CONNECTIVITY BACKGROUND PAPER FOR <IR>

The Technical Task Force of the International Integrated Reporting Council (IIRC) established a Technical Collaboration Group (TCG) to prepare this Background Paper for <IR>. The TCG was coordinated by the lead organizations with input from participants from a range of disciplines and countries. This paper reflects the collective views of TCG participants, not necessarily those of their organizations or the IIRC.

The IIRC considered interim findings from the TCG when preparing the Prototype Framework released in November 2012, and considered aspects of this paper in developing its Consultation Draft of the International Integrated Reporting (<IR>) Framework.

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Executive summary

• Integrated Reporting (<IR>) is a process that results in communication, most visibly a periodic integrated report, about value creation over time. To encourage the transition to <IR>, the International Integrated Reporting Council (IIRC) has developed a draft International <IR> Framework (the draft Framework). Connectivity of information is one of six principles guiding the content and presentation of the integrated report. Within the context of <IR>, connectivity is defined as follows:

An integrated report should show, as a comprehensive value creation story, the combination, interrelatedness and dependencies between the components that are material to the organization’s ability to create value over time.

• Integrated thinking is the basis for integrated reporting. The experience has shown that integrated reporting in an organization further helps to embed integrated thinking. Therefore, the processes of Integrated Reporting and integrated thinking are mutually reinforcing. The organization’s ability to maintain a big picture view, connect time horizons and develop a strategy for consistent messaging fosters a connected mindset and informs report content.

• To translate integrated thinking into Integrated Reporting, the organization should convey a holistic view of strategy, governance, performance and prospects. The integrated report should link the draft Framework’s content elements and fundamental concepts and bridge time horizons. Effective connections between qualitative and quantitative information can provide both context and credibility to the report.

• The draft Framework recognizes the importance of connecting ‘beyond financial statement’ matters to value creation; however, this should not be interpreted as a directive to monetize, or even measure, all non-financial information (e.g., manufactured capital, intellectual capital, human capital, social and relationship capital and natural capital).

• As expectations for transparency grow, businesses are focusing not only on what to report, but also on how to report it. Connectivity is enhanced when the integrated report features a logical structure, linked sections, cross-referencing and navigation devices such as icons, color coding or other tools.

• Communications technology is playing an ever more important role in corporate reporting. Digital reporting platforms, including web-based applications, are improving connectivity. Digital reporting standards such as XBRL play a critical role in sharing and connecting information electronically. By creating technology-based feedback loops and customizing the presentation of information to suit readers’ preferences, organizations are better connecting to report users.
1. Introduction

1 Integrated Reporting (IR) is a process that results in communication, most visibly a periodic integrated report, about value creation over time. To encourage the transition to IR, the International Integrated Reporting Council has developed a draft International IR Framework (the draft Framework), which embodies the following features:

<table>
<thead>
<tr>
<th>Fundamental Concepts</th>
<th>Guiding Principles</th>
<th>Content Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>In its effort to create value, an organization’s business model draws on various capitals which the organization uses and affects</td>
<td>Six principles inform the content and presentation of an integrated report:</td>
<td>An integrated report should include the following elements:</td>
</tr>
<tr>
<td></td>
<td>• Strategic focus and future orientation</td>
<td>• Organizational overview and external environment</td>
</tr>
<tr>
<td></td>
<td>• Connectivity of information</td>
<td>• Governance</td>
</tr>
<tr>
<td></td>
<td>• Stakeholder responsiveness</td>
<td>• Opportunities and risks</td>
</tr>
<tr>
<td></td>
<td>• Materiality and conciseness</td>
<td>• Strategy and resource allocation</td>
</tr>
<tr>
<td></td>
<td>• Reliability and completeness</td>
<td>• Business model</td>
</tr>
<tr>
<td></td>
<td>• Consistency and comparability</td>
<td>• Performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Future outlook</td>
</tr>
</tbody>
</table>

Figure 1. Key features of the draft Framework.

2 As shown in Figure 1, the concept of connectivity is a central principle of IR, one that was introduced in the IIRC’s 2011 Discussion Paper, Towards Integrated Reporting: Communicating Value in the 21st Century. At that time, the concept was described as the ‘connections between the different components of the organization’s business model, external factors that affect the organization and the various capitals on which the organization and its performance depend.’

3 Public responses to the Discussion Paper underscored the importance of connectivity as a core feature of IR, particularly as traditional reporting models tend to overlook the concept. As IR seeks to present a more holistic picture of value creation to providers of financial capital, connectivity is considered a fundamental principle. Respondents to the Discussion Paper also stressed the importance of emphasizing connections between financial information and intangibles such as innovation, brand, talent and effective resource management.

4 While stressing the importance of connectivity as a central principle of IR, respondents acknowledged the considerable challenge in implementing the principle, particularly in a concise manner, in an integrated report. To address this concern, this Background Paper provides further insights into, and practical guidance on, the topic of connectivity.

1 http://www.theiirc.org/resources-2/framework-development/discussion-paper/
5 This Background Paper responds to the need for additional guidance on connectivity by providing a blend of theory and practical examples. Although the material is intended to illustrate key concepts, it is neither exhaustive nor authoritative. Like the draft Framework itself, this Background Paper does not prescribe an ideal or universally applicable approach. Rather, organizations will need to tailor their approach to their own circumstances, reporting needs and reading audience.

6 <IR> is a process that results in communication, most visibly a periodic integrated report, about value creation over time. Integrated thinking is the basis for integrated reporting.

7 This Background Paper reflects the dual benefit of connected information. As shown at the bottom of Figure 2, an organization can enhance its transparency by communicating important connections to providers of financial capital and other external stakeholders. Such connections may include those between the organization’s strategy, governance, past performance and future prospects. In drawing these links, the integrated report presents a more complete picture of the organization’s ability to create value and supports readers’ understanding of the material factors that affect future performance. With its emphasis on conciseness, the report offers an entry point for understanding the business, while still allowing readers to access more comprehensive information elsewhere.

