ESSENTIAL GUIDE TO MANAGEMENT INFORMATION

Supporting decision makers with information that is fit for the future
This guide is aimed at management accountants and other finance team members to provide guidance on how to bring social and environmental information into management information (MI).
THE PROJECT TEAM

We would like to thank all the project team members, and CFOs from the A4S CFO Leadership Network.

A4S TEAM
Jessica Fries
Helen Slinger
Elizabeth To
Luke McLaughlin
Elizabeth Ace
Jamie Stewart
Annabel Clark
James Ives
Charlotte Drain
Chris Moreton
Alpa Wagjiani

WITH THANKS TO
Adidas Group
Anglian Water
British Land
Bupa
Marks and Spencer
Royal DSM
Sainsbury’s
SSE
The Crown Estate
Unilever
Yorkshire Water

WITH SPECIAL THANKS TO
Roger Seabrook, VP Finance Marketing & Sustainability, Unilever
Jeffrey Unerman, Professor of Sustainability Accounting, Lancaster University Management School
INTRODUCTION FROM THE A4S CFO LEADERSHIP NETWORK

Business is changing. Sustainability is no longer in the ‘start-up’ phase or a topic for early adopters. Sustainability is becoming mainstream. Business performance is no longer solely judged in terms of financials. Internal and external stakeholders expect organizations to deliver value beyond just short-term financial performance.

As a CFO, this is not the only reason I focus on sustainability. For me, sustainable business is good business. At ABN AMRO, we aim to strengthen our reputation and franchise with stakeholders, reduce long-term costs and increase long-term revenues by doing business in a sustainable way.

This has implications for the finance function too. We are broadening the definition of what good MI is, to capture the things that are important to stakeholders. By going beyond the traditional financial metrics, we will also safeguard and enhance our financials.

This message, at a strategic level, is starting to get through. At an operational level we need to ensure we catch up. Our processes, systems and MI need to support our transition to a sustainable business. In day-to-day business this is still a challenge. Availability of sustainability data, clarity and consistency of methodology, and auditability of related reporting are still relatively immature. The A4S CFO Leadership Network has produced this guide to provide practical ways of maturing further.

At ABN AMRO, we have worked on integrating social and environmental metrics into our day-to-day reporting. We are starting to see examples of where this new insight is influencing the decisions being made. Having said this, there is still a long way to go and we need to improve continuously.

With boardroom access, an understanding of value drivers and the ability to provide robust information, I believe finance professionals have a key role to play in the transition towards sustainable business. We are strategically placed to provide our businesses with the insights they need to thrive.

I have been inspired by A4S and fellow CFOs by the steps they have already taken and would like to encourage other finance professionals to join this journey – to develop the pathway to more sustainable and long-term value creation. I hope this guide helps you to do so.

CLIFFORD ABRAHAMS, CHIEF FINANCIAL OFFICER, ABN AMRO

“We are broadening the definition of what good MI is, to capture the things that are important to stakeholders. By going beyond the traditional financial metrics, we will also safeguard and enhance our financials.”
THE IMPORTANCE OF INFORMATION

Information drives decisions. Those with access to better information are more likely to make better decisions. Never before has the importance of broad, far-reaching, forward-looking information been so important. Yet within the profession of accounting, backward-looking financial information still receives almost all the focus.

Financial capital does not exist in isolation. An organization’s value depends on many broader factors, eg interactions with key stakeholders, such as suppliers, customers and wider society. The impacts and dependencies on these intangible factors are often not captured by traditional accounting methods, which focus on measuring financial capital. Greater visibility and understanding allows management to make decisions that incorporate the breadth of information that matters. One way of accounting for these broader factors is to think of them as other capitals – human, social, natural, intellectual and manufactured capital. This can help to articulate the relative value (or cost) of the different factors to the organization.

MI AND REPORTING

Accountants recognized the need for robust information long ago with the development of management accounting and MI. To continue offering the most valuable insight to decision makers in a changing world, MI needs to look beyond the preference for financial information and support decision makers with information that integrates broader value drivers. Within this guide, and to be consistent with the terminology used in the International Integrated Reporting (IIR) Framework, we call this integrated management information (IMI).

The A4S Essential Guide to Management Information aims to support finance professionals and their organizations in this transition to IMI.
GLOSSARY

**Capitals:** Any store of value that an organization can use in the production of goods and services which need to be maintained, protected and nourished to continue producing benefits in the future. The International Integrated Reporting Council (IIRC) defines the following capitals: financial capital; manufactured capital; intellectual capital; human capital; social and relationship capital; and natural capital.

**Circular economy:** An economy in which resources are reused for as long as possible. This is an alternative to a traditional linear economy ("take, make, dispose") and involves a continuous positive development cycle that preserves and enhances natural capital, optimizes resource yields, and minimizes system risks by managing finite stocks and renewable flows.

**Environmental:** Environmental factors examine how a company performs as a steward of the natural environment.

**Integrated management information (IMI):** MI which focuses on value creation, with sustainability and financial information integrated. The processes, systems and information flows are all integrated into one framework.

**Key performance indicator (KPI):** A measurable value that demonstrates how effectively an organization is achieving its key objectives. Organizations use KPIs at multiple levels to evaluate their success at reaching targets.

**Multicapital:** Something which relates to all (or many) of the six capitals. For example, multicapital information includes natural capital, social capital, human capital, intellectual capital, manufactured capital and financial capital information.

**Social:** Social factors examine how a company manages relationships with its employees, suppliers, customers and the communities that it operates in.

**Stakeholder:** A party that can either affect or be affected by an organization. Stakeholders can be internal or external. Internal stakeholders are those who have a direct relationship with an organization, such as employment; external stakeholders are those who relate to the actions and outcomes of the organization, such as customers, suppliers, investors or governments.

**Sustainability:** The ability to satisfy the needs of the present generation without adversely affecting the conditions for future generations.

**Sustainable Business:** A business that delivers financial returns in the short and long term in a way that generates positive value for society and operates within environmental constraints.

---

There are five key factors that distinguish the MI discussed in this guide from traditional MI, set out below.

### User-centric reporting
The needs of users and stakeholders are central to the design and production of MI. Users are empowered to make better decisions and drive the right actions, in part due to receiving the right information. MI should take into account the views of both internal and external stakeholders, which leads to better decisions and relationships.

### Connectivity of information
IMI provides a holistic view of performance and helps to explain the linkages between:
- All of the different capitals within multicapital information
- Qualitative and quantitative information
- Past and future performance
- Governance, strategy, risk management and performance

It also shows how MI and board information are connected to externally reported information.

### Focus on value creation
MI should focus on how the organization is creating, protecting or eroding value over time in order to allow management to monitor and assess performance against strategic objectives. This includes information on the activities, relationships and interactions that an organization undertakes to create value for itself, its shareholders, its people, society and the environment.

### Integrated information
Reports draw together the performance of not only financial information but also social and environmental information. Reporting on this information should be sufficiently reliable, complete and accurate for the decisions that depend on it. There are many ways of structuring sustainability information. Some organizations use a multicapital approach and others use a social, environmental and economic approach.

### Outlook: short, medium and long term
MI should incorporate performance over the short, medium and long term. Information is presented on a basis that is consistent over time and enables comparison internally and externally, using benchmarks, ratios or other performance indicators.
Produce consistent and accurate integrated performance reports which develop insight and enhance decision making.

Ensure the control environment is sufficiently robust to provide complete and accurate reporting under the framework.

Extend the current reporting framework to support integrated strategic and operational decision making.

Create an integrated strategy and set strategic objectives.

Produce an integrated budget and forecast with sensitivity testing where appropriate.

HOW DOES THIS FIT INTO THE DECISION-MAKING CYCLE?

The diagram below sets out the overall process flow from strategic planning to management reporting. For further details on the right hand side section, see the A4S Essential Guide to Strategic Planning, Budgeting and Forecasting.
BENEFITS OF IMI

We have identified eight key benefits to integrating social and environmental factors into MI.

- **Better decision making and action**: Understanding how multicapital information links to value creation and financial performance will enable better business decisions. This, in turn, will drive more effective actions.

- **Efficient reporting**: Making reporting more focused will drive efficiency in report production. This will allow finance to become an effective business partner because they will spend more time with the business on value-creating activities.

- **Greater collaboration and innovation**: Adopting IMI can facilitate cross-functional collaboration within the organization, which can stimulate innovation.

- **Better external reporting**: Improving the quality of internal reporting will help to produce better quality external reports that are more useful for external decision makers or stakeholders, such as investors.

- **Improved financial performance**: Identifying new business models can generate increased and/or diversified revenue. Identifying opportunities for more efficient resource allocation can also lead to cost savings, e.g., reducing waste, water usage, and energy costs. This can be a competitive advantage.

- **Improved risk management**: Including views from external stakeholders and considering sustainability macro-trends will allow organizations to identify, manage, and mitigate risks better. Using scenario analysis helps to understand these risks over the short, medium, and long term.

- **Enhanced stakeholder relationships**: Incorporating the feedback of external stakeholders into internal decision making will enhance transparency and build trust.

