By valuing social, environmental, tax and economic impacts, business leaders are now able to compare the total impacts of their strategies and investment choices and manage the trade-offs

Measuring and managing total impact – strengthening business decisions for business leaders

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Foreword

Stakeholders of a company want sustainable growth. This requires something more than a focus on the financial aspects and the present value of future cash flows.

Prof Mervyn King SC
Chairman International Integrated Reporting Council

We know that today some 80% of the market capitalisation of companies is represented by so-called intangible assets which would not, according to financial reporting standards, be included as additives in a balance sheet.

While at the core of a business's performance is its financial return, because we report in monetary terms, a board has to take account of the legitimate and reasonable needs, interests and expectations of all its stakeholders and the resources used by the company.

Whilst it is clear that there are inputs other than the financial and manufactured resources such as human, intellectual, natural and social, the output or product and service of a company in turn has an impact on its stakeholders and the resources used by the company.

Integrated thinking requires all these factors to be considered in a holistic manner, such that a company can understand, and make decisions based on, the overall impact it has on all its stakeholders and generally on society, the environment and the economy.

I am delighted that PwC has developed the Total Impact Measurement and Management (TIMM) framework which demonstrates it is possible to carry out an impact study that puts a value on all a company's activities (or its product or service).

Some of the world's iconic companies have realised that the impacts of their activities, and of their products or services, on their stakeholders and generally on society, the environment and the economy, are critical. Consequently, the impact measurement and management framework developed by PwC is a huge step forward in assisting companies in thinking on an integrated basis and enabling them to do business in the 21st century. It also helps to change mindsets to take a holistic perspective and move towards Integrated Reporting.

The TIMM framework is a new language to assist companies in understanding the overall impact of their activities. I urge all companies to start incorporating this type of thinking into their strategic business decisions.

Mervyn King

Introduction

Total Impact Measurement and Management (TIMM) is a flexible framework that enables business to develop a better understanding of how to create sustainable value for their shareholders while generating value for the wider communities they affect.

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The world needs growth. Growth puts people in work and lifts them out of poverty. It generates the income to fuel a progressive and stable society. To date, growth (as measured by profits, dividends and GDP) has been a benchmark of success. But not all growth is the same. Many developing countries have growth, but often it is not translating in to the jobs or wider societal benefit they need. While in the developed nations, many are just striving to recapture the growth that they once enjoyed.

At the same time, customers, suppliers, employees, governments and society in general are becoming more demanding of business. And what they want from them is not the same – creating confusion, tension and even conflict.

Against this backdrop of ambiguity, together with a growing population seeking a better lifestyle, to be delivered from a planet of finite resources, is it time for a new business model?

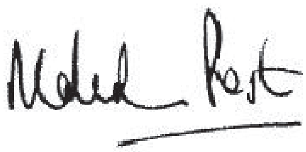
To address this dilemma, we have developed a new framework, TIMM. It looks beyond the narrow notions of input, output and profit, to a model that also takes into account the outcome and impact of an organisation's activities.

TIMM enables management to develop a better understanding of the social, fiscal, environmental and economic impacts of their activities, while still, of course, making a profit. It gives management the ability to compare strategies and investment choices, using quantified data, and evaluate the total impact of each decision and choice they make.

This flexible framework will allow management to make sound business decisions and at the same time better understand which stakeholders will be affected by which decisions, and why. In so doing they will be able to deliver the kind of growth that their disparate communities require – in short, it will deliver what they will all see as "good" growth.

With TIMM we are not advocating more reporting. But with the clamour for business to be more accountable, we believe business leaders have a choice. To stay out of the debate and risk regulation that is not fit for purpose or get involved, lead and help set an agenda that ensures they are addressing the relevant issues of a changing world, in an efficient and effective way.

TIMM is not an end in itself, it is the start of a journey. We invite you to join the debate.



Designing TIMM to support business

TIMM gives you a new perspective on your business. Whatever the initiative or the strategy, there's more to understanding its actual or potential success than financial analysis alone can give.

Competing demands

When you think about the demands on business today, to meet the needs of customers, regulators, employees, suppliers, governments, shareholders and communities, a new approach is required to identify and assess the implications of choices made (see Figure 1). TIMM gives greater insight of how your business creates (and destroys) value and is designed to help you make more informed and better decisions as it takes into consideration a broad range of impacts to give you a much more complete and total picture (see Figure 2).

