

How do current public Integrated Reports align with the <IR> Framework?

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EXECUTIVE SUMMARY This paper examines empirically the current practice with regard to integrated reporting according to the <IR> Framework among the 104 original participants (companies) of the IIRC Pilot program. We made a selection with respect to these 104 participants based on organization's stipulation that they issue an integrated report and/or that they made use of the <IR> Framework for their report in a journey towards integrated reporting.

In general we can conclude that the 38 companies in our sample are well ahead on the journey of integrated reporting. These 38 companies comply to a certain extent with the requirements with respect to the fundamental concepts, guiding principles and content elements of the <IR> Framework. Also the majority of the annual integrated reports have an assurance opinion.

The main fields of improvements are the connection of the content elements with the capitals and the value creation process. Furthermore, companies should pay more attention to the content element 'opportunities' and not only display their 'risks'. Also, companies should treat the content element 'governance' as a means to create value and have this element connected with the capitals. Currently the governance information is rather traditional and in line with the legal requirements. Moreover there is room for improvement with respect to the content element 'strategy in relation with resource allocation' (use of capitals). The content element 'basis of preparation and presentation' is often not present in the annual integrated report.

PRACTICAL RELEVANCE The board of directors and supervising board of companies, users and auditors of annual integrated reports can use this article to acquire insights in the present state of the art and best practices with regard to integrated thinking and annual integrated reporting according to the <IR> Framework. The board of directors can determine to implement integrated reporting at their companies if they have not yet implemented integrated reporting and identify what the troublesome areas are.

1 Introduction

High-quality business reporting is at the heart of strong and sustainable organizations, financial markets, and economies. Since the 1970s, there has been significant progress towards the international convergence of financial reporting practices (International Accounting Standards Board (IASB)). There is growing recognition that it is important to capture and report other, largely non-financial information. Investors demand increasingly Environmental, Social, and Governance (ESG) information, as well as greater insight into how these factors affect strategy, risk and financial performance (Maas et al. 2013, p. 15).

The IIRC is a global coalition of regulators, investors, companies, standard setters, the accounting profession and NGOs. Together, this coalition shares the view that communication about businesses' value creation should be the next step in the evolution of corporate reporting'. It states its mission is "to create the globally accepted International <IR> Framework that elicits from organizations material information about their strategy, governance, performance and prospects in a clear, concise and comparable format". The Framework is intended to underpin and accelerate the evolution (Paul Druckman: "evolution, not revolution") of corporate reporting, reflecting developments in financial governance, management commentary and sustainability reporting (Bruce interviews Paul Druckman, 2014).

The IIRC began a Pilot Program in 2011 in order to underpin the development of the International Integrated Reporting Framework. The group of organizations participating in the Pilot Program had the opportunity to contribute to the development of this Framework (IIRC, 2013, pp. 10-11). In total there were 104 organizations in the Pilot Program that was ended in 2014. Launched in December 2013, the IIRC-Framework has been gaining importance, although this framework is not a requirement.

Currently organizations conduct a wide range of 'business reporting', including financial and regulatory re-

porting, ESG reporting or sustainability reporting, and increasingly, integrated reporting. Recently (2013), the IIRC issued the first International Integrated Reporting Framework (<IR> Framework) (IIRC, 2013).

This research intends to analyze empirically to what extent the annual integrated reports 2014 (2013/2014) of a sample from the 104 organizations in the Pilot Program are aligned with the International <IR> Framework.

The remainder of this article is structured as follows: Section 2 describes the business case of integrated reporting and a short literature review of integrated reporting. Section 3 provides the contents of the <IIRC> Framework. Section 4 contains the research methodology and research limitations. Section 5 displays our empirical results including best practices. Section 6 summarizes this article.

2 The business case of Integrated Reporting

Sustainability is no longer a separate agenda item for management and supervisory boards of enterprises; it is embedded in strategy discussions and discussions on risk management, performance management and external reporting (Dassen, 2011, p. 532). Climate change crisis and the crisis of ecological overshoot have brought to light the importance of business incorporating ESG factors into fundamental corporate analysis and business planning, to rethink the basis for sustainable economic performance (King, 2011, p. 535). Society is increasingly expecting corporations to take responsibility for a broader range of sustainability issues that will ultimately affect financial performance and the company's ability to create value over time, in the public interest (Maas et al., 2013, p. 15). King (2011, p. 535) states that the influence and impacts of multinational companies on society and environment is enormous. And as reporting influences behaviour companies' reports have to ensure that the users will find the company's conduct justifiable in the context of public society.

Stakeholders expect a broader scope of information in terms of societal value creation as a result of variety of their involvement in companies (Wallage, 2011, p. 545). Wallage states that an integrated way of reporting on the value creation process and performance will contribute to the confidence of stakeholders in the company. Integrated Reporting <IR> reflects the awareness that information needs of providers of financial capital are changing.

Several listed entities in the Netherlands have embraced <IR> thus trying to articulate the relevance of the enterprise for society (Kamp-Roelands, 2011).

Integrated reporting <IR> is a process that results in communication of both financial and non-financial data, in a periodic 'integrated report', about how an

organization's strategy, governance, performance and prospects lead to the creation of value over the short, medium and long term (IIRC, 2013, p. 2).

"Communications based on <IR> provide greater context for stakeholders as it envisages to clarify how value relevant information is embedded into decision-making, business model and operations. Although communications that result from <IR> are principally aimed at providers of financial capital, they will also be of benefit to a wide range of stakeholders and thus indirectly again to providers of financial capital and furthermore attract the appropriate providers of financial capital" (Bray, 2013; IIRC, 2013, p. 7, par 1.7). There is an urgent need to bring financial and non-financial reporting together and make them speak to each other meaningfully; John Elkington (SustainAbility) called it "the Holy Grail of reporting" (Gleeson-White, 2015 p. 145). Integrated information improves the quality of decision-making among investors (Krijgsman, 2015).

"The difference is that integrated reporting, unlike financial reporting, is not technical. It is the company telling its story" (Paul Druckman, ICAEW Economia, 2013). In certain cases where organizations redirect their focus to long-term and customer-perspective, they convince long-term owners and are creating the basis to deliver a steady growth and profitability; as such materiality is determined in favor of long-term owners. Unilever, a proponent of an "integrated governance", its approach to sustainability focuses on sustainable growth over the long-term (Unilever Sustainable Living Plan, 2014). Paul Polman, CEO of Unilever, tries to reinforce the Unilever focus and its corresponding effort "to attract the right longer-term shareholders to our share register" (Polman, 2014).

3 The International Integrated Reporting Framework (<IR> Framework)

In 2009, The Prince of Wales convened a high level meeting of investors, standard setters, companies, accounting bodies and UN representatives including The Prince's Accounting for Sustainability Project, International Federation of Accountants (IFAC), and the Global Reporting Initiative (GRI), to establish the International Integrated Reporting Committee (IIRC), a body to oversee the creation of a globally accepted Integrated Reporting framework.

In November 2011, the Committee was renamed the International Integrated Reporting Council. Prince Charles stressed the urgency with: "We are battling 21st century challenges with, at best, 20th century decision making and reporting systems" (Gleeson-White, 2015, p. 180).

The <IR> Framework (hereafter Framework) is intended as a guide for all businesses producing integrated reports. The Framework defines an "integrated report"

as “a concise communication about how an organization’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term (IIRC, 2013, p. 33). Value creation – and preservation – in this context is not limited to monetary value, but can also comprise, for example, social, environmental, or wider economic value.

International <IR> Framework

IIRC’s *International <IR> Framework* (2013) is a recent attempt to set generally accepted guidelines. Integrated reporting links both financial and non-financial data, not only providing a combination of these two sets of information, but also trying to articulate the overall performance of an organization in a connected way. By providing information on the various inputs (financial capital, manufactured capital, intellectual capital, human capital, social and relationship

capital, natural capital) (refer to Box 1) and how they are used to create outputs through its business model and governance, the entity will be able to better demonstrate its performance.