8 Consideration of the user view includes considering not only the information users need (its usefulness) but also the way how they use it (its usability). With such consideration, the disclosed information will be more valuable and successful to be used by the report users and to co-create the business value with key stakeholders.

9 As the upper section of Figure 2 suggests, <IR> in itself is not the end game. The connections made for reporting purposes also provide internal benefits by enhancing management’s understanding of the business and its strategy.

10 As Figure 2 implies, a discussion of <IR> would not be complete without addressing both the internal and external connections that a business can make. And, as the cyclical arrows suggest, the processes of integrated reporting and integrated thinking are mutually reinforcing. The discipline of drawing clear and meaningful connections for external reporting purposes strengthens management’s interest in identifying and validating causal relationships. By the same token, the breadth and quality of these internal connections can help shape the content of the integrated report. Additionally, other functional departments that support connected thinking can influence how that information is communicated to the outside world. Figure 3 maps these concepts and identifies where each is addressed in this Background Paper.

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2 Other functional departments are the processes and tasks that support core business activities. Examples include information technology, investor relations, communications, accounting, internal audit and compliance functions.
B Defining connectivity

“Connectivity of information” was identified in the Consultation Draft as one of the Guiding Principles for the preparation of an integrated report. The Guiding Principle clarifies the meaning of connectivity as it relates to <IR>: “An integrated report should show, as a comprehensive value creation story, the combination, inter-relatedness and dependencies between the components that are material to the organization’s ability to create value over time.”

Figure 2 not only depicted the mutually reinforcing nature of integrated thinking and <IR>, but it also provided a basis for defining connectivity in the context of <IR>. Considering, for a moment, the upper integrated thinking box in Figure 2, several questions come to mind:

- What are the key factors that drive business value?
- How are the organization’s objectives influenced by its operating context?
- How might the operating context help or hinder matters in the future?
- How do resource dependencies and stakeholder expectations influence strategy and core activities?
- How are the organization’s objectives reflected in internal policies, systems and processes?
- How does past performance position the organization for the future?

Although by no means an exhaustive list, questions like these are presumably top of mind for the Boards (as in charge of strategy) and management (as implementing the strategy) of well-functioning organizations.

Interestingly, the preceding questions can be readily mapped to the concepts and terminology presented in the IIRC’s draft Framework. This mapping is shown in Figure 4.

<table>
<thead>
<tr>
<th>MANAGEMENT CONSIDERATIONS</th>
<th>&lt;IR&gt; CONSIDERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the key factors that drive business value?</td>
<td>➔ Fundamental concept value creation</td>
</tr>
<tr>
<td>How are the organization’s objectives influenced by its operating context?</td>
<td>➔ Content element organizational overview &amp; external environment</td>
</tr>
<tr>
<td>How might the operating context help or hinder matters in the future?</td>
<td>➔ Content elements opportunities and risks future outlook</td>
</tr>
<tr>
<td>How do resource dependencies and stakeholder expectations influence strategy and core activities?</td>
<td>➔ Fundamental concept stock and flow of capitals</td>
</tr>
<tr>
<td>How are the organization’s objectives reflected in internal policies, systems and processes?</td>
<td>➔ Content elements strategy and resource allocation business model</td>
</tr>
<tr>
<td>How does past performance position the organization for the future?</td>
<td>➔ Content element governance</td>
</tr>
</tbody>
</table>

**Figure 4.** Mapping of management considerations to <IR> considerations.
2. Integrated reporting

14 An organization’s ability to connect the dots internally provides an important basis for <IR>. In particular, the capacity to bridge functional silos allows a holistic assessment of value creation in the short, medium and long term. Therefore, connectivity is not merely a feature of the organization’s integrated report; it also becomes engrained in the organization itself. This section explores the internal implications of connected information and in so doing builds the foundation for Section 3.

A Governing body and management considerations

15 As introduced in the Consultation Draft, value creation lies at the heart of <IR>. An organization’s business model is the vehicle through which it creates value. That value is embodied in the capitals that it uses and affects. The assessment of an organization’s ability to create value in the short, medium and long term depends on an understanding of the connectivity between its business model and a wide range of internal and external factors. By identifying the most significant considerations for value creation (see Materiality – Background Paper for <IR>), organizations establish a big picture view of their operations and their ability to remain viable in the longer term.

16 Such connections also serve to naturally bridge time horizons, for example, by showing the description of the “past-to-present” value creation and an indicative analysis for the “present-to-future” value creation connect the past, present and future.

17 By extending a connected mindset beyond the integrated report itself, the organization can develop a consistent message across communications. As will be shown in Section 2B, technology and other functional departments can play a significant role in building this internal consistency.

18 The following pages consider the three aspects of connectivity introduced in Paragraph 15-17, namely establishing the big picture, connecting time horizons and developing a consistent message.

Establishing the big picture

19 One of the ambitions of <IR> is to show how the organization creates value over time by utilizing its unique capitals in its own business model in a big picture. It is necessary to bridge today’s fragmented disclosures to present a more holistic picture of the organization’s value creation story.

<table>
<thead>
<tr>
<th>Raw information</th>
<th>Sorted by subject</th>
<th>Big Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="raw.png" alt="Image" /></td>
<td><img src="sorted.png" alt="Image" /></td>
<td><img src="big.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of pieces</th>
<th>No connectivity</th>
<th>Partial connectivity without “big picture” in mind</th>
<th>Truly integrated</th>
</tr>
</thead>
</table>

Figure 6. The three degrees of connectivity.

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Improving the connectivity of information can help minimize disclosure gaps by showing the total picture of the organization in a dynamic model, with due consideration to the interests and needs of report users. Gaps in current reporting practice can include a gap between:

- The true economic state of the organization and what is shown in its reports. This can result from such factors as: a biased or incomplete understanding within the organization of its true economic state; a tendency to report only positive factors; static, linear, or silo thinking; and intangibles not being included in the balance sheet.