A holistic view of value

TIMM provides a holistic view of how business delivers value through

- the value chain and communities they operate within
- their contribution to the economy and public finances
- their impact on the environment and wider society.

In this way, TIMM provides a comprehensive assessment of how businesses generate and, potentially, destroy value for shareholders and for the diverse other stakeholders who are relevant to the business.

Trade-offs are clear

With this total impact approach, you can see at a glance the impact you're making and better still the trade-offs between alternative strategies. In effect, you can see the optimal decision for all your stakeholders. The example on page 8 shows how TIMM works in practice and lets you compare trade-offs.

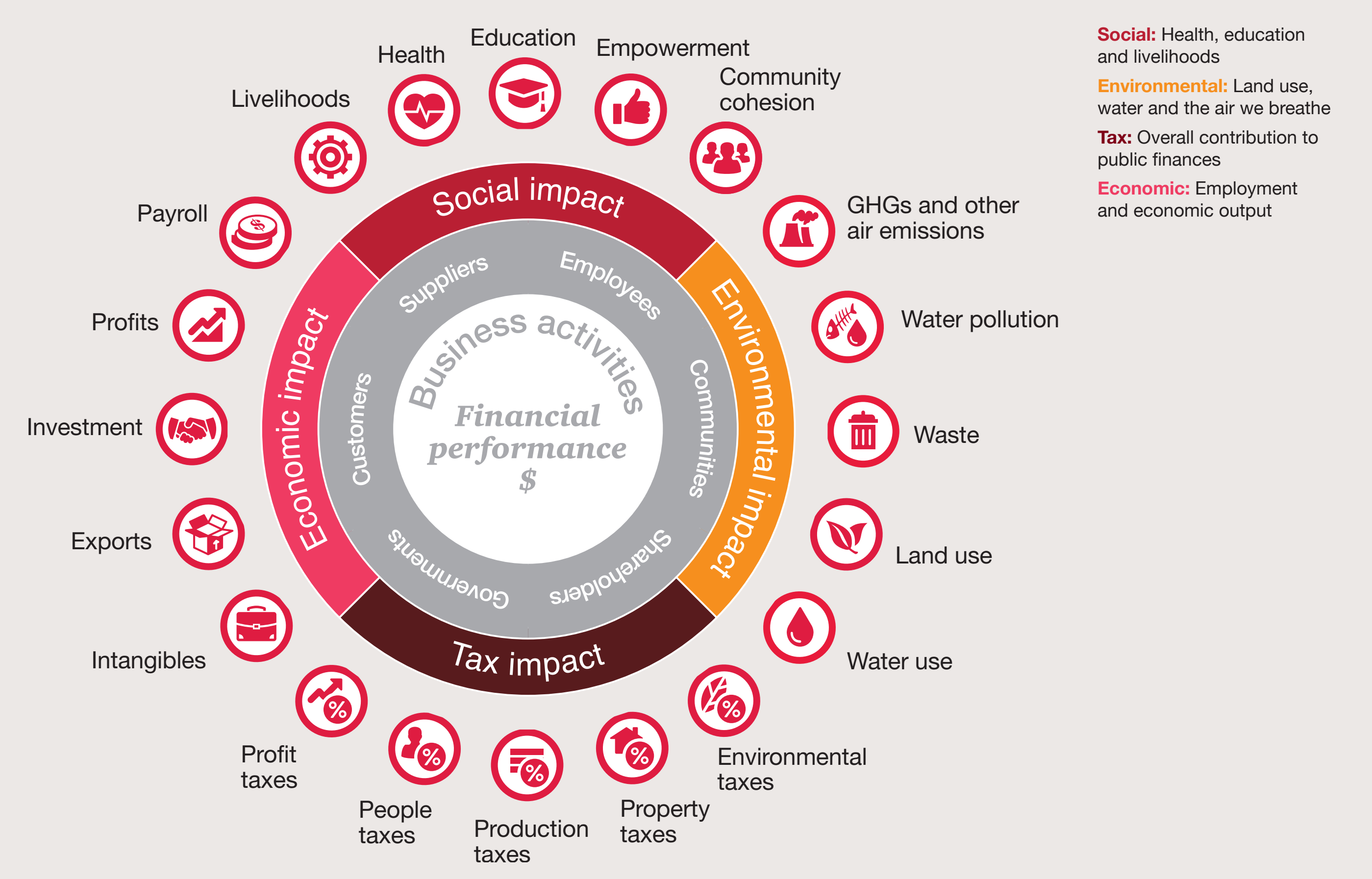
Benefitting from a total impact approach

Adopting TIMM provides tangible benefits, helping answer fundamental questions from 'will a strategy deliver sustainable shareholder value?' to 'what's the best way to demonstrate the value a business creates?' Business leaders recognise that a total impact approach strengthens decision making, with more than 90% CEOs in our survey believing that measuring total impact would help their businesses to identify and manage their risks more effectively (PwC CEO Total Impact Pulse Poll Survey 2013). More than 80% of CEOs believe it would provide more insights than conventional financial reporting and identify new business opportunities.

