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**Embankment Project
for Inclusive Capitalism**

"Congratulations on this substantive, practical, actionable approach to mastering some of the most important but most elusive corporate performance objectives."

Jeffrey Sonnenfeld, Yale University

"EPIC is radically altering our understanding of how corporations and investors can address the complex issues they face today. By bringing the different parties together, it has successfully identified the multiple metrics of performances..."

Colin Mayer, University of Oxford

"The future of the corporation is in large measure dependent on the credibility and acceptance of the metrics for measuring non-financial performance. The Embankment Project for Inclusive Capitalism is creating those metrics."

Martin Lipton, Wachtell, Lipton, Rosen & Katz

"This work has value creation over time at its core which is such a critical starting point. I can only applaud the effort and commitment of all those involved in creating momentum in such an important arena."

Paul Druckman, Financial Reporting Council

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Foreword

01

Can changing the way we measure value help companies focus on the long term?

Over the past few decades, the world has seen the introduction of innovative new technologies like smart phones and artificial intelligence, the rise of major economic markets including India and China, and the disruption of entire industries such as transportation and retail. The scope and speed of these changes have been breathtaking – and they have ushered in a new era of business. In many ways, this has created significant new opportunities for companies and entrepreneurs. But it is also an era in which companies are confronting more challenges, coming from more places, than ever before. And a key consequence of the rapid evolution of the business landscape is greatly increased pressure on companies to focus on performing in the short term.

In an age of instantaneous information and 24-hour news cycles, there is heightened scrutiny of almost every decision that businesses make, and even minor stumbles can turn into major problems. The rise of activist investors who can be intensely focused on short-term profits has made it harder for many public companies to innovate and implement long-term strategies. At the same time, widespread geopolitical uncertainty means that major global markets can rise or fall seemingly overnight. Add it all up, and it is easy to grasp why many businesses are focused on ensuring their survival in this quarter or the next, even if it comes at the expense of their success in the future.

Yet as business leaders navigate the challenges of this new era, there is one thing that still has not changed: the metrics that markets and investors use to evaluate a company's success.

Nearly two decades into the 21st century, businesses worldwide are still reporting to financial markets based on accounting principles and concepts that were first codified in accounting standards in the 1970s to record financial transactions. This was a time before most people had personal computers, let alone the technology that is prevalent today.

Considering the incredible changes that have taken place, it is not surprising that despite continuous updates, these standards do not cover all the aspects of value that have become increasingly important in business. Today, it is not uncommon that as little as 20% of a company's value is captured on its balance sheet¹ – a staggering decline from about 83% in 1975. Meanwhile, the majority of a typical company's real value is now reflected in intangible aspects of its business model – relating to things such as innovation, culture, trust, and corporate governance – that are difficult to measure.

This can result in differences in perspective between businesses and investors – and even more pressure for short-term returns. For example, if businesses want to prepare for a rapidly changing future, they might want to invest in employee training or innovation programs – even though that means they have lower dividends or short-term profitability. However, without a clear way to measure and communicate to investors why these trade-offs will pay off in the long term, many businesses feel compelled to put them off or avoid them entirely. And when businesses stop investing in the future, our entire economy suffers.

The fact is, the best businesses are defined by more than their short-term profitability. They drive broad-based prosperity by creating value for shareholders, customers, employees, and society alike. When they invest in giving employees the most in-demand skills, for instance, it is clearly good for their business. But it also benefits employees themselves and equips them for a more successful career, whether they stay with the company or not. Society benefits, too, since the economy grows more sustainably with a more highly skilled workforce. And when businesses can make a stronger case that they are creating long-term value for stakeholders across society, we can begin to restore much-needed trust between them. That's why we need to find a way to measure that value.

¹ Brand Finance (2018). Global Intangible Finance Tracker (GIFT™) 2018 – an annual review of the world's intangible value - <http://brandfinance.com/images/upload/gift.pdf>.

The good news is that players across the investment chain have recognized that this is a problem, and are working to broaden the way they think about a business's value. By our own count, there are more than 50 different initiatives finding ways to move this conversation forward — from convening key players to advocating for specific policy reforms. A growing number of business leaders recognize that this is a problem, too — which is why we have seen many companies begin experimenting with non-GAAP and other alternative measures to supplement their traditional financial reporting.

But despite all of this momentum, progress in this area is still being held back by a fundamental obstacle: currently, there is no consensus on what intangible assets and stakeholder value we should be measuring, how to measure them, or even the process by which we might arrive at the metrics that matter. And without standard and verifiable metrics that investors can trust, many companies will continue to struggle to effectively communicate how they are creating long-term value and positioning themselves for the future.

That is why, in 2017, the Coalition for Inclusive Capitalism launched the Embankment Project for Inclusive Capitalism (EPIC) to tackle this challenge. The Coalition, EY and 31 companies, asset managers and asset owners, with approximately USD 30 trillion of assets under management, came together in pursuit of a single goal: to identify and create new metrics to measure and demonstrate long-term value to financial markets.

Over the past 18 months, this remarkable effort has convened a series of workshops that bring all of these key players across the investment chain into the same room. Together, we are pursuing a consensus on how businesses really create value — and how to measure that value in a way that is useful to businesses and investors alike.

This report is the initial result of that process. While it will take a lot more work to overcome the challenges we have outlined, the framework that we have created and the metrics we have identified through EPIC represent an important step forward. With a verifiable way to measure long-term value, business leaders can more effectively make the case for strategies that will help their companies succeed over time. And that will not only help individual businesses; it will help their investors, their stakeholders, the global economy, and our society at large.

We came together in pursuit of a single goal: to identify and create new metrics to measure and demonstrate long-term value to financial markets.

We would like to personally thank everyone who made EPIC possible. Together, over the last 18 months, we have made significant progress driving this work forward and creating more inclusive capitalism. We are grateful for the commitment and contributions of the participating organizations and their teams. Their continued leadership and support will be vital as we work to open-source and further strengthen the project outputs, and we look forward to their ongoing commitment.

The EPIC advisory council also played a vital role in the development of the project outputs, and we cannot thank them enough for their expert input and guidance. In addition, we also would like to express our gratitude to the staff of EY, the Coalition for Inclusive Capitalism, academics and the many investment and corporate professionals that have contributed their time, intellect, best practices, and ideas to further inclusive and sustainable growth.

This unique project has engaged many parties across the investment chain; the diversity of thought has proven to be invaluable. What makes us most proud is our shared vision for EPIC and, demonstrated through our respective actions, our collective commitment to sustainable, inclusive long-term value creation.



Lady Lynn Forester de Rothschild
CEO and Founder of the Coalition
for Inclusive Capitalism



Mark Weinberger
Global Chairman and CEO of EY

Key terms

A full glossary is available in chapter 10 of this document. Here we outline some of the key terms commonly used in the report.

Asset manager

The companies participating in EPIC who are responsible for managing different financial instruments (e.g. shares, bonds, commodities or property) on behalf of asset owners and make decisions on how, when and where to invest based on the financial goals and investment guidelines of their clients.

Asset owner

The legal owners of assets who are participating in EPIC and make asset allocation decisions based on their investment objectives. Asset owners can manage assets directly and/or delegate asset management to asset managers.

Asset owners include pension funds, insurers, banks, sovereign wealth funds, and endowments.

Company

Companies including those participating in EPIC in the consumer goods, healthcare and industrials sectors.

Embankment Project for Inclusive Capitalism (EPIC)

31 companies, asset managers and asset owners brought together by the Coalition for Inclusive Capitalism and EY to identify new metrics to measure and articulate long-term value to investors and other stakeholders. We refer to the Embankment Project for Inclusive Capitalism as 'EPIC' or 'the project' throughout this report.

Investment chain

All of the players involved in creating value through capital markets. This includes companies, asset managers and asset owners and other intermediaries such as rating agencies and data providers.

Long Term Value Framework

An open-source framework and supporting methodology to identify and develop metrics to better articulate the long-term value created by business. It is referred to throughout this report as 'the framework'.

Metric

A standardized quantitative indicator, which can be used to measure inputs, outputs, outcomes or impacts. For the purposes of this report, 'metric' refers to an indicator of long-term financial performance that measures an outcome or impact.

Narrative

A qualitative explanation of a metric that provides further context and information to stakeholders. Narrative includes data calculations, assumptions, limitations and information about how the metric can be interpreted.

Stakeholder

A group or an individual who can directly or indirectly affect, or is directly or indirectly affected by, a company's activities.

Examples of stakeholders include shareholders, customers, suppliers, employees, governments and communities.

Value lever

A factor that influences or affects value. In this report and in the framework, we use value 'driver' and value 'lever' interchangeably.

Executive summary



02

An important first step

The Embankment Project for Inclusive Capitalism (EPIC) is founded on a simple idea: in order for society and economies to thrive, business needs to focus not only on the short term, but also the long term.

The pace of global change is accelerating. Technological innovation, the proliferation of data and rapidly evolving social and economic conditions are disrupting and reshaping every aspect of society, including the business environment. People around the world have begun to question some fundamental facts about business's role in society. On the whole, globalization has been an incredible force for good but the benefits of economic growth have not been shared equally across society and in many cases this has resulted in declining trust in institutions – including business.

Today, the world is producing unprecedented amounts of data. 90% of all the data that currently exists has been generated in the last two years alone.² This proliferation of data and its consumption by consumers, governments and investors is putting companies at risk of losing control of their equity narrative.

For most of the previous century, the value of a business was determined in large part by its tangible assets, but in the current digital era, tangible assets comprise less of a company's value than they once did. This changing shape of business value has created clear problems for our economy – because the more it has evolved, the more it has contributed to a growing disconnect between players along the investment chain. Companies and investors recognize the importance of creating long-term value but without consensus on how to measure this value they often rely on short-term metrics to measure success.

Many initiatives have acknowledged and debated these challenges. But while quarterly returns provide a clear and broadly recognized way to measure how a company is sustaining its financial value in the short term, there have been few consistent and comparable ways to evaluate the actions companies take to increase their long-term value. Reporting needs to be rebalanced to provide an appropriate mix of both short-term and long-term performance measures.

Convening companies, asset managers and asset owners

That is where EPIC comes in. We created a unique forum where players across the investment chain – representing over thirty leading global companies with almost USD 30 trillion of assets under management – could have candid conversations and share their different perspectives

about how to measure long-term value. Initiatives like this, which are run by and for practitioners, are crucial but are much too rare in the business world. It is a journey that has taken 18 months and required participants to dedicate time and resources to an ambitious goal: to forge consensus on how to measure value beyond pure financials, to improve communications along the investment chain and to make a case for long-termism that could strengthen not just businesses, but our entire economy.

These efforts have resulted in an open-source framework and an initial set of metrics that represent a tangible and practical step forward. Although we are conscious that there is no silver bullet that will eliminate the short-term pressures along the investment chain, we are confident that EPIC is a positive first step. We need many more efforts like this going forward if we want to move from discussing the problems to implementing practical solutions.

Consensus on the most important areas to measure

Surprisingly, there was a striking consensus among the diverse group of companies, asset managers and asset owners. They agreed on many of the factors that define long-term value – from a productive, creative and cost-efficient workforce to effective corporate boards. Together, they then set out to measure a number of them.

Although there were many important factors identified, participants agreed to focus on four key areas during the project: talent; innovation and consumer trends; society and the environment; and governance. Up to now, many have considered these aspects too abstract and intangible to measure. Even when leading companies do report on them, investors say that the information reported is not actually useful or does not enable comparisons among companies.