- **Increased employee engagement**: Linking remuneration to value creation measures, such as environmental and social factors, can help increase employee engagement. It can also help attract high-calibre employees.
CONNECTING THE BENEFITS OF IMI

The diagram below provides an indication of how the benefits may be connected and mutually reinforcing.
## CHALLENGES OF AN INTEGRATED APPROACH

### Challenges for finance to integrate social and environmental factors into MI

Finance has a clear role to play in integrating social and environmental factors into MI, but our research has shown the following key challenges.

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of buy-in from senior management or the board</td>
<td>Engage with the senior leadership team on social and environmental risks and opportunities that impact the organization in the short, medium and long term. Establish who can act as an influencer at a senior level and use MI to provide them with the information they need.</td>
</tr>
<tr>
<td>Lack of or abundance of data with no ability to filter or sort information</td>
<td>Gain an understanding of the latest technology trends, products and services and how these can help to develop better reporting solutions.</td>
</tr>
<tr>
<td>Short-term financial pressure impacting long-term sustainability goals</td>
<td>Adopt a data driven mindset and reinforce the importance of having good quality data available for all key decisions. Think long term and work to understand how financial capital is affected by the other capitals. Embed these factors into the finance team's culture.</td>
</tr>
<tr>
<td>Finance, sustainability and operations teams do not speak the same language when it comes to sustainability</td>
<td>Build your network across other functions, including reaching out to the sustainability team, if it exists. Understand what they do, what issues are important to them, the language that they use and how they report to the business. Use your skillset to identify opportunities for improving collaboration, internal reporting or decision making. Use infographics and internal workshops to align the language on sustainability.</td>
</tr>
<tr>
<td>Difficulty in converting sustainability measures into financial impact and lack of understanding of connectivity</td>
<td>Look at the practical examples from the A4S Essential Guide to Social and Human Capital Accounting to get inspiration. See the Social and Human Capital Protocol and the Natural Capital Protocol for structured frameworks on these measurements.</td>
</tr>
<tr>
<td>Functional departments are still structured in silos (HR, finance, sustainability, etc) so overarching responsibility for MI across the organization is unclear</td>
<td>Use an integrated approach to MI to help to break down silos and increase engagement between teams. Take the lead on this if necessary. The A4S Essential Guide to Finance Culture contains tools and guidance to help align the culture between teams.</td>
</tr>
</tbody>
</table>
TOP TIPS FOR GETTING STARTED

Consider how sustainability factors are reflected in the organization’s purpose, vision and mission statement.

Consider which sustainability factors are important to internal and external stakeholders.

Identify areas to explore connectivity of information, e.g., the connectivity between employee wellbeing and financial impact.

Review the International <IR> Framework to gain a better understanding of concepts such as multicapitals.

Identify key people to support from within the organization and define their roles and responsibilities, as relevant to the factors that are within their control.

Assess how the long-term outlook for the company translates back into short-term objectives.

Look at the current technology landscape within the organization and assess its strengths and weaknesses, including key controls and data availability.

Identify potential sources of data both internally and externally that could be used to generate insight as part of an IMI framework.
Introduction

Management information framework
• MI framework overview
• Developing the MI framework
• Analyse business model and value creation process
• User-centric reporting
• Stakeholder-centric reporting
• Standards
• Integrated and connected performance measures
• Implementing the framework
• Top tips

Control environment

Reporting and developing insight

Maturity map
**MI FRAMEWORK OVERVIEW**

Finance’s approach to developing an MI framework that considers social and environmental factors

**FOLLOWING ON FROM STRATEGIC PLANNING, BUDGETING AND FORECASTING**

The A4S Essential Guide to Strategic Planning, Budgeting and Forecasting provides tools and guidance that help to assess the organization’s mission, vision, strategic context and environment. It then outlines how to incorporate sustainability into strategic planning, budgeting and forecasting.

Following on from this, the first steps that finance should take in developing an MI framework are:

1. Identify the key stakeholders who need to be involved in developing the framework.
2. Use the output from the strategic planning work to understand the business strategy. This information should inform the approach to designing and implementing the MI framework. This framework will help the organization to monitor the performance of its strategy.

The framework is a documented policy that outlines the principles, processes and participants relevant to your organization. It will enable the integration of sustainability into MI by embedding sustainability into the processes, people, tools and reports.

It is important that the framework can be periodically updated and refined to ensure it remains relevant for the context of the business.
MI FRAMEWORK OVERVIEW

Establish principles for the implementation of the MI framework

A PRINCIPLES-BASED APPROACH

There will not be a one-size-fits-all approach to developing an MI framework. Each organization has a unique set of circumstances, therefore, a principles-based approach, rather than a rules-based approach, should be adopted. Establishing a set of principles will enable a pragmatic approach to the implementation of the framework.

The output of an IMI framework process should be a documented policy setting out the guiding principles and recommended practices within the organization.

The desired outcome from implementation of this policy is good performance and more effective control of the organization.

A PRINCIPLES-BASED APPROACH WILL:

• Provide a framework for the design of the IMI
• Allow consistent decisions to be taken
• Drive a pragmatic approach to implementation

WHAT MAKES A GOOD GUIDING PRINCIPLE?

• Simple to interpret and understand
• Can be applied consistently across the IMI framework
• Precise about what it describes

EXAMPLE PRINCIPLES:

User-centric information
MI will be tailored to meet the requirements of users within the organization and incorporate external stakeholders’ views for decision-making purposes where appropriate.

Connectivity of information
MI will provide contextual information to explain how the information is connected to wider factors to present a holistic view of performance.

Focus on value creation
MI will focus on value creation, incorporating social and environmental measures alongside financial.

Multicapital information
MI will be based on the full range of capitals (natural, social, human, intellectual, manufactured and financial).

Information that informs decisions
• Information will be robust enough to inform the decisions needed.
• Where necessary, information will be reliable, complete, free from material error, comparable, consistent and timely.
• Information will be presented on a consistent basis over time in order to enable comparison both internally and externally.
DEVELOPING THE MI FRAMEWORK

Steps to develop the MI framework

The MI framework should define the:

- Organization’s information requirements
- Overarching approach to delivering high quality information
- Analysis to support evidence-based decision making

Once the key stakeholders and design principles have been identified, the following key steps can be used to develop the framework.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Evaluate business strategy and outlook</th>
<th>Analyse business model and value creation process</th>
<th>Define information requirements of users</th>
<th>Identify relevant standards and define principles</th>
<th>Agree key performance measures, targets and connectivity</th>
<th>Monitor on an ongoing basis, to drive decisions and actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor the effectiveness of the organization’s strategy over the short, medium and long term.</td>
<td>Align MI framework to the organization’s strategic objectives and include a forward-looking view of performance.</td>
<td>Understand resource allocation plan and define basis of measurement, e.g. will it use a multicapital approach? Identify sources of information to monitor.</td>
<td>Identify information required by internal users and external stakeholders.</td>
<td>Identify relevant standards that can be used to define key performance measures.</td>
<td>Agree performance measures and targets and examine the linkages between them.</td>
<td>Set up measurement and monitoring systems for reporting and generating insight to provide decision-useful information.</td>
</tr>
<tr>
<td>Support the development of stakeholder relationships through effective MI.</td>
<td>Deliver reliable, consistent and comparable information over time.</td>
<td>Deliver a holistic approach to demonstrating the interrelated factors that impact value creation.</td>
<td>Deliver the right information at the right time to drive decision making and action.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

So the MI framework will:

- Monitor on an ongoing basis to drive decisions and actions
- Agree key performance measures, targets and connectivity
- Set up measurement and monitoring systems for reporting and generating insight to provide decision-useful information
- Deliver a holistic approach to demonstrating the interrelated factors that impact value creation
- Deliver the right information at the right time to drive decision making and action
# DEVELOPING THE MI FRAMEWORK

**MI framework: key questions and the role of the CFO and finance**

Below we set out some key questions for the board, finance and executive management to consider as part of developing the MI framework.