Figure 1: Total Impact Measurement and Management

Total	A **holistic view** of social, environmental, fiscal and economic dimensions – the big picture
Impact	Look beyond inputs and outputs to **outcomes** and impacts – understand your footprint
Measurement	Quantify and **monetise** the impacts – value in a language business understands
Management	Evaluate options and **optimise** trade-offs – make better decisions

Figure 2: Illustrative dimensions of impact considered within TIMM



Source: PwC

Strengthening decision making

So what sets TIMM apart from conventional management information? Figure 3 highlights TIMM's unique attributes – it is the ability to assign a monetary value to both individual and aggregate business impacts that is crucial here. It means that like-for-like assessments and comparisons can be made for the first time across a comprehensive range of impacts, so providing a much stronger bedrock for decision making.

Practical applications

It's one thing to hear the theory, another to evidence its success. What follows are three client case studies – they've all taken a difference approach with different objectives in mind, but have used concepts of the TIMM framework to support management in their decision making.

Figure 3: Key attributes of TIMM
Measures impact both to society and to the business
Backward and forward looking
Flexible for different boundaries eg. geographical, type of impact
Flexible to enable focus on material impacts
Monetises impacts using leading validation techniques
Accounts for attribution
A balanced understanding of impact
Consistent and comparable information
Produces decision ready/useful information

Delivering TIMM to support decision making

Actions speak louder than words – this is how clients view a total impact approach and their thoughts on the value it adds.

Case study 1:

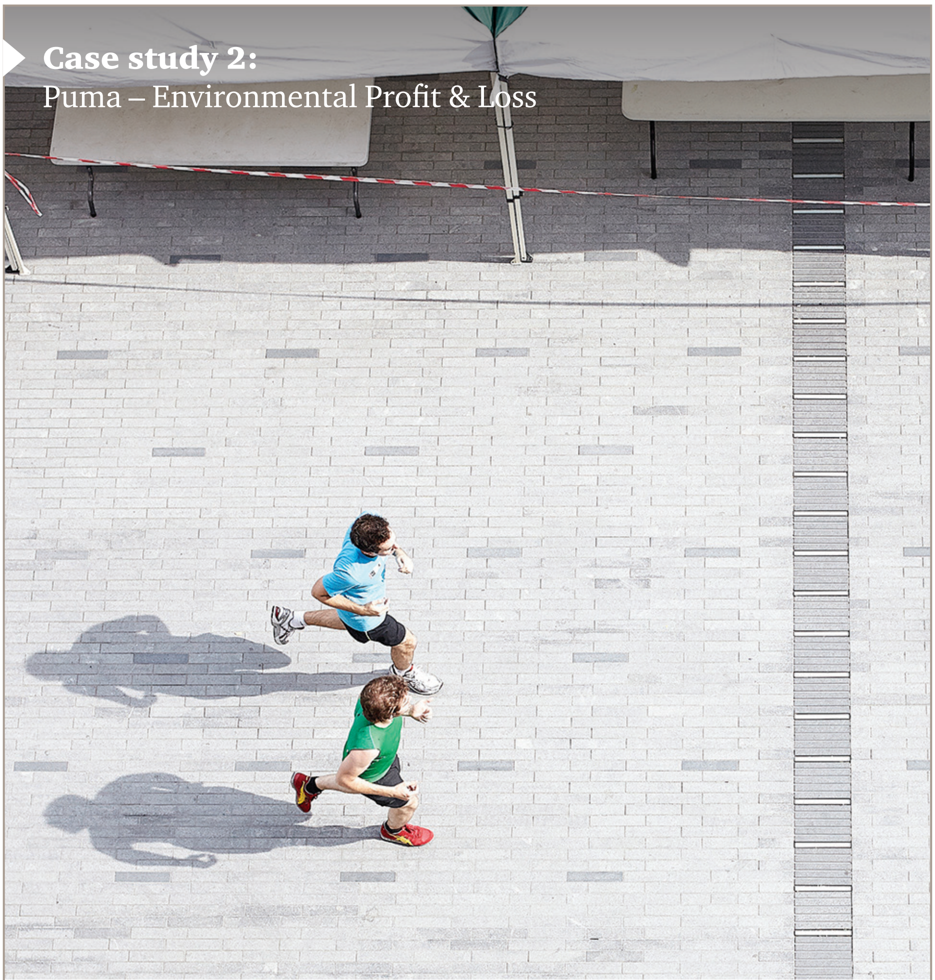
Scottish Hydro Electric (SHE) Transmission Assessing the total impact of the construction of a new transmission line