Required Statements

It is clear that the approach and methodology for preparing an integrated report is very different from fully complying with ‘generally accepted accounting principles’, or ‘GAAPs’. Integrated reporting does not require compliance with specific technical requirements. The Framework is, today, a principles-based document, which can be applied in any format, even adapted (IIRC, 2013, p. 7), using a personal approach. It is nonetheless extremely relevant to have an appropriate knowledge of the purpose and methodology to be applied in order to plan and organize the reporting process adequately. <IR> requires nonetheless clear statements about reference to the Framework and board responsibility (Required Statements).

Box 1 Capitals

Financial capital: The funds available to an organization to produce goods or provide services. These funds are sourced through debt, equity or grants, or generated through operations or investments.

Manufactured capital: Manufactured physical objects available to an organization to produce goods or provide services, including buildings, equipment and infrastructure (such as roads, bridges, and waste and water treatment plants).

Intellectual capital: Knowledge-based intangibles including intellectual property, such as patents, copyrights, software, rights and licenses; and ‘organizational capital’ such as systems, protocols and ‘tacit knowledge’ (knowledge of the business held by employees and managers that is difficult to communicate). Intellectual capital is ‘carried’ by the organization.

Human capital: People’s skills, abilities, experience, motivation, intelligence, health and productivity. It includes their support for an organization’s governance framework, risk management approach and values; their understanding of an organization’s strategy and the ability to implement it; and their loyalty and ability to lead and collaborate. The ‘carrier’ of the human capital is the individual person.

Social and relationship capital: This category includes institutions and relationships within and between communities, stakeholders groups and other networks; shared norms, common values and behaviour, trust the organization has fostered, brand and reputation; and an organization’s social license to operate. The ‘carriers’ of this capital are the networks of humans.

Natural capital: All renewable and nonrenewable environmental resources and processes that provide goods and services that support the organization’s past, present and future prosperity, including air, water, minerals, forests, biodiversity and ecosystem health.

Source: Gleeson-White, 2015, pp. 191-193, based on <IR> Framework (IIRC, 2013 p. 11).

Fundamental Concepts

The Framework in essence proposes to inform how businesses create and sustain value in the short, medium and long term. To this end, three Fundamental Concepts are introduced in the first part of the International <IR> Framework (IIRC, 2013, pp. 10-14):

- value creation for the organization and for others;
- the capitals;
- the value creation process.

Value creation for the organization and for others

The concept of <IR> is about the explanation of how a company creates value over time. The value creation story can be considered as the ‘heart’ of the integrated report. It is crucial to recognize that value is not created by or within a business alone. Value creation includes not only financial returns to providers of financial capital, but also comprises positive or negative effects on the other capitals and other stakeholders and is thus influenced by the external environment. This contrasts with the traditional meaning of value, which was narrowly associated with the present value of expected future cash flows.

The capitals

The capitals are described as stores of value on which the company depends for input into its business model. They are categorized in the <IR> Framework (IIRC, 2013, pp. 11-12) as: financial, manufactured, intellectual, human, social and relationship, and natural capital. Capitals are affected through corporate activity and outputs. Financial capital increases for example if profit is realized and a way to influence the quality of a company’s human capital is through educating / training employees. Explaining how the business manages the avail-

liability, affordability and quality of these stores of value is key to the company's value creation story.

The value creation process

The value creation process is defined by the International <IR> Framework (IIRC, 2013, pp. 13-14) as the system chosen by the organization of inputs, business activities, outputs and outcomes which aim to create value over the short, medium and long term.

The integrated reporting framework is not only a tool for reporting; it is a tool for management, providing directors and managers with an exhaustive view of the system the entity relates to, in order to create value in the short, medium and long term. From this perspective, the integrated report is only the final step of a process or chain of integrated thinking, integrated strategy, integrated performance and integrated reporting. For this reason, the IIRC promoted the concept that integrated reporting is founded on "integrated thinking", which is "the active consideration by an organization of the relationships between its various operating and functional units and the capitals that the organization uses or affects" (IIRC, 2013, p. 33).

The first part of the framework shows the interrelationships between the concepts of <IR> in the value creation process (see figure 1).

The second part of the framework focuses on the requirements for an integrated report, which consist of guiding principles and content elements; they are explained further below.

At the core of the organization is its business model, which draws on various capitals as inputs and, through its business activities, converts them to outputs (products, services, by products and waste). The organization's activities and its outputs lead to outcomes in terms of effects on the capitals. The capacity of the business model to adapt to changes (e.g., in the availability, quality and affordability of inputs) can affect the organization's longer term viability (IIRC, 2013, p. 13).

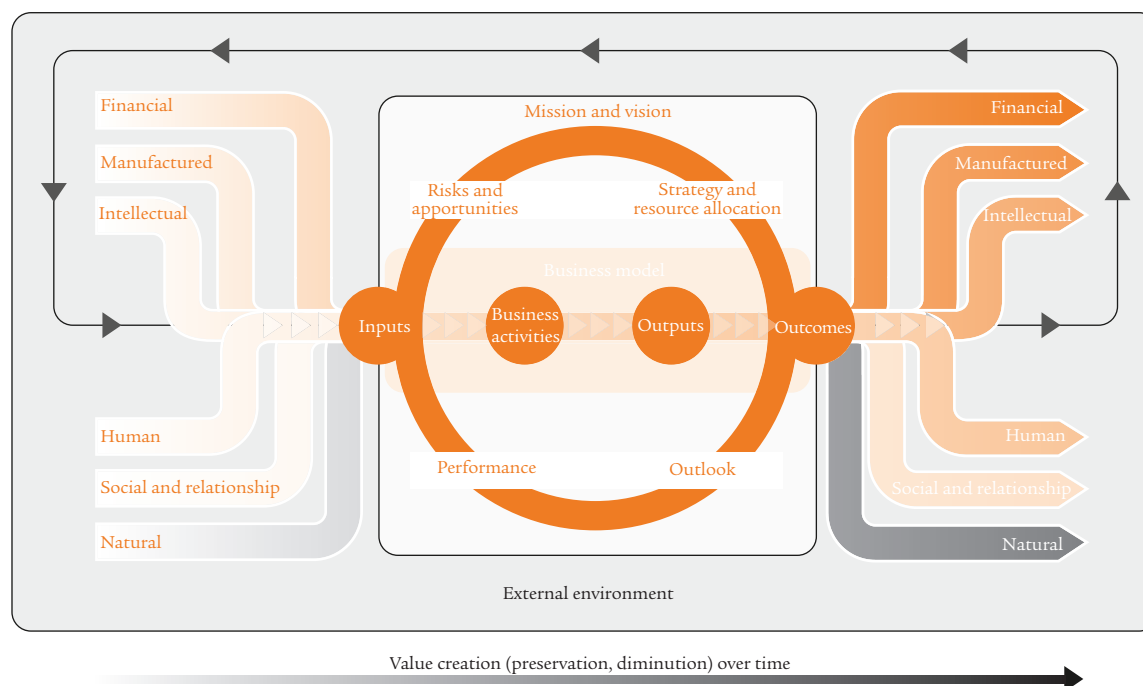
Figure 1 starts with capitals as input variable and ends with the capitals as outcomes. The capitals are therefore of prime importance in the business model and application of integrated reporting.

Requirements for an integrated report

The following Guiding principles underpin the preparation of an integrated report, informing the content of the report and how information is presented (refer to box 2).

The content of an organization's integrated report will depend on the individual circumstances of the organization; the elements of the content as required in the Framework are called Content elements (IIRC, 2013, pp 24-32) The Content elements are stated in the form of questions rather than as checklists of specific disclosures. An integrated report includes the following Content elements that are fundamentally linked to each other and are not mutually exclusive (refer to box 3).