- The intentions of the organization as stated in its reports and the perceptions of report users. This can result from such factors as: failing to show the big picture; lack of explicit feedback from report users (i.e., a feedback loop); and use of poorly defined terms, jargon and unclear calculation methods and assumptions.

The value creation story describes the organization’s strategic objectives and strategy and what it has done in the past, as well as giving an indication of how it is going to perform in the future. Story is not a fiction in an integrated report. The role of the value creation story in an integrated report is to recognize and describe the relationships between complex matters, and effectively communicate with key stakeholders in the organization’s own words.

Underpinning this value creation story is the ability to apply systems thinking (Box 1). Systems thinking acknowledges that the actions or behaviour of one part of a system can have an effect on other parts of the system. Thus, the interactions within the system are as critical to understanding that system as is the structure of the individual elements. Systems thinking will be useful to check the consistency and plausibility of the value creation story.

Box 1: Systems thinking

Perhaps more commonly associated with the natural sciences, engineering and cybernetics, systems thinking is used increasingly to explain well-functioning businesses and economies.

A system refers to a set of interacting parts or components that form a unified whole. At the root of systems thinking is the notion that understanding the relationships between the components is at least as important as, if not more than, understanding those components in isolation. This is reminiscent of the premise that the whole is greater than the sum of its parts.

Ackoff and other organizational theorists criticize the theory that well-managed segments automatically yield well-managed organizations. They reject this view on the basis that segments can simultaneously improve their own individual performance, and compromise organizational success as a whole. In this sense, systems thinking is viewed as a critical response to reductionism.

Effective systems thinking requires that linear thinking be supplanted by more lateral reasoning. The fact that the system can be constricted, triggered or influenced by outside forces underscores this need. Systems will evolve over time in response to external events, emerging priorities and revised objectives.

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6 Thinking in Systems - A Primer, Donella Meadows, Sustainability Institute, September 2007.
23 Organizations can translate the theory of systems thinking into practice by:

- developing a governance structure that supports holistic thinking
- seeking strategic and operational input across business units and functional divisions
- developing processes that enhance internal communication and knowledge sharing
- aligning data management systems to support decision-making
- analyzing how information is used internally and identifying gaps.

24 With this infrastructure in place, the organization can develop an overarching view of operations, one that connects material matters to the stock and flow of capitals used or transformed in the business model to generate enduring value. To evaluate how these and other factors interact, the organization might consider a range of questions, including those in the accompanying panel.

Connecting time horizons

25 Many contend that today’s reporting places a disproportionate focus on historical results, with inadequate attention paid to future value creation. Also, the organization’s value creation story, described usually in a narrative form, often tends to be perceived as just pie-in-the-sky rather than a substantive vision of the organization’s future value creation. To avoid such tendencies, an integrated report needs to present both the description of the “past-to-present” value creation and an indicative analysis for the “present-to-future” value creation.

26 The draft Framework strives to change this imbalance of the description of the past-to-present value creation and an indicative analysis for the present-to-future value creation by encouraging organizations to better connect the past, present and future. Such connections span the:

- influence of past achievements and misses on present strategy
- suitability of past performance indicators given present circumstances
- relationship between past performance and future expectations
- pace at which past drivers are expected to change in the future
- adaptability of present strategy to future opportunities and risks
- responsiveness of present business activities to future quantity or quality of capitals
- interaction of future interests in the short, medium and long term.

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27 Organizations are also encouraged to assess the relevance of past performance indicators given current or anticipated conditions. The reason is that some of the material matters might change over time; for example, a positive material matter in the past might become a negative material matter in the future, or vice versa, due to changes in the business model, process automation, and market changes. Consider, for example, a retailer that is transitioning from a physical, bricks-and-mortar presence to virtual stores on the internet. Management may conclude that its past use of retail sales per square foot is no longer a suitable proxy for performance.

SAMPLE CONSIDERATIONS
• How does the organization apply past experience to identify future opportunities and risks?
• How will the organization’s use or transformation of capitals differ in the future?
• What is the current quality of stakeholder relationships? Is this expected to change in the future?
• How will future targets be modified to reflect new conditions?

28 In connecting time horizons, organizations might also consider the questions in the panel below.

Developing a consistent message
29 Users of corporate reporting may review an organization’s full suite of disclosures to inform their evaluations and opinions. Their review might include regulatory filings, voluntary reports, press releases, marketing briefs and website disclosures. Many organizations are also increasing their reliance on social media and blogs as key communication channels. An organization’s first step in ensuring external audiences have a coherent understanding of the business is to explain clearly about the organization’s value creation story and deliver a consistent message.

30 The focus and tone of external communications will naturally depend on their objectives and target audience. However, for public disclosures to be useful, they ought to meet two fundamental premises. In particular, externally reported information should:
• reinforce rather than negate the organization’s other disclosures
• reflect or align with information used internally to drive business decisions.

31 Though clearly a reporting issue, projecting a consistent message to the outside world begins in house with an appropriate organizational mindset. For example, the ability of the organization to learn from successes and failures in past communication efforts relates to the groundwork laid in Paragraph 16 of this Background Paper. Important lessons may come from a variety of sources including past feedback on particularly compelling messaging, pervasive misunderstandings from outsiders about the organization’s motives or activities or more serious accusations of fraudulent misrepresentation. Without clear mechanisms for collecting, sharing and addressing external feedback, the organization foregoes important opportunities to clarify and connect external messaging.