SHE Transmission is currently building a new 400-kilovolt transmission line in Scotland. At present there is no approach to help assess the value of the full range of impacts, including consent conditions, of a new transmission line. Through the use of our TIMM framework, we've worked with SHE Transmission to develop a range of methods to measure and value all material social, economic, environmental and fiscal impacts in the UK resulting from the construction of the transmission line.

The project is now in the process of estimating the value of the line's impact on areas such as visual amenity, cultural heritage, traffic, land use and waste, as well as considering taxes paid and the contributions to local and national GDP. This approach will help SHE Transmission to communicate more effectively to stakeholders how planning choices and consent conditions affect the impact of the transmission line, including any trade-offs generated.

And by building jointly with SHE Transmission a transparent and quantitative framework, they will be able to revolutionise the way that social, economic and environmental impacts are considered when planning and implementing future projects. This will not only add value to the business, but also value for society.

Case study 2:
Puma – Environmental Profit & Loss



PUMA, the Sportlifestyle company, and its parent company Kering have been pioneers in the development and reporting of an 'Environmental Profit & Loss (E P&L)'. The aim is to put a monetary value on the environmental footprint across the entire value chain (material sourcing, manufacture and disposal), which in the case of PUMA is now being applied to particular products to help consumer comparison. For example, the environmental impact of its InCycle shoe is nearly a third less than its conventional suede shoe and equivalent to €2.95, or 3% of the retail price.

PUMA hopes that this sort of information will help aid more informed consumer choices as well as the development of more sustainable products and is exploring ways to bring this information to consumers as has been done with calories and nutritional information on food products. It can also help in discussions with government, for example addressing areas where sustainable materials may be subject to higher import duties than more environmentally costly alternatives.

PUMA and Kering have invested heavily as first movers and the question will now be at what point will consumer pressure and government policy make this the norm and what dividend can companies like PUMA reap in the meantime. To illustrate this dividend, for the first time PUMA had real insight into the environmental consequences of commercial decisions and of their impact on the environment by region, by product line and by use of raw material. And in the face of declining natural resources and biodiversity, the company was able to clearly assess the environment-related risk and act upon it.

Case study 3:
Rio Tinto – Taxes paid reporting

Tax is a major subject of debate for all businesses, governments and other stakeholders. At Rio Tinto, tax strategy and payments are central to the approach to achieving sustainable development for the long term as a business, as a sector and as a global corporate citizen.

In 2010 the organisation committed to increase the level of detailed tax reporting on tax payments to governments by voluntarily providing a detailed breakdown of all the taxes paid, not just corporate income tax.

"We believe that our voluntary reporting can help to foster constructive debate over natural resource taxation policy as part of the overall contribution to economic development that responsible mining investments can make. We believe that it is essential for tax policy and design to take into account the cyclical nature of the industry and to respect agreements under which investment capital has already been committed. For an industry that makes multi-decade investments, with significant up-front capital expenditure, the risk of fiscal instability will influence the global flow of capital and a country's ability to attract and retain investment. Above all, tax law should never be retrospective."

Hypothetical Example:
We recognise the best way to bring TIMM to life is to see it in action. This is a hypothetical example to show how TIMM could work in practice. We explore the impact of a new strategy and highlight the trade-offs that TIMM reveals. Here we focus on two to keep it simple.

Business type and geography:
Brewer in Africa

Key strategic question:
Should barley be imported or should an alternative, locally grown crop be grown for the brewery?