Figure 1 The value creation process



Source: IIRC, 2013, p. 13.

Box 2 Guiding principles

a. Strategic focus and future orientation: An integrated report should provide insight into the organization's strategy, and how it relates to the organization's ability to create value in the short, medium and long term, and to its use of and effects on the capitals.

b. Connectivity of information: An integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization's ability to create value over time.

c. Stakeholder relationships: An integrated report should provide insight into the nature and quality of the organization's relationships with its key stakeholders, including how and to what extent the organization understands, takes into account and responds to their legitimate needs and interests.

d. Materiality: An integrated report should disclose information about matters that substantively affect the organization's ability to create value over the short, medium and long term.

e. Conciseness: An integrated report should be concise. It is worth observing that conciseness is a fundamental principle of integrated reports. One of the most common complaints in recent years about financial reports is that they are too long and too complex.

f. Reliability and completeness: An integrated report should include all material matters, both positive and negative, in a balanced way and without material error.

g. Consistency and comparability: The information in an integrated report should be presented: (a) on a basis that is consistent over time; and (b) in a way that enables comparison with other organizations to the extent it is material to the organization's own ability to create value over time.

Source: IIRC, 2013, pp. 16-22.

4 Research Methodology and research limitations

4.1 Research Methodology

We analyzed the 2014 annual reports of the 104 organizations that participated in the global IIRC-pilot project. The research has been performed on data from a population of 38 annual reports 2014 (broken fiscal years 2013/2014).

Our selection is based on organization's stipulation that they issue an integrated report and/or that they made use of the <IR> Framework for their report in a journey towards integrated reporting. Further, we restricted ourselves to companies, excluding accounting firms, accountancy associations and governmental organizations from the initial population.

The research methodology for this report is as follows. In the first phase of our research an analysis is performed based on the criteria of the IIRC-Framework: fundamental concepts (value creation and capitals), guiding principles and content elements. The <IR> Framework does not capture external assurance, but we used the fact of assurance for our analysis with regard to the reliability principle.

The second phase of this research involves a qualitative narrative content analysis of the organizations' progress in their annual integrated reports with respect to the fundamental concepts, guiding principles and content elements according to their annual integrated reports. In several sessions we discussed as a team our approach to the empirical work and the subdivision in full compliance, partial compliance and no compliance with the <IIRC> Framework. After our research of the annual reports we discussed our results and made some revisions in our excel worksheet.

For specific parts of the <IR> Framework as adopted by companies we have selected best practices.

Box 3 Content Elements

a. Organizational overview and external environment: What does the organization do and what are the circumstances under which it operates?

b. Governance: How does the organization's governance structure support its ability to create value in the short, medium and long term?

c. Business model: What is the organization's business model?

d. Risks and opportunities: What are the specific risks and opportunities that affect the organization's ability to create value over the short, medium and long term, and how is the organization addressing them?

e. Strategy and resource allocation: Where does the organization want to go and how does it intend to get there?

f. Performance: To what extent has the organization achieved its strategic objectives for the period and what are its outcomes in terms of effects on the capitals?

g. Outlook: What challenges and uncertainties is the organization likely to encounter in pursuing its strategy, and what are the potential implications for its business model and future performance?

h. Basis of presentation: How does the organization determine what matters to include in the integrated report and how are such matters quantified or evaluated?

Source: IIRC, 2013, pp. 24-30.

Table 1 Sample selection

Organizations participating in the global IIRC-pilot project:	104
Accounting firms and accountancy associations:	(12)
Governmental organizations:	(2)
Companies which do not refer to the use of the <IR>-Framework	(47)
Company which mentions the use of the <IR> Framework, but report is not available in English (Japanese)	(1)
IR 2014 not yet publicly available as of 15 August 2015/not found	(4)
Total sample	38

4.2 Research limitations

We acknowledge that other organizations which do not belong to the IIRC- pilot could have started integrated reporting, but we have chosen to limit our research to the original 104 IIRC pilot project organizations (see table 1).

We have not conducted direct interviews with the organizations for our analysis (see Rowbottom & Locke, 2015 for such an approach), nor have survey questionnaires been distributed to the organizations with a request to respond. For which reason we communicate a disclaimer on the exactness of the scores, if possible at all in this principles-based environment.

As we cannot measure the *reliability* of the reports directly. We have chosen to use the assurance by an audit firm of the integrated annual report as a proxy for reliability.

Further, we have chosen to use comparative figures of the year before as a yardstick for *consistency* and *comparability* of the reports.

The best practices in the research report are for illustration purposes only. The choice of best practices is not based on a specific research method.

5 Results of the empirical research

The research has been performed on the (integrated) annual reports of 38 companies for the fiscal years 2014 (or broken years 2013/2014).

5.1 General information with respect to the sample

Country and industry of the companies in our sample

The 38 companies are originating from a number of countries and from different industries.

We used the country and industry indications of the IIRC with respect to the organizations which have participated in the pilot.

There is a high number of companies in our sample from Brazil, The Netherlands and South Africa and a (relatively) low number of companies from the US, UK, China and Japan. The high number of companies from Brazil and South Africa can be explained by the fact that integrated reporting is part of the listing requirements in those two countries (PwC, 2015,

p. 3). Our results suggest that the Netherlands is a forerunner in the field of integrated reporting. Further, there is a large variety of industries in our sample.

5.2 Empirical results with regard to the researched integrated reports

5.2.1 Name of the report and form of the report

We have observed different names which the companies use for their integrated annual report.

The name 'Annual report' which includes (elements of) integrated reporting is still popular (20: 53%). However, there are also companies which use as a name 'Integrated annual report' (11: 29%). For the rest we see names in incidental cases as 'Citizen report', 'Annual

Table 2 Number of countries and industries of the companies in our sample

Panel A: Number of companies by country on the basis of frequency		Panel B: Number of companies by industry	
Country	Number of companies in our sample	Industry	Number of companies in our sample
Brazil	6	Electricity	4
Netherlands	6	Transportation services	4
South Africa	6	Banking	3
Italy	3	Chemicals	3
United States	2	Financial services	2
Germany	2	Food	2
Spain	2	Mining	2
China	1	Pharmaceuticals & biotechnology	2
Denmark	1	Support services	2
France	1	Construction & materials	1
India	1	Energy	1
Japan	1	Industrial engineering	1
New Zealand	1	Insurance	1
Russian Federation	1	Forestry & pulp	1
Singapore	1	Manufacturing	1
South Korea	1	Media	1
Sri Lanka	1	Nuclear	1
United Kingdom	1	Oil & gas	1
		Postal services	1
		Real estate	1
		Retail	1
		Software & computer services	1
		Telecom	1
Total	38	Total	38

and Sustainability report', 'ESG report' and 'Report of economic, environmental and social performance'.

21 (56%) companies publish a separate integrated annual report and 17 (44%) companies have a combined annual report (the traditional annual report and integrated report combined in one single report).

5.2.2 Reference to <IR>-Framework in the report, statement of board responsibility for the integrated report and general information

38 companies make a specific reference to the <IR>-Framework in the annual integrated report. In 37 (97%) reports we observed a statement of the board in which they state their responsibility for the integrated report data.

Most of the companies have published an integrated annual report before (36: 95%) and some companies published for the first time an annual report in an integrated manner (2: 5%).

The number of pages of the annual integrated report varies between 20 pages and 466 pages. In the case of 20 pages it was a separate integrated annual report and in the case of 466 it was a combined annual report also containing the full consolidated financial statements.

5.2.3 Fundamental concepts of the <IR>-Framework mentioned in the report

A. Value creation for the short, medium and long term

28 (74%) companies give an overview of the value creation for the short, medium and long term. For six of

these 28 companies this overview is still rather vague and sometimes lacking the medium and long term value creation.