<table>
<thead>
<tr>
<th>MI Framework Step</th>
<th>Key questions to consider</th>
<th>Role of CFO and finance</th>
</tr>
</thead>
</table>
| 1. Evaluate business strategy and outlook | • What is the organization’s purpose?  
• How have we incorporated sustainability into the strategy?  
• What are our strategic objectives?  
• What are the risks and opportunities?  
• How are we positioned in the market?  
• What is the relationship between past and future performance, and what are the factors that can change that relationship?  
• How will the organization balance short, medium and long-term interests?  
• Where does the organization want to go and how does it intend to get there? | • The CFO should ensure that they are aligned with the board on the organization’s vision and purpose.  
• The CFO will work with the executive management team to develop a strategy and business model and should expect challenge from the board on how they will create/protect value.  
• Once the strategy has been agreed, it will be up to management to implement the strategy and execute it. To be successful in implementing the strategy, the CFO needs to have an effective IMI structure in place.  
• Finance teams will have a key role to play in pulling together analysis and data that will support strategic decision making. |
| 2. Analyse business model and value creation process | • How does the business model support the delivery of the strategy and what resources do we need over the short, medium and long term?  
• How will environmental and social issues be integrated into the value creation process?  
• If a multicapitals approach is being used, which of the six capitals will we use or impact?  
• How can we examine and track the value creation process to support innovation? |  |
| 3. Define information requirements of users | • Who are our internal stakeholders and users? What are their information requirements?  
• Who are our key external stakeholders? What matters are important to them? What is their view of the organization?  
• What are analysts saying?  
• How are our competitors doing? | • Finance should expect that the board will periodically review the information it receives to ensure that it is getting what it needs. The CFO should ensure that all board members fully understand the information provided.  
• The CFO should consult with the board to help to determine which external stakeholders are important. |
## DEVELOPING THE MI FRAMEWORK

### MI framework: key questions and the role of the CFO and finance

<table>
<thead>
<tr>
<th>MI Framework Step</th>
<th>Key questions to consider</th>
<th>Role of CFO and finance</th>
</tr>
</thead>
</table>
| 4. Identify relevant standards and define principles | • What standards are we currently reporting against?  
• Do any of the metrics we are reporting externally meet our internal decision-making requirements?  
• What are the principles that will allow a consistent and effective decision-making process? | • The CFO should ensure that the needs of the board are met by implementing a performance reporting process that links objectives, principles and practices.  
• Finance teams should maintain an awareness and knowledge of new standards for financial and sustainability information. |
| 5. Agree key performance measures, targets and connectivity | • How will we monitor performance in the short, medium and long term?  
• What measures and metrics will we use?  
• How will we build skills in decision makers to use qualitative information effectively?  
• What targets will be set for each measure and metric?  
• What are our KPIs?  
• What are our key risk indicators?  
• How are the measures connected and what are the interdependencies?  
• Can we benchmark our selected metrics against a peer group? | • The CFO should gain board agreement on the defined performance indicators and be able to explain the connectivity of indicators.  
• The CFO and management should then set targets, gain agreement from the board that the targets are right and track performance against those targets.  
• The CFO should report to the board on how successfully the strategy is being delivered. |
| 6. Monitor on an ongoing basis, to drive decisions and actions | • How do we develop an MI system that drives insight?  
• How frequently will we report and will we use self-service reporting?  
• What systems will we use for reporting?  
• How will our processes be developed for reporting?  
• Are we treating information as an asset?  
• Should we invest to help strengthen the MI capability and develop our intellectual capital? What are the costs and benefits of doing so? | • The CFO should ensure that all key information is provided to the board to enable them to probe and question. This should focus on critical success areas and key performance indicators and identify appropriate management actions where there are positive or negative variances from projected performance.  
• The CFO should provide the board with information that provides an external industry view.  
• The CFO should guard against the board being inundated with an unnecessary amount of data that provides little or no information and which may prevent the board from taking action.  
• Finance teams will be responsible for providing the right information to decision makers and drive the right actions throughout the organization.  
• Finance teams should look for opportunities to improve the reporting process as part of continuous improvement. |
ANALYSE BUSINESS MODEL AND VALUE CREATION PROCESS

Maximizing organizational value

KEY COMPONENTS THAT IMPACT VALUE

The term ‘value’ is often thought about in financial terms. What is the value of my investment? How can I increase the value of my financial assets? The same concept can also be applied to social and environmental factors. Social and environmental value can be enhanced, protected and destroyed, just as with financial value.

But social and environmental value do not exist separately to financial value. Social and environmental factors should be thought of as factors that drive financial value and vice versa. This means that businesses depend on social and environmental factors to enhance their own value. Businesses also have a role in making a positive impact on these factors in order to avoid destroying the value that they rely on. For example, businesses rely on education to have access to a skilled workforce. By enhancing value in education, a business can ensure it has the skills it needs in the future.

ANALYSING THE BUSINESS MODEL

All business models create and destroy value. What is important is to understand where and how the creation and destruction is happening. By understanding these interactions, the MI framework can support an organization in maximizing its value.

SHORT TERM VS LONG TERM

Evidence demonstrates that companies which consider social and environmental factors have outperformed those which do not in the short term and long term. There are also examples where a short-term trade off of economic value, can lead to a long-term gain in economic value. The example below demonstrates this.

Understanding that these factors will materialize at some point in the future is key to analysing the long-term viability of your business model.

<table>
<thead>
<tr>
<th>Example activity</th>
<th>Social value</th>
<th>Environmental value</th>
<th>Economic value</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paying employees a minimum wage (as opposed to a living wage/fair wage)</td>
<td>↓</td>
<td>-</td>
<td>↑ (short term)</td>
<td>Poor remuneration of staff will lead to low morale and low productivity. Low productivity will materialize itself financially by reduced output.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>↓ (long term)</td>
<td></td>
</tr>
</tbody>
</table>

ANALYSE BUSINESS MODEL AND VALUE CREATION PROCESS

Financial value and stakeholder value

When we discuss value creation it helps to understand where this sits on the spectrum of financial value to wider stakeholder (or societal) value.

Financial value: Maximizes financial capital in the short term.

Stakeholder value (or societal): Maximizes the interest of all stakeholders (e.g., society, customers, employees, investors).

THE CURRENT SITUATION

In reality, most organizations do not sit at either extreme, but somewhere along the scale. We see a general trend in businesses moving towards stakeholder value, one that focuses on addressing societal challenges that generate competitive financial returns. This was demonstrated by the Business Roundtable redefining the purpose of a corporation to put the interests of employees, users, suppliers and communities on par with shareholders.

INFORMING THE PREPARATION OF MI

Wherever an organization sits on this scale, there is still value in an integrated approach to MI due to the linkage between financial performance and environmental, social and governance (ESG) performance. This analysis can feed into the next steps of MI framework development and refine the information that is provided.

HOW DO INVESTORS VIEW THIS?

Just as business models can be viewed against this spectrum, the type of investors and the type of investments they make can be viewed through a spectrum of capital. This spectrum moves from short-term financial-only investors, through to responsible investors, sustainable investors and finally impact investors. Just as the trend of organizations is broadly moving towards stakeholder value, more investors are moving towards the impact investor side on this scale by looking at ESG risk and opportunity as a driver of financial value.

See Bridges Fund Management’s The Bridges Spectrum of Capital report for more information.
DIFFERENT METHODOLOGIES

There are a number of different methods for businesses to integrate social and environmental factors into their strategy. One common method is by using the multicapital framework, made popular by the <IR> movement.

THE MULTICAPITAL FRAMEWORK

The multicapital framework takes the concept of financial capital and applies it to five other capitals. These are natural, human, social, intellectual and manufactured. You can analyse your organization’s business model by understanding:

- **The ‘stock’ of each capital** – how much of this capital exists at a point in time.
- **The ‘flows’ of each capital** – the value created and destroyed.
- **Impacts and dependencies of each capital** – which capitals the organization impacts (positively and negatively) and which capitals it depends on for success.

### CAPITAL | Description | Examples of value creation | Examples of value destruction
--- | --- | --- | ---
Human | The knowledge, skills and attributes of the workforce and others across the value chain | Investment in employee wellbeing | Absenteeism Regrettable leavers
Natural | The materials and services from the natural environment that the organization relies upon | Improvement of natural habitats | Greenhouse gas (GHG) emissions Pollution
Social | Value added to society by the organization’s products, services and activities, as well as the relationships within and between communities, groups of stakeholders and other networks | Provision of affordable products | Increasing income inequality
Manufactured | An organization’s property, plant and equipment | Upgrading a factory (increasing the property value) | Damage to the value of a building through flooding
Intellectual | Knowledge and processes | Learning from others through collaboration | Failure to protect intellectual property
Financial | The financial assets needed to provide goods and services | Inflow of financial resources | Financial loss
ANALYSE BUSINESS MODEL AND VALUE CREATION PROCESS

Business model sustainability and innovation

MULTICAPITAL VIEW OF PERFORMANCE AND OUTLOOK

As part of the development of the <IR> framework, much has been done on sustainable business models. This work focuses on the interactions of the inputs, activities, outputs and outcomes of an organization and how these interact with the six capitals. The diagram represents the impacts an organization has on the capitals. It also shows the dependencies on the capitals.

See the IIRC’s Business Model Background Paper for <IR> for more information on this topic.
USER-CENTRIC REPORTING

Defining the requirements of internal users

One of the key factors for MI is to put the user at the centre of the reporting requirements. This is to ensure that information produced meets their requirements and supports them in making decisions and driving the right actions.

Below is a three-step approach to define the requirements of internal stakeholders and some tools and techniques that can support this.

1. Identify the key users of MI
   - Who needs access to reports and information?
   - Consider the following users as a starting point:
     - Board
     - Executive committee
     - Business units/divisions/regions
     - Managers
     - Employees

2. Conduct a review of current KPIs and reporting
   - Does the business currently use the reports being produced?
   - Do the reports contain the right KPIs?
   - Where are there gaps in the current reporting landscape?
   - How are reports being delivered to the different user groups?
   - Are there any duplicates, redundancies or opportunities to streamline metrics?

