Towards an Integrated Reporting Taxonomy in Europe – An analysis of 40 annual corporate reports regarding their value creation disclosures

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ABSTRACT: After the financial crisis of 2008/2009 non-financial reporting information became in the spotlight of investors. Integrated reporting (IR) facilitates management control and supports stakeholder relations management. IR combines financial accounting with non-financial sustainability and corporate governance related issues with the aim to enhance the decision usefulness of modern business re-porting. Although there has been steady growth in IR (Eccles and Saltzman, 2011), there are a limited number of empirical studies compared to theoretical studies. This study is an empirical study on Integrated Reporting disclosures, which focus for the first time with the sample on the European market. We will briefly introduce the IR research agenda. We will provide an overview about the evolution of IR.

KEYWORDS: Integrated Reporting, Empirical Study, Qualitative study, External Disclosures

RESEARCH FINDINGS/ INSIGHTS: This research intend to provide a better understanding of the value creation of voluntary integrated reporting disclosures of European-based corporations.

METHODLOGY: A single qualitative-method approach is followed, which includes content analysis.

1. Introduction

In the last years, investors increasingly request additional information on corporates, not only due to the financial crisis but also reflecting different stakeholder requirements (Busco, 2013). “Traditional annual reports” might have failed to adapt to an increasing dynamic environment, as they do not manage to provide a complete picture about an organization’s economic progress (EY, 2014).

One form of corporate reports is the Integrated Report, which intends to combine and connect financial with non-financial information within one document. This follows also the very well-known concept of the “Balances Scorecard” from Kaplan and Norton (1995). Integrated Reporting not only enable companies to disclose financial and non-financial information but also making transparent how value is created. “Integrated Reporting represents the cutting-edge and probably the future of corporate reporting worldwide”(Eccles and Saltzman, 2011).

To analyse the value creation disclosure, an evaluation catalogue with 24 questions is developed based on the IIRCs expectations regarding the value creation process. Additionally, a scoring system the “Value Creation Disclosure Score” is created.

2. Design of Research

Methodology encompasses analysing the methods applied for a set of study for a theoretical and systematic purpose (Franklin, 2012). Research represents the search for knowledge (Kothari, 2004). Assessment of the methods implemented in management research plays an important role. This relates to the fact that the reliability and relevance of research is also strongly impacted by the choice of methods demonstrating to be robust and rigorous (Scandura and Williams, 2000).

A content analysis will be applied. A deductive category derivation based on IIRC’s suggestions is performed. Based on those categories, which will form the evaluation catalogue clusters considering analogies, differences and similar behaviours in the annual reporting of different European companies are identified.

The research question is what is the value creation of integrated reporting disclosures of European-based corporations.

Research question 1: Do companies follow the expectations of the <IR> Framework regarding the information that facilitates the assessment of "the value creation process"?

Research question 2 and 3 has the aim to identify overlaps between/across sectors and possibilities of harmonization.

The methodology of this research incorporates the underpinnings of economics as an "application-oriented social economy" (Ulrich, 1984). According to this interpretation, practical action in enterprises is the knowledge perspective for business economics. The aim is to explore useable knowledge for leadership and management that enables the optimal contribution to solving real business cases and issues (Kagelmann, 2013).

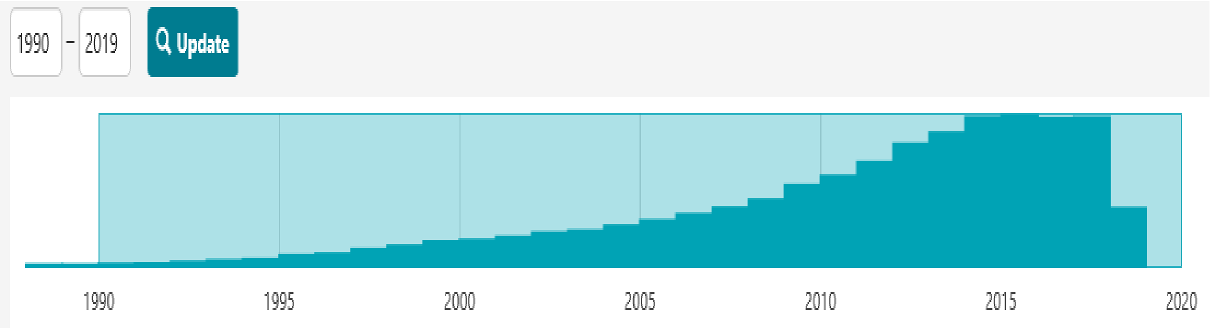
Economic research as an interdisciplinary branch of science frequently perform surveys on methods, concepts and rules critically and modifies them to some extent. This can only be done in connection with theory-based statements and practical knowledge (Ulrich, 1984). While fundamental research focus on theory-related questions, research problems in applied sciences arise from the practical context. Therefore, theory and practice are closely linked (Ulrich, 1984). This applies particularly to the agile methodology and organizations, as the literature review will demonstrate.