B. Six capitals indicated in the report

13 companies (34%) mention the six capitals (financial, manufactured, intellectual, human, social and relationships, and natural capital) in their report. 15 companies (40%) restrict themselves to the capitals which are relevant for their company what is allowed according to the <IR> Framework. For example, financial services companies have little usage of natural capital in comparison with mining or oil and gas companies and do not mention this capital in their report.

C. The value creation process of the company expressed in the report

25 (66%) companies give an overview of the value creation process: some of them make use of a value chain in their report. Five of these 25 companies provide a rather vague overview.

5.2.4 Guiding principles according to the <IR> Framework

The <IR> Framework distinguishes seven guiding principles (refer to box 2). In table 3 we will make a distinction between full compliance, partial compliance and no compliance with respect to the first four guiding principles: strategic focus and future orientation, connectivity, stakeholder relationships and materiality with an emphasis on the relation of these four guiding principles with the capitals used by the company at stake.

Table 3 Guiding principles according to the <IR> Framework with a distinction between full, partial and no compliance in numbers and percentages

Guiding principle	Full compliance	Partial compliance	No compliance
	n (%)	n (%)	n (%)
a. Strategic focus and future orientation in terms of the ability to create value and the use of the capitals	14 (37)	15 (39)	9 (24)
b1. Presence of a holistic picture of the value creation process of the company in the report specific for the company	13 (35)	7 (18)	18 (47)
b2. Connectivity between capitals with regard to the value creation process in the report	22 (58)	6 (16)	10 (26)
c. Dialogue with stakeholders included in the report which provide insight into the nature and quality of the organization's relationships with its key stakeholders	18 (47)	11 (29)	9 (24)
d. Clear and understandable materiality matrix or a clear and understandable discussion of the materiality assessment	14 (37)	9 (24)	15 (39)

Remarks:

b1: In the case of partial compliance of b1. the holistic picture is present in the report but there is no connection with the capitals used or the relations between the capitals are not dealt with.

b2: According to the <IR>-Framework it is not required to mention all six capitals in the integrated report. A company may restrict itself to the capitals relevant for the business and industry. Full compliance means connectivity between the capitals relevant for the business and industry of the company. Partial compliance: relevant capitals are mentioned but no or some connection between all capitals. No compliance: no connection between the (mentioned) capitals.

c: In the case of partial compliance the companies mention their stakeholders but there is a very fragmented dialogue or only with some stakeholders presented in the report.

Full compliance means that the guiding principle is well documented in the report with a clear connection with the capitals.

Partial compliance means a well written guiding principle with some connection with the capitals.

No compliance means that the guiding principle is not included in the report or very short and vague with no connection to the capitals.

e. Conciseness

We used the size in pages of the integrated report as a measure of conciseness.

Further, we took into account whether the company had a combined annual integrated report or an annual integrated report separately from the traditional consolidated financial statements. We consider an integrated report to be concise in the combined format if it is less than 150 pages and in the case of a separate integrated report if it is less than 50 pages. These boundaries are of course arbitrary in nature.

7 (21%) companies have a concise combined annual integrated report. 4 (11%) companies have a concise standalone integrated annual report. In total 11 (29%) companies have a concise annual integrated report.

f. Reliability and completeness

An integrated report should include all material matters, both positive and negative, in a balanced way and without material error.

Reliability

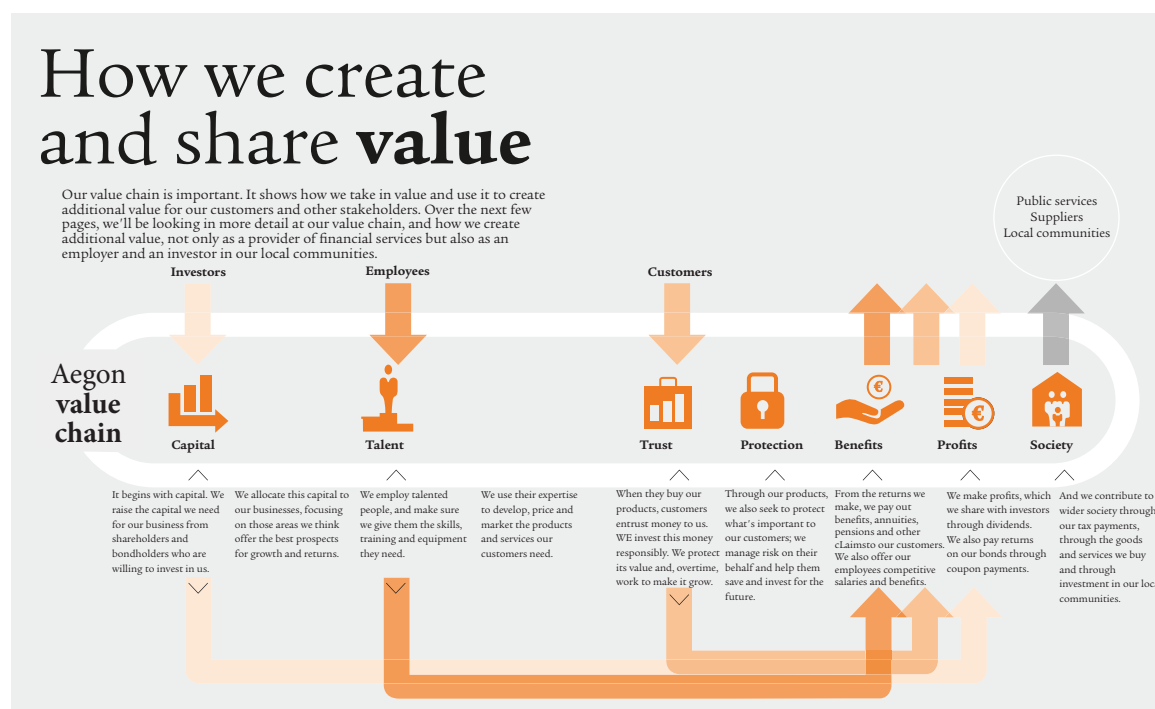
To capture reliability of the integrated report we used as a measure the existence of an assurance opinion of an audit firm with respect to the integrated annual report and if so the degree of assurance (reasonable, limited or mixed).

Under the IAASB Assurance Framework, there are two types of assurance engagement a practitioner is permitted to perform: a reasonable assurance engagement and a limited assurance engagement. The objective of a reasonable assurance engagement is a reduction in assurance engagement risk to an acceptably low level in the circumstances of the engagement as the basis for a positive form of expression of the practitioner's conclusion. The objective of a limited assurance engagement is a reduction in assurance engagement risk to a level that is acceptable in the circumstances of the engagement, but where that risk is greater than for a reasonable assurance engagement, as the basis for a negative form of expression of the practitioner's conclusion. (IAASB, 2014, p. 20).

Mixed assurance means that for certain KPIs there is reasonable assurance (mostly financial) and limited assurance for other KPIs (mostly non-financials) in the assurance opinion.

21 (55%) companies have an assurance opinion with respect to their annual integrated report. 3 (14%) of these 21 companies have a reasonable degree of assurance, 14 (67%) have a limited degree of assurance and 4 (19%) have a mixed degree of assurance of the integrated report.

Figure 2 Best practice holistic picture (guiding principle b1). Aegon's 2014 review. Creating and sharing value, pp. 28-29



Completeness

We used as a measure of completeness of the annual integrated report whether the company reported also material negative KPIs in their annual integrated report.

7 (18%) companies reported negative KPIs in their integrated report. Therefore 82% of the companies do not report negative KPIs of importance in magnitude in their annual integrated report.

g. Consistency and comparability

The information in an integrated report should be presented: (a) on a basis that is consistent over time; and (b) in a way that enables comparison with other organizations to the extent it is material to the organization's own ability to create value over time. We used comparative figures of the year before for KPIs as a (rather crude) measure for comparability.

28 (66%) companies have comparative information for their KPIs.

It is difficult to detect from the reports that these companies measure their comparative information of their KPIs on the same basis (measurement consistency).