3. Define future KPIs and reports required by users
   - What new information and reports need to be produced?
   - Who will receive the reports/information?
   - How frequently will they be delivered?
   - Will self-service reports be available?

SURVEY/DATA ANALYSIS:
- Conduct a review of current reporting inventory extracted from the systems.
- Distribute a survey to key users in order to understand which reports are used for decision making.

VOICE OF THE USER INTERVIEWS:
- Bespoke and tailored interviews in order to gain qualitative information about what the organization uses to make decisions.
STAKEHOLDER-CENTRIC REPORTING

Integrating the views of external stakeholders for MI purposes

EXTERNAL STAKEHOLDER VIEWPOINT

The views of external stakeholders can be a valuable source of insight for internal decision making. They can provide insights about matters that are important to them. These may include economic, social and environmental issues that also impact the organization’s ability to create value. For example, the knock-on effect of unemployment on the employee’s family and community, which impacts the organization’s social license to operate, can be understood much better through stakeholder engagement. Information from the external environment can be used as a valuable input for MI if it is analysed in conjunction with the company’s internal views.

These insights can assist the organization to:

- Identify trends that might not yet have come to general attention, but which are rising in significance, manage the associated risks and take early action to make the most of opportunities.
- Identify material matters, including risks and opportunities, that are relevant to the organization.
- Develop and evaluate the organization’s strategy, including appropriate responses to material matters identified.

In addition to this, taking in the views of external stakeholders can contribute to open innovation. Techniques such as crowdsourcing or innovation working groups can be used to provide more information on how the organization can create value. Qualitative and quantitative data captured through crowdsourcing can be integrated into MI in order to generate insight.

WHO TO INVOLVE

In designing the framework, consider who your external stakeholders are and who to involve to support internal decision making.

These external stakeholders may include:

- Customers
- End consumers
- Investors
- Analysts
- Other providers of financial capital
- Suppliers
- Regulators
- Governments
- NGOs
- Communities
- Prospective employees
STANDARDS

The relevance of standards

A USEFUL STARTING POINT

Standards for financial and sustainability information exist primarily for external disclosures. While MI does not need to adhere to these standards, they may act as a useful starting point for sustainability metrics by helping to identify what to measure and how to measure it. It can be useful to analyse the external reporting that is already being performed by the organization to determine if this information meets internal decision-making requirements. If it does, it can improve reporting efficiency.

Additionally, by adopting standards, organizations will be able to benchmark themselves against peer groups through a set of comparable metrics.

FINANCIAL REPORTING STANDARD SETTERS, SUCH AS IFRS AND LOCAL GAAP:

- IASB – International Accounting Standards Board
- FASB – Financial Accounting Standards Board

SUSTAINABILITY REPORTING STANDARD SETTERS:

- GRI – Global Reporting Initiative
- SASB – Sustainability Accounting Standards Board

OTHER RELEVANT ORGANIZATIONS OR BODIES:

- TCFD – Task Force on Climate-related Financial Disclosures
- IIRC – International Integrated Reporting Council
- CDP – Carbon Disclosure Project
- DJSI – Dow Jones Sustainability Indices
INTEGRATED AND CONNECTED PERFORMANCE MEASURES

CRITERIA FOR KPI SELECTION

There are many KPIs that organizations can choose to manage the performance of their business. The challenge for organizations is to pick the right combination of KPIs to monitor the performance of all capitals and to understand connectivity.

The criteria set out on the right can be used to help select a final set of KPIs for each of the capitals.

It is worth noting that ease of collection does not always produce the most useful information for decisions. In other words, just because a metric/KPI is easy to measure, it may not respond directly to the information needed. For example, measuring outputs instead of outcomes or impact (measuring the number of people that attended a course rather than the effect on productivity or customer service) may be easier, but may not provide the desired insight.
INTEGRATED AND CONNECTED PERFORMANCE MEASURES

What to do when an adequate KPI is not available

Social and environmental factors can often be difficult to measure directly. It is a common problem to be unable to find an adequate KPI. For example, consider a strategic objective that focuses on consumer trust. Trust cannot be measured directly in the same way as revenue or carbon emissions. So how should the finance team provide information on these difficult to measure areas?

1. Consider proxies – consider what is measurable that is closely related to your target factor. In the example of trust, this could be customer satisfaction surveys.

   However, when information is delivered in this way, the MI should provide the narrative as to why this metric is included, and how the proxy relates to the target factor. Decision makers should be made aware of the drawbacks of this way of measuring.

2. Consider if measurement is the right option – quantitative information is not always the best option for supporting decision making. Sometimes qualitative information can deliver as much, if not more, insight than numbers alone. In this case, it is important that the decision makers are trained in using qualitative information to best effect. The drawback of qualitative information is often that it lacks comparability and typically has to sit alongside quantitative information like NPV calculations. As a result, it can often be ignored or seen as an afterthought when a decision is made. When used well, however, it can be very powerful. In particular, social and environmental information can benefit from the use of qualitative information to demonstrate impact.

   For example, when monitoring a workplace mental health initiative, there may be quantitative measures available, such as the number of employees off work on medical leave due to a mental health issue, but this information alone does not provide much insight. By combining this with the responses to mental health questions in the employee engagement survey, decision makers will be able to gain more insight on the health and wellness of their organization’s workforce.


   Consider an organization with a strategic objective to reduce its impact on the environment because it recognizes its dependency on nature. One such activity that could help to reduce the impact could be a target to reduce plastic packaging in its products. An impact pathway for this activity could look like this:

<table>
<thead>
<tr>
<th>Input: Resources dedicated to, or consumed by, the project/initiative</th>
<th>Output: The results of the project/initiative</th>
<th>Outcome: Benefits or changes during or after project activities</th>
<th>Impact: Long-term consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in alternatives</td>
<td>Tonnes of plastic waste avoided</td>
<td>Less plastic waste leakage into the environment</td>
<td>Reduced negative impact on ecosystems and environment</td>
</tr>
<tr>
<td>Time spent on achieving the target</td>
<td>Staff costs</td>
<td>Improved customer loyalty</td>
<td>Increased likelihood of sales growth</td>
</tr>
</tbody>
</table>

In this example, it may be easier to measure the inputs or outputs to demonstrate positive progress. These measurements can be aggregated with other relevant environmental metrics to provide insight into the overall performance against this strategic objective.

When the strategic objective is difficult to measure directly, finance teams can consider the impact pathway to identify accessible and relevant metrics.
IMPLEMENTING THE FRAMEWORK

MI framework as an asset

INCREASING YOUR INTELLECTUAL CAPITAL: INFORMATION AS A CORPORATE ASSET

In today’s fast paced, uncertain and volatile world, information is a corporate asset that forms part of the company’s stock of intellectual capital. As such, it needs governance structures to protect and enhance this asset. Developing and implementing an IMI framework will be a key component of developing information as a corporate asset, hence increasing its intellectual capital.

By adopting IMI and improving the connectivity of information, it is more likely that your organization will become more innovative as it learns about the interrelationships between the different factors that impact value creation.

ILLUSTRATIVE EXAMPLE: APPLYING THE FRAMEWORK

See how two fictional organizations applied the framework in step-by-step illustrative examples. Both Growth plc and Purposecorp are fictional examples and do not reflect any real company. Any similarities are coincidental.

Growth plc

Shareholder value driven, Europe-based, global insurance company

Purposecorp

Societal value (purpose) driven, USA-based materials company
MANAGEMENT INFORMATION FRAMEWORK

Top tips

Understand your business
Ask the following questions: What is your business strategy? How do social and environmental factors interact with your strategy? How do you create value for all stakeholders through your strategy? What information is needed to ensure that you achieve your strategy?

Understand your users
Ask the following questions: What do the users of your information need? Do they understand the relevance of social and environmental information to their roles?

Improve as you go
Start small and build as you go. Start by incorporating the social and environmental information which is most useful for the users. Improve measurement methodologies over time.

Leverage existing processes
Do not create a whole new process from scratch. Use existing processes, systems and information flows. Where social and environmental factors are already being measured, make this information robust and useful for decision making.
CONTROL ENVIRONMENT

MANAGEMENT INFORMATION

Introduction
Management information framework
Control environment
• Risk management and compliance
• The role of finance
• Three key risks related to the implementation of an integrated approach
• Utilizing existing frameworks
• Basis of preparation
• Using technology to enhance the control environment
• Top tips
Reporting and developing insight
Maturity map
MANAGING RISK AND UNCERTAINTY IN MI

Organizations and their stakeholders are more attuned than ever to social and environmental factors and their impact on business performance and value. However, these factors have traditionally been managed separately from core finance. Often departments such as sustainability, marketing, corporate communications or public relations are responsible. These departments sometimes lack formal coordination with the finance team.