The metrics and narratives in this report are a starting point toward changing that. They offer some well-researched yet practical ways to measure factors that participants agreed contribute to a company's long-term value.

In fact, some of the companies involved in the project have already embraced some of the practices and metrics pioneered by participants. Although we are realistic that more widespread change will not happen overnight, this fact gives us hope that the project's findings can gain broader adoption and wider change will happen.

² Domo (2017). Data Never Sleeps 5.0 – How much data is generated every minute? <https://www.domo.com/learn/data-never-sleeps-5>.

Standardized approaches to evaluate and compare companies

One of the key challenges that participants identified, even when companies do report on these areas, is that everyone does it differently. This makes it very difficult to compare one company with another. Therefore, we created participant-led working groups to identify consistent, standardized metrics and associated narratives that a wide variety of companies could use to measure and report on their actions in each of the key areas.

1. Talent: Participants agreed employees make a big difference when it comes to a company's ability to create long-term value. At their best, employees effectively implement the company's strategy, apply their skills to help the company navigate disruption, and bring new ideas to the table. Project participants concluded there was a need for comparable metrics in three key areas of talent where a company's actions could influence its long-term prospects:

- **Human capital deployment:** The working group outlined a series of metrics across five dimensions that companies could disclose to offer a clearer picture of how effectively they deploy and manage their human capital. For instance, what is your voluntary turnover compared to overall turnover? What is the diversity breakdown at all levels of the company?
- **Organizational culture:** It is notably difficult to get hard data around culture. So, the working group created a standardized survey that companies could use to gauge employee feedback on their company culture. Questions include: "is it clear to me how my work contributes to our stated purpose?", and "do I receive timely feedback that strengthens my performance?".
- **Employee health:** While undervalued, health is everyone's business. Therefore, the working group proposed metrics to provide investors with insights about how companies are helping their employees manage their health. For instance, what percentage of employees participate in 'best practice' health and wellbeing programs that help to reduce absenteeism and improve productivity?

2. Innovation and consumer trends: There is a simple truth at the heart of every business: if people don't want to buy what the business sells, there is no way it can survive. Therefore, participants agreed that it was critical to measure areas that impact whether consumers and other stakeholders are likely to interact with a company. Is the company innovating to keep up with evolving demands? Do people trust it? Do its products and services impact people's health? All of these factors help gauge whether the company is positioned to stay relevant over the long term.

- **Innovation:** The working group developed an approach that helps companies communicate performance during each stage of the innovation process. Combining a narrative that addresses the overall innovation strategy and key elements of ideation, development, launch and maturity with metrics that demonstrate performance against the strategy. For instance, what is a company's R&D spending in strategic areas as a percentage of sales? What percentage of revenues is forecast to come from new products or services?
- **Consumer trust:** The working group tested a new metric, the net trust score, on a representative sample of 20 Financial Times Stock Exchange (FTSE) 100 companies. They found a positive correlation between the trust score and financial performance over 12 months. Companies could use this same methodology to generate a net trust score for themselves and demonstrate their performance in this area with additional narrative details to provide the necessary context.
- **Consumer health:** Here, the working group identified two types of metrics to understand how a company's products and services impact consumer health. One metric aims to count the number of people whose health is improved or reduced by products and services. More ambitiously, another metric would measure by how much a consumer's quality of life has been improved or reduced.

3. Society and the environment: Participants also recognized that, increasingly, companies must earn their 'license to operate' in society in order to be successful in the long term. But despite this growing consensus, the conversation around societal value has remained relatively abstract. Businesses still have difficulty quantifying the societal value they create. This was the challenge one working group sought to confront using the United Nations Sustainable Development Goals (SDGs) as a basis for their work.

- **SDGs:** While many companies already use the SDGs as a framework to report on environment, social and governance (ESG) topics, in part because asset owners are asking for this, it became clear during the working group's research that investors need better information to inform decision-making. At present, companies do not sufficiently explain the link between their strategy and the SDGs, as well as how their contribution to the SDGs creates long-term value for the company. The working group looked to address this challenge.

4. Corporate governance: There is, of course, already a great deal of disclosure around corporate boards. However, as boards become more involved in strategic planning, investors say that very little of it enables them to gauge whether the board is equipped to help shape a business's long-term strategy and value.

- **Governance:** The working group has outlined a way to build on the current disclosures by creating a clearer, more widely adoptable approach. Through a series of standard metrics, it would demonstrate how corporate governance and the quality of board leadership affect a company's long-term success. For instance, what are the skills different board members bring to the table? What strategic milestones did the company achieve in the previous year?

What next?

EPIC has made good progress. In each of these key areas of talent, innovation and consumer trends, society and the environment and governance, participants have proposed useful and comparable metrics for the impact of corporate actions. Some of these metrics are based on those currently reported by leading companies and could be adopted by others. This moves the debate in these areas from aspiration to reality, from broad concepts to testable metrics.

This is a very important step. But there is much more to be done to research, test, apply, and build on these results. In addition, talent, innovation and consumer trends, society and the environment and governance fall into three broader categories of value that companies create outside of pure financial value: human value, consumer value, and societal value. Much work remains to define additional metrics in these value areas.

A framework to continue this work

In the past, some of these topics have been covered in a piecemeal way, often by different professions, without necessarily linking them to or explaining why they are important for long-term value creation. One of the goals of the project was to change that.

The approach we tested was comprehensive, methodical, and transparent. It helped a wide variety of companies identify the factors that mattered most for long-term value. This approach was based on the Long Term Value Framework, described in more detail later, which will also enable other companies to apply the same thinking and continue this work going forward.

We acknowledge that the findings of the project do not represent a definitive solution to the challenges outlined in this report. But we believe that the proposed metrics founded on the practical experiences of some of the world's top companies and investors, represent an important step toward addressing these challenges.

Without the collective efforts of all the CEOs, participants, academics, advisory council members and subject matter resources involved, we would not have made the progress that we have. We would like to thank everyone for their hard work and dedication over the 18 months of the project and encourage each and every one of you to continue building on this important work.



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Introduction

03

Challenges along the investment chain

In recent years, short-termism has emerged as a significant topic of debate among leaders from across the investment chain. While much of the conversation revolves around the impact of quarterly reporting, a more fundamental question lies at the heart of the debate: regardless of how often we report it, are a company's investors and other stakeholders actually getting the information they need to understand if and how that company is creating value?

One look at the ways we measure companies' performance and value underlines the problem we face. Today, the accounting standards companies use for both internal and external reporting are grounded in principles that were established in the 1970s – a time when there was less volatility in the operating environment of companies and historical accounting information provided a better indication of future success.

Meanwhile, the pace of global change is accelerating. Technological innovation, the proliferation of data and rapidly evolving social and economic conditions are disrupting and reshaping every aspect of society, including the business environment. At the current rate of churn, for example, half the companies on the S&P 500 are projected to fall off the list within a decade.³ And in a world that is changing faster

than ever before, it is not enough to simply measure the things that would have defined a company's success in the 20th century. It is also not enough to just focus on their results over the next quarter or fiscal year. Now more than ever, it is critical to have a long-term mindset and effectively communicate a strategy that creates sustainable value.

In a world that is changing faster than ever before, it's not enough to simply measure the things that would have defined a company's success in the 20th century.

Against this backdrop, CEOs and boards are faced with four interrelated issues:

1. In many countries, rising economic inequality has caused public trust in institutions – including businesses – to decline;
2. The proliferation of data is creating new opportunities, but it is also making it difficult for companies to influence the conclusions made about their business;
3. As the shape of value changes, the focus on traditional financial reporting metrics is impeding companies' ability to adapt; and
4. Despite increasing recognition of the need for long-term value creation, there is pressure in the investment chain to focus on short-term financial performance.

³ Anthony, S. D., Vigue, S. P., Schwartz, E. I. and Van Landeghem, J. (2018). Corporate Longevity Forecast – Creative Destruction is Accelerating, p.3.

The trust deficit

The first issue goes to the heart of how businesses interact with society – and how they earn their license to operate within it. In a global economy that is more interconnected than ever before – and one that has changed rapidly in recent years – people around the world have begun to question some fundamental facts about business’s role in society.

On the whole, globalization has been an incredible force for good. It has fueled economic growth around the world and helped lift more than a billion people out of poverty.⁴ But there is no question that it has also left many people behind. Over the last few decades, as the pace of global change has accelerated, the benefits of economic growth have not been shared equally across society. This has led to a situation in which economic inequality between countries is decreasing, but inequality within many countries, including the US, has skyrocketed.⁵

In many places, these trends have provoked a backlash against globalization, often in the form of opposition to immigration and free trade. But they have also resulted in declining trust in institutions – including business. According to the Edelman Trust Barometer, nearly half of people globally no longer trust business. The survey also found that just 44% of people consider CEOs credible, while 60% agreed that “CEOs are driven more by greed than a desire to make a positive difference in the world.”⁶

The rise of greenwashing, the failure of companies to adequately address socially relevant issues and a lack of transparency around some company communications may have contributed to that picture. The public must have confidence in the information that is disclosed. Current accounting practices, however, have done little to improve the materiality and relevance of information. Thus, finding better ways of measuring and communicating how a company creates value consistently across all material stakeholder groups over the long term lies at the core of rebuilding trust, even if this information is hard to measure at first.

There is reason for optimism – because while much of the global population does not trust business to create widespread prosperity anymore, the Edelman survey also found that people are eager for business to lead the way forward. But in order to restore trust and earn their license to operate, businesses need the ability to demonstrate how they are creating long-term value for stakeholders, not just shareholders.

The proliferation of data

There is another major force affecting the relationship that companies have with investors and other stakeholders, including the public: the proliferation of data.

Today, the world is producing unprecedented amounts of data. In fact, 90% of all the data on Earth has been generated in the last two years alone – and we are currently producing another 2.5 quintillion bytes of data per day.⁷ For companies with strong data and analytics capabilities, this represents a significant opportunity to gain a competitive advantage. That is because it has enhanced their ability to manage risk and identify opportunities, as well as make informed decisions and measure aspects of their business, such as trust, that were difficult to quantify in the past.

At the same time, however, the exponential growth of available data has made it harder for companies to inform the conclusions that investors and other stakeholders make about them. For example, investors are now evaluating companies through a combination of proprietary and public data, ranging from employee reviews on platforms like Glassdoor to the voice patterns of management teams on quarterly earnings calls. Similarly, without the ability to prevent false or conflicting information from being reported, companies are losing their ability to shape perceptions among stakeholders and the public of their brand or conduct.

But there is also some good news here. In a world with more data – and better tools than ever to analyze it – we can understand more about a company than ever before. These insights could be invaluable to help better understand how businesses are positioned to perform and create stakeholder value in the long term, assuming we find consensus on how to arrive at them.

The changing shape of business value

As we gain the ability to measure unprecedented aspects of a business’s performance, it is also important to focus on what we measure. That requires us to recognize that the shape of business value has changed considerably in the last several decades.