Figure 2 is an example of a best practice of guiding principle b1, showing the holistic picture of Aegon. This is identified as a best practice since the company visually presented its value chain and shows how the non-financials are linking to the financials.

22 (58%) companies use *qualitative* connectivity between the capitals in their report. No companies in the sample have *quantitative* connectivity between the capitals in their report. The <IR> Framework does not require quantitative connection between the capitals. It is quite hard to have reliable quantitative connectivity between the capitals at this moment for companies. The usage of the capitals is in different terms (monetary and non-monetary).

Usually the investment decisions of investors depend on investment formulas that are based on numerical input variables (Berk & DeMarzo, 2013). Putting numbers to an argument enhances its persuasive power (Kadous et al., 2005) but also the credibility of the information, since it will be easier to provide a reasonable level of assurance on information that is quantified compared to qualitative information. However, there

Figure 3 Best practice stakeholder dialogue (guiding principle c): Eni S.p.A. Integrated Annual report 2014, pp. 14-15

Stakeholder engagement

Eni believes that the participation and involvement of stakeholders in the business choices are the key elements which contribute to the development of the territories

where Eni operates; these factors, in fact, create mutual trust between the actors of the territory, promote consensus and strengthen Eni's reputation as a reliable partner.

Stakeholder	Engagement procedures and actions	Stakeholder	Engagement procedures and actions
Eni's people	Workshop (i.e. "idea generation" projects focused on business and efficiency); Strategy and annual performance sharing through the HR Ambassador Project and the Cascade Programme; Communication plan through MyEni and MyEni International Portal; Brand activation initiatives; "cascade" e-mailing for topic business projects; Training programmes and on-the-job training; Welfare initiatives; Renewal of the agreement with European Works Council (EWC); - Dialogue with the European Works Council [EWC] on Eni's policies within the European framework and with the representatives of the European Observatory for Safety and Health at Work.	National and international NGOs	Dialogue with main Italian NGOs (WWF, Greenpeace, Legambiente) on oil&gas issues; Dialogue with Amnesty International on the activities in Nigeria and the protection of Human Rights of populations living near the extraction sites; Consultation of NGOs for a preliminary assessment of Eni's impact on human rights in Mozambique.
Financial community	Conference call on quarterly results and strategy presentation; Meetings with SRI focused on Eni's integrated risk management model; Road show dedicated to Corporate Governance; Meetings with institutional investors and main proxy advisors.	Suppliers	Development of suppliers' organizational, technical, quality, HSE and Human Rights skills; Support on improvement following negative ratings resulting from audits; Verifying observance of Human Rights in the supply chain; Call on significant suppliers to take part in the Carbon Disclosure Supply Chain; Issue of procedure on the management of Local Content within the procurement process; Energy efficiency project: qualifications of suppliers for technical assessment services in Italy and abroad.
Local communities	Update of websites dedicated to a specific geographic area (NAOC, Eni Norge, KPO, Eni in Basilicata); Public consultation forums on activities in Nigeria, Kenya, Mozambique, Norway, Italy, Russia; Update of the mechanisms for collecting and managing live reports in 6 pilot Countries (Mozambique, Congo, Angola, Pakistan, Kazakhstan, Nigeria); Promotion of multi-stakeholder committees for planning, management and implementation of social projects (i.e. sectorial committees in Pakistan, technical and management committees for the Hinda project in Congo, local committees in Ecuador and Gabon); MOU with local institutions and other local partners to set up long-term social projects.	Customers and consumers	Calibration of trade, advertising and pricing initiatives; Definition of new offer models; Consolidation of the new model for relations with Consumer Associations in order to enforce the attention on energy saving and the comprehension of sustainable value in our products and services (green chemistry, bio-fuels, smart mobility, products and culture for energy efficiency); Planning of remediation actions to meet customer's expectations and their most critical instances represented by the Consumer Associations. Implementation of a dedicated tool, on telephone channel, for detection, enumeration and faster solution of criticality about gas and electricity offer, to promote the gradual digital access by aged customers represented by Consumer Associations.
Government, National Parliament, Public Ministries, Institutions	Inspections and institutional visits at the production sites; Information, awareness-raising and technical in-depth initiatives; Regular meetings with officials of the European Commission, Parliament and European Council; Active participation in national and international roundtables on energy and climate policies; Participation in the Policy Dialogue on Natural Resource-based Development organized by the OECD.	Universities and research centers	Creation of "virtual labs" in collaboration with universities, research centers and companies; Renewal of framework agreements with the "Politecnico di Milano" and the "Politecnico di Torino", and with the Italian National Research Council (CNR); Continuation of the collaboration agreement with the Massachusetts Institute of Technology in Boston (USA); Continuation of the alliance with Stanford University on core technologies of the oil&gas business and environmental remediation; Agreement with Earth Institute of Columbia University to strengthen the systems for planning, monitoring and evaluation of Eni investments for local development.
The United Nations system	Participation in the main meetings between the United Nations and companies (Private Sector Focal Points Meeting; Private Sector Forum, Annual Forum on Business and Human Rights); Participation in the UN Climate Summit and in the first Sustainable Energy for All Forum; Participation in UN Sustainable Development Solutions Network and in particular in "Energy for All in Sub-Saharan Africa" initiative; Participation in Global Compact LEAD Board pilot programme for the Board training programme on sustainability issues; Participation in working groups on anti-corruption under the auspices of the Global Compact, on national and international level; Membership of the UN Global Compact Call to Action: Anti-corruption and the Global Development Agenda and participation in the tenth anniversary of the 10th UN Global Compact anti-corruption principle.	Other sustainability organizations	Active role within the anti-corruption working group of the B20; Participation in the working groups of the WBCSD and IPIECA, the O&G constituency of EITI, the working group within the PACI, the Pilot Program IIRC, the working groups of the O&G Climate Initiative.

is still a long way to go to arrive at reliable quantitative connectivity between the capitals in integrated annual reports.

An interesting attempt in the field of quantitative connectivity between capitals is the new vision of value of KPMG (2014). KPMG connects corporate and societal value creation and comes to a “true” earnings figure measured in dollars combining earnings with e.g., taxes and wages (economic positive), corruption (economic negative), infrastructure, healthcare and education (social positive), pollution, low wages and health & safety (social negative), renewables and recycling (environmental positive), waste, ecosystems, energy, water and raw materials (environmental negative) (KPMG, 2014, p. 77). However, this publication of KPMG is not on the basis of the <IR> Framework.

Figure 3 is an example of a best practice stakeholder dialogue (guiding principle c). The company indicated per stakeholder group what engagement procedures and actions are performed. This provides insight into the nature and quality of the organization’s relationships with its key stakeholders.

Figure 4 shows the materiality matrix of BAM. The company included a 3-dimensional materiality matrix in which it included the level of relevance for its stakeholders, society and the company.

5.2.5 Content elements integrated report according to the <IR> Framework

The Framework distinguishes eight content elements for an annual integrated report (refer to box 3). They should be linked to each other in this report.

In our research we have focused on the connection of these content elements with the capitals except for the last content element ‘basis of preparation and presentation’.

In table 4 we display our results with respect to the content elements except for the element ‘basis of preparation and presentation’.

h. Basis of preparation and presentation

3 (8%) companies give a clear overview of the way they determine what matters should be included in the annual integrated report. Many companies refer to the GRI guidelines or provide no clear overview of the basis of preparation and presentation and the underlying decision making what matters should be in the annual integrated report.

Figure 5 is an example of a business model (content element c) in the 2014 annual report of Schiphol. The company provides an overview of its value creation model and connects this to the capitals.