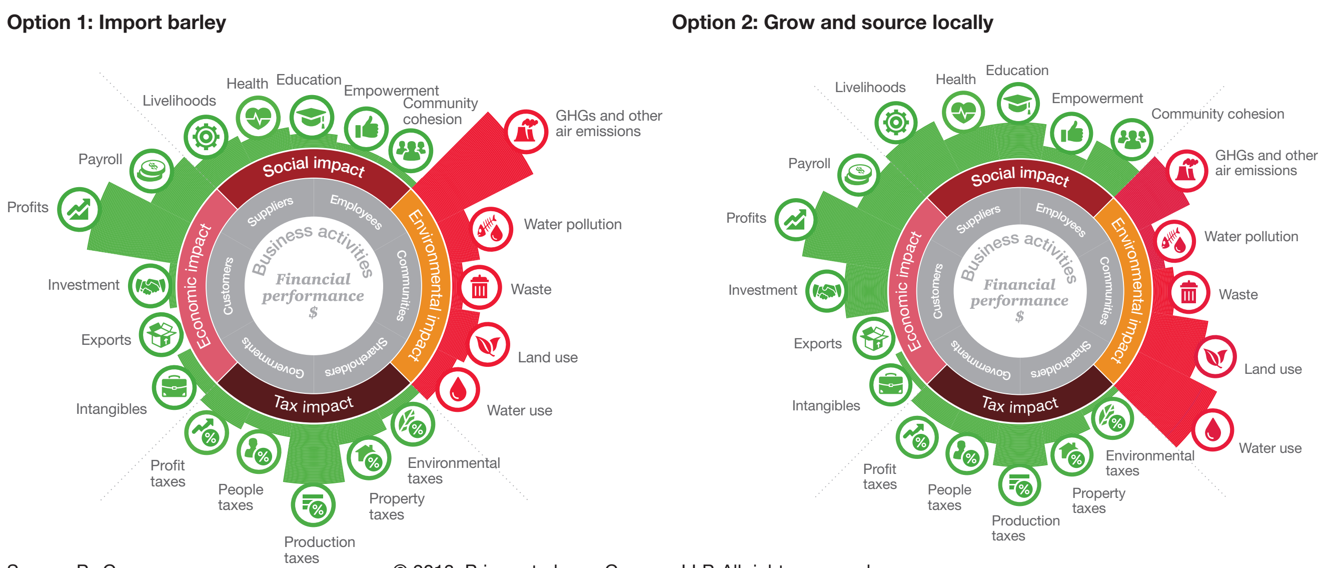
Description of strategic context:
Procurement decisions include capital and revenue expenditure (including overheads) as well as potential risks such as regulatory change. Often they do not take account of wider impacts (e.g. environmental or social) or the more intangible implications for business (e.g. reputation or changes in consumer attitudes).

In this case, the brewer wants a balanced, holistic analysis to support its decision. An approach that compares the total long-term impact of using barley with that of a locally grown alternative will provide the basis for transparent decision making on sourcing. This new total impact perspective could also help address, for example, security of supply and foreign exchange exposures. In addition, it would allow the brewer to develop a clearer long-term strategy for the business and help engage with stakeholders on the basis of a more credible analysis of the impacts of business decisions.

How TIMM could be used (examples of analysis)
The brewer has two options: it can import barley from Country A (Option 1) or it can grow an alternative crop locally in Country B (Option 2). Each option has different social, tax, economic and environmental implications as well as, of course, financial ones. TIMM can be used to measure and value not only the business financial performance, but also the societal costs and benefits of each option on both a global and a national basis. A simplified analysis of the pros and cons of each strategy are set out below.

Summary outputs of the TIMM analysis
Figure 4 summarises the results of the TIMM analysis for the two options. Each bar represents a positive (green) or negative (red) impact. The inner circle represents the expected return to shareholders. The different impacts can be compared and aggregated.

Figure 4: Using TIMM to weigh up the options



Source: PwC

Business financial performance:

- Local sourcing in Option 2 reduces the brewer's costs and risks due to lower distribution costs and reduced foreign exchange exposure.
- Local sourcing in Option 2 enhances the brewer's reputation with local consumers which is reflected in stronger demand and customer loyalty; in Option 1, the brewer's reputation in barley-growing countries is weakened, but only marginally.
- However, Option 2 has higher set up and running costs, including supply chain development, community investment and increased local staff and offices.
- Trade-off: Will reduced operating costs of Option 1 outweigh the benefits and set-up costs of Option 2?