3. Related Literature and Hypothesis development

Based on a preliminary search on the Aalto learning centre with the criteria "international articles", "Peer reviewed", "full text", e-Article and the search topic "Integrated Reporting" the following graphical development of the number of articles between 1990 and 2019 can be observed (Total 337,756).

The peak of the number of publications was reached 2015, while since then the number of publications decreased with regard to the Integrated reporting as research topic.

Figure 1.1: Development of publications in peer-reviewed Journals on Integrated Reporting



Source: Aalto learning centre Search for literature on Integrated Reporting 1990 - 2019

While the dominant numbers of research articles explores the theory behind IR only 44 empirical studies on IR were since 1990 made public (Velte, 2017). Empirical studies on IR are only possible once companies implement integrated reporting practices. Besides the pressure to adapt business practices to consider the growing public awareness of environmental, social and governance (ESG) issues (Kolk, 2008), regulation also changed. Integrated Reporting was very much supported by laws and regulations e.g. Management Reporting GAS 5 in Germany, which recommended to include non-financial indicators in the Management Report of the Financial Report, which was based on a EU directive. Since 2015 more companies followed integrated reporting and that is why more empirical research became possible.

Dumay et al. have identified the following approaches in the current literature:

(1) Case/field study/interviews (van Bommel, 2014, Dumay and Dai, 2014)

(2) Content analysis/historical analysis (Wild and van Staden, 2013)

(3) Surveys/questionnaire/other empirical (Churet and Eccles, 2014, García-Sánchez et al., 2013)

(4) Commentary/normative/policy (Cheng et al., 2014, Tweedie, 2014)

(5) Literature reviews (Dumay et al., 2016)

This paper adds an empirical research in the field of Integrated Reporting to the already existing literature, while the focus is here on European capital market, while previous empirical research had a global, US or South African sample view (Velte, 2017).

Due to the limitations of traditional financial reporting and the complexities within sustainability reporting the business and academic shows an increasing interest into the evolving so called "Integrated Reporting" since 2009. IR allows companies to report their financial and sustainability performance, responsibility issues, including social, economic and environmental aspects within one report. In 2015 Eccles et al. have examined the evolution of Integrated Reporting over the last years and have identified four main phases regarding its concept, application and development:

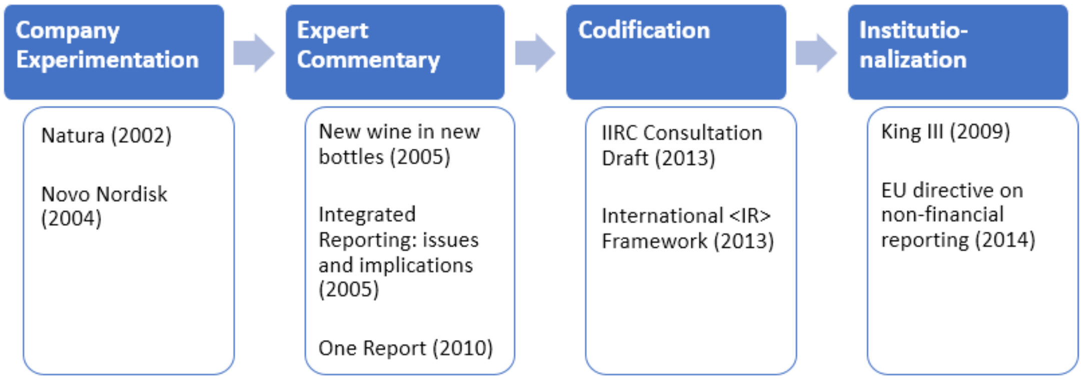


Figure 1: The evolution of Integrated Reporting

(1) *Company experimentation:* In the early 2000s companies started to combine financial and non-financial data in one report, as for example Novo Nordisk and Natura.

(2) *Expert judgement*: Based on the experience of those companies' consultants, academics and expert started to think about Integrated Reports since 2005.

(3) *Codification:* Principles and several standards emerged due to need for a common framework accompanied with an increasing interest of researchers in the field.

(4) *Institutionalization*: Increasing interest of policy makers and organizations towards the adoption of Integrated Reporting.(Eccles et al., 2015)

Perego et al. (2016) argue that IR is still a fast-emerging field, and that its development as well as the successful implementation are challenging. Based on a literature review and interviews with experts they identified the following key themes:

- Integrated Reporting is a diverse and incoherent field
- A weak understanding of IR exists
- Progress despite different challenges
- Need for harmonization in the field (Perego et al., 2016)

Those findings are supported by Dumay et al. (2016) which also prepared a comprehensive literature review and argue that there is a weak understanding of the transformation of the six capitals, the linkages between them and the impact on society and environment.
When thinking about IR one must differentiate between three existing approaches in the field, which are slightly different, for example in their direction or presentation.31

(1) "King III" (King Report on Governance for South Africa, (King, 2009)): Demands the holistic and integrated representation of a company's financial and sustainability performance. The aim is to achieve an effective reporting about the goals and strategies of a company and to align them with the interests of its stakeholders. It should benefit all stakeholders and can take the form of a single or dual report.