IMPROVING THE CREDIBILITY OF SUSTAINABILITY INFORMATION IN MI

Sustainability information typically sits outside of Enterprise Resource Planning (ERP) and financial reporting systems. This means it is not subject to the same internal controls which support financial information. As a result, many organizations do not put in place appropriate internal controls on this data in a systematic and integrated manner. The risk is that poorly controlled information is not robust. Decision makers cannot rely on it.

To improve the credibility of sustainability information in MI, an integrated approach to the internal control environment is required. This, in turn, will drive decisions that create value for the business and stakeholders.

WHY CAN SUSTAINABILITY INFORMATION BE DIFFICULT TO CONTROL?

Sustainability information can be hard to control for many reasons.

Whole value chain – Information from suppliers, customers and other relevant third parties along the whole value chain is often in scope. This means your control environment will need to reach beyond the boundaries of your organization.

Uncertainty – Historical precedence alone can be an unreliable predictor of the future as many sustainability issues manifest themselves through rapid and abrupt changes, which leads to increased uncertainty.

Unfamiliarity – Often the factors considered in sustainability information are less well known to those responsible for the controls.

Difficult to quantify – Many sustainability factors require more complex methodologies to quantify, and some cannot be quantified at all.
THE ROLE OF FINANCE

The finance team should act as a catalyst in aligning the organization, internally, to the strategic priorities. As part of this, cross-functional collaboration between finance and sustainability teams allows you to assess and quantify the risks associated with sustainability issues that are likely to impact business performance.

STEPS FOR FINANCE TO ENABLE INTEGRATED RISK MANAGEMENT

1. **Build a culture that embraces sustainability.** This requires breaking down silos, connecting data and integrating a multicapital view of business decision making. This will drive the delivery of effective IMI and value creation.

2. **Put in place organizational structures and processes that enable ongoing collaboration.** Sustainability and corporate performance are inextricably linked. Subject matter expertise from both the finance and sustainability teams is essential to achieve a comprehensive view of material value drivers. This will help to direct where to focus effort on the production of MI.

3. **Develop cross-functional communication between various departments on social and environmental factors.** Departments such as HR, IT and marketing should all be included and communications made in a common language.

4. **Leverage existing technology.** Financial and sustainability information can be combined into a centralized data system. This will enable controls for all relevant information to be managed centrally.

HOW ROBUST IS ROBUST ENOUGH?

Information should be robust enough for the decision it informs. In some cases, this will need to be very robust, in other cases less so. For example, in many cases, general trends showing an increase/decrease can be useful for decisions, even if it is not robust. An example of this could be a biodiversity metric. Impacts on biodiversity are notoriously difficult to measure, but information showing the trend may be enough to change the decision being made.

ROBUST SOCIAL AND ENVIRONMENTAL INFORMATION AND REMUNERATION

Increasingly, remuneration is being linked to social and environmental factors. This means that there will be increased scrutiny on social and environmental information, both internally and externally. The organization will need robust information on these factors in order to determine remuneration correctly. See how Royal DSM link their executive remuneration to social and environmental factors.
THREE KEY RISKS RELATED TO THE IMPLEMENTATION OF AN INTEGRATED APPROACH

RISKS RELEVANT TO ALL ORGANIZATIONS

A one-size-fits-all approach to MI is not possible due to the complex and diverse nature of different organizations. However, there are three key risks to successful implementation of an integrated approach which are common to all. These can be easily mapped against the decision-making cycle.

1. Failing to respond to arising macrotrends
   Not being able to measure, manage or respond effectively to macrotrends caused by arising issues not being captured at the strategic planning stage. This may result in loss of competitive advantage if opportunities or material financial impacts on the business are missed.

2. Failing to deliver material information to decision makers
   Decision makers not having access to material information, caused by incorrect assessment of their information needs when developing the MI framework. This may result in poorly informed decisions and an inability to assess reliably the performance of the business against its strategic objectives.

3. Providing low quality sustainability information
   Not being able to make decisions using sustainability information as it is not reliable, caused by a lack of adequate controls. This may result in poorly informed decisions and an inability to assess reliably the performance of the business against its strategic objectives.

These risks can be added to the organization’s risk register and mitigated in the same way as any other business risk. In particular, strong controls can alleviate the risk of low quality information, which is explained in the following pages.
THREE KEY RISKS RELATED TO THE IMPLEMENTATION OF AN INTEGRATED APPROACH

1. Failing to respond to arising macrotrends

Management of the risk of failing to respond to arising macrotrends is discussed in the A4S Essential Guide to Strategic Planning, Budgeting and Forecasting in more detail. However, there is a clear intersection between this risk and MI. If arising macrotrends are not included in MI, the business will be less able to respond to them. See the diagram on the right for an illustration of how this works.

WHAT IS HORIZON SCANNING?

Horizon scanning is a technique to consider how emerging trends and developments might affect the success of organizations. It does this through a systematic examination of potential threats and opportunities.

By treating horizon scanning as a control, businesses can ensure that emerging trends are identified as part of the strategic cycle. This activity should be performed periodically, covering changes within the business, as well as external developments.

USING THE SUSTAINABLE DEVELOPMENT GOALS FOR HORIZON SCANNING

In 2015, the United Nations set 17 Sustainable Development Goals to be achieved by 2030. These 17 Goals can be used to identify relevant sustainability trends or issues. The trends or issues can feed into the horizon scanning process. For more information on how the goals are relevant for business, see the SDG Business Hub.
THREE KEY RISKS RELATED TO THE IMPLEMENTATION OF AN INTEGRATED APPROACH

2. Failing to deliver material information to decision makers

When developing the MI framework, it is important to assess the information needs of decision makers. Otherwise, they may not have access to material information, which may result in poorly informed decisions. This risk can be split broadly into two parts. Firstly, is the information material to the user? In other words, will its inclusion change the decisions being made? Secondly, how is the material information delivered to the decision makers? What structures (i.e., communication channels, systems, processes, and controls) are in place to ensure that the right information is delivered to the right people, in a timely manner?

Once the structures for delivering the information are in place, the finance team can focus on delivering material information and insights that meet the needs of decision makers. This process is expanded on in the “Reporting and developing insight” section of this guide.

FINANCE TEAMS CAN ASK THE FOLLOWING QUESTIONS:

- What are the existing structures in place for delivering information?
- What is the role of the finance team in those structures?
- Is there an adequate and effective structure to deliver sustainability information?
- Does the structure demonstrate how the information underpins the achievement of our strategic objectives?
- Does the structure provide the right level of representation for strategic discussions on this information?
- How can the finance team influence this structure so that decision makers can have access to this information?
- Is a new structure necessary? If so, what actions can the finance team take?
THREE KEY RISKS RELATED TO THE IMPLEMENTATION OF AN INTEGRATED APPROACH

Providing low quality sustainability information

THE RISK
Low quality information cannot be relied on. This will limit the organization’s capacity for better decision making. The example below is limited to the common metric of GHG emissions, but a similar concept applies to all sustainability information, whether it is human, social or natural capital. The risk of misstatement is greatly reduced by managing the information flow the same way as you would with a financial information flow. Consider the following information flows:

POORLY CONTROLLED INFORMATION
- Engineer records meter reading on site
- Manually enters readings into weekly spreadsheet
- Meter readings spreadsheet emailed to head office
- Head office manually aggregates site readings in the central IT system
- Meter readings are converted to GHG emissions using online calculator
- GHG emissions data is uploaded to the central IT system

ROBUSTLY CONTROLLED INFORMATION
- Smart meter directly linked to local IT system
- Local IT system automatically uploads information to central IT system
- Central system automatically converts from meter reading to GHG emissions using regularly updated conversion factor
- Reports can be run from the system as needed
- Reconciliation of data to an additional source of information is performed
- Reports are reviewed by management

THE RESPONSE
There are a number of approaches to financial controls that should also be applied to sustainability information. These are:
- A preference for automated controls
- Formal documentation around the process
- Adequate training for relevant employees to understand the importance of information integrity
- Ensuring the control environment is reinforced throughout the whole organization/information chain
- Detective controls to identify errors or irregularities that may have occurred

As well as this, a confidence scale for internal information below can be used to serve as a benchmark for existing information flows.
## UTILIZING EXISTING FRAMEWORKS

**COSO**

The key to developing successful IMI is to adapt and update existing processes, rather than building new processes from the ground up. One such example of this is the Committee of Sponsoring Organizations (COSO) approach. COSO is one of the most widely used models for designing and evaluating internal control.

Many organizations are familiar with the COSO framework since it is widely used for Sarbanes-Oxley Act (SOX) compliance. Organizations can look to leverage expertise within existing risk management teams to implement processes and controls that ensure a robust internal control environment.