Environment:

- Option 2 generates lower greenhouse gas emissions as transport demands are lower and creates less water pollution because more traditional growing techniques are utilised which use natural fertilisers.
- On the other hand, Option 2 has some higher environmental costs due to less advanced waste management and the loss of valuable ecosystems which may have been cleared for agricultural purposes.
- Even though the alternative crop chosen requires less water than barley, Country B has greater water scarcity which makes it more valuable in comparison to Country A.
- Trade off: Which is better... reduced global greenhouse gas emissions or better water availability in Country B?

Economic:

- More mechanised barley production in Country A means that more physical capital is employed in Option 1.
- Local procurement under Option 2 has more wide spread economic impacts along the brewer's supply chain. Although, given the higher value added activities across the supply chain for Option 1 (i.e. higher use of technology), this generates overall higher profits.
- Additional investment is needed under Option 2 to establish the infrastructure required for local production which will have a positive economic impact.
- At a global level, there is no net effect on exports so the impact in both options is zero.
- Even though Option 2 will require more local employees, these generate lower value added per employee so the overall impacts for the two options are similar.
- Trade-off: It can be seen the impact on the economies of the two countries is very different under the two scenarios.

Social:

- Under Option 2, local farmers benefit from access to a (more) secure market and the support of the brewer in developing business infrastructure such as co-operatives, training and health services. This is reflected in more secure livelihoods, greater self-confidence and enhanced cohesion of the agricultural communities.
- Under Option 1, barley is bought on the international market with no established direct supply chain relationship. This means the brewer's influence is weaker on the social outcomes in exporting communities.
- Volumes of beer consumption are largely unaffected by the choice of option.
- Trade-off: There would appear to be a clear social impact benefit of Option 2.

Tax:

- Under Option 2 the brewer is expected to be more profitable in the long term and, hence, liable to greater profits tax. However, in the short term, the costs of establishing the local supply chain will reduce profits tax.
- Under Option 1, duty would be payable on imports of barley; this would not be offset by the taxes payable by local farmers.
- Trade-off: In reality, tax considerations would be considerably more complex.

Summary

In this hypothetical example, in the absence of total impact thinking, the decision would have been made largely using financial analysis with some qualitative overlays.

TIMM brings a new perspective. Using TIMM and putting a value on the qualitative overlays, the total impact of each decision is clear and the many trade-offs between Options 1 and 2 are easy to identify. It is immediately obvious that there are two key trade-offs that need to be considered:

- reduced green house gas emissions vs increased water usage in a more water scarce location
- improved societal outcomes vs an increased use of an already scarce water resource in those same communities

TIMM may not be able to provide the empirical answer, but it gives management significantly more information with which to make a more informed decision, and communicate the rationale for that decision with their multiple stakeholders.

Embedding total impact thinking

TIMM gives you a new perspective on your business and its value that resonates with your stakeholders as well as investors, shareholders and analysts. It gives you a robust foundation upon which to base your decisions. But knowing your impact is one thing, it's how you manage it that counts – how you choose to interpret the results and the initiatives you choose to implement.

Figure 5 shows what TIMM brings to business. It delivers a knowledge base to empower, helps drive strategy and deliver change. There is no linear path or set timeframe, you move through multiple pathways, connections and benefit combinations as well as feedback loops at a pace you set.

For example, it can help to compare investment options which might result in a new product and better employee engagement. Or identify the trade-offs and the impact on various stakeholder groups which in turn might result in new policies that reduce risks or increase transparency in the value chain.

By understanding the wider impacts and adopting TIMM, the business benefits are numerous. It's a new way of thinking that could help transform the way business develops.

Figure 5: How TIMM generates business benefits

TIMM drives...				
KNOWLEDGE		**ACTION**		**RESULTS**
Unparalleled understanding of the organisations impact	Leads to	New or enhanced business decisions, practices and behaviours	Leads to	Improved business performance and conditions
Examples				
Deeper understanding of the organisation's total impact		Develop new products/services and new markets/market expansion		Reduce value chain and political risks
Comparisons of options from an impact perspective		Change business policies and practices to increase net positive impacts		Save costs/increase revenues
Insights into the trade-offs across impact dimensions		Communicate with and manage stakeholders		Enhanced license to operate and partnership working
Insights into the stakeholder groups affected		Report in a more credible, integrated and useful way		Improve employee and stakeholder engagement
				Improved trust & transparency

Source: PwC

Contacts

If you would like to discuss any of the issues raised in 'Measuring and managing total impact: A new language for business decisions' in more detail, please speak to your usual PwC contact or any of the contacts listed below:

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