Figure 4 Best practice materiality matrix (guiding principle d). BAM Integrated report 2014, p. 19

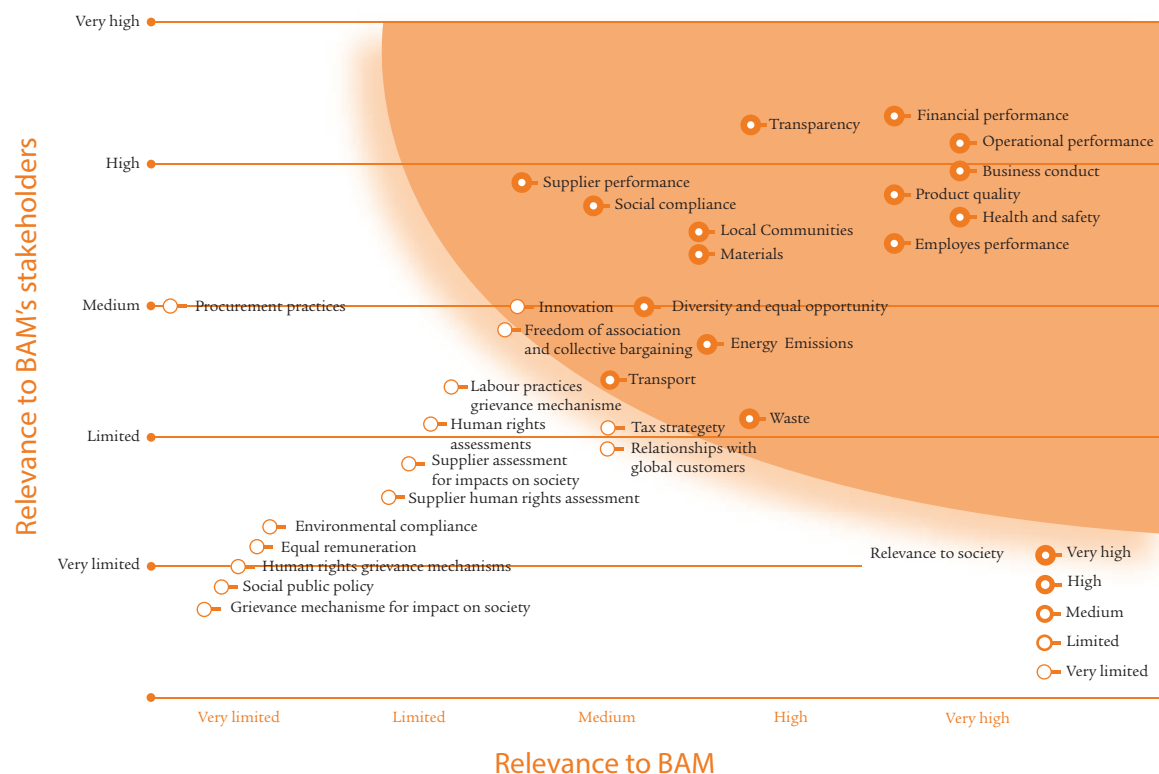


Table 4 Content elements according to the <IR> Framework with a distinction between full, partial and no compliance in numbers and percentages

	Full compliance	Partial compliance	No compliance
	n (%)	n (%)	n (%)
a. Overview of the organization and the external environment in which it operates	21 (55)	9 (24)	8 (21)
b. Organization's governance structure which support its ability to create value in the short, medium and long term	2 (5)	18 (47)	18 (47)
c. Business model of the company connected to the capitals and the other content elements	16 (42)	14 (37)	8 (21)
d. Risks and opportunities which affect the organization's ability to create value over the short, medium and long term, and the way the organization is dealing with them	17 (45)	13 (34)	8 (21)
e. Strategy connected to the capitals of the company (allocation of resources)	14 (37)	19 (50)	5 (13)
f. Performance: achievement of strategic objectives of the organization for the period and the outcomes in terms of effects on the capitals	12 (32)	16 (42)	10 (26)
g. Outlook: challenges and uncertainties the organization is likely to encounter in pursuing its strategy, and the potential implications for its business model and future performance	6 (16)	12 (32)	20 (52)

Remarks:

- Partial compliance means that there is no presentation of the connection of what the organization does with the capitals or the discussion is restricted to the operations of the company without attention for the external environment in which it operates.
- Partial compliance means that the presentation of the governance structure is (partially) linked to the value creation process but there is no connection with the capitals.
- Partial compliance means that the business model is visualized properly in the report with (some) connection to the other content elements without or partially connected to the capitals.
- Partial compliance means that the risks are mentioned but not the opportunities, that there is no connection with the capitals, or that there is no connection with the ability of the company to create value over the short, medium and long term.
- Partial compliance means that the strategy of the company is presented in the report but there is no connection with the capitals used.
- Partial compliance means a clear overview of the KPIs and target KPIs but no or fragmented connection with capitals.
- Partial compliance means that there is a presentation of the outlook of the company without connection with capitals or only with one capital (mostly only with the financial capital).

Figure 5 Best practice Business Model (content element c). Schiphol group Annual Report 2014, pp. 1-3

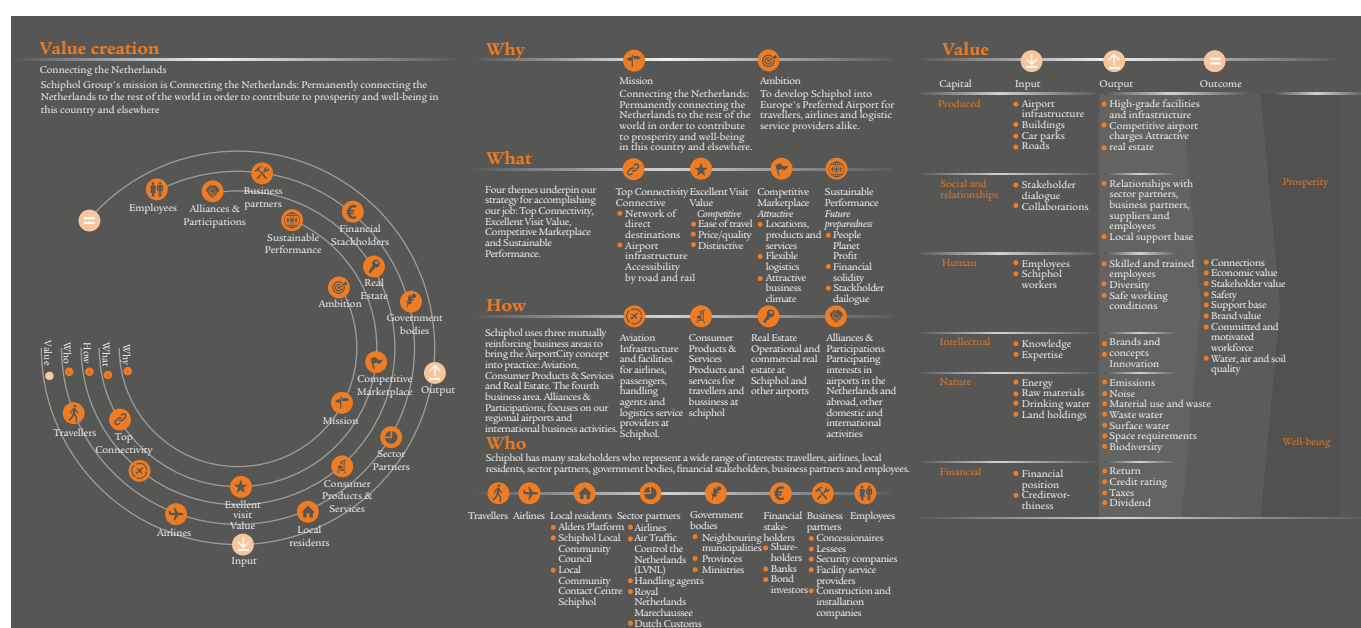


Figure 6 Best practice presentation of KPI's (content element f). Akzo Nobel Report 2014, pp. 68-69