A lot of resources are available on applying the COSO framework to sustainability information, such as:

### WBCSD's Applying Enterprise Risk Management to Environmental, Social and Governance-related Risks

### WBCSD's Guidance on Improving the Quality of ESG Information for Decision-making

### Leveraging the COSO Internal Control – Integrated Framework to Improve Confidence in Sustainability Performance Data

### Utilizing Existing Frameworks

<table>
<thead>
<tr>
<th>Category</th>
<th>Example questions for finance teams to stimulate discussion when applying the COSO framework</th>
</tr>
</thead>
</table>
| 1. The control environment | - Is reference to sustainability included in the new staff onboarding process?  
- Does everyone understand your business’s definition of sustainability and its relevance to the strategy?  
- Are reporting boundaries defined in terms of risk, opportunities, outcomes and interdependencies across the business?  
- Are sustainability terms defined and understood by everyone? |
| 2. Risk assessment       | - Which sustainability factors are most relevant to the business?  
- Are sustainability factors prioritized based on the magnitude and likelihood of the risk, and the risk appetite of the business?  
- How often are risks assessed on an ongoing basis to respond to sustainability factors as they evolve? |
| 3. Control activities    | - Are appropriate authorities, roles and responsibilities defined in the pursuit of organizational objectives?  
- Is the same standard of control applied to financial and sustainability information?  
- Are quality assurance processes in place to ensure reporting is accurate and reliable?  
- Are existing systems and controls leveraged to automate control activities of sustainability information? |
| 4. Information and communication | - Have you ensured transparency of reporting by enabling appropriate and timely access to multicapital information?  
- Is there a defined, standard escalation process for the business to provide feedback and report on ongoing risks and issues (eg RAG reporting)?  
- Is there a feedback loop with internal audit to help improve the internal control environment? |
| 5. Monitoring activities  | - Is there an internal process for quality checking the use of external sources of information?  
- Is there a periodic assessment of the usefulness of MI?  
- Are the MI KPIs assessed periodically for relevance and sufficiency? |
BASIS OF PREPARATION

MEASUREMENT HANDBOOK

Consistency of information is very important to decision makers. In the absence of mandated external standards, this is even more important with sustainability information. A measurement ‘handbook’ is a good way to ensure consistency through time, business divisions and regions.

WHAT SHOULD A HANDBOOK INCLUDE?

The objective of the handbook is to help ensure consistency and transparency of information. It should layout: how the KPI or metric is measured; assumptions that have been made; and scope of the measure. For each item below, an example from Unilever’s Basis of Preparation for its Sustainable Living Plan has been included.

<table>
<thead>
<tr>
<th>Item to include</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric/measure title</td>
<td>The title of the metric</td>
<td>Opportunities for Women – Build a gender-balanced organisation with a focus on management</td>
</tr>
<tr>
<td>Performance measure</td>
<td>What is the measure?</td>
<td>The percentage of women who were in Unilever management roles as at 31 December 2018.</td>
</tr>
<tr>
<td>Definitions</td>
<td>How do you define the measure? This is where all of the terminology used in the performance measure can be expanded on and defined.</td>
<td>A Unilever management role is a position where employees are at a work level of 2, 3, 4, 5 or 6. Employees at work levels 1 are not in Unilever management roles. Work level (“WL”) definitions are:</td>
</tr>
<tr>
<td>Scope</td>
<td>What are the boundaries of the measurement, is geographical, business unit, time/period.</td>
<td>All Unilever women employees are in the scope of the performance measure.</td>
</tr>
<tr>
<td>Performance data preparation and assumptions</td>
<td>How is the information collected and processed? What assumptions have been made during preparation of the data?</td>
<td>The performance measure is reported annually as at 31 December. The gender of employees as female and male is recorded by human resources (“HR”) in Unilever’s Online Global System for Human Resources (“HR global system”) based on official identification (such as a passport or national identity card). Work levels are maintained in Unilever’s HR global system based the role and position in which women are employed. A list of all employees at WL2 to WL6 is extracted on the last working day of the year from the HR global system by the HR team. The list of female employees in management roles is then extracted and summed up by HR team to calculate the percentage of women in management roles. Some of Unilever’s employees are not captured in HR’s global system. These are: 1. Plantation workers 2. Employees of companies purchased by Unilever that have not yet been fully integrated into Unilever 3. Employees of Unilever entities operating in embargoed countries The gender and work levels for these employees is manually collected for reporting at year end by the global HR team from local HR contacts at the respective Unilever entities, where the data is maintained on separate local HR systems.</td>
</tr>
</tbody>
</table>

Unilever's Basis of Preparation
USING TECHNOLOGY TO ENHANCE THE CONTROL ENVIRONMENT

TECHNOLOGY AND ROBUST DATA

Complex value chains add to the challenge of making sustainability data sufficiently robust. The data must go through multiple layers of the value chain before it can be processed. While this remains a challenge, there are some examples of technology being used to bridge this gap.

SATELLITE DATA

Data from satellites is more accessible than ever before. Crucially, this data is independent. Businesses have used this data for purposes such as tracking illegal fishing, quantifying emissions and assessing deforestation in regions they are sourcing from.

See how Sainsbury’s used this method to access robust data in their supply chain.

SOCIAL MEDIA

Data mining from social media sources is becoming commonplace in business. This data can also be used as an independent source of sustainability data. While an individual social media data point cannot provide robust information, the sheer volume of data available can provide high quality information. This approach can be applied to many social sustainability metrics, such as employee or B2B customer engagement.

BLOCKCHAIN

Blockchain is an emerging technology that uses a shared ledger to record transactions. There is huge potential for this technology to revolutionize how information is shared through a supply chain. There are, however, limited examples of this technology being used in practice. One example is packaging company Sappi, which is running a pilot using blockchain to manage the roundwood supply chain. See page 37 of this report from Cambridge Institute for Sustainability Leadership (CISL) for more information.
CONTROL ENVIRONMENT

Top tips

- Use a consistent approach to risk and control for all information: Work with colleagues who are responsible for the control environment. Bring all financial, social, and environmental information needed in decision making under the same framework.

- Utilize existing frameworks: Do not create a brand new framework. Use the current approaches, whether that is COSO or another approach, to cover all MI.

- Work with external assurance providers: Use their expertise and support to critique independently the basis of preparation of your MI.

- Consider how technology can help: Work with technology teams in your organization to understand how automated controls can be applied to social/environmental information.

- Make sure information is robust enough for decision making: Gather the opinions of relevant internal stakeholders, such as management and the board, to understand the level of robustness of information that is needed to inform the decisions being made.
DEVELOPING MATERIAL INFORMATION

Providing users with relevant information that will drive value

MATERIALITY AND RELEVANCE

The definition of materiality in the context of MI is:

*Information is material if its misstatement or omission will change the decision of the users.*

As with any management accounting, it is the preparer’s judgement that defines which information to include. This includes making a judgement on which information is needed, as relevant for the decisions that will be made. Relevance is, again, down to judgement. In determining relevance, preparers should consider information in the context of strategy, policies, stakeholders (including peers and competitors), potential outcomes (both positive and negative), social norms and financial impacts.

MATERIALITY BASED ON JUDGEMENT

In theory, judgements on materiality for social and environmental information are no different to judgements on materiality for MI. In practice, there can be more things to consider.

**Quality of information** – Different types of information will require different levels of robustness, depending on the decision it is informing. Decision makers should be made aware of the level of robustness of the information. Completeness is also an important consideration, particularly when collating information from the whole value chain.

**Past trends and future information** – Past trends of sustainability information do not always forecast the future accurately. Many of the sustainability macrotrends, e.g., climate change or loss of nature, do not follow the trends of the past, and have so-called ‘tipping points’ where trends can accelerate. Additionally, public perception, societal expectations and scientific understanding frequently change for many of the macrotrends. This should also be factored in.

**Uncertainty and the precautionary principle** – Where there is uncertainty and the potential for catastrophic or irreversible impacts, the precautionary principle should be applied. The precautionary principle states that “precautionary measures should be taken, even if some cause and effect relationships are not fully established scientifically.” More information on this principle can be found [here](#).

DEFINITIONS OF MATERIALITY

Materiality means different things to different people. Here are a few common uses of the term.

- **SASB**
  SASB standards focus on financially material issues because its mission is to help businesses around the world report on the sustainability topics that matter most to their investors.

- **GRI**
  The Materiality Principle of the GRI Standards defines materiality in the context of a sustainability report:
  “The report should cover Aspects that:
  Reflect the organization’s significant economic, environmental and social impacts; or
  Substantively influence the assessments and decisions of stakeholders.”

- **IASB**
  Information is material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity.
DELIVERING MATERIAL INFORMATION

Providing users with relevant information that will drive value

QUESTIONS TO ASK WHEN DETERMINING WHICH INFORMATION IS MATERIAL FOR USERS

1. Understand the existing information needs of the user
   - What information is currently received?
   - What information is currently used?
   - If relevant information is not being used, why not?
   - Is there any information that can be trimmed from their reports?

2. Map value drivers to users
   - Which strategic objectives are directly relevant to the user?
   - Do they directly contribute to the realization of this strategic objective?

3. Determine which KPIs and metrics are linked to relevant strategic objectives
   - Does the user understand why they are receiving this information?
   - Is the user equipped to use this information (particularly for qualitative information)?