For most of the previous century, the value of a business was determined in large part by its tangible assets. In a manufacturing-based economy, the logic of this approach was evident: property, plant, and machinery were indeed critical components required for success. In the digital era, however, manufacturing no longer provides the growth opportunities and

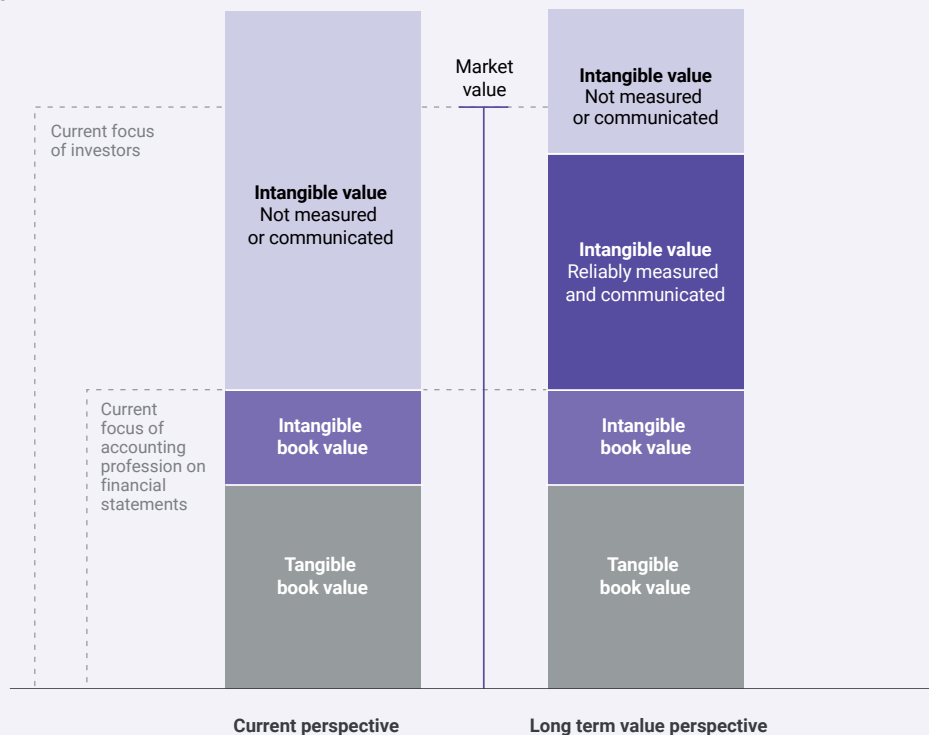
⁴ World Bank Group (2016). Taking on Inequality – Poverty and Shared Prosperity 2016, p.4: The world had almost 1.1 billion fewer poor in 2013 than in 1990, a period in which the world population grew by almost 1.9 billion people.

⁵ Sustainable Development Goals (2018). Goal 10 – Reduce inequality within and among countries. <https://www.un.org/sustainabledevelopment/inequality/>.

⁶ Edelman (2018). Edelman Trust Barometer 2018 – The Employer Advantage, p.10.

⁷ Domo (2017). Data Never Sleeps 5.0 – How much data is generated every minute? <https://www.domo.com/learn/data-never-sleeps-5>.

Value perspectives



prosperity it did. Now, as business adapts to an increasingly service-based economy – one in which intellectual property and innovation are often key drivers of value – tangible assets comprise less of a company's value than they once did. Indeed, this is a world where a company like Airbnb can become larger than any hotel chain in the world without owning a single property.

In this 21st century business environment, intangible assets like human capital, organizational culture, customer loyalty and trust are more important than ever. They have become such important determinants of a business's success that, globally, intangible assets now represent on average over 50% of a company's market value – and up to 80% in some industries, such as advertising and technology.⁸ The problem is that standard accounting practices show the costs associated with these intangible assets, such as the cost of training employees or investing in innovation. But they still do not reflect the vast majority of their value.

There is a similar gap between current accounting and shareholder returns. The income statement is focused on in-period changes in revenues and costs, but only takes into account movements in values of certain assets and liabilities. It fails to account for the value of strategic capabilities that increase long-term shareholder returns.

Without the metrics to demonstrate the value of these long-term investments, many companies face intense pressure to focus on short-term results above all else.

Of course, this is not a new trend but it has increased to the point where we now see a significant divide between the net book value of assets on a company's balance sheet and its market capitalization, as illustrated in the chart above. With so much value being attributed to future cash flows it is important to have a common understanding of the drivers of these cash flows and measure what are largely intangible aspects of 21st century businesses. We are not suggesting that intangible value should be further captured on the balance sheet but we are advocating for comparable metrics to measure it. Advances in data and analytics, as well as new measurement approaches are starting to enable this value to be quantified and its relationship to financial value to be better understood but there is a long way to go.

⁸ Brand Finance (2018). Global Intangible Finance Tracker (GIFT™) 2018 – an annual review of the world's intangible value - <http://brandfinance.com/images/upload/gift.pdf>.

Investment disconnect

This changing shape of business value has created clear problems for our economy – because the more it has evolved, the more it has contributed to a growing disconnect between players along the investment chain.

On the one hand, in order to succeed in the modern economy, companies need to adopt a long-term mindset. Although some shareholders might prefer a focus on short-term results, that is not a reliable path to sustainable profitability. Instead, it is critical for companies to look to the future and execute a strategy to succeed in it. In part, that means investing in areas that create value over the long term, even if they appear as a cost in the short term.

At the same time, asset owners, such as pension funds, sovereign wealth funds and institutional investors, want companies to deliver long-term sustainable growth. But while it may seem as though

companies and asset owners are aligned, companies lack the tools to measure long-term value and, as a result, struggle to communicate how their strategies create value. This has led many asset owners to place greater emphasis on short-term profitability despite their desire for long-term value creation.

Meanwhile, performance pressures on asset managers exacerbate the challenge. In the absence of agreed upon metrics to assess a company's performance, the vast majority of asset managers are largely evaluated based on shorter-term financial metrics of their portfolio companies. As a result, they are not incentivized to make investment decisions that would deliver longer-term sustainable value despite the stated desires of many asset owners.

Combined, these factors have resulted in a significant disconnect between what the players along the investment chain say they want and the common behaviors that we see in practice.

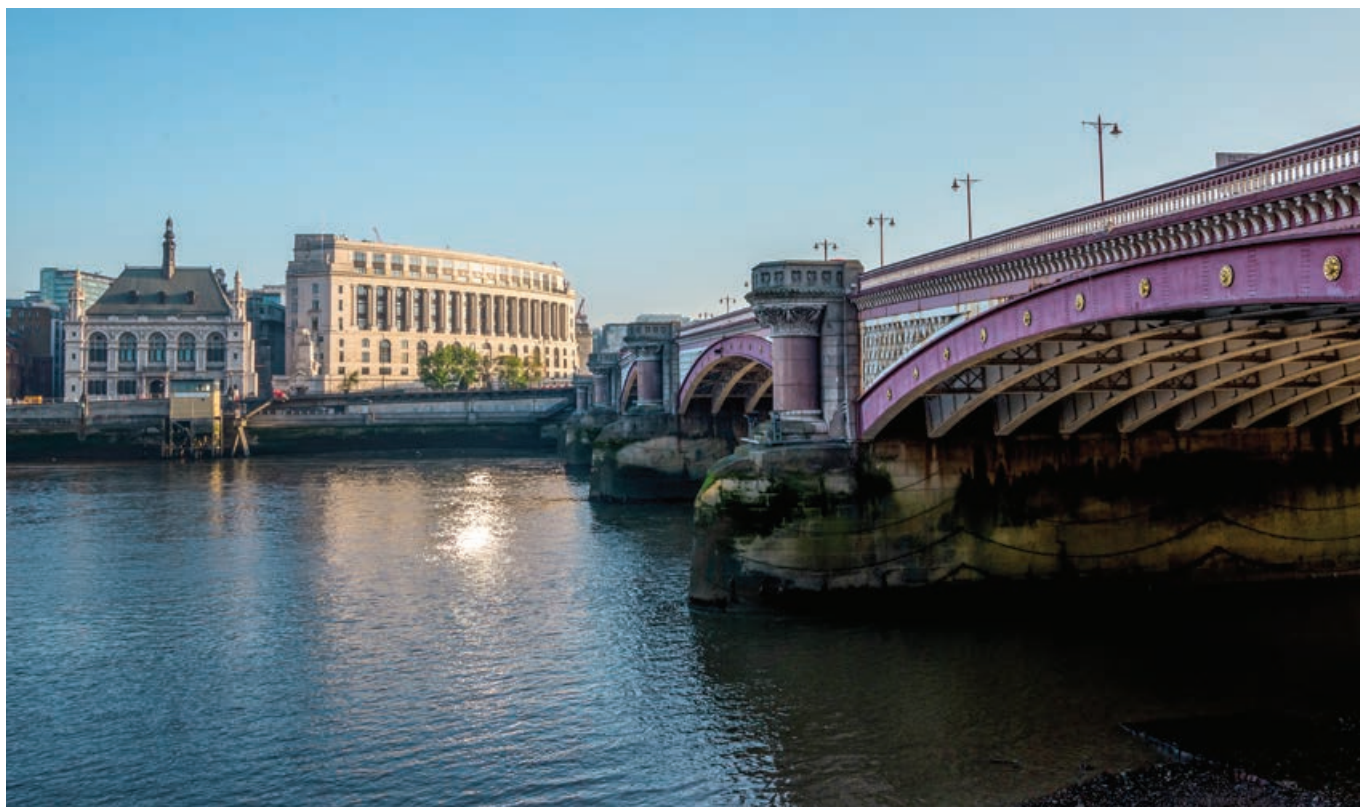
The Embankment Project for Inclusive Capitalism

Each of these underlying trends poses a distinct challenge. Taken together, however, they lead to the inescapable conclusion that businesses cannot succeed in today's environment by focusing only or even primarily on their short-term financial performance, as reported in quarterly and annual reports.

There is no silver bullet that will eliminate the short-term pressures and get companies to focus on long-term value creation. But, if we hope to change the behavior of players along the investment chain, giving them better tools to measure the true drivers of long-term value is an essential place to start.

New metrics will only be useful if companies, investors and asset owners all buy into them. In order to inform and influence business decisions, the metrics need to reflect what these decision-makers value in the real world. That is why the Embankment Project for Inclusive Capitalism (EPIC) has devoted a significant amount of time and effort to building consensus – and defining value in a way that is useful for the entire investment chain.

This report is the culmination of that effort. It describes the journey that EPIC participants have taken over 18 months and the insights that we have gained, as well as a new open-source Long Term Value Framework and initial set of EPIC metrics that represent a tangible and practical step forward in a process that is sure to continue in the years ahead.



EPIC participants

Companies

Aetna
BASF
DowDuPont
Ecolab
Johnson & Johnson
Nestlé
Novartis
PepsiCo
Unilever

Asset managers

Amundi
Barings
BlackRock
Fidelity Investments
Investec Asset Management
J.P. Morgan Asset & Wealth Management
Neuberger Berman
Nuveen
Schroders
State Street Global Advisors
Vanguard

Asset owners

Allianz
Allstate
ATP
CalPERS
CalSTRS
Canada Pension Plan Investment Board
Government Pension Investment Fund
Guardian Life
MetLife
New Zealand Super Fund
Washington State Investment Board

The project benefited from the insights and advice of CEOs and participants from the above companies, asset managers and asset owners, as well as the advisory council, EY staff and academics. Participants were involved to varying degrees in the project working groups and as a result, all the views expressed in this document do not necessarily represent the views of all the companies and individuals involved.

For a complete list of those involved please see the acknowledgments at the end of this document.