(2) "One Report": This approach was introduced by Eccles & Krzus 2010 in their book "One Report. Integrated Reporting for a Sustainable Strategy". The approach, by some researchers also called the US version of Integrated Reporting, wants to establish the Integrated Reporting of financial and nonfinancial information in one report (Eccles and Krzus, 2010). Moreover, the report should present the information in a way that shows how they impact each other.

(3) "Discussion Paper on Integrated Reporting (<IR>)": The "International Integrated Reporting Council" (IIRC) was founded in 2010, which issued its first discussion paper on <IR> in 2011. With the intent to meet the needs of the 21s century by showing the interdependencies between the financial, management commentary and sustainability reporting and how they create value. Thereby supporting companies in communicating broad information regarding the long-term prospects to investors and

other stakeholders in a concise, clear structured, connected and comparable format. In the form of a single Integrated Report as primary report that replaces existing variety of required reports (Busco et al., 2013).

For the purpose of this paper the next chapters will mainly focus and critically assess on the current research about Integrated Reporting as originally defined by the IIRC's discussion paper on <IR>, especially regarding the value creation process, and the discussion about its future role in corporate reporting.

4. Data Collection and Data results

5.1 Qualitative Study

There, the author will present how the companies in the sample performed overall in the analysis regarding their value creation disclosure and thereby already answer Research question 1 (Do companies follow the expectations of the <IR> Framework regarding the information that facilitates the assessment of "the value creation process"?). The first Research question of this thesis can be answered by the analysis of all Key Questions (KQ) defined in the evaluation catalogue at once, since each of the 10 Key Questions tries to identify if a company has accomplished/not accomplished the expectations of the IIRC regarding the different topics presented previously. The performance in all Key Questions together can be reviewed to decide if a sample company in general follows the <IR> Framework regarding the description of the value creation process. Furthermore, it is possible to say to which extend in general the sample follows the expectations.

The previously described Value Creation Disclosure Scoring system allows that in an easily understandable way, as one can see in the following graph. In the view of the author 30 companies have at least accomplished or even exemplary accomplished the expectation of the IIRC based on the evaluation catalogue. The complete evaluation catalogue and all questions can be found in the appendix. Further comments and information are given in the complete excel sheet.

Since six additional companies at least follow the <IR> Framework to "some extent" it is reasonable to argue that companies follow the expectations of the IIRC, because overall 90% at least meet the expectations to some extent. Anyhow four companies (10%) do not accomplish the defined expectations, what is a bit suspect since all analyzed companies are "IR reporters" in the viewpoint of the IIRC. This could be still true for the complete Integrated Report but maybe not for the part regarding the value creation process. The best achieved score was 0.8 (6x "accomplished" and 4x "exemplary"), while the worst score was 2.3 (2x "not accomplished", 7x "to some extent" and 1x "accomplished").

Score	>1.50	>1.25 - 1.50	1.00 - 1.25	<1.00
Achievement	Not accomplished	To some extent	Accomplished	Exemplary

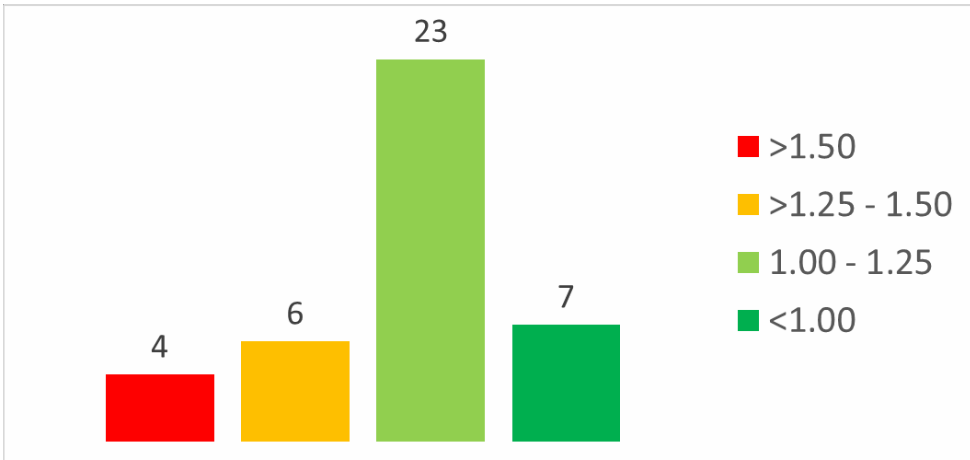


Table 2: Distribution of Value Creation Disclosure Scores

The average Value Creation Disclosure Score of all companies in the sample was 1.19. This can also be seen as an indicator that the companies follow IIRC's expectations. Due to the performed analysis, the author is also able to name 7 exemplary adopters of <IR>. The companies ABN AMRO, BASF, Coco-Cola Hellenic Bottling Company, Enagas, KGMH and UniCredit all received a score lower than 1.0 and are therefore perceived as outstanding reports. In the following, more detailed chapters the author will use also parts of those reports to highlight what makes them exemplary compared to other companies in the sample. For other <IR> reporters or companies that want to adopt <IR>, those reports can be used as role models according to the performed evaluation.