4. Consider which additional insight could be delivered to users
   - Will bespoke analysis support the user in making better decisions?
   - What other information could they benefit from?
REPORTING TO MEET USER REQUIREMENTS

Using personas to provide better reporting to the business

Finance teams need to understand the requirements of the end users involved in the process. This will help to ensure that the MI produced is useful for decisions and that the process of producing reports is efficient and effective.

One technique to help with this is to create personas. Creating personas is an iterative process and requires finance to adopt a customer-oriented mindset. Finance may be able to collaborate with colleagues from the digital marketing team who will be used to working with the concept of user experience to help create the personas.

The purpose of creating personas is to have a realistic representation of the end users of reports for reference when designing reports. When developing the persona, you should look to describe each relevant user, e.g., those included in the diagram below:

<table>
<thead>
<tr>
<th>User description</th>
<th>Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• What is your user’s professional/operational background and functional role?</td>
</tr>
<tr>
<td></td>
<td>• Why will they use IMI (user needs, interests, and goals)?</td>
</tr>
<tr>
<td></td>
<td>• Where else is this user getting information about finance or sustainability performance or similar services?</td>
</tr>
<tr>
<td></td>
<td>• When and where will users access the information (user environment and context)?</td>
</tr>
<tr>
<td></td>
<td>• How does your user expect to see information? How visual should it be, how are trends demonstrated and what level of detail is expected?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>• What technological devices does your user use on a regular basis?</td>
</tr>
<tr>
<td>• What software and/or applications does your user use on a regular basis?</td>
</tr>
<tr>
<td>• Through what technological device does your user primarily access information?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User motivation and goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>• What motivates your user?</td>
</tr>
<tr>
<td>• What are they looking for?</td>
</tr>
<tr>
<td>• What are their goals?</td>
</tr>
</tbody>
</table>
REPORTING TO MEET USER REQUIREMENTS

Using personas to provide better reporting to the business

To ensure your personas are accurate representations of your users, you should:

1. **Understand your users through research** – Identify who your users are and why they are using the reports or information.
2. **Analyse the findings** – Look for themes/characteristics that are specific, relevant and universal to the reports produced and their users.
3. **Categorize and classify** – Organize elements into persona groups that represent your target users. Name or classify each group.
4. **Combine and prioritize** – Combine and prioritize the rough personas. Separate them into primary, secondary, and, if necessary, complementary categories.
5. **Make them realistic** – Develop the appropriate descriptions of each persona’s background, motivations and expectations. Do not include personal information.

Below is a simple template that can be used to capture your personas:

<table>
<thead>
<tr>
<th>Name</th>
<th>User description</th>
<th>User motivation/goals</th>
</tr>
</thead>
</table>

By using personas, finance teams can develop a realistic picture of the audience. Once you have built up a few personas in each identified user group, it is possible to establish common traits, preferences and goals within the groups, which will inform the design and production of more value-adding MI. Personas can provide you with real insight into your users. This will result in you designing a much better reporting service.
Developing a menu of reports and reporting services to manage the business

DIFFERENT REPORTS FOR DIFFERENT PURPOSES

The requirements for reporting within the organization will be dependent on the level at which the decision is being made. Forward-looking, strategic decisions will require more decision support and analysis. This is due to the complexity and the challenges involved in trying to look to the future and combining operational, financial and sustainability data.

Operational decisions may not require bespoke analysis, but information needs to be readily available, ideally in real time. The diagram on the right outlines an example of a menu of reports and reporting services that finance teams can offer the organization based on the type of decisions being made and the level of analysis required for reporting.

VISUAL INFORMATION AND INFOGRAPHICS

In order to get the best response from the user, any MI should be visual and useful. The days of the unopened spreadsheet sent to the whole office are over. There are now countless applications and tools that can make your information more accessible. This is especially important with IMI. Social and environmental information may be interpreted by the user as distant from their day-to-day work if it does not have context, prioritization, analysis of trends and a mix of qualitative and quantitative information. Telling the story behind the numbers, using infographics, prioritizing information and showing the connection to the strategy can help make it relevant for the user. Visual information and infographics should be used in a way that delivers the best decisions.
**TYPES OF REPORT AND REPORTING SERVICES**

**Using self-service reports to provide contextual information**

Self-service reporting allows business users to access and work with IMI without the need for intervention by finance or sustainability teams. This allows the end user to decide the items that they need for their own purposes, but should also enable them to access relevant contextual information about the data they are accessing.

For self-service reporting to be successful the organization will need to:

1. Develop intuitive and easy-to-use user interfaces for reporting, using the information from your personas.

2. Standardize reports where possible, including the look and feel and use of terminology through a common data dictionary.

3. Establish security practices early in the implementation process to avoid data breaches.

4. Embed analytics and data science into your reporting solution.

5. Embrace good data quality practices – data quality is the foundation for all good quality reporting.

It is important to recognize that self-service reports alone will not be sufficient for supporting decision making and driving action. Self service should be supplemented with support from a business partnering capability in order to help the business to understand and interpret the information. There may also be the need for in-depth, ad hoc analysis on specific topics which may require specialist input from finance, sustainability and analytics/data science professionals.
REPORTING AND DEVELOPING INSIGHT

Key skills for generating insight

GENERATING INSIGHT

Developing insight that drives the right actions from the business requires a broad mix of skills. This includes technical and analytical skills such as being able to leverage technology and perform statistical data analysis. Business and communication skills are required in order to be able to understand the context of the business and effectively tell the story of the organization’s performance. Finally, sustainability skills are required in order to help interpret the results and review implications from a sustainability perspective.

COLLABORATION IS KEY

Finance teams do not necessarily need to have all of these skills available within the finance department, but they will need to find them in the organization. This has implications for the ways that finance interacts with other departments in order to deliver reporting to the business.

Finance teams that aspire to become a genuine source of insight and deliver high quality IMI should:

1. Assess the current skills and capabilities both within finance and across relevant individuals within the wider organization.
2. Identify key gaps in the skills and capabilities.
3. Decide whether to develop analytics and sustainability capability within the finance team or develop ways of working with analytics and sustainability teams that already exist in the organization.
4. Design the new operating model, embed and sustain the new ways of working.

For more guidance on the skills that finance needs to integrate sustainability, see the finance sustainability competencies tool from the A4S Essential Guide to Finance Culture.
REPORTING AND DEVELOPING INSIGHT

Spotlight on internal carbon pricing

Internal carbon pricing (ICP) can be incorporated into MI as a way of achieving an organization’s strategic climate objectives. These commonly include GHG reduction targets with some organizations having a net zero target.

WHAT IS ICP?

An internal carbon price is a monetary value placed on GHG emissions. This value can be used in capex decisions, budgets and MI across an organization to inform investment decisions and business operations so as to align with meeting carbon reduction targets. ICP is different to the cost set by governments in that it is voluntary and the value is set by the organization itself.

The use of ICP is becoming more common globally. The prices reported by companies to CDP are diverse, ranging from US$0.3/tonne of carbon dioxide equivalent (tCO₂e) to US$906/tCO₂e. When setting an internal carbon price, research should be carried out on the cost of carbon to ensure credibility.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Price (per tCO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal DSM</td>
<td>US$55.84</td>
</tr>
<tr>
<td>Solvay</td>
<td>€25</td>
</tr>
<tr>
<td>Unilever</td>
<td>€40</td>
</tr>
<tr>
<td>National Grid PLC</td>
<td>US$86.04</td>
</tr>
<tr>
<td>Pennon Group</td>
<td>US$75.83 – 291.65</td>
</tr>
</tbody>
</table>

Example internal carbon prices used by members of the A4S CFO Leadership Network in 2019

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CDP</td>
<td>CDP carbon pricing hub</td>
</tr>
</tbody>
</table>

BENEFITS OF ICP

ICP is an important way to achieve carbon targets and allow MI to support the delivery of strategic objectives. Using a carbon price across the entire business can also benefit an organization by:

• Encouraging new and innovative technologies and solutions that contribute to achieving strategic objectives
• Generating finance for cleaner alternatives and reducing emissions
• Optimizing cost and operational efficiency
• De-risking business and investments against future carbon pricing legislation
• Providing a clear basis for communication to investors and other stakeholders

TYPES OF ICP

There are two main forms of ICP:

Shadow pricing – a hypothetical cost for GHG emissions is embedded into calculations for potential investments or climate risk analyses to influence decision making. An example of a company already using shadow pricing is Royal DSM, which currently uses a price of US$55.84/tCO₂e.

Internal carbon fee – recharged to business units for the GHG emissions associated with their energy use. This helps to steer operational decisions towards low-emission activity. This mechanism can be used to generate finance for clean technologies and solutions, such as the fund created at Microsoft which has already reduced emissions by 7.5 million tCO₂e and saved more than US$10 million per year.

Further resources

• CDP: how to set an internal carbon price
• CDP carbon pricing hub
• Carbon Pricing Leadership Coalition
REPORTING AND DEVELOPING INSIGHT

Using data to gain insight

DATA: A KEY CHALLENGE?