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Project journey

04

The road to Embankment

The Coalition for Inclusive Capitalism engages leaders across business, government and civil society in the movement to make capitalism more equitable, sustainable, and inclusive. In March 2017 they convened a meeting to bring together a number of influential and forward thinking CEOs – representing fund managers, corporates and pension funds – to discuss one of the great challenges of our time.

Each had achieved great successes in their companies, and all expressed concern about how to communicate to markets and investors the value of investing in long-term growth. From their years of accumulated expertise and experience in running some of the world's most successful businesses, they knew that the things that matter in the long term – like developing human capital – are often intangible and much harder to communicate to investors than quarterly earnings. They worried this would keep businesses focused on short-term value instead of incentivizing investments that would pay off over the long run and ultimately diminish trust in business.

It was these concerns that the participants hoped to turn into an impetus for concrete actions at the meeting.

Investors and other stakeholders find increasingly diminishing value in the way that companies measure and articulate their value creation.

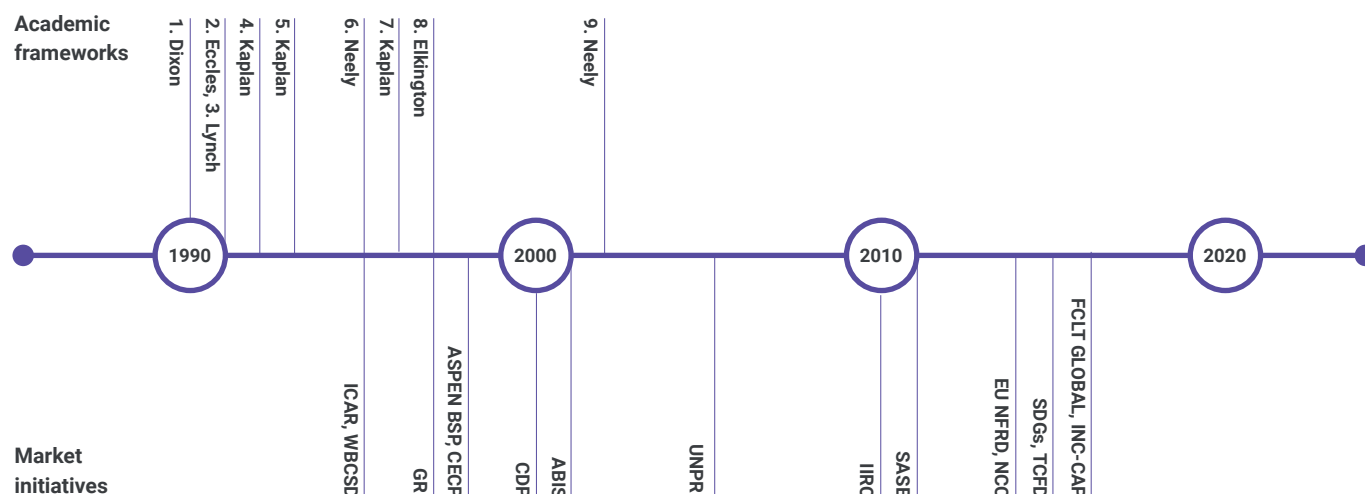
After a wide-ranging discussion about what was needed to create market change and move from theory to reality, the CEOs settled on a plan: a market-led initiative involving some of the world's largest investors and companies (across the healthcare, consumer goods and industrials sectors) in an effort to find real solutions that would help businesses to communicate how they are creating long-term value to markets.

In the subsequent months, 31 leading companies signed up to participate in EPIC, as it soon became known, with the asset owners and managers involved representing approximately USD 30 trillion in assets under management.

The project was built on the notion identified in that first meeting: Investors and other stakeholders find increasingly diminishing value in the way that companies measure and articulate their value creation.

But while a range of developments and initiatives have made enhancements to the quality and usefulness of annual disclosures and other means of communication, a significant disconnect between current reporting practices and the drivers of long-term value continues to persist. Almost everyone agrees corporate reporting needs to go through a process of evolution and consolidation in order to be valuable to a wide range of businesses and investors, and really move the needle on long-term value creation.

Evolution of measurement and reporting



1. Dixon, J.; Nanni, A., and Vollmann, T., The New Performance Challenge. 2. Eccles, R.G., The performance measurement manifesto. 3. Lynch R.L. and Cross, K.F., Measure Up! 4. Kaplan, R.S. and Norton, D.P., The balanced scorecard: measures that drive performance. 5. Kaplan, R.S. and Norton, D.P., Putting the balanced scorecard to work. 6. Neely, A.D., Gregory, M. and Platts, K., Performance measurement system design. 7. Kaplan, R.S. and Norton, D.P., The Balanced Scorecard: Translating Strategy Into Action. 8. Elkington, J. (1998). Cannibals with forks: the triple bottom line of 21st century business. 9. Neely, A., Adams, C. and Kennerley, M. (2002) 'The Performance Prism: The Scorecard for Measuring and Managing Stakeholder Relationships

As shown in the timeline above, the publication by academia of widely recognized academic measurement and reporting frameworks has been rare since the proliferation of publications in the 1990s. Perhaps because of this there has been a resurgence in the number of market-led initiatives in recent years. Most of these have either focused on metrics or specific areas of value, but none have provided a comprehensive framework that enables companies to determine the drivers of long-term value for their business and the tools to communicate this to investors.

As a result, participants dedicated time and resources to an ambitious goal: to forge consensus on how to measure value beyond pure financials; to improve communications along the investment chain; and to make a case for long-termism that could strengthen not just businesses, but our entire economy. Their work went through three distinct phases: setting the objective and scope, identifying the key outcomes that create long-term value, and developing metrics to measure and demonstrate that value. In the latter stages, the project's advisory council, made up of leading professionals and academics, provided input and guidance to help shape the project outputs and way forward.

EPIC participants



Phase 1: Setting the scope and principles

Participants were onboarded in mid-2017 and completed their initial work on the project before meeting at two initial workshops in October 2017 (in New York and London).

At these workshops, the participants discussed the root causes of the problems outlined in chapter three, their ambitions and the scope of the project.

It became apparent there were two different, but mutually reinforcing priorities. The companies wanted to demonstrate the value of their long-term investments. The asset managers and asset owners wanted to better understand how those investments would impact growth.

With this in mind, the participants agreed on an objective for EPIC that reflected the perspectives of companies and investors alike. The project set out to find a measurable, comparable and meaningful way for companies to better articulate to the financial markets how value is created for stakeholders and for investors to better differentiate the ability of assets to protect or grow future cash flows.

The project sets out to find a measurable, comparable and meaningful way for companies to better articulate to the financial markets how value is created for stakeholders and for investors to better differentiate the ability of assets to protect or grow future cash flows.

To achieve this objective, the participants agreed on a number of founding principles to guide their work. For instance, it was clear that

a collective aim would be to reach consensus on the types of value that influence long-term cash flows. However, the group also agreed that it would oversimplify the problem to define 'long term' as a specific time horizon to be applied universally to all sectors or operating environments. Rather, 'long term' should refer to a mindset that a given business adopts to achieve sustainable value creation.

Participants also agreed from the outset that EPIC should build on the work that has already been done in

this space. They would review existing frameworks and metrics in the market and determine whether they were sufficient or could be adapted to achieve their goals. Then, in cases where there were no widely accepted or appropriate metrics, participants would develop new ones.

EPIC scope

Participants agreed that the project **would not**:

- ✗ Try to solve all issues related to short-termism in the financial markets;
- ✗ Provide a point of view on which industries perform better in the long term; and
- ✗ Attempt to standardize the way investors value assets.

Rather, the group determined that the project **would**:

- ✓ Develop an overarching methodology to identify relevant stakeholder outcomes;
- ✓ Agree on current best practice methodologies, metrics, and data sources to measure a defined set of stakeholder outcomes; and
- ✓ Pioneer new ways to measure and compare the defined set of stakeholder outcomes, if required.

Phase 2: Identifying components of long-term value

In the months that followed, the companies, asset managers and asset owners met and shared what they considered the most important areas of value creation, and where they felt current communications in these areas were falling short. Just as importantly, they began to discuss the areas where their perspectives differed.

A key goal of EPIC was finding common ground where these differences could be resolved and consensus could be reached. The participants wanted to do this in a systematic way and started road testing the Long Term Value Framework, a concept that EY started developing in 2015.

The framework offered a comprehensive way to think about the components of long-term value, as well as a consistent way to analyze the performance and long-term prospects of complex companies. That made it ideal as a way to both address the current lack of holistic frameworks to measure value and reach consensus on what to measure beyond traditional financial value. Participants agreed that without a standardized methodology and verifiable metrics, companies will continue to struggle to effectively articulate how they are creating long-term value for investors and other key stakeholders.

The participants wanted to see how this framework would fare in the real world, so they took the next logical step: They used it themselves. The companies applied the framework to their own companies, which helped them to test and validate the logic internally and identify the stakeholder outcomes they valued most. At the same time, asset managers and asset owners applied the framework to the companies from an outside-in perspective. This helped them identify the components of long-term value that mattered the most to them, such as human capital, innovation, employee health and safety, and brand.

After participants applied the framework, they consolidated and compared the stakeholder outcomes identified by each group. Then, in open discussions during one of the workshops, each participant explained their rationale for the inclusion or exclusion of various outcomes, as well as their importance in terms of sustainable long-term value creation. Together, they determined where there was the most agreement – and put a process in place to create working groups to identify or develop EPIC metrics for the outcomes identified.

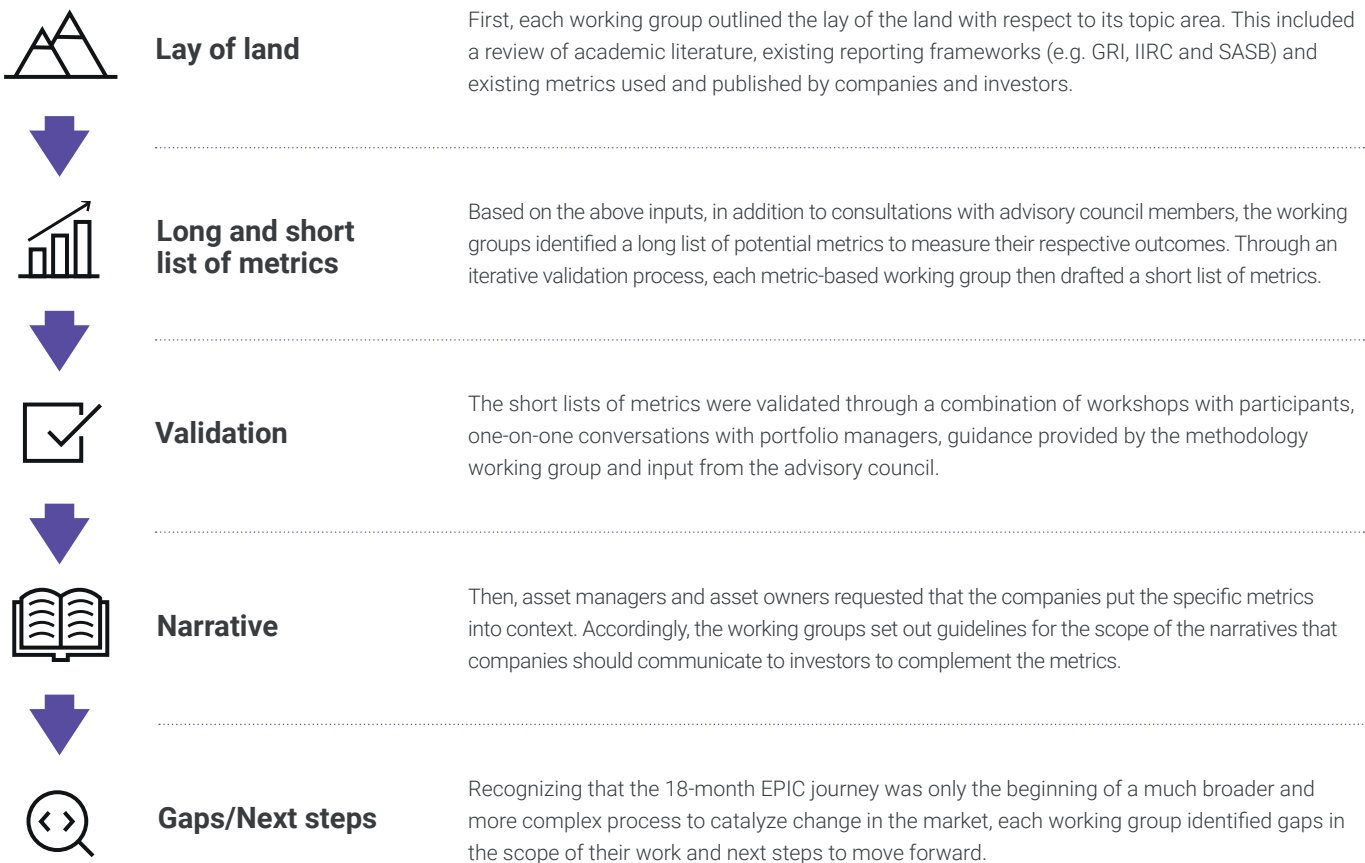
Following the workshop, meetings were held with more than 30 portfolio managers and senior analysts from the asset manager companies to discuss the potential working groups and identify where it would be most valuable to focus. That list of working groups was then reviewed and approved by several participating CEOs of companies, asset managers and asset owners.