When one analyzes different topics (related Key Questions) within the value creation disclosure separated from each other it is also remarkable that the companies struggle in some topics. This can be seen in the following graph. While the performance in KQ6 and KQ8 seems good, one can see that in KQ4, KQ5, KQ7 and KQ9 at least some companies struggled. In those questions, some companies did not accomplish the expectations according to the authors analysis. Possible reasons for this and what makes some companies outstanding will be described in the following chapters in more detail for every topic.

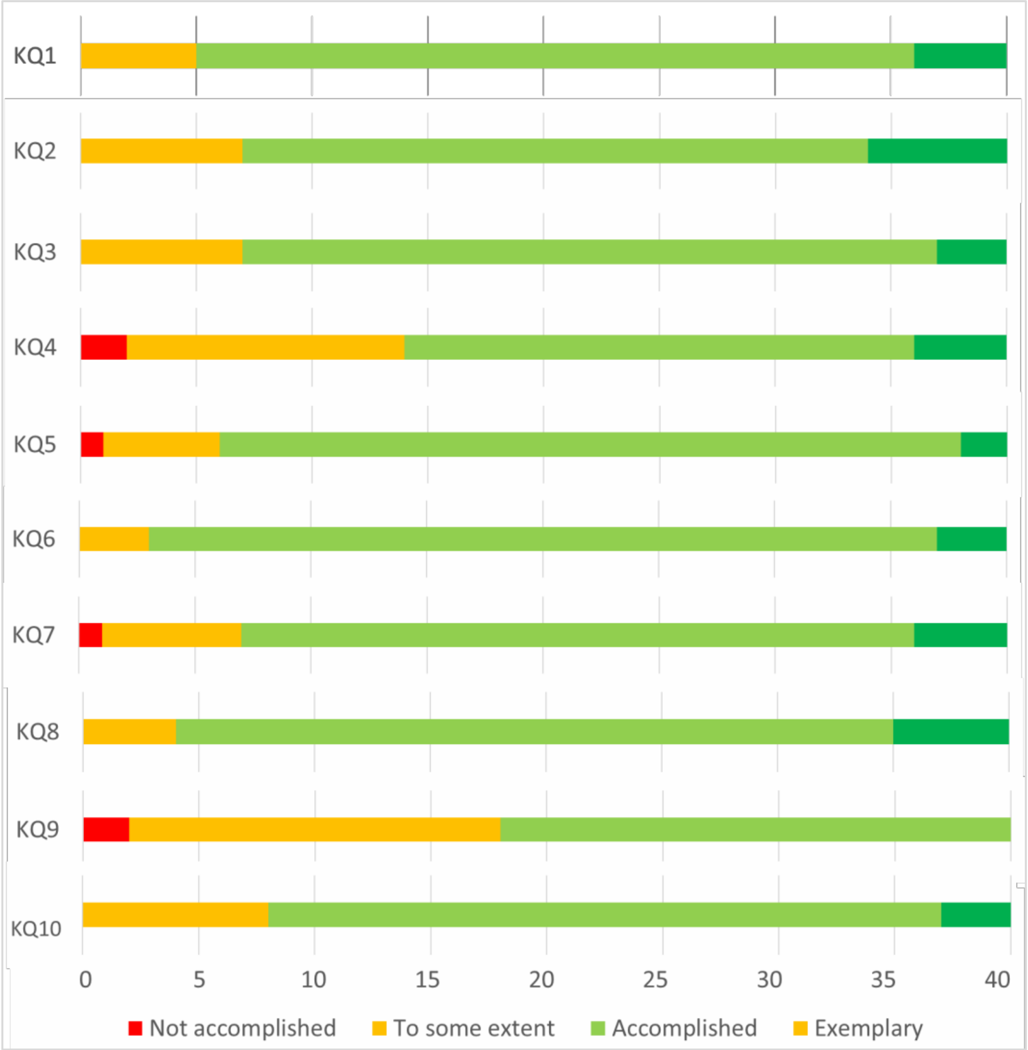


Table 3: Overview of results regarding the value creation disclosure

To get a better understanding in which Key Questions the companies especially struggled, it is worthwhile to look at the average score per topic. In the following graph, one can see that the companies overall had an average score of 1.55 in KQ9, therefore one could argue that it is not accomplished by the sample in general since its above 1.5. KQ9 stands for the topic "Overview about external factors (e.g. external policy, regulation etc.)" and will be discussed in more detail later. Also in KQ4, which deals with the "Management's assessment regarding intended value creation", the sample companies did not accomplish the expectations with an average score of 1.4. On the other hand, the companies performed very well in KQ6 (Governance structure of the organization) and KQ8 (Relationship to various stakeholders) with average scores of 1.04.

