFR + social media company.

c. Test Cross-Industry and Cross-Country Differences

IFR is heavily influenced context regulation and technology. Research advanced can:

- a) Compare industry technology vs. traditional industry,
- b) Comparing developed vs. developing countries,
- c) Test influence culture national to digital transparency.

2. Recommendation For Practitioner / Company

In order to optimally benefit from IFR, the company recommended:

a. Increase Website Quality and IFR Disclosure

Companies need to:

- 1) Speed up update report finance,
- 2) Expand content(financial & non- financial),
- 3) Ensure website accessibility (mobile-friendly),
- 4) Include easy navigation understood user.

b. Strengthening Corporate Governance

Based on research, good governance influence the IFR level. Companies can:

- 1) strengthen role audit committee,
- 2) increase internal transparency,
- 3) ensure independent auditors quality tall.

c. Adopt Technology Modern Reporting

Companies can start use:

- 1) XBRL,
- 2) reporting real-time data based,
- 3) digital investor relations dashboard.

3. Recommendation for Regulators/Government

The regulator has role important in increase national IFR adoption.

a. Set IFR National Standard

Regulators can make guidelines mandatory/optional related:

- a) IFR format,
- b) minimum disclosure items,
- c) standard website quality for reporting finance.

b. Give Training and Incentives

IFR training for issuers and incentives like:

- a) reporting website certification finance,
- b) award digital transparency,
- c) incentive listing fee for companies that implement quality IFR tall.

c. Integrating IFR with National Digital System

Example: integration with OJK, IDX, taxation, or system reporting government other.

4. Recommendation For Academics

Academics can:

- 1) Develop instrument more IFR measurements latest,
- 2) Enter IFR topic to in curriculum digital accounting,

Do research collaborative cross- country for enrich global knowledge of IFR.

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