In cases where a large number of initiatives already existed – such as for environmental outcomes – no working groups were formed. But the seven metric-based groups that were formed – and crucially, led by participants – allowed the project to start delving into the details, finding concrete ways of measuring the value of investing in each of these critical areas.

Participants agreed that without a standardized methodology and verifiable metrics, companies will continue to struggle to effectively articulate how they are creating long-term value for investors and other key stakeholders.

Phase 3: Measuring long-term value

During phase 3, the working groups identified existing metrics and developed new ones to demonstrate what long-term value looks like in each of their respective areas. As part of this effort, they outlined ways that companies could give these metrics more context through narratives that would accompany the metrics. This was done by each working group following a broadly similar process, which is outlined below:



The overall insights that came out of this process are included in the Sector insights and Working group insights chapters.

Long Term Value Framework



05

A broader view of value

As outlined in the previous section, EPIC builds on the work of many initiatives carried out by participants in recent years. This includes EY who, starting in 2015, conducted research with Cambridge University on what accounting and reporting could like in the 21st century, during which they engaged with other academics, investors and business leaders. The proposed solution and way forward was presented in EY's 2016 white paper, 'Accounting and Reporting for Long-Term Value,' and has since evolved into the current Long Term Value Framework.⁹

The framework has been built on a series of interactions between companies and asset managers and also benefited from the input of asset owners and the advisory council members. By following a standardized and transparent process of logical steps to systematically and consistently evaluate what is important to a company in the long term, the framework guides companies to identify and develop metrics that demonstrate how their strategies create long-term value and provides a basis for more structured discussion along the investment chain.

Furthermore, the framework provides a structure for the written narrative required to contextualize the metrics measured and disclosed by companies – as metrics without an associated narrative are just numbers without the means for comprehension. And disparate metrics without a consistent and transparent framework to develop, test and interpret them, do not foster trust or provide a consistent basis for the investment chain to make an assessment of a company's future long-term financial performance. Based on this, the participants concluded that the framework and validated metrics need to:

1. Enable measurement of non-financial outcomes and capabilities:

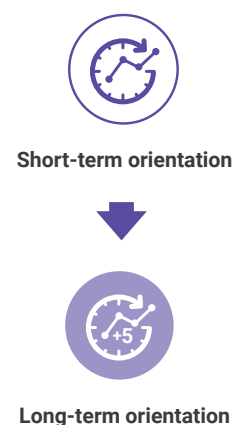
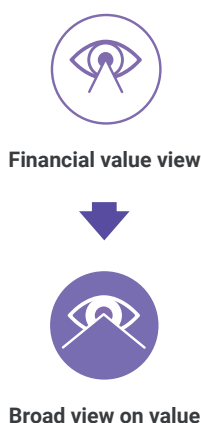
The first examples of alternative measurement frameworks – to value intangibles, externalities and other non-financials – can be traced back to at least the 1950s. Since then, as described in EY's 2016 white paper,¹⁰ there have also been calls for the disclosure of intangible assets and the evolution of accounting standards themselves, including the Strategic Report.¹¹ However, most of these alternative measurement frameworks only cover a specific aspect of value creation, such as natural capital or intellectual property. Other domains such as human capital may be more mature, but their relationship with financials is not yet widely understood or incorporated into decision-making along the investment chain in a consistent and holistic manner.

2. Capture stakeholder value:

When taking a broader perspective on value creation, beyond financials, it is important to assess how all material stakeholders perceive the company's performance because this is highly likely to have a financial impact, both today and certainly in the future. For example, shareholders alone may be satisfied with high quarterly returns, but if a company achieves these returns at the expense of other key stakeholders, its long-term performance may look a lot less promising. In other words, we need a better way for companies to assess and communicate how short-term demands from different stakeholders are impacting the long-term prospects, and vice versa. This will enable the investment chain to understand the trade-offs and maintain an appropriate balance between short-term and long-term outcomes.

3. Inform a clearer indication of future financial performance:

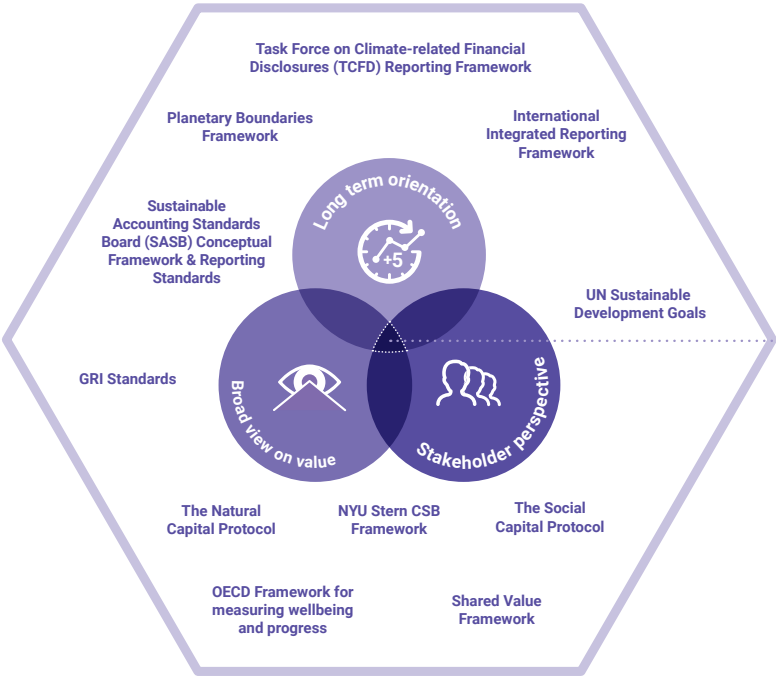
Although there are indeed several initiatives promoting long-termism, few articulate how to identify the most important measures for an individual company or sector. Even fewer have proposed metrics that offer insight in terms of pre-financial outcomes and impacts of beyond one reporting year, let alone developed a comprehensive framework to logically and consistently develop and assess metrics to begin with. So articulating corporate performance over the long-term – comparatively, through both metrics and supporting narrative – is new territory for the entire investment chain.



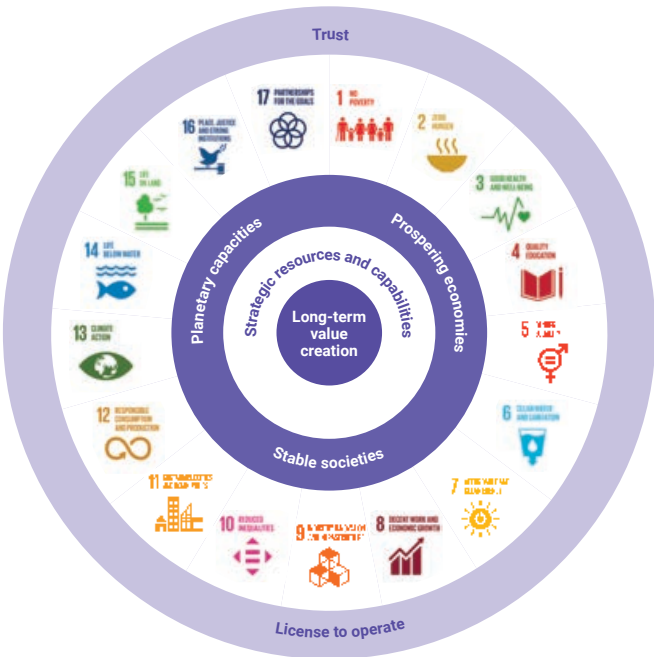
^{9,10,11} EY (2016). Accounting and Reporting for Long-Term Value. [https://www.ey.com/Publication/vwLUAssets/Long_term_value_white_paper_December_2016/\\$File/EY-LTV- white-paper-v14.pdf](https://www.ey.com/Publication/vwLUAssets/Long_term_value_white_paper_December_2016/$File/EY-LTV- white-paper-v14.pdf).

For a company to effectively measure and articulate its long-term value creation potential, we need a framework that combines the three aspects on the previous page: a broader view on value creation, with a broader stakeholder perspective and long-term orientation. Many existing frameworks may cover one or two of these across a defined field, such as human or natural capital, but all parties involved in the conception of the Long Term Value Framework agreed that none of them are sufficiently comprehensive.

Despite this, many of the existing frameworks contain valuable concepts and metrics within their area of work. During EPIC the framework was further developed by building upon and strengthening the existing initiatives and frameworks that already covered different elements of it. The existing initiatives working group mapped these initiatives and closely liaised with the most strategically aligned ones over the course of the project. The adjacent diagram offers a non-exhaustive overview of several of these frameworks.