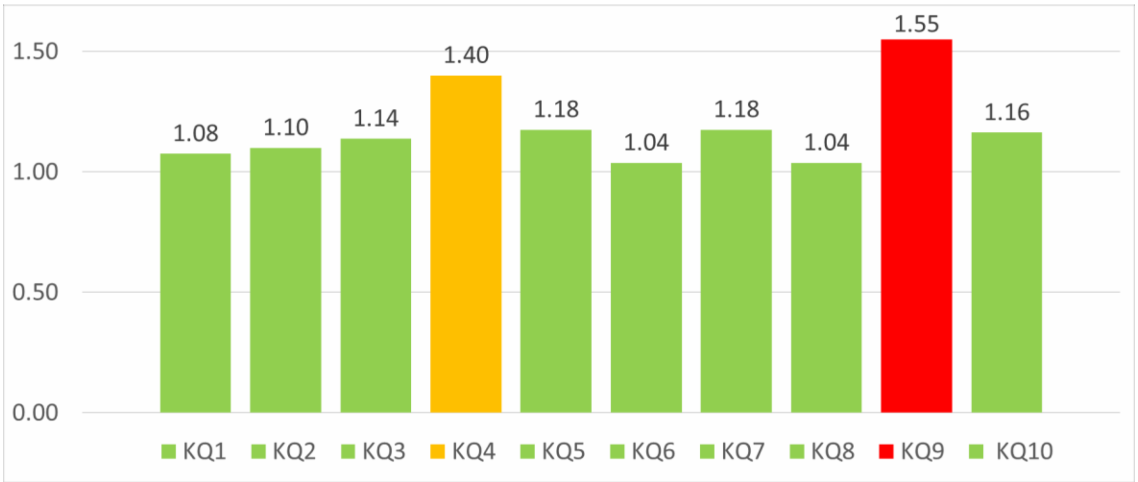


Table 4: Average score per Key Question

Furthermore, the developed scoring system also allows to compare the analyzed sectors. Anyhow this should not be overdone, since some sectors only consist of 3 companies and are therefore highly volatile due to single outliers. In the following graph, one can see that there are quite some differences between the sectors. With an average score of 1.02 the Chemicals sector performed the best, while Telecommunications with an average score of 1.64 performed very poor. The bad performance is due to two companies with total scores of ≥ 2.0 in this sector.

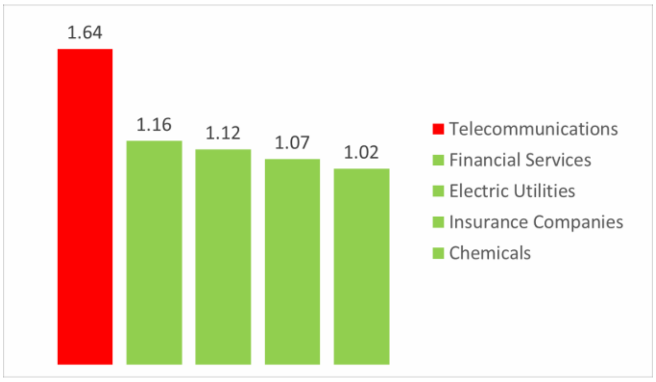


Table 5: Average score per sector

T To sum-up, Research question 1 can be answered more accurately based on the described insights. While 90% of the companies at least achieve the expectations to “some extent”, the detailed analysis reveals that there are noticeable differences between the companies and the different categories.

Anyhow this overview is not able to answer the research questions 2 & 3, which deal more with the “how” of the disclosure and possible overlaps that could allow harmonization. Therefore, the following chapters will go more into detail. This is possible based one the analysis of the Sub-questions which were to a large extent open questions to account for the diverse findings. Also, the detailed figures for the Key Questions will be shown to provide as much transparency as possible.

The description of the business model is highly important to understand how a company wants to create value and which factors, influences, stakeholders etc. need to be considered. Based on the performed analysis the author concludes that all companies have at least "to some extent" met the expectations of the IIRC regarding the disclosure of their business model. Four of the sample companies (10%) even meet the expectations exemplary, please see the following table which provides a short summary of the results in this topic. With an average Value Creation Disclosure Score of 1.08 this topic is the third best in the evaluation.

To receive a better insight into the presentation of the business model the 21 companies that are assigned to the five analyzed sectors were also evaluated based on Sub-questions. In this topic SQ1 was very specific regarding the presentation of the business model. Based on the evaluation the author concludes that 13 companies present their business model verbally and eight as an illustration.

Question	Evaluation				Relevance
	Does the report include a description of the business model including inputs, business activities, outputs and outcomes and links to the organization's strategy?				
	Not accomplished	To some extent	Accomplished	Exemplary	
	0	5	31	4	

SQ1	How is the business model presented?				**RQ2**
	Illustration	Table	Verbal	Other	
	8	0	13	0	

Table 6: Evaluation of the business model

Companies that use an illustration of their business model often illustrated it in a comparable picture to the one offered by the IIRC (please see chapter 3; The value creation process). Companies that were hereby only marked with a "to some extent" often missed a clear connection to their strategy or were just not concise in their presentation, for example by having too much information or more than one type of presentation. Anyhow the presentation of this topic was above average. Companies that were marked here with an "accomplished" mostly provided a concise overview with interesting and important connections to other parts of the value creation process (e.g. the capitals).

Companies that received an "exemplary" in this category were really outstanding in terms of their concise presentation and illustration of connections to their future strategy, business partners or other factors. To show here a role model that could help other <IR> reporters to get some ideas the author will present a short extract from one analyzed annual report.