SAMPLE CONSIDERATIONS
• Can the big picture, as described, be easily understood by report users outside of the organization?
• Is the kind of information disclosed consistent with what was disclosed in the past or, if not, is it inconsistent for a good reason and is there an explanation of this?
• Can the big picture, as described, be easily understood by report users outside of the organization?
• Are there clear lessons to be learned from past communication efforts?
• Does the organization’s standard communication profile align with the integrated report’s Organizational Overview and External Environment discussion?
• Do indicators and statistics across the suite of disclosures support the narrative and convey a consistent message?
• Do external disclosures align with information used to drive internal decision making? Do they reflect the collective mind of the Board?
• Is the organization best leveraging technology and other communications tools to draw explicit connections?
32 Many organizations will treat the integrated report as an information hub or entry point to understanding the business in totality. With this in mind, it seems logical to draw from, or build standard messaging around the content of, this report. For instance, the organization might revisit the current description of its organizational profile – or series of descriptions depending on the purpose, audience and document length – to ensure that key aspects of the Organizational Overview and External Environment are captured.\(^\text{10}\)

33 Consistent messaging across the body of corporate communications can also be enhanced through cross-referencing and electronic links. Sections 2B and 3B address the role that other functional departments, including IT systems, and effective communication techniques can play in improving connectivity within and across disclosures.

**B Other functional departments’ considerations**

34 Other functional departments – including communications, IT and internal audit – that support the organization’s connected thinking can also have a pronounced effect on its reporting. Although these functions may have a bearing on report content, their greater influence is perhaps on how that content is reported. This section explores the ways that other functional departments can shape the effectiveness of \(<\text{IR}>\).

**Internal communications**

35 Paragraph 19 of this Background Paper considered ways to connect business functions. Connectivity within the organization is the essence of “integrated thinking”. Integrated thinking enables an organization to understand better the relationship between these different units, helping to break down internal barriers to working, monitoring and managing information and to communicate its value creation process. Integrated thinking leads to integrated decision-making and actions that focus on the creation of long term, as well as short and medium term, value. Integrated thinking can be contrasted with what is sometimes known as “silo thinking”, in that it takes into account the connectivity and interdependencies between the full range of factors that have a material effect on an organization’s ability to create value over time, including (but not limited to):

- The capitals the organization uses and affects, and the critical interdependencies, including trade-offs, between them.
- The capacity of the organization’s governance structure to assess resilience against short-term disruptions and respond to stakeholders’ legitimate needs, interests and expectations so as to secure long-term returns.
- How the organization tailors its business model and strategy to respond to the opportunities and risks it faces as well as major changes in its external context.
- Other organizational value drivers, activities, results (financial and other), and outcomes in terms of the capitals – past, present and future.

36 Connecting the different strands within the organization is a prerequisite for fully connecting information in the integrated report. Breaking down silos within the organization facilitates a holistic assessment of its ability to create and preserve value in the short, medium and long term.

37 Connectivity is, therefore, more than a feature of the report; it is a specific state of the organization itself. A pre-condition to effective connectivity of information within an integrated report is that, even if germinal, connectivity exists at the organizational level.

38 In addition to connecting one function to another, it is equally important that these functions connect to the principles of \(<\text{IR}>\). In particular, the organization’s functions should be equipped to implement each of the following guiding principles:

- Strategic focus and future orientation
- Connectivity of information

\(^{10}\) See Section 4A – Organizational overview and external environment of the Consultation Draft of the International <IR> Framework. www.theiirc.org/consultationdraft2013/
• Stakeholder responsiveness
• Materiality and conciseness
• Reliability and completeness
• Consistency and comparability.

39 Although the connectivity of information principle is the primary focus of this Background Paper, those involved in report preparation must also have the skills and expertise to implement the other guiding principles. For example, as suggested below, clear expression of the organization’s strategic focus and future orientation is enhanced by lateral reasoning.

3A Strategic focus and future orientation

3.3 Applying this Guiding Principle is not limited to the Content Elements strategy and resource allocation and future outlook. It pervades the selection and presentation of other content, and may include, for example:
• Highlighting significant opportunities, risks and dependencies flowing from the organization’s market position and business model.
• An explanation of those charged with governance’s view of:
  • the relationship between past and future performance, and the factors that may change that relationship, and
  • how the organization balances short, medium and long-term interests.

40 The systems thinking used to develop the strategy should also be used to communicate this information.

Connecting material matters

41 Other functional departments will mainly be responsible together to ensure the consistency of material matters. An organization should connect information about material matters throughout the Content Elements. Connecting material matters shows further details than the big picture. This allows report users to take a closer look at material matters to better understand the process of the organization’s value creation.

42 Connectivity at this level includes the relationships between:
• The capitals, including the trade-off, conversion, enhancement, and depletion of the capitals over time (see discussion of the capitals in the Background Paper “The Capitals”).
• Financial information and other information, especially as it relates to future cash flows, such as:
  • Research and development policy, technology/know-how, capital investment, investment in human resources and patents, and their implications for expected revenue growth or targeted market share.
  • Environmental policies, energy efficiency, cooperation with local communities, or technologies to tackle social issues, and their implications for cost reductions or enlarged business opportunities.
  • Long-term customer relationships, customer satisfaction and reputation, and their implications for revenue or profit growth.
  • Adequate mix of basic and applied research, new product development policy, actual products from product development, teamwork of customer relationship and development teams, commercialization based on the new product, and the trend of R&D and facility investment.

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12 Described in Box 1 of this Background Paper
• Investment in human capital to increase and stabilize technical capabilities, improve yield rate of products under changing production conditions, unify management of information and production, and increase operating profit margin.

• Quantitative and qualitative information. Both qualitative and quantitative information are necessary if an integrated report is to properly represent the organization’s value creation story, with each providing context to the other. Including key performance indicators in the explanation is often an effective way to connect qualitative elements and quantitative ones.