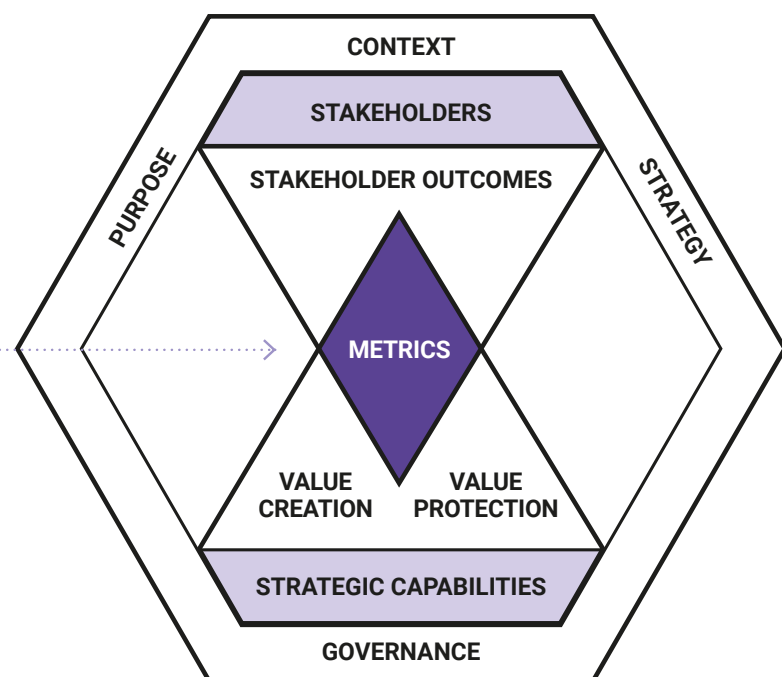


Furthermore, the project participants were conscious of the need to contextualize how we understand the long-term impacts and dependencies of their business models. Some of the companies and asset managers have started thinking about aligning their long-term strategic priorities and capabilities with the broader socio-economic context they are operating in, including the UN SDGs, as shown in the circle figure on the right:



How it works

The Long Term Value Framework is described in detail with accompanying step-by-step guidance for practitioners in the Detailed guidance chapter, which includes a summary overview of the framework that has been developed to date.

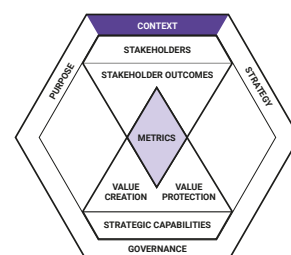


The framework provides a logic trail to guide companies to determine and assess the metrics that are relevant to articulate sustainable value creation for their business. An overview of the recommended steps to apply the framework is outlined below. This starts with analyzing the context within which a company operates, as well as its purpose, strategy and governance, to determine what outcomes it needs to deliver to its most material stakeholders. Once a company understands this, it needs to think through which capabilities and resources are required to deliver the outcomes stakeholders may desire, while at the same time protecting the longevity of its business model. These resources are called strategic capabilities. Pre-existing strategic capabilities need to be maintained by the company to continue to create and protect value, while new ones will need to be invested in as context, purpose, strategy and governance change over time. Metrics to measure both the achievement of stakeholder outcomes and the status of strategic capabilities – i.e. their existence and relative 'health' – are required in order for management and investors to make informed decisions about the company's long-term performance.

Going through the Long Term Value Framework step by step

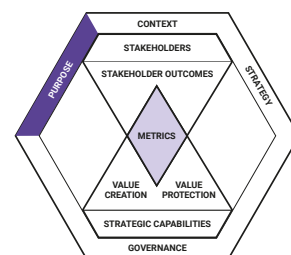
Analyze context

It is important to examine the external world in which a business operates, including factors such as macroeconomic, social, technological, political and market trends. This analysis enables a company to identify fundamental current and future trends potentially affecting the business or its key stakeholders and the outcomes they desire. None of the analyses should be static, as context can evolve – sometimes rapidly – and analyzing it effectively requires a comprehensive system of well-integrated information sources.



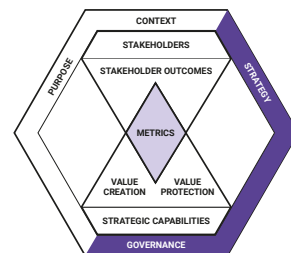
Examine a company's purpose within this context

Purpose is what enables a company to frame and communicate how successful it is at fulfilling its reason for being. This should not simply be an inspiring statement on the front door but a clear explanation of how the company's purpose is relevant to its stakeholders, as well as who is integral to the company delivering on its purpose (e.g. suppliers, employees, regulators).



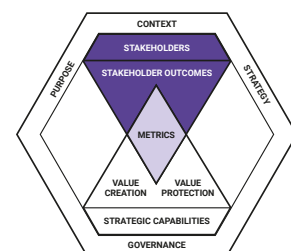
Review the company's strategy and governance

How does a company work, and what structures are in place to help it reach its goals? These embody the heartbeat of a company. Strategy provides the best indication of the future direction of the company; and governance helps assure investors and other stakeholders that a business's strategy execution is directed, controlled and monitored effectively.



Assess how effectively a business is positioned to meet those goals

How likely are they to deliver the outcomes that are most important to its stakeholders? All businesses have a wide range of stakeholders: investors, consumers, suppliers, customers, employees, governments, regulators, NGOs, academics, etc. Some are considered more material than others to a company's business model (e.g. market regulators) and they can generally be grouped along the lines of a fewer number of shared perspectives. For example, governments and regulators often share a similar view on what they expect a company to adhere to in their operating context. Stakeholder outcomes are then the fundamental dimensions of performance that matter to different stakeholders and are therefore most material to the business. It's simply recognizing that value lies in the eye of the beholder and is inherently subjective. Analyzing stakeholder outcomes holistically, including how they interdepend, helps to structure these perspectives and focus on how value is created over time.



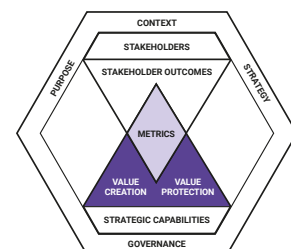
Structure stakeholder outcomes by value categories and explore value creation and protection levers further

The framework recognizes that businesses should think about creating or protecting value beyond the financial yardstick. The following three additional value categories offer a lens on value creation in addition to financial value:

- 1. Human value:** The value a company creates through the employment and development of people, in terms of its culture, engagement, leadership, know-how and skills.
- 2. Consumer value:** The functional or emotional value a company creates through goods and services to meet customer needs, including innovation (e.g. product quality and brand).
- 3. Societal value:** The value created through the relationships between a company and all other external stakeholders, including its environmental, social and economic impacts across the full value chain (e.g. resource efficiency, health and wellbeing, and job creation).

Please see the Detailed guidance chapter for more detail on how these categories were developed and relate to other value frameworks that may already be familiar.

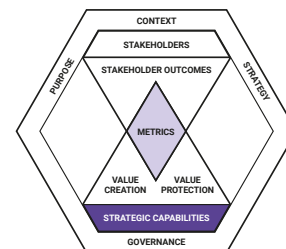
In each of these categories, businesses have value creation levers they can draw on to deliver stakeholder outcomes. By reviewing the value creation levers, including applying a risk lens to them, companies can better understand their ability to meet their goals and create long-term value.



Analyze strategic capabilities through the value levers

The value levers analysis serves to assist companies to identify the strategic capabilities required to deliver the stakeholder outcomes.¹²

These strategic capabilities are the resources that are most valuable, rare, inimitable and non-substitutable to create competitive advantage for companies, such as customer relationships and product pipelines.

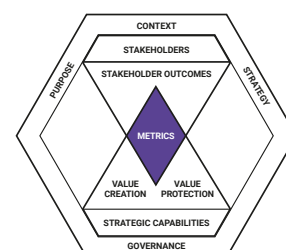


Identify the relevant metrics for long-term value

The metrics are at the core of the framework, measuring both the company's ability to achieve stakeholder outcomes and the associated strategic capabilities in a consistent and transparent way.

Metrics measuring the 'health' of the company's strategic capabilities allow them to assess which capabilities they should invest in to ensure stakeholder outcomes will continue to be delivered, as well as ensure sustained financial performance. The metrics identified and assessed through the application of the framework fall into the following three categories:

- **Common metrics** that impact long-term value across industries. These metrics are universal and broadly applicable. For example, one such metric might be employee turnover ratios. Here we would be able to see how a company – in whatever industry – manages its human capital. A sector or function-specific lens will still have to be applied in most cases, for reasons of comparability, but the concept of the metric is industry-agnostic. Most traditional financial metrics fall into this category.
- **Sector-specific metrics** that enable comparisons within a sector. These metrics are more specific to an industry. For example, if looking at a consumer goods company, one such metric might be the repurchase rate – measuring how often customers return to buy things. Most of the metrics that have been identified through the application of the Long Term Value Framework to date fall into this category, especially because the participants in essence represent three sector cohorts (i.e. consumer goods, industrials and healthcare) and investors highly value comparability within sectors.
- **Company-specific metrics** take a customized look at how a company aims to create long-term value based on its specific purpose and intentions. While we did not establish such metrics as part of EPIC, we do wish to point out that company-specific metrics and narrative could be created using the framework, which would be useful for internal decision-making at the very least.



Application of the Long Term Value Framework

Developing this framework, to derive and assess metrics and their supporting narrative, was a crucial first step. Applying it as part of the project has been instrumental in validating, improving and expanding the framework, as well as identifying and assessing a first set of EPIC metrics. The next section will feature these metrics and other insights that have been identified by the project working groups.

¹² For more information on the concept of 'strategic capabilities', please see Lev, B. and Gu, F. (2016). The End of Accounting and the Path Forward for Investors and Managers. John Wiley & Sons, Inc., New Jersey.

Sector insights

06

Looking beyond financial value

All companies are different. But over the course of many in-depth discussions and working sessions, the diverse group of EPIC participants found that many of the factors that enable a business to create value for investors and other stakeholders over the long term are remarkably consistent.

The breadth of this consensus is encouraging, and formed a solid foundation for the project's work. This section details how participants reached that agreement about what elements contribute to long-term financial value and which areas the working groups have explored.

Reaching consensus

During the course of the project, companies were asked to road-test the Long Term Value Framework by identifying the desired outcomes of their stakeholders, as well as the capabilities and resources their company needed to deliver these outcomes. To facilitate an in-depth dialogue, asset managers were asked to perform the same road-test from an outside-in perspective and share their points of view on a specific company or sector.

The outcomes identified by participants were aggregated into sector-specific stakeholder outcome matrices for three sectors:



Consumer goods



Healthcare



Industrials

Subsets of participating companies, asset managers and asset owners discussed the consolidated matrices, identified which outcomes were most relevant from their perspectives and discussed any areas of alignment and misalignment between the different participants. Therefore the consolidated stakeholder outcome matrices do not reflect the overall opinions of all participants and are not intended to be comprehensive.

Identifying what matters

When it comes to long-term value, participants focused on measuring the effect of a company's actions on a wide range of material stakeholders – such as investors, employees, customers, governments, suppliers, and society. The key stakeholders differed only slightly between the three sectors – and a careful examination of their perspectives across the four value categories: financial, consumer, human and societal value, showed that there were also a number of commonalities.

Unsurprisingly, financial value is the most mature category of value, with a broad consensus on what to measure and how to do so, including margins, revenue growth, free cash flows and earnings per share. As a result, the participants focused primarily on consumer, human, and societal value – while recognizing that the outcomes in these three categories mattered only if they had an impact on long-term financial value.

For consumer value, participants looked beyond headline sales figures to understand the long-term sustainability of those sales

and underlying business model. To that end, they asked how a company could maintain its functional or emotional relevance to its customers over the long term. This included looking at how businesses innovate to stay competitive, gain or lose consumer trust, and create new opportunities or risks for themselves through their impact on consumer health.

Human value captures how successfully a company is investing in its people so they can advance the company's strategic priorities. The outcomes that matter most related to how effectively a company deploys human capital, fosters a strong culture and purpose, and how well leadership executes the company's strategy.

For societal value, investors were most interested in understanding the degree to which a company can manage risks (e.g. climate change or natural resource scarcity) and take advantage of opportunities arising from societal trends to maximize financial value over the long term. The key lens participants used to examine societal value was the UN Sustainable Development Goals.