To receive a deeper insight into the presentation of the business model the 21 companies that are assigned to the five analyzed sectors were also evaluated based on Sub-questions. In this topic SQ2.1 was very specific regarding the presentation of the performance goals and the achievements. SQ2.2 & 2.3 were open questions to find some overlaps within the reports which could be possible points for a harmonization and therefor are relevant for research question 3.

Question	Evaluation				Relevance
	Does the report provide information about the extent to which a company has created value from achieving its strategic objectives?				
	Not accomplished	To some extent	Accomplished	Exemplary	
	0	7	27	6	
SQ2.1	How is the performance evaluated/presented?				RQ2
	Illustration	Table	Verbal	Other	
	13	0	8	0	
SQ2.2	Which KPIs where used?				RQ3
SQ2.3	What facts where stated?				RQ3

Table 7: Evaluation of performance goals and achievements

Based on the evaluation the author concludes that eight companies present this topic mainly verbally and 13 as an illustration. If a company used an illustration in this topic it was often included in a comparable chart to the value creation process presented by the IIRC (please see chapter 3; The value creation process). This approach ensured mostly a concise and connected presentation of the performance goal evaluation while verbal presentations were often perceived as not complete or had not enough linkages to the strategic objectives.

The description of the intended value creation is a crucial part in the disclosure of the value creation process since it builds the foundation for a company to design the overall process. Based on the performed analysis the author concludes that all companies have again at least "to some extent" met the expectations of the IIRC. Anyhow only 3 sample companies (7.5%) met the expectations exemplary, please see the following table, which provides a short summary of the results in this topic. With an average Value Creation Disclosure Score of 1.14 this topic is only in the midfield of the analyzed topics.

SQ3	Which values were stated?	**RQ2**

Table 8: Evaluation of the description of the intended value creation

With SQ3 the author tried to identified values that are maybe of general interest within and across sectors, which is again relevant for Research question 2&3. While the majority of the sample companies accomplished this topic, seven companies only met the expectations of the IIRC "to some extent" in the view of the author. This was often because a concise overview or detailed description of the intended values to create was missing.

An exemplary illustration was provided by Philips a leading Dutch technology company with focus on electronics, healthcare and lightning. The company defined in total six clear values with specific KPIs and furthermore provided a concise and very well-connected illustration (Please see the attached screenshots). In contrast, other companies did the same but were not able to present it in a simple and easily understandable way. Additionally, Philips included a verbal description how the company intends to create value for whom and why, a point that was also often missing.

Based on the evaluation of the open SQ3 one can conclude that all companies state that they intend to create economic value. Also, social, environmental and intellectual value is often mentioned. In the financial services and insurance sector especially the long-term orientation is highlighted. Electric utilities for example mostly highlighted the stability of the energy provision.
According to the IIRC an understanding of the different capitals a company uses and affects including their interdependencies is crucial to assess to which extent value has been created or destroyed. Anyhow with an average Value Creation Disclosure Score of 1.4 this topic was the second worse of all 10 topics analyzed by the author. Only 26 companies at least "accomplished" the expectations in the view of the author. Two companies not even accomplished it and 12 only "to some extent". Mainly due to the fact that links between the capitals and outputs were missing, a concise overview was missing or because the capitals model as described by the IIRC was just not completely employed.

Question	Evaluation				Relevance
KQ4	Does the report include a management's assessment of the way in which various forms of capital have been affected by the business model so as to create or destroy value?				RQ1
	Not accomplished	To some extent	Accomplished	Exemplary	
	2	12	22	4	

SQ4	In which form was the management assessment presented?	RQ2

Table 9: Evaluation of the assessment regarding used forms of capital

On the other hand, the findings were diverse since also four companies accomplished the topic exemplary. All those companies have oriented their information about the various capitals on the IIRC presented value creation picture and even developed own KPIs for the effect on the capitals. As an outstanding example the author has chosen Atos a leading French IT services and consulting company. The company not only presents the capitals and relevant links to other parts of the process in a creative and concise way but also presents specific KPIs per capital. Moreover, the company provides an overview about the development of those KPIs over the last annual reports (example: human capital).

The open question SQ4 allowed the author to investigate in which form the sample companies presented their effect on the various capitals. While Atos here provides an outstanding example in an illustrative form / table most companies described the topic verbally what often did not support a concise and easily understandable presentation.

The stability of a company's governance structure is important to assess the organizations resilience against short term disruptions. Additionally, it represents the company's ability to successfully implement its business model and to achieve its intended values. In the topic only two companies "exemplary" accomplished and one company even "not accomplished" the expectations.

Question	Evaluation				Relevance
KQ5	Does the report include information about the stability of the organizsation's governance structure, that is useful to assess its resilience against short term disruptions so as to continue to create value?				**RQ1**
	Not accomplished	To some extent	Accomplished	Exemplary	
	1	5	32	2	
SQ5	In which form was the stability of the governance measures?				**RQ2**

Table 10: Evaluation of the governance structure disclosure

That company failed in the view of the author since it only provided a link to another published document what is not sufficient if one tries to follow the IIRC's expectations since it was not even partially included in the integrated format. Overall the quality of the disclosure in this topic was good but due to one "not accomplished" grading the Value Creation Disclosure Score is only 1.18 and therefor higher (=worse) than other topics.