Decorative Paints value creation summary 2014

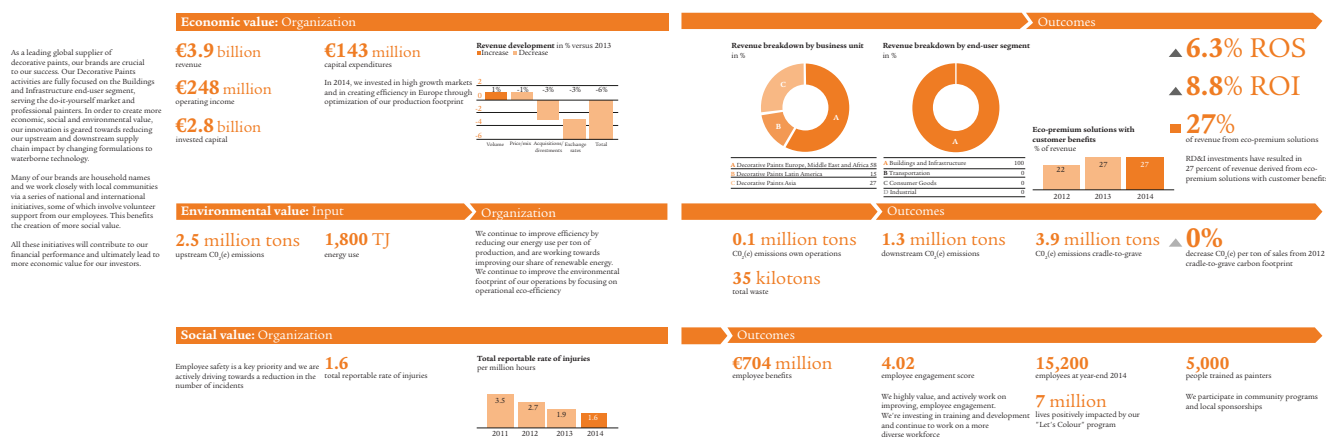


Figure 6 is an example from the Akzo Nobel 2014 Report in which the company has presented its strategic objectives and outcomes for the period and also targeted the consequences for the environmental, social and economic capitals in a very clear and understandable way.

In general with respect to the content elements the information about governance (content element b) is traditional and according to the accounting rules and governance codes. The connection with capitals and governance as a means to support value creation is lacking in the reports (see also PwC, 2013). Further, we perceived much more attention for risks than for opportunities in the investigated annual integrated reports. Also, there is limited attention in the annual integrated reports regarding strategy connected to resource allocation.

Further, we made an empirical analysis in total of the sample by company with respect to the application of the three fundamental concepts, the seven guiding principles and the eight content elements. The scores are calculated as follows: two points for full compliance, one point for partial compliance and no points for no compliance. With regard to the guiding principle (f) Reliability and completeness we made an extra distinction between an assurance opinion or not and the presentation of negative KPIs. So, in total companies could score 38 points (3 x 2 points Fundamental concepts, 8 x 2 points Guiding principles and 8 x 2 Content elements). The results of this analysis are included in table 5.

Most of the companies are on the journey of integrated reporting and score more than half of the points. Eskom Holdings SOC Limited and Gold Fields both

from South Africa and Indra from Spain have a score higher than 30 points and have a good annual integrated report.

29 (76%) companies have four or more of the six points with respect to the fundamental concepts.

19 (50%) companies have eight or more points of the 16 points regarding the guiding principles and 17 (45%) companies have eight or more of the 16 points with respect to the content elements.

6 Summary and conclusions

"The way companies report matters, because it influences the way they behave" (King, 2011). According to King the future of the planet rests in the hands of accountants, because, as King argues, corporations are the most powerful entities on earth and they turn for advice first to their accountants. The advisory role of accountants has become very important for the future of the world. If the accountant's mindset has been changed to think in terms of integrated reporting, then business will not just consider profit but also the impacts of how to make money on society and environment" (King, 2011). High-quality business reporting is at the heart of strong and sustainable organizations, financial markets, and economies. Since the 1970s, there has been significant progress toward the international convergence of financial reporting practices (IASB).

Table 5 Application of the fundamental concepts, guiding principles and content elements in the annual integrated reports of the sample divided in classes (number of points and percentages)

Ranking in classes	0 ≤ 10	11 ≤ 20	21 ≤ 30	> 30
Number of points (Percentage)	8 (21%)	8 (21%)	19 (50%)	3 (9%)

The last decades there is also a growing desire to capture more non-financial information in annual reports (e.g. ESG information).

The last few years there have been various initiatives to stimulate annual integrated reports because stakeholder groups demand more and more insight in what the interaction is between ESG information and performance and valuations. Further, it is becoming more important to show in annual reports what the benefits of the company are for society in general.

We investigated the annual integrated reports of 2014 (2013/2014) of the 104 companies that were participating in the Pilot program of the IIRC. We restricted ourselves to companies which mention in their annual integrated report that they are actually applying the <IR> Framework for their annual integrated reports. We must stress that there are also other companies not in our sample which could be well ahead in having an annual integrated report. We must bear in mind that this Framework is principle-based and not required by law. Moreover, this Framework is brand new, so there is no history and most of the companies in our final sample are on the journey of applying the <IR> Framework and not at the last stage of complying with this Framework.

Our sample is 38 companies of the 104 participants in the IIRC Pilot Program. This sample is well distributed over industries and countries although we have relatively more companies from Brazil, the Netherlands and South Africa. The conclusions of our research are thus restricted to the 38 companies which may not be representative of the whole population of 104 participants in the IIRC Pilot Program.

The size of the annual integrated reports varies quite a bit (between 20 pages and 466 pages) so conciseness of the report is not always reached.

The majority of the companies provide an overview of the value creation process for the short, medium and long term and mention the capitals which they use in their business activities.

The <IR> Framework distinguished seven guiding principles. For most of these guiding principles there is already full compliance or partial compliance and only a minority of no compliance with the <IR> Framework. There is already full compliance with the <IR> Framework with respect to linkages between capitals with regard to the value creation process as part of the principle of connectivity. In our sample we perceived only *qualitative* connectivity and no *quantitative* connectivity between capitals. The majority of the companies in our sample have an assurance opinion with regard to their annual integrated report mostly with limited assurance.

We used as a measure of completeness of the annual integrated report whether the company reported any

negative KPIs of importance in magnitude. Only a small minority of the companies report large negative KPIs in their annual integrated report. The large majority of the companies in the sample report no or very small negative KPIs.

The <IR> Framework consists of eight content elements for an annual integrated report. We focused our research on the connection of the content elements with the capitals (with the exception of the last content element 'basis of presentation and preparation'). Most of the companies have already full or partial compliance with the requirements of the <IR> Framework with regard to the most of the content elements. However, with regard to the mentioned content element 'governance' there is almost no full compliance and only partial compliance. The presented information about 'governance' is quite often not connected to the capitals and/or the value creation process. Mostly, it is presented in a traditional way and in accordance with accounting rules and governance codes. The content element 'organizational overview and external environment' is often restricted to a discussion of the organization without a connection with the external environment (in relation to the capitals). The content element 'risks and opportunities' is in most cases a list of risks according to the accounting rules and not a discussion of the opportunities of the company. The content element 'strategy and resource allocation' is mostly a clear description of the strategy without any connection with the capitals (resource allocation). With respect to the content element 'outlook' there is quite often a presentation of the outlook without any connectivity with the capitals or with some of the capitals (financial). Also, the connection with the value creation process in the short, medium and long term is lacking. In general the content elements are well described as such but with no or fragmented connection with the capitals and the value creation process in the company. Almost no companies give a clear overview of the way they determine what matters should be included in the annual integrated report (content element 'basis of preparation and presentation').