Despite the consensus on the key areas of long-term value and what outcomes to measure in these areas, there was less alignment on how exactly to measure the agreed outcomes. In some cases, investors believed that certain outcomes, for example, business-to-business client satisfaction, could not be measured credibly and are merely a matter of professional judgment and experience.

Other investors work almost exclusively with publicly available data or data vendors and use increasingly sophisticated ways of aggregating and analyzing external information.

Below we have summarized the key points that were discussed for each sector.

Consumer goods

How do we ensure companies remain relevant for consumers in the long term? In the consumer goods sector, where consumer demands are constantly changing this seemed particularly relevant. Understanding how consumer goods companies are innovating to meet these changing consumer demands and preferences towards, for example, more local, authentic, transparent, traceable and ethical products was seen as important to participants. This is particularly relevant in light of the recent dynamics in the market – where barriers to entry have become lower and the big consumer goods companies have seen a decline in volume growth and flat operating margins over the last five to ten years.¹³

Attracting new customers and engaging existing ones requires new modes of media, new commerce platforms and distribution models and agile innovation. In light of this, participants discussed the importance of effectively marketing products or services – success being often dependent on the trust, strength, and purpose of their brands or the consumer perception of the company as a whole. Participants saw this as something key for consumers, who often ask themselves: do I trust the brand enough to repurchase the product or service or recommend it to others? The outcomes of this decision are often based on consumers' perceptions of the safety and quality of products, as well as the quality of the customer service. Some participants argued that over the long term the success of products and services will ultimately depend on their ability to fulfill societal needs.

Participants also agreed that the impact of products and services on consumers' health could create opportunities or risks for companies in this sector. Companies could find that unhealthy products or services fall out of favor with consumers, negatively impacting sales. Additionally, regulation, such as a 'sugar tax' is a real risk in this sector if companies are not seen to self-regulate to the satisfaction of governments. Participants believed that this increasing consumer awareness of the impacts of companies' products and services on their health meant that understanding and minimizing the impact of unhealthy ingredients or attributes was key for long-term growth.

With regards to human value, similar to the other sectors, participants recognized that a skilled and satisfied workforce were more likely to effectively implement the company's strategy and deliver positive financial outcomes. They identified employees' level of engagement, skill, and overall health as some of the outcomes likely to contribute to long-term value. In this context, participants also discussed the level of employee turnover but recognized the importance of understanding this within the company's context and human capital strategy. For example, some companies may invest heavily in employee development and aim to have a lower employee turnover rate to ensure they make the most of these investments. Others may not have the same strategy, so participants believed that understanding the context in which the company operates and its strategy was key.

¹³ EY (2016). The retailer - EY's publication in consumer products and retail sector. [https://webforms.ey.com/Publication/vwLUAssets/EY-the-retailer-october-december-2016/\\$FILE/ey-the-retailer-october-december-2016.pdf](https://webforms.ey.com/Publication/vwLUAssets/EY-the-retailer-october-december-2016/$FILE/ey-the-retailer-october-december-2016.pdf).

Other key outcomes discussed within human value were the ability of boards to manage and oversee the execution of strategic initiatives, whether a company's strategy is aligned with its organizational culture and purpose, the ability of the workforce to adapt to change and the level of diversity within the company. Participants felt that diversity was not necessarily about gender or ethnicity but about diversity of thought, experiences and skills and concluded that diversity needed a strong organizational culture to support it in order for companies to benefit in the long term.

When it came to societal value, participants concluded that limiting the negative environmental impacts that consumer goods companies have, both in the supply chain and product use phase was highly relevant for stakeholders. For this reason, participants believed resource and energy use, as well as CO₂ emissions were relevant to this sector. On the other hand, ignoring the environmental impacts of products was seen as a long-term risk. In the case of personal care products, which often require water or consumption of energy during use, the scarcity, continuity and price volatility of resources could reduce the long term marketability of products.

Healthcare

With aging populations, increasingly unhealthy lifestyles and what some refer to as the misalignment of incentives within the healthcare industry, consumers increasingly face rising health costs. For intermediate buyers of healthcare services, often governments, these increasing costs also force a difficult choice between their responsibility to provide healthcare on the one hand, and their need to balance their budgets on the other. In addition, increased collaboration and potential competition with the technology sector could present both opportunities and risks over the long term. Opportunities include more personalized healthcare, improved research and development (R&D) efficiency through artificial intelligence, miniaturization of medical devices and bio-printing. Yet as technology giants enter the market, it can also present risks as margins are put under pressure. Some asset managers believe the historical cost increases that have been borne by governments and patients, as well as the potential market entry of technology giants mean current business models are unsustainable. Companies either need to rebalance the price,

quality and access equation, or governments will do so. That is why participants widely agreed that in the long term companies would have to offer relevant, quality products and services that deliver positive health outcomes for patients, while managing the cost pressures effectively.

In healthcare, a field where technology continues to advance rapidly and medical breakthroughs driven by intensive R&D can make a huge difference, a workforce that is capable of innovating successfully is critical to the long term value of a healthcare company. That means the workforce must have effective training, engagement, and commitment to the company's culture and purpose. In doing so healthcare companies will be able to provide more value to customers over the long term – and in doing so generate financial value.

Participants agreed that societal value is highly relevant for healthcare companies due to the important role that governments and healthcare payers play. Public backlash against the sector or company can prompt governments to impose new regulations or turn to alternative healthcare providers. For this reason, participants believed it was important to communicate how businesses are creating societal value by improving the health of consumers and communities or making healthcare more affordable.

Industrials

Companies in the industrials sector are most likely to sell products and services to other businesses. The key factor determining whether these companies could succeed over the long term is their ability to innovate and respond to changing societal and consumer trends so that the industrial products they sell remain relevant for their business customers.

The onset of the Fourth Industrial Revolution is culminating in increased interconnectedness between physical and virtual systems – resulting in an increased use of data to help optimize supply chains through improved supply and demand forecasting, optimization of production processes, improved customer experiences, and the increasing use of additive manufacturing and 3D printing.

In order to realize the full potential of these new technologies, companies need to have a workforce with the right skills to complement them. The industrials sector in general is facing some key challenges in this regard due to retiring baby boomers, poor perceptions of the sector compared to the technology sector, lack of experience and skills in the current workforce and a mismatch between the knowledge and skills currently being taught in academic curriculums and those required in the workforce.

Moreover, regulators and consumers are putting pressure on companies in this sector to reduce environmental impacts. By working more efficiently, finding renewable alternatives and developing more sustainable products, industrial companies are trying to meet the needs of these stakeholders. In addition to these more recent trends, there has been a slow but steady shift towards the commoditization of products, thereby putting pressure on margins and forcing companies to specialize and consolidate.

These trends form the backdrop of the participant discussions, during which they agreed that an effective workforce was key to the long-term value of companies in the industrials sector. Continuously training and developing employees, fostering a culture where employees felt engaged with the company's purpose, and ensuring their health and safety were the most important factors discussed. Investors believed there was a link, specifically in this sector, between employee health and safety and operational excellence. While they cited employee turnover as an informative proxy for employee engagement, they thought it was more reliable and comparable than self-reported employee engagement scores but the limitations of using it as a proxy were acknowledged. Lastly, investors viewed a clear strategy and a leadership team capable of delivering that strategy as critical.

In the industrials sector, asset managers said they value companies that limit their environmental impacts (e.g. natural resources use and emissions). On the one hand, they saw this as a proxy for overall organizational efficiency (whereby wastage is minimized and as a result so are unnecessary costs), while on the other hand, it helps negate the risk of increased regulations in the supply chain, production or consumer use phases. For a similar reason, it is also valuable for this sector to maintain the integrity of the supply chain (e.g. ethical practices through strong relationships with suppliers and ensuring the reliability of supply). Finally, investors felt that there was value in companies taking steps to respond to emerging societal challenges through innovation.

Stakeholder outcomes matrices

The sector-based stakeholder outcomes matrices are included on the following pages. Each matrix shows the extent to which companies and asset managers/asset owners agree on the outcomes that create long-term value. This is shown per value area (vertically) and stakeholder perspective (horizontally). The outcomes presented have been aggregated, for example different environmental outcomes such as water or resource use have been aggregated into one category in order to simplify the output.

Each matrix was created based on the insights and advice of three companies and between three to five asset managers/asset owners, and were validated by 30 portfolio managers. The stakeholder outcome matrices were primarily used to identify the most important outcomes for each of the three sectors. Based on this working groups were formed to identify relevant metrics for several of these outcomes. The matrices do not necessarily represent the complete views of all participants.

Forming the working groups

Despite the diversity among the participants, the stakeholder outcome analyses showed that many of the factors that they identified as drivers of value over the long term are remarkably consistent. However, there was a lack of consensus of how to measure these outcomes. This was where the metric-based working groups came in – each was tasked to come up with useful metrics that could actually measure the outcomes. In the following sections the seven metric-based working groups present their findings.



Human capital deployment

This group's goal was to identify a combination of metrics that allow management to communicate to investors how effective they are at deploying their human capital.



Organizational culture

This group aimed to identify a common taxonomy to communicate culture and develop comparable leading indicators for a number of the components of culture.



Consumer trust

This group aimed to use a big-data enabled metric that utilizes natural language processing to extract a signal from social media and the wider internet to measure trust.



Innovation

This group worked to develop a narrative and supporting metrics for companies to communicate their innovation strategy and performance.



Sustainable Development Goals (SDGs)

This group aimed to establish links between the SDGs and their related business themes before identifying appropriate metrics for these themes.



Corporate governance

This group worked to define the nature and extent of a narrative disclosure for corporate governance and to identify key qualitative and quantitative indicators not already broadly required by legislation.



Health

The goal of this group was to identify metrics that capture both positive and negative improvements in health for employees, consumers and society.

In addition to the above seven metric-based working groups, participants also created the following two working groups:



Methodology

This group worked to ensure a) the working groups define complementary outcomes and metrics based on a holistic and validated Long Term Value Framework and b) the consistent application of the framework.



Existing initiatives

This group analyzed the landscape and identified opportunities for EPIC to engage with other relevant initiatives.