As outstanding report in terms of the governance reporting one could mention British American Tobacco. The company not only presented the board and its activities in general, it also published a "board effectiveness" chapter and a detailed board evaluation table with six different categories and findings accompanied by actions for the upcoming years.

The value creation process overall is dynamic it is not static, current trends and possible future developments require a regular review of each component and its interactions within the process. Based on a company's outlook the value creation process should be revised or refined to improve all the components. Since more than 90% of the sample companies here at least "accomplished" the expectations and no company failed, the topic received an average score of 1.04 what is the best score within all topics.

Question	Evaluation				Relevance
	Does the company provides an overview about innovations and a future outlook, including the measures taken, and				
	Not	To some extent	Accomplished	Exemplary	
	0	3	34	3	

SQ6.1	In which form was the future outlook provided?				**RQ2**
	Illustration	Table	Verbal	Other	
	1	0	20	0	
SQ6.2	Which KPIs where used?				**RQ3**
SQ6.3	What facts where stated?				**RQ3**

Table 11: Evaluation of the innovation and outlook disclosure

Based on the analysis of the Sub-question one can see that the companies preferred a verbal presentation for the future outlook. Regarding SQ6.2 the author concludes that there is an overlap between some KPIs in that field. Often used KPIs include: R&D spending, number of employees in R&D, university networks, investments in specific trends (for example in the telecommunications sector into new technologies) and the investment in start-ups or other technology driven partner companies (in-house venture capital activities).

Regarding SQ6.3 there were sector specific trends & approaches observable:

Financial Services:

- Highlight their cooperation with different partner companies, for example young innovative fin tech companies
- State that they are rethinking their business model and are aware of the challenges of banking with future generations

Chemicals:

- Identify trends in their specific business units and how their strategy fits them
- Provide forecasts and market potentials and what projects they have in their product pipeline
- Identify megatrends and how they relate to their business

Electric Utilities:

- Especially focus on sustainability and identify different trends to work on (renewables, optimized consumptions, reduction of CO2, energy storage and the efficiency of their services)

Telecommunications:

- Especially focus on security issues (data security, digital identity etc.)
- Explain how they want to develop their businesses together with young and creative partner companies to offer unique services to their customers in the future

Insurance Companies:

- The sector is mainly driven by digitization and regulation
- Focus on new regularity demands and changes in their business model due to new digital services

Value drivers affect a company's ability to create value over time. Thereby the type and how they are combined are unique to each company. According to the IIRC it is therefore important to disclose those in an Integrated Report. Considering the importance of that topic for a company the results are surprising. The topic is by far the worst in this analysis with an average Value Creation Disclosure Score of 1.55. Not only that no company was considered by the author as exemplary, 18 companies (or 45%) did not even accomplish the expectations of the IIRC regarding the disclosure of their unique value drivers. It is anyhow questionable if the companies are not aware of their unique value drivers or if they want to hide them due to strategic considerations.

Question	Evaluation				Relevance
KQ9	Does the report specify value drivers (capabilities or variables) resulting in outcomes that give an organization competitive advantage and over which it has some degree of control so as to create value?				RQ1
SQ9	Which value drivers were				RQ2
	Not accomplished	To some extent	Accomplished	Exemplary	
	2	16	22	0	

Table 14: Evaluation of the value creation disclosure

To sum-up, many companies failed to provide detailed information about their value drivers. In many cases, only a very surficial analysis and a very broad description of competitive advantages/value drivers were presented. As an example, one company claimed to be a leader in the digital transformation but then did not offer a sufficient explanation or facts regarding its "unique" or "leading" position. Two companies not even touched this topic and are consequently marked as "not accomplished". Companies that accomplished the expectation at least provided a more specific definition of such drivers and how they are possibly impacted.

Based on SQ9 the author tried to identify if there is an overlap between the companies/sectors regarding their disclosed value drivers: Nearly all financial service companies claim to have engaged employees and a customer focused strategy but then often fail to precisely describe what they are exactly doing. In the chemicals sector innovations, customer focus and sustainability are often mentioned. The electric utilities and telecommunication companies in comparison often offer only very broad definitions and descriptions of their value drivers. Comparable to the financial services sector the insurance company claim to have nearly identical value drivers such as transparent products, operational excellence and customer satisfaction. All in all, the author concludes that the companies fail in providing individual and clearly recognizable value drivers that are specific to their own value creation.

In the view of the IIRC an Integrated Report should provide a holistic picture of the combinations and dependencies between the various factors that affect a company's ability to create value over time.[131] Therefor an Integrated Report should not only provide detailed information about the different steps within the value creation process, in addition it should provide the information in a concise, easy understandable and connected way.

All in all, the author concludes that the analyzed companies are already on a promising way towards a well-connected value creation disclosure within their Integrated Reports. Since 80% at least accomplished and no company that failed to accomplish the expectations this topic receives an average score of 1.16.