Overall, we can conclude that the companies in our sample are well ahead on the journey of implementing the fundamental concepts, the guiding principles and the content elements of the <IR> Framework. The journey is however not ended yet and there are still areas for further development and improvements. This is in line with conclusions of the research of PwC (2013) among 50 companies. We agree with De Waard (2015, p. 31) that IR is a journey and does not exist yet. It is in the phase of design. ■

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Literatuur

- Berk, J., & DeMarzo, P. (2013). *Corporate Finance* (Vol. 3). Boston: Pearson Addison Wesley.
- Bray, M. (2013). *The business case for integrated reporting. KPMG in Australia*. Retrieved from <https://home.kpmg.com/content/dam/kpmg/pdf/2013/04/business-case-integrated-reporting-v2.pdf>.
- Bruce, R. (2014). Interviews Paul Druckman, *Integrated Reporting Next steps*. Retrieved from www.iasplus.com/en/publications/global/robert-bruce-interviews/2014/iirc2.
- Busco, C., Frigo, M.L., Quattrone, P., & Riccaboni, A. (2014). Leading practices in Integrated Reporting, *Strategic Finance*, 96(3), 23-32.
- Dassen, R.J.M., (2011). Een geïntegreerde benadering van governance, duurzaamheid en verslaggeving. *Maandblad voor Accountancy en Bedrijfseconomie*, 85(11), 532-534.
- Gleeson-White, J. (2015). *Six Capitals: or can accountants save the planet? Rethinking capitalism for the twenty-first century*. First American edition. W.W. Norton & Company.
- IAASB (2014). *Handbook of International Quality Control, Auditing, Review, Other Assurance and Related Services pronouncements*, Volume II, Framework. Retrieved from <https://www.ifac.org/publications-resources/2014-handbook-international-quality-control-auditing-review-other-assurance-a>.
- ICAEW Economia (2013). *Paul Druckman – a different story*. Retrieved from <http://economia.icaew.com/people/december-2013/paul-druckman>.
- International Integrated Reporting Council (IIRC) (2013). *The International <IR> Framework*. Retrieved from <http://integratedreporting.org/resource/international-ir-framework/>.
- International Integrated Reporting Council (IIRC) (2015). *Integrated Reporting. How does it fit in the UK?* Retrieved from www.theiirc.org.
- International Integrated Reporting Council (IIRC). *IIRC Pilot Program Yearbook 2013* Retrieved from www.theiirc.org : <http://integratedreporting.org/wp-content/uploads/2013/11/IIRC-PP-Yearbook-2013.pdf>.
- International Integrated Reporting Council (IIRC). *IIRC Pilot Program Yearbook 2013*. Retrieved from <http://integratedreporting.org/wp-content/uploads/2013/11/IIRC-PP-Yearbook-2013.pdf>.
- Kamp-Roelands, N. (2011). Integrated reporting en assurance, *Maandblad voor Accountancy en Bedrijfseconomie*, 85(11), 552-561.
- Kadous, K., Koonce, L., & Towry, K.L. (2005). Quantification and persuasion in managerial judgement. *Contemporary Accounting Research*, 22(3), 643-686.
- King, M.E., (2011), *Integrated Reporting – a concept whose time has come*, *Maandblad voor Accountancy en Bedrijfseconomie*, 85(1), 535-536.
- Klijnsmit, P. (2011). Mervyn E. King, de King-rapporten en de weg naar integrated reporting, *Maandblad voor Accountancy en Bedrijfseconomie*, 85(11), 537-542.
- KPMG (2014). *A New Vision of Value Connecting corporate and societal value creation*. Retrieved from <https://www.kpmg.com/Global/en/topics/climate-change-sustainability-services/Documents/a-new-vision-of-value.pdf>.
- Krijgsman, K. (2015). Geïntegreerde verslaggeving; een beter communicatiemiddel? *Maandblad voor Accountancy en Bedrijfseconomie*, 89(6), 229-238.
- Maas K., Strootman R., Meliefste S., & Vermeulen M. (2013). De toekomst van de duurzaamheidsverslaggeving. *Maandblad voor Accountancy en Bedrijfseconomie*, 88(10), 15-21.
- Maas, K. (2011). Maatschappelijke prestaties van organisaties: van outputmeting naar impactmeting, *Maandblad voor Accountancy en Bedrijfseconomie*, 85(11), 563-572.
- Polman, P. (2014). Business, society and the future of capitalism. *McKinsey Quarterly*, (3), 170-175. Retrieved from http://www.mckinsey.com/insights/sustainability/business_society_and_the_future_of_capitalism.
- Paternostro, S., & Quarchioni, S. (2014). *Integrated reporting: a new approach or a change of label?* Paper presented at the 2014 EMAN Conference, Erasmus University Rotterdam.
- PwC (2013). *The value creation journey A survey of JSE Top-40 companies' integrated reports*. Retrieved from <https://www.pwc.co.za/en/assets/pdf/integrated-reporting-august-2013.pdf>.
- PwC (2015). *Implementing integrated reporting*. PwC, June. Retrieved from <http://www.pwc.com/gx/en/audit-services/publications/assets/pwc-ir-practical-guide.pdf>.
- Rowbottom, N., & Locke, J. (2015). The emergence of <IR>. *Accounting and Business Research*, in press. DOI: 10.1080/00014788.2015.1029867.
- Unilever (2014). *Sustainable Living Plan, Summary of Progress 2014*. Retrieved from https://www.unilever.com/Images/uslp-Unilever-Sustainable-Living-Plan-Scaling-for-Impact-Summary-of-progress-2014_tcm244-424809.pdf.
- Waard, D. de (2015). Integrated reporting bestaat eigenlijk nog niet. *Management Control & Accounting*, 2015(4), 31.
- Wallage, Ph. (2011). Naar geïntegreerde verslaggeving -Voor elk wat wils. *Maandblad voor Accountancy en Bedrijfseconomie*, 85(11), 543-551.

Appendix 1 List of the organizations from which the integrated reports have been investigated

Nr	Pilot company	Country	Sector
1	Achmea	Netherlands	Insurance
2	AEGON NV	Netherlands	Financial services
3	AkzoNobel N.V.	Netherlands	Chemicals
4	AngloGold Ashanti Limited	South Africa	Mining
5	BAM Group	Netherlands	Construction & materials
6	BASF SE	Germany	Chemicals
7	BNDES	Brazil	Banks
8	BRF S.A	Brazil	Food
9	CCR S.A	Brazil	Transportation
10	CLP Holdings Limited	China	Electricity
11	CPFL Energia	Brazil	Energy
12	Danone	France	Food producers
13	DBS Bank	Singapore	Banks
14	Diesel & Motor Engineering PLC	Sri Lanka	Industrial engineering
15	Edelman	United States of America	Media
16	Enel S.p.A.	Italy	Electricity
17	Eni S.p.A.	Italy	Oil & gas producers
18	Eskom Holdings SOC Limited	South Africa	Electricity
19	Fibra Celulose S.A	Brazil	Forestry and pulp
20	Flughafen München GmbH	Germany	Transportation services
21	Gold Fields	South Africa	Mining
22	Indra	Spain	Software & computer services
23	Industria de Diseño Textil S.A. (Inditex)	Spain	General retailers
24	Interserve Plc	United Kingdom	Support Services
25	Itau Unibanco	Brazil	Banks
26	Jones Lang LaSalle Incorporated	United States of America	Real Estate
27	Kirloskar Brothers Limited	India	Manufacturing
28	N.V. Luchthaven Schiphol	Netherlands	Transportation services
29	New Zealand Post	New Zealand	Postal services
30	NIAEP	Russian Federation	Nuclear industry
31	Novo Nordisk	Denmark	Pharmaceuticals & biotechnology
32	Randstad Holding N.V.	Netherlands	Support services
33	SASOL	South Africa	Chemicals
34	SK Telecom	South Korea	Telecommunications
35	STRATE	South Africa	Financial services
36	Takeda Pharmaceutical Company Limited	Japan	Pharmaceuticals & biotechnology
37	Terna S.p.A.	Italy	Electricity
38	Transnet	South Africa	Transportation services