Consolidated stakeholder outcome matrix: **Consumer goods**

	Financial value		Consumer value	
	Company	Asset manager/asset owner	Company	Asset manager/asset owner
Investors	Consistent/increasing returns Improving margins Improved revenue Sales and revenue growth in key markets Strong cash flow	Sales and revenue growth in key markets	Innovation Meeting changing consumer demands Brand trust Dynamic portfolio management Dynamic resource allocation Product safety	
Employees			Brand perception	
Governments and regulators	Fair share of taxes		Product safety Responsible marketing	Product safety Privacy and security
Customers (end-users)	Competitive pricing		Product quality Product safety Product convenience Nutritious, healthy and delicious products Affordability Diverse and competitive product range Local, authentic product characteristics Data quality and responsibility Trust in products	Product quality Product safety Product convenience
Customers (vendor/retail)	Fair and consistent agreements		Product offerings that match retailer's customer demands (market share) Exceptional customer service and support	
Suppliers	Competitive cost of goods Fair and consistent agreements Inclusive business models		Service level reliability Supplier dialogue and joint business planning Joint development projects	Service level reliability
Society	Fair share of taxes Sustainable business model		Business ethics Innovation Product safety	



Mentioned by **one** participant



Mentioned by **multiple** participants

Human value		Societal value	
Company	Asset manager/asset owner	Company	Asset manager/asset owner
Diverse leadership Organizational culture and purpose Leadership's ability to execute strategy Employee engagement Workforce planning Diverse organization		Nutrition and health outcomes Social returns Limiting environmental impact	Limiting environmental impact
Employee development Competitive remuneration Diverse and inclusive culture Employee health and safety Purposeful career Employee retention Employee attraction Fair employment practices	Competitive remuneration Employee health and safety Fair employment practices	Purposeful community engagement	
	Fair employment practices Employee health and safety	Job creation Limiting environmental impact Meet laws and regulatory requirements	
	Exceptional customer service and support	Limiting environmental impact Nutrition and health outcomes Brand advocacy	
	Employment practice alignment	Limiting environmental impact Rural development	Limiting environmental impact
Health, safety and wellbeing Human rights Diverse and inclusive culture Fair employment practices and youth employability	Health, safety and wellbeing	Limiting environmental impact Nutrition and health outcomes Socio-economic value through market development Collaboration with value chain partner to drive transformational change	Responsible corporate citizenship

Consolidated stakeholder outcome matrix: **Healthcare**

	Financial value		Consumer value	
	Company	Asset manager/asset owner	Company	Asset manager/asset owner
Investors	Consistent/Increasing returns Continuous and efficient innovation to generate long-term revenue growth Increase market share Improving margins		Innovation Product quality and safety Brand trust	
Employees	Long-term financial sustainability		Delivering high quality and innovative products/services to improve health outcomes	Delivering high quality and innovative products/services to improve health outcomes
Governments	Fair share of taxes		Improved health of citizens Product safety Product innovations	
Customers (including patients and healthcare providers)	Innovation Long-term financial sustainability		Quality and performance of product/service Accessibility/affordability of product/service Product efficacy and safety Product efficacy and safety Value for money/competitive prices Innovative solutions and new business models Product variety	
Suppliers		Fair price to suppliers	Long term business relationships (in product/service development)	
Regulators	Long-term financial sustainability		Fair pricing of products Product safety Consumer communication about health outcome	
Society				
Research partners and academia			New innovations resulting from collaboration Access to healthcare	



Mentioned by **one** participant



Mentioned by **multiple** participants

Human value		Societal value	
Company	Asset manager/asset owner	Company	Asset manager/asset owner
Employee engagement Ethical business management	Employee productivity Diverse and inclusive culture	Improving health outcomes Access to healthcare	
Employee development Employee engagement Competitive remuneration Purposeful career Employee health and safety Fair working conditions Diverse and inclusive culture	Competitive remuneration	Ethical business and management Access to healthcare	
Fair and respectful employment practices		Improving health outcomes Job creation	
Fair and respectful employment practices (in supply chain)		Improving health outcomes Innovation	Improving health outcomes Innovation
		Limiting environmental impact	
		Ethical business and management	
		Access to healthcare Purposeful community engagement Limiting environmental impact	Access to healthcare

Consolidated stakeholder outcome matrix: **Industrials**

	Financial value		Consumer value	
	Company	Asset manager/asset owner	Company	Asset manager/asset owner
Investors	Consistent/increasing returns Strong cash flow	Minimize default risk Reliability of supply chain	Innovation to meet customer demand Level of substitution of products/services Brand perception	
Employees				
Governments	Fair share of taxes		Brand perception Product safety	
Customers	Competitive pricing Innovations that help grow their business			
Suppliers	Long term business partnerships for innovation Increasing/consistent returns Meeting contractual obligations			
Regulators				
Society				
Local community			New innovations resulting from collaboration Access to healthcare	

Mentioned by **one** participantMentioned by **multiple** participants

Human value		Societal value	
Company	Asset manager/asset owner	Company	Asset manager/asset owner
Diverse leadership Fair wages and benefits Leadership's ability to execute strategy Executive compensation/ incentives alignment Diverse organization Organizational culture and purpose		Limiting environmental impact Compliance with rules and regulations Innovations that support customers to respond to societal challenges Integrity in the supply chain (Human right issues, relationship with suppliers)	Limiting environmental impact
Fair wages and benefits Engaged workforce Employee development Employee health and safety Stable employment Employee retention Organizational culture and purpose Engaged workforce		Innovations that support customers to respond to societal challenges	
Fair and respectful employment practices		Limiting environmental impact Compliance with rules and regulations Job creation	Limiting environmental impact
Well trained workforce that supports customer needs to get to the best possible result		Limiting environmental impact Innovations that support customers to respond to societal challenges	
		Assisting suppliers in meeting safety, environment and human rights performance	
		Limiting environmental impact Safe environment Innovations that support customers to respond to societal challenges	Limiting environmental impact
Integrity in the supply chain (Human right issues, relationship with suppliers)		Limiting environmental impact Fair share of taxes Job creation Innovations that support customers to respond to societal challenges Purposeful community engagement	
		Safe and healthy communities around operations Limiting environmental impact Job creation Transparent and open communication with local communities	Limiting environmental impact

Working group insights

07

The insights from the seven metric-based working groups listed on page 33 are presented in this chapter. The working groups' insights are presented by value category: human, consumer and societal.

Human value

Working groups



Human capital deployment



Employee health



Organizational culture

It is often said that people are a company's most important assets. Every day, the sum total of their talents, ideas, and actions determine how a company will perform. And so, there is wide recognition along the investment chain that a major way that businesses create value is through the employment and development of people.

This human value is important to a wide variety of stakeholders, from investors who want a productive, creative and cost-efficient workforce, to employees who want to be engaged in meaningful work, develop new skills and be recognized for their contribution to the company's success. However, it has historically been difficult to measure.

This was the challenge several EPIC working groups sought to address. They looked for ways to quantify aspects of human value that offered the clearest picture of a company's long-term value. They worked to identify standardized and streamlined information that would be most relevant and compelling to investors. And while they recognized that there are many aspects of human value that can and should be measured, they decided to begin this work by focusing on three key areas:

- **Human capital deployment:** This working group focused on measuring a company's ability to deploy the knowledge, skills and capabilities of its workforce. They recognized that companies tend to report on this through qualitative narratives or data that is not comparable, which makes it difficult to evaluate companies in a rigorous or consistent way. To remedy that, they outlined a series of metrics – like percent of voluntary turnover – that all companies could disclose to offer a clearer picture of how effectively they deploy and manage their human capital.

- **Employee health:** This working group identified that there is a significant body of evidence that effective workplace health programs deliver net positive financial returns. However, current disclosures are often limited and primarily focus on occupational safety. Taking into account privacy considerations, the working group has proposed a metric that can be universally applied, allows for comparability, is easily adopted and provides insights to investors about how companies are helping their employees manage their health.
- **Organizational culture:** This working group recognized that, while culture is a vital determinant of a company's success, there are virtually no widely used or accepted ways to measure it. In response, they created a standardized survey that every company could use to collect hard data on how their culture impacts their people's performance.

If adopted widely, these approaches would align investors and businesses around key metrics to evaluate long-term performance, while offering a consistent comparison between different companies across sectors. Further details about their respective processes and findings are summarized on the following pages.

Human capital deployment

In a fast-moving, interconnected global economy, every company must fight harder than ever to keep its competitive advantage in the market. And in that environment, employees have become some of the most valuable competitive advantages that companies can deploy.

But as more and more CEOs and board of directors invest in their talent pipeline to attract and retain a world class workforce, they face a key obstacle: there is still no standardized way to measure and show how their people create value and drive their competitive edge. Even businesses that do try to disclose this tend to do so with narratives in company publications – not quantitative data.

In response, our working group, with support from Dr. Anthony Hesketh (Lancaster University), worked to develop a rigorous method for companies to evaluate and assess what we call human capital deployment (HCD) – the ability of a company to deploy the knowledge, skills and capabilities of its human capital.

There is already evidence that measuring and disclosing relevant HCD data can increase a company's financial value and secure higher productivity from their employee base. In our own analysis, we found that organizations which disclose HCD data tend to perform better than organizations which do not disclose this information. In fact, top HCD reporting firms in the UK had a return on invested talent (ROIT)^{14,15} – which measures the dollar return per one dollar invested in talent and associated charges – of 3.01, while firms that do not disclose this information had a ROIT of 1.17. Top HCD disclosing firms in the UK also secured 33% higher operating margins.

Firms that DO disclose HCD in the UK

3.01 ROIT

Firms that DO NOT disclose HCD

1.17 ROIT

Yet despite these benefits, current disclosures of HCD information varies and is heavily influenced by regulators. For example, International Financial Reporting Standards (IFRS) require the disclosure of total costs relating to employee salaries and benefits along with data relating to gender pay and workforce composition, whereas US GAAP does not require the disclosures. Firms also tend to disclose information in

narrative form in annual reports, Form 10-Ks, and other publications, as opposed to tables, charts, or metrics. Our research found that firms that are 'low human capital disclosers' use three times more narrative observations in their publications than top HCD reporting firms, indicating that top performing companies disclosing HCD rely less on qualitative descriptions. Also, in most cases, when companies disclose this information in a narrative format as opposed to numbers, it has an operational rather than strategic focus.

Low HCD reporting firms use

3x

more narrative observations
than top HCD reporting firms

More than

60%

of narrative observations
focus on operational matters

Thus, in seeking to develop consistent, high-quality metrics, we looked into four areas that our analysis shows investors care about:

- The capacity of the company to deploy the knowledge, skills and abilities of its human capital;
- Understanding how human capital management is aligned to and enables the execution of strategy;
- Establishing key metrics to relate human capital data to financial analysis; and
- Exploring the notion of building the human capital asset of firms over time.

Our research indicates that investors believe these needs are not being met. Many fundamental investors do try to incorporate HCD data in their analysis but given the limited data currently disclosed, they have primarily looked at employee turnover alone. Quantitative investors (those that look to use data to drive investment decisions) have also told us they are willing to investigate new data. However, without consistent, high quality, comparable data, they would find it difficult to systematically incorporate HCD data into investment decisions

This is why we believe the metrics identified and developed will not only provide investors with better information, it will enable companies to understand if they are outliers relative to their peers, either favorably or unfavorably, in terms of long-term performance.

¹⁴ Hesketh, A. (2014). Managing the value of your talent: a new framework for human capital management. CIPD Publishing, London.

¹⁵ Fleetwood, S. and Hesketh, A. (2010). Explaining the Performance of Human Resource Management. Cambridge University Press, Cambridge.

Metrics and associated narrative for human capital deployment

Our research and analysis supports the working group's conclusion that there are five broad dimensions of human capital deployment, within which there are multiple metrics for assessing HCD. This includes a range of metrics that are helpful in explaining a company's approach to human capital deployment in the context of long-term value creation.

The five HCD dimensions are:

- 1. Workforce costs:** Reveals the cost of deploying human capital (employee salaries and benefits).
- 2. Attraction, recruitment and turnover:** Combining recruitment costs with turnover allows investors to ascertain the extent to which a firm is losing people and the costs of unwanted or excess turnover. Capturing the recruitment costs identifies part of the associated cost of deploying human capital.
- 3. Workforce composition and diversity:** Describes employee profiles, such as age, gender, race, sexuality, and departmental ratios at various levels. This category also looks at modes of employment (e.g. part-time vs full-time labor) and the diversity of the leadership measured against the organization's diversity strategy.
- 4. Training, learning and development:** Revealing how much is invested, either through total training hours or dollars, provides a clear indication of the firm's investment in preserving the value it has created as well as the development of future revenue streams. We see