Data is often cited as a limitation to measuring sustainability outcomes. Once an organization has decided on which sustainability information to provide to decision makers, the challenge becomes measuring this information. Advances in technology have given organizations new sources of data and, in total, more data than ever before. Finance professionals have long been providing decision makers with insight on complex financial and operational information so the same principles can be applied to sustainability information.

INTERNAL AND EXTERNAL DATA

The combination of internal and external data sets can be a great source of insight for an organization. A common example of this is scenario analysis as part of the TCFD recommendations. Below are a number of additional examples of how this combination can help an organization address its needs.

<table>
<thead>
<tr>
<th>Internal data source</th>
<th>External data source</th>
<th>Insight delivered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase ledger of a retail company</td>
<td>Water scarcity mapping data from World Resources Institute (WRI)</td>
<td>The purchase ledger will give insight to the geographical footprint of the value chain. This can be used to assess water scarcity risk areas for materials (e.g., cotton). This information is then used to manage risk in the supply chain.</td>
</tr>
<tr>
<td>Purchase ledger of a retail company</td>
<td>Modern slavery data from Global Slavery Index</td>
<td>Combining internal data on purchasing footprint with external analysis on modern slavery likelihood can help to understand where the high risk of modern slavery is in the supply chain. Using this insight, companies can understand where extra focus should be given.</td>
</tr>
<tr>
<td>HR data on absenteeism</td>
<td>Mental health risk factors</td>
<td>Combining internal data on mental health related absenteeism with external data on mental health risk factors can provide insight on cause and effect of business policies on employee wellbeing.</td>
</tr>
<tr>
<td>Sales ledger (B2C)</td>
<td>Consumer trend data</td>
<td>Social media data mining can be used to provide insight on consumer trends. For example, consumers being more aware of plastic waste in products.</td>
</tr>
</tbody>
</table>

See how Sainsbury’s used this approach to understand its exposure to modern slavery.
# REPORTING AND DEVELOPING INSIGHT

## Top tips

<table>
<thead>
<tr>
<th>Tip</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Know your user</strong></td>
<td>Consider which information your users currently get, what they need to deliver on the business strategy and what additional insight you can provide.</td>
</tr>
<tr>
<td><strong>Provide training for the user</strong></td>
<td>Understand the current competency of your user base in relation to using social/environmental information and consider if they need training or support, particularly on working with qualitative information.</td>
</tr>
<tr>
<td><strong>Combine external and internal data to generate insight</strong></td>
<td>Build on the work done on understanding social/environmental information and look for external data to provide insight to the business.</td>
</tr>
<tr>
<td><strong>Collaborate to innovate</strong></td>
<td>Share insights across different areas of functional expertise within the organization. Gaining external perspectives via two-way communication channels can help to stimulate innovative ideas and solutions.</td>
</tr>
</tbody>
</table>
MATURITY MAP

MANAGEMENT INFORMATION
**MATURITY MAP**

Sustainability factors integrated into management information to enhance decision making

Does your management information (MI) process position your organization to respond to major environmental and social trends? If not, what is preventing this?

<table>
<thead>
<tr>
<th>MI framework</th>
<th>Moderate consideration of sustainability in MI</th>
<th>Full consideration of sustainability in MI</th>
</tr>
</thead>
<tbody>
<tr>
<td>• There is little or no integration of social and environmental factors within MI.</td>
<td>• There is some integration of social and environmental factors within MI.</td>
<td>• There is full integration of social and environmental factors within MI.</td>
</tr>
<tr>
<td>• MI provides limited indication of the linkages between different information types (qualitative versus quantitative, past performance versus future performance, sustainability versus financial).</td>
<td>• MI provides some indication of the linkages between different information types (qualitative versus quantitative, past performance versus future performance, sustainability versus financial).</td>
<td>• MI provides a holistic view of performance and explains linkages between different information types (qualitative versus quantitative, past performance versus future performance, sustainability versus financial).</td>
</tr>
<tr>
<td>• Sustainability information within MI is rarely used to drive decisions.</td>
<td>• Sustainability information within MI informs decision making which creates value for shareholders.</td>
<td>• Sustainability information within MI informs decision making which creates value for all stakeholders.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control environment</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Social and environmental information is poorly controlled.</td>
<td>• Financial, social and environmental information is well controlled, but the processes are managed separately.</td>
<td>• Financial, social and environmental information is all well controlled with the same process, people and systems.</td>
</tr>
<tr>
<td>• The preparation of sustainability information and its integration into MI heavily relies on manual data analysis using excel spreadsheets or similar approaches.</td>
<td>• The preparation of sustainability information and its integration into MI uses a mixture of manual and automated systems.</td>
<td>• The preparation of sustainability information and its integration into MI uses integrated IT systems. It is connected and rationalized.</td>
</tr>
<tr>
<td>• MI processes differ across geography, business unit and department.</td>
<td>• MI processes are similar across geography, business unit and department. There is a measurement handbook, but it is not always used.</td>
<td>• MI processes are consistent across geography, business unit and department. There is a measurement handbook which is widely used and reviewed regularly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting and developing insight</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Limited analysis of the needs of users is performed.</td>
<td>• Some analysis of the needs of users is performed.</td>
<td>• Extensive analysis of the needs of users is performed.</td>
</tr>
<tr>
<td>• Information is distributed through standardized reports.</td>
<td>• Information is distributed through a mixture of standardized reports with some bespoke reporting.</td>
<td>• Information is distributed depending on the needs of the particular stakeholder through a mixture of dashboards, reports and self service.</td>
</tr>
</tbody>
</table>

**Introduction**

Management information framework

Control environment

Reporting and developing insight

Maturity map
THE A4S CFO LEADERSHIP NETWORK

The Prince’s Accounting for Sustainability Project (A4S) was established by HRH The Prince of Wales in 2004 to convene senior leaders in the finance, accounting and investor communities to catalyse a fundamental shift towards resilient business models and a sustainable economy.

The A4S CFO Leadership Network was launched at St James’s Palace in December 2013. It brings together a group of leading CFOs from large organizations that are seeking to embed management of environmental and social issues into strategy and decision making, and is currently the only network of its kind. The Network has worked on a number of projects including this guidance. The outputs from the other projects are available from the A4S website www.accountingforsustainability.org

Our project team would value feedback on this guide from other organizations working in this area. Please send any comments to: info@a4s.org

NETWORK MEMBERS – EUROPE
Geraldine Matchett, Royal DSM
Alan Stewart, Tesco
Clifford Abrahams, ABN AMRO Group
Steve Buck, Anglian Water Group
Simon Carter, British Land
Julie Brown, Burberry
Philippe Blondiaux, Chanel
Iain Mackay, GSK
Javier Echave, Heathrow Airport
Andy Agg, National Grid
Susan Davy, Pannond Group
Henry Schirmer, Randstad
Maria Ferraro, Siemens
Gregor Alexander, SSE
Seppo Parvi, Stora Enso
Lars Loddesøl, Storebrand
Kate Bowyer, The Crown Estate
Birgit Conix, TUI Group
Graeme Pitkethly, Unilever
Chris Johns, Yorkshire Water
George Quinn, Zurich Insurance

NETWORK MEMBERS – USA
Mark Hawkins, Salesforce
Scott Herren, Autodesk
Andrew Bonfield, Caterpillar
Keith Taylor, Equinix
Harmit Singh, Levi Strauss & Co
Claus Aagaard, Mars
Mark Kaye, Moody’s Corporation
Ewout Steenbergen, S&P Global
Warren Zaccaro, Securian
Matthew D. Ellis, Verizon
Zane Rowe, VMWare

NETWORK MEMBERS – CANADA
Brian Lawson, Brookfield Asset Management
Lawrence E. Davis, British Columbia Investment
Maarika Paul, Caisse de dépôt et placement du Québec
Patrice Impey, City of Vancouver
Karen Higgins, The Co-operators Group
Jocelyn H. Perry, Fortis
Philip J. Witherington, Manulife
Jonathan Simmons, OMERS
David McGraw, Ontario Teachers’ Pension Plan
Doug French, Telus
Pamela Steer, Payments Canada
Victor Pang, Vancouver Fraser Port Authority (VFFA)
THE A4S CFO ESSENTIAL GUIDE SERIES

LEAD THE WAY
Developing a strategic response to macro sustainability trends
- Managing Future Uncertainty
- Engaging the Board and Executive Management*
- Finance Culture
- Incentivizing Action*

TRANSFORM YOUR DECISIONS
Integrating material sustainability factors into decision making
- Strategic Planning, Budgeting and Forecasting
- Management Information
- Capex

MEASURE WHAT MATTERS
Developing measurement and valuation tools
- Natural and Social Capital Accounting
- Social and Human Capital Accounting

ACCESS FINANCE
Engaging with finance providers on the drivers of sustainable value
- Enhancing Investor Engagement
- Debt Finance
- Implementing the TCFD Recommendations
- Implementing a Sustainable Finance Framework

* Coming soon
GET IN TOUCH OR FIND OUT MORE

@PrincesA4S

The Prince’s Accounting for Sustainability Project (A4S)

ThePrincesA4S

info@a4s.org

www.accountingforsustainability.org