43 Connecting material matters is important. It is, however, useless if it is presented without the big picture.

Information technology
44 Systems incompatibility is a considerable obstacle to integrated thinking in many organizations today. The patchwork of software platforms used to manage human resource, production, procurement, financial and other information presents a host of challenges. Whether those challenges stem from imperfectly defined data entry fields, unit inconsistencies or mixed degrees of automation, legacy systems can stall internal data analysis, forecasting and decision-making. Moreover, the manual intervention needed to reconcile incompatible data sets tends to divert resources from more value adding activities.

45 The usefulness of internally generated data is influenced by, among other attributes, its accessibility, timeliness, reliability and usability. An effective IT strategy can strengthen these attributes and improve organizations’ ability to share information internally, examine causal relationships and inform business decisions. The IT strategy should extend beyond hardware and software considerations alone to identify the role of emerging applications, establish related policies and align technology-related decisions to strategy.

46 As noted earlier, stakeholder responsiveness is one of the six guiding principles underpinning <IR>. That is, an integrated report should address the quality of relationships with key stakeholders and the extent to which their interests and expectations are being met. A core element of the organization’s IT strategy, at least in the context of <IR>, could be the creation of effective feedback loops. Web-based applications and social media are gaining traction in this area.

47 Paragraph 19 highlighted the importance of bridging an organization’s full suite of disclosures. This reflects an understanding that providers of financial capital base their analyses on multiple information sources. Here, too, an effective IT strategy can play a powerful role in breaking down internal silos and helping information users to access, navigate and connect information. Digital reporting platforms, including web-based applications, offer a range of advantages. The most obvious concerns connectivity of information through cross-referencing and drill-down capability. In practice, cross-referencing allows the organization to achieve conciseness in reporting by managing the quantity of information included in the integrated report. Although more comprehensive disclosures lie behind the scenes, they are but a click away.

48 The degree of connectivity within and across digital reports is in sharp contrast to that enabled by static paper and PDF documents. The digital formats allow you to automatically import data, customize language, automatically filter data based on user needs/perspective and/or authorizations, search for desired data points, and view/display information in custom user-defined templates, etc.

49 Digital reports can offer the added benefit of customized formats, allowing report users to view information in a manner suitable to their needs.

50 Digital reporting standards such as Extensible Business Reporting Language (XBRL) play a critical role in the sharing of electronic information. Box 2 provides an introduction to XBRL.
51 The topic of external assurance is top of mind for many tracking the progress of <IR>. An important precursor to this discussion is the role that internal controls and procedures play in ensuring the reliability and completeness of information.

52 Although the scope of internal audit is broad and varies across organizations, its function is perhaps most commonly associated with financial and management reporting. As <IR> challenges the traditional approach to corporate reporting, so too does it challenge the approach to internal audit.

53 Paragraphs 17 of this Background Paper emphasized the need to bridge business units and functional departments to reinforce a big picture view internally. This bridging will alter the way that groups collaborate, communicate and share information. To the extent that these interactions yield reportable information, supporting systems, structures and processes will need to be robust and reliable. Likewise, internal audit will need to develop expertise in subject areas that, for better or for worse, have been deemed of secondary importance until now. Systems thinking, already a requisite skill for internal audit professionals, will continue to be critical.

**Box 2: Extensible Business Reporting Language (XBRL)**

XBRL is a subset of Extensible Markup Language (XML), an internationally recognized standard for electronic communication. Key attributes are captured in a kind of dictionary, called taxonomy. The information becomes machine readable, allowing for easy dissemination and analysis.

XBRL is already used in financial and non-financial, statutory and tax reporting applications around the world. Taxonomies exist for International Financial Reporting Standards (IFRS), US Generally Accepted Accounting Principles (US GAPP), Management Discussion and Analysis (MD&A) and Management Commentary (MC), as well as for disclosures in accordance with the Carbon Disclosure Project, Global Reporting Initiative and World Intellectual Capital Initiative.

In terms of XBRL use, organizations may opt for a bolt-on approach, whereby financial and other information is tagged during the final stages of reporting. The benefit of tagged disclosures is that analysts and other users have access to more timely and accurate information. Moreover, XBRL lends the possibility of drilling down on information, normalizing data over time and drawing comparisons to industry peers.

Other organizations may choose a more sophisticated integrated approach, whereby information is tagged at the activity or transactional level. Though more costly at inception of the project, this approach offers inherent benefits internally. Without replacing existing systems, a mapping process not only tags information for reporting purposes, but it can also bridge legacy systems by translating tagged information into a common language. Internal reporting capabilities are improved by enhancing information flow, simplifying data compilation and analysis functions, and highlighting causal relationships.

Using supporting software, XBRL allows report users to:

- import data into spreadsheets or other applications
- customize the presentation of information according to language, data or other needs
- display related disclosures, regardless of their location in the original presentation.

**Internal audit**

51 The topic of external assurance is top of mind for many tracking the progress of <IR>. An important precursor to this discussion is the role that internal controls and procedures play in ensuring the reliability and completeness of information.

52 Although the scope of internal audit is broad and varies across organizations, its function is perhaps most commonly associated with financial and management reporting. As <IR> challenges the traditional approach to corporate reporting, so too does it challenge the approach to internal audit.

53 Paragraphs 17 of this Background Paper emphasized the need to bridge business units and functional departments to reinforce a big picture view internally. This bridging will alter the way that groups collaborate, communicate and share information. To the extent that these interactions yield reportable information, supporting systems, structures and processes will need to be robust and reliable. Likewise, internal audit will need to develop expertise in subject areas that, for better or for worse, have been deemed of secondary importance until now. Systems thinking, already a requisite skill for internal audit professionals, will continue to be critical.
3. Integrated report

54 Section 1 emphasized the important relationship between integrated thinking and Integrated Reporting. In particular, it highlighted the influence of internal management considerations on report content, as well as the importance of other functional departments on reporting approach. Section 2 considered how these concepts translate into practical measures for organizations, including the development of a big picture view of the organization, connection of time horizons and coordination of a strategy for consistent messaging across all disclosures. The important role of integrated thinking within communications, information technology and internal audit functions was also explored.

55 Section 3 takes these measures a step further by considering their influence on reporting. In particular, through examples, this section explores how integrated thinking influences the content and approach of integrated reports. It should be noted that although the examples illustrate key concepts, they do not represent definitive guidance. Each represents one of many possible approaches. For a range of emerging reporting practices, which businesses may choose to adopt or modify to suit their circumstances, visit the Emerging <IR> Database at http://examples.theiirc.org/home.

A Report content

56 The translation of integrated thinking into Integrated Reporting can be reduced to a single question: Has the organization presented a holistic view of its strategy, governance, performance and prospects to inform decision-making? To answer this question, the organization should consider how effectively it has communicated the bigger picture by connecting the draft Framework’s content elements and fundamental concepts. It should also consider how well it has connected the past, present and future. Each consideration is explored in this section.

Communicating the big picture

57 Paragraph 11 of this Background Paper defined connectivity, for the purpose of <IR>, as follows:

“An integrated report should show, as a comprehensive value creation story, the combination, interrelatedness and dependencies between the components that are material to the organization’s ability to create value over time.”

58 In terms of reporting practice, this translates into drawing explicit links between the fundamental concepts and content elements of <IR>. In drawing these links, of course, the organization should not feel constrained by the order in which the elements are listed in Figure 1 or in the draft Framework. On the contrary, the organization should avoid the pitfall of linear thinking and apply its own judgement to determine how the various pieces fit together.

59 In its 2012 integrated report, Sasol connects key inputs to business model activities (namely, natural and intellectual capital), business model outputs and outcomes, value creation and governance. These concepts are introduced in a diagram, shown on the following page, and discussed further in the report’s narrative.

<table>
<thead>
<tr>
<th>value creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>capitals</td>
</tr>
<tr>
<td>governance</td>
</tr>
<tr>
<td>opportunities and risks</td>
</tr>
<tr>
<td>strategy and resource allocation</td>
</tr>
<tr>
<td>business model</td>
</tr>
<tr>
<td>performance</td>
</tr>
<tr>
<td>future outlook</td>
</tr>
</tbody>
</table>
**Figure 7. 2012 Integrated Report excerpt, Sasol, p. 24-25.**
60 Figure 8 provides a second example of connectivity. Specifically, Rio Tinto defines and links one of its key performance indicators, all injury frequency rate, to organizational strategy. Management provides a tidy snapshot and directs readers to another section of the report for more detailed information.

61 As noted earlier, internal management considerations will help shape the content of the integrated report. Of course, the guiding principle of materiality and conciseness ensures that the organization filters its entire universe of management considerations, decisions and actions to yield a package that is relevant, useful and digestible. For more information on the materiality principle and its application, readers are directed to the publication Materiality – Background Paper for <IR>.14

62 Box 1 of this Background Paper emphasized the importance of a systems approach to business management. This same mindset should inform the content of the integrated report. When evaluating information for inclusion in the integrated report, the organization should go beyond considering matters in isolation to also understanding their interactions. After all, the net impact of matters considered immaterial in isolation may be important to investors as they carry out their assessments. The adjacent panel provides sample considerations, in this case focusing on the interaction of capitals.
63 As indicated earlier, <IR> urges businesses and investors alike to consider the important contribution of “beyond financial statement” matters to the organization’s ability to create value. This ambition is often misconstrued as a directive to monetize all information. In a great many cases, such efforts would be too assumption-laden to be meaningful. In other cases, however, management can draw useful connections between non-financial information (e.g., manufactured capital, intellectual capital, human capital, social and relationship capital and natural capital) and future cash flows. For example, the organization might consider and communicate the projected impact of:

- intellectual capital – including R&D investments, technology developments and patent pipeline – on revenue growth or targeted market share
- environmental policies – including energy efficiency plans and associated technology investments – on cost reduction
- customer satisfaction and reputation on revenue or profit growth
- product development policies and ratio of basic to applied research on R&D spending
- investment in human capital – including spending to enhance skills and improve yield rates – on operating profit margin.

64 Figure 9 illustrates one company’s approach to linking two content elements, namely governance and performance. In this example, Potash Corp connects its compensation structure, including a short-term incentive program (STIP), to the organization’s financial, safety and environmental performance. Performance targets and incentives are also aligned to broader organizational goals.

<table>
<thead>
<tr>
<th>GOAL</th>
<th>DISCUSSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create superior shareholder value</td>
<td>At-risk incentive compensation plans include short-term, medium-term and long-term cycles and are based on total shareholder return, share appreciation or a related measure.</td>
</tr>
<tr>
<td>Be the supplier of choice to the markets we serve</td>
<td>The STIP is based on annual Board-approved goals for sales, productivity and profitability. Achieving them requires us to meet the needs of our customers throughout the year.</td>
</tr>
<tr>
<td>Build strong relationships with and improve the socioeconomic well-being of our communities</td>
<td>Our target is to invest 1 percent of consolidated income before income taxes on a five-year rolling average in the communities in which we work and in other philanthropic programs. We actively encourage all employees, particularly executives, to participate in these programs.</td>
</tr>
<tr>
<td>Attract and retain talented, motivated and productive employees who are committed to our long-term goals</td>
<td>Target compensation is competitive with the industry average. Executives are motivated to achieve strong results through opportunities to earn above target based on company and individual performance.</td>
</tr>
<tr>
<td>Achieve no harm to people and no damage to the environment</td>
<td>At all plant locations, one-half of the annual STIP payout is based on performance in relation to local metrics, a significant portion of which relates to safety and environmental performance. At corporate offices, 5 percent of the annual STIP payout depends on the company’s overall safety performance.</td>
</tr>
</tbody>
</table>

Figure 9. 2012 Summary Integrated Report excerpt, Potash Corp, p. 35.
Connecting time horizons

65 Much of today’s reporting focuses on historical performance – primarily historical financial performance – with little emphasis on future opportunities, risks and strategies. True, a business should be held accountable for its use of invested funds over the past quarter or past year; however, it should also equip report users with a basic roadmap for the organization’s future. Paragraphs 25 through 28 of this Background Paper explored various ways in which an organization can draw links across the time spectrum.

66 In Figure 10, Truworths International connects past, present and future by:
- Citing past objectives, performance and challenges
- Assessing present needs, strategies and budgets
- Disclosing future objectives and plans.

As shown, <IR> is not necessarily about providing specific forecasts. Of course, some organizations may choose to share their expectations based on strategies, reasonable assumptions and current understanding of external conditions. Expectations may be predicated on industry know-how and third-party studies and forecasts. Based on a clear communication of related assumptions, report users can make their own assessments as they consider their allocation of financial capital.

ADOPTING LEADING INFORMATION TECHNOLOGY SYSTEMS

PERFORMANCE AGAINST OBJECTIVES IN 2012

<table>
<thead>
<tr>
<th>Objective</th>
<th>2012 Objective</th>
<th>2012 Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>After a pilot phase, new POS and store inventory management applications installed in over 70 stores by period-end.</td>
<td>Performance in 212.</td>
</tr>
<tr>
<td>Organizational overview &amp; external environment</td>
<td>New account acquisition system developed in-house and implemented across all account acquisition channels.</td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td>Capital expenditure of R40 million committed to Information Technology (IT)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• R30 million invested in IT, with IT solution expenditure lower than anticipated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• New IT projects in 2012 include:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Upgraded store data networks with increased bandwidth capacity.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Account acquisition system developed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Developed merchandising assortment system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enhanced IT governance processes across the business in line with hiring.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enterprise-wide IT governance framework implemented, focusing mainly on risk management of IT resources and improvements of IT processes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quarterly reporting of board meetings against the IT governance framework.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continued development of key merchandising and supply chain IT systems.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Several merchandising and supply chain IT applications introduced during the period.</td>
<td></td>
</tr>
</tbody>
</table>

CHALLENGES ENCOUNTERED IN 2012
- International trading systems to operate in African countries which have different currencies, seasons and supply chain lead times.
- Meeting the needs for the business for constant innovations within cost and resource constraints.
- Managing the business needs to enhance legacy applications while those are in the process of being replaced or upgraded.

KEY RISKS AND MITIGATION STRATEGIES FOR 2012

<table>
<thead>
<tr>
<th>Description of risk</th>
<th>Risk mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth and expansion in the business has resulted in certain systems requiring upgrade or replacement and IT capacity increases.</td>
<td>Project Steering Committee prioritizes IT projects.</td>
</tr>
<tr>
<td>Fixed asset IT-related capital expenditure in the period.</td>
<td>Reduced IT-related capital expenditure in the period.</td>
</tr>
<tr>
<td>Resilience continuity plans, disaster recovery backup and recovery processes are in place.</td>
<td>External vendor support used to address on new technology.</td>
</tr>
</tbody>
</table>

The new POS system is being introduced in stores. The project has change management implications and potential implementation risk.
- Dedicated project management team with internal and external expertise.
- Engaged services of change management consultant.
- Purchased and pilot phases undertaken before POS system rolled-out to stores on a phased basis to limit implementation risks.
- Project designed to limit impact on merchandise distribution and customer management systems.

OBJECTIVES AND PLANS FOR 2013
- Implement new human resources IT solution.
- Complete implementation phase of the POS project.
- Complete roll-out of standardized business intelligence systems throughout the business.
- Continuously implement new or enhanced IT systems relating to merchandise, supply chains and new account acquisition.
- Upgrade IT capacity relating to merchandise distribution.
- Ensure improved ‘end-to-end’ operational stability.
- Capital expenditure of R61 million committed for 2013.

Figure 10. 2012 Integrated Annual Report excerpt, Truworths International, pp. 22-23.
68 Figure 11 includes excerpts from Stockland’s 2012 Shareholder Review. In the upper graphic, the company connects present and future by indicating its planned business portfolio relative to the current mix. A supporting narrative explains the associated rationale and strategy.

69 In the bottom diagram, Stockland divides the future into short and long term considerations. In the process, the diagram bridges four content elements.

<table>
<thead>
<tr>
<th>Future Direction</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% Apartments &amp; UK</td>
<td>24% Office &amp; Industrial</td>
</tr>
<tr>
<td>44% Retail</td>
<td>65% Retail</td>
</tr>
<tr>
<td>10% Retirement</td>
<td>12% Retirement</td>
</tr>
<tr>
<td>21% Residential</td>
<td>23% Residential</td>
</tr>
</tbody>
</table>

Figure 11. 2012 Shareholder Review excerpt, Stockland, p. 5.
Corporate reporting is changing at a remarkable pace. Disclosures perhaps unheard of a decade ago have become all but standard practice today. And, as expectations for transparency and accountability continue to grow, businesses are focusing not only on what they are reporting, but also on how they are reporting it. Businesses are also operating in an increasingly connected world, thanks in part to a growing reliance on social media and proliferation of hi-tech devices. With these factors in mind businesses are accepting – or even embracing – a new reporting reality. This section explores how some organizations are leveraging communications and technology resources to better connect and clarify their information.

Applying communication techniques

The connectivity, and overall utility, of the integrated report is enhanced when it is well presented, logically structured and written in straightforward language. Organizations can improve readers’ comprehension by providing clearly delineated yet linked sections, section summaries, cross-references and navigation devices. An example of the latter is shown in Figure 12. In particular, icons direct readers to a glossary, other report content or further information online. Simple icons also help report users easily spot performance hits and misses. These and other visual techniques help weave common threads throughout the entire report. In so doing, they avoid repetition and provide access to further information as needed.

There are other techniques by which the business can tell its value creation story in a concise, coherent and logical manner. For example, in its 2011 Summary Annual Report (Figure 13), Potash Corp presents its five drivers of value. Through a simple diagram, these drivers are connected to the organization’s core values, external context, key resources or capitals and key relationships. To each value driver, the report assigns related goals, strategies and targets or performance measures. The diagrams include several useful attributes:

- Bullet points convey strategies succinctly.
- Plain language communicates concepts effectively.
- Consistent goal – strategic approach – targets pattern for each driver provides logic and predictability.
- Page references connect targets to performance data.
- Color-coding links information for each value driver, both within the diagrams and throughout the balance of the report.

Figure 12. Integrated Report 2012 excerpt, Vodacom, p. 9.
Figure 13. 2012 Summary Annual Report excerpt, Potash Corp, pp. 13-16.
73 Clearly, there are a range of approaches that can enhance the clarity and cohesiveness of communication. Naturally, the organization must be mindful not to forego substance for style. As in all forms of corporate communication, the credibility of the underlying information is and will continue to be critical.

74 To achieve this credibility, the organization ought to consider another aspect of connectivity: the partnership between quantitative and qualitative information. On the one hand, performance metrics or indicators provide evidential support for broader statements or assertions. In so doing, numerical data can lend a level of objectivity and reliability to the integrated report. On the other hand, a well-crafted narrative offers a function that numbers alone cannot provide. The accompanying text can provide essential context for understanding internal trends over time or comparisons to industry peers.

75 Rather than relying exclusively on standardized or externally imposed metrics, the organization should consider carefully the information that best reflects its unique circumstances, strategies and objectives. With the big picture concept in mind, Key performance indicators may be useful for: (1) exposing trends in the organization’s own performance over time with the clear linkage to the important change of strategy, (2) contrasting actual versus targeted performance and (3) benchmarking performance to that of other companies.

**Leveraging technology**

76 Communications technology is playing an ever more important role in corporate reporting. As noted in Section 2B Information technology of this Background Paper, digital reporting platforms, including web-based applications, are vastly improving the connectivity of information.

77 At the simplest level, an organization can embed weblinks in the integrated report to connect content to more comprehensive information online or in other documents. With this cross-referencing and drill-down capability, the integrated report serves as an information hub through which a suite of other disclosures can be accessed as needed. Such links promote conciseness while still maintaining a level of background detail that readers may ultimately seek.

78 Box 2 provided an overview of XBRL, an internationally recognized standard for electronic communication. In many ways, XBRL paves the way for more sophisticated connections, both within the organization and for external information users. As noted earlier, the machine readability of information improves the ease and speed with which that information can be searched, accessed, combined, customized, analyzed and reused. The instantaneous ability to view an organization’s performance data in the context of important variables such as program expenditures or annual production is especially beneficial.

79 As shown in Figure 14, technology can be used at a more macroscopic level to clearly demonstrate the bigger picture. In this example, through the click of a button, SAP demonstrates to online readers how various financial and non-financial performance dynamics connect. Cause and effect relationships are further clarified through brief accompanying explanations at the bottom of the screen.
Employee retention is the ratio of the average headcount (expressed in full-time equivalents) minus employee-initiated terminations (turnover) divided by the average headcount, taking into account the past 12 months.

**Capability Building >> Employee Retention:**
According to the Global Workforce Study (2012) the "chances to advance the career" is the second most important driver of employee retention. By having and thus growing from within, SAP creates career opportunities for its employees. In turn, it is our expectation that this opportunity leads to an increase in employee retention.

**BHCI (Business Health Culture Index) >> Employee Retention:**
Studies show that an organization is four times more likely to lose talent if its employees have an unfavorable view of health and well-being at the company (World Economic Forum Report, 2010). By implication, stronger performance on the Business Health Culture Index will correlate with a higher level of employee retention.

**Employee Retention >> Employee Retention:**
The KCG Genesis (2014) reports that companies with highly engaged employees have considerably lower voluntary turnover than companies with unengaged employees and will thus lead to a higher retention rate.

**Employee Retention >> Revenue:**
Alexander, Bloom, & Nevolins (1984) have found a negative relationship between employee turnover and organizational productivity. In other words, employee retention is positively correlated with organizational productivity and thus a company's revenue.

**Employee Retention >> Customer Success:**
Kees (2001) has found evidence that employee turnover has a negative impact on customer satisfaction. We believe this effect stems from the fact that experienced employees work more efficiently, have better product knowledge, can build trusting relationships with colleagues and customers, and thus have the ability to better serve customers' needs.

**Employee Retention >> Operating Margin:**
"The cost of finding and replacing a strategic or critical employee starts at 150 percent of the value of that employee's compensation package" (Rodgers: The Hidden costs of employee turnover). A higher level of employee retention will therefore help to avoid costs and thus increase SAP's operating margin.

**Figure 14.** Online Integrated Report 2012, Key Facts, SAP,
In addition to connecting disclosures or content elements themselves, organizations are leveraging technology to better connect to their readers. The combination of XBRL and supporting software can cater for the presentation of information to users’ own format, layout and language preferences.

As shown in Figure 15, Rio Tinto uses a Quick Response code, or QR code, to connect readers to further online content via mobile or tablet devices. The matrix barcode is gaining popularity as a tool for connecting readers and their devices to additional information. Figure 16 demonstrates Vodacom’s use of the same technology to fulfill its commitment to stakeholder responsiveness. In particular, the company uses the QR code to create a feedback loop that informs future assessments of what is material to report, based on what matters to its stakeholders.

Figure 15. 2012 Annual Report excerpt, Rio Tinto, p.ii.

Figure 16. Integrated report excerpt, Year ended 31 March 2012, Vodacom Group Limited, p. 3.
VISIT THE EMERGING INTEGRATED REPORTING DATABASE

http://examples.theiirc.org/