Question	Evaluation				Relevance
	Does the report reflect the the dynamic nature of business, performance and the wider economic, environmental,				
	Not	To some extent	Accomplished	Exemplary	
	0	8	29	3	
SQ10	How is the connectivity implemented?				**RQ2**

Table 15: Evaluation of the connectivity of information

Anyhow eight companies fulfilled the requirements only "to some extent". This was mainly due to a missing common thread within the disclosure and an unconcise presentation. Companies that were marked with "accomplished" provided an overall concise presentation that supported an easy understanding and offered additionally first links between different part of the value creation process. Companies that were marked as "exemplary" not only provided a concise structure they additionally linked each topic within a "logical circle" or provided one complete picture of the process to allow an easy understanding within a short time. This already partly represents a result of SQ10. Based on the analysis one can conclude that in general the structure of the report supports the connectivity of information. Some companies also implemented the connectivity having concise overviews, typically in front of the report, which allow an easy understanding about the most important factors which can be assessed later on in detail within a specific chapter.

In the following are two examples which present how connectivity between different topics can be achieved. For example, Aegon is able to connect three different topics within the value creation discloser in one illustration. So, the company could connect parts of the stakeholder analysis with the innovation and outlook as well as with the external environment.

While the external harmonization in the field of <IR> should not be targeted in the view of the author, companies that want to adopt <IR> in the future should be aware of the reporting of their direct competitors or comparable companies in the same sector. In detail, what they report and what not, in which fields they have a strong presentation and maybe where they fail. Based on such an analysis, it will not only be easier to build up the new form of an annual report but also be possible to create a report that will have the potential to be perceived as outstanding.

Another advice of the author is to first build up a picture of the own value creation process that is inspired by the value creation process standard picture presented by the IIRC (see chapter 3). It seems that companies that try to adopt a similar picture not only receive a better presentation of their process but also present it in a concise and easily understandable way.

Additionally, new reporters of <IR> should consider the ten different reports which have been described as being outstanding in a specific topic of the value creation process. Furthermore, one can find more detailed parts of the used evaluation sheet in the appendix of this thesis and in the provided Excel sheet.

Additionally, the author assumes that another important factor for a good Integrated Report will be a very diverse team that setups the overall process to achieve the connectivity and implement integrated thinking in the organization. This is only he author which could be tested in further research by comparing the achieved Value Creation Disclosure Scores with internal surveys on how the companies tackle the creation of an Integrated Reporting. Thereby also answering questions like: how diverse are the teams, how is integrated thinking promoted and what learnings are perceived by the team members.

5.2 Conclusions

Based on the performed analysis, the author concludes that the analyzed companies follow the expectations of the IIRC because 90% of them at least meet the expectations "to some extent". Nonetheless, 4 companies (10%) do not accomplish the defined expectations, which is surprising since all analyzed companies are "<IR> reporters" in the viewpoint of the IIRC. Furthermore, a more detailed analysis reveals that there are noticeable differences in terms of content and overall quality between the companies and the different assessed topics. For example, the analysis shows that companies seem to especially struggle with the disclosure of topics such as the management's assessment regarding used forms of capitals (analyzed in KQ4) and drivers of value creation (KQ9) while they perform very well in topics like innovation and outlook (KQ6) or the overview about external factors (KQ8). All in all, the results on the Key Questions support the first hypothesis (H1) that companies which adopt Integrated Reporting follow the <IR> Framework.

Based on the Sub-questions, the author further concludes that companies within the same sector seem to report similar approaches, facts and even sometimes KPIs. This can be observed in the detailed analysis of the two topics "performance goals and achievements" as well as in "innovation and outlook". Especially in the reporting of financial services and of the chemicals sector, overlaps were observable. Those findings support the second hypothesis (H2) that companies in the same sector report similar approaches/facts about their performance.

However, the author concludes that a wide harmonization does not seem possible across all sectors and especially not for every single presented topic. There is only some potential for harmonization in topics like "governance structure of the organization" since one could imagine specific KPIs which could be provided by every company regardless of the sector it belongs to. Overall the third hypothesis (H3) that harmonization is only possible in a limited extent is confirmed by this analysis.

All in all, the presented findings are highly relevant for different stakeholders, namely: researchers, the IIRC, <IR> reporters and investors or researchers, this thesis not only provides deep and specific insights into how

- <IR> is practiced but also reveals topics for further research, which will be described in more detail at the end of this chapter.
- For the IIRC, it serves as a confirmation that companies which want to adopt the

<IR> Framework work with the provided material and try to meet the expectations of the IIRC. Additionally, it can be observed that there are potential overlaps which could be harmonized.

- For other companies or new <IR> reporters, this paper is highly valuable for two reasons: First, it provides a detailed analysis which reveals topics within the value creation disclosure which may be hard to tackle. Second, it provides examples which are able to present the content in an exemplary way. In return, these could be used as role models, especially when an organization builds an Integrated Report for the first time.
- For investors, this thesis provides an overview of different approaches how to implement and interpret a relatively new form of reporting and therefore it could be used as material for educational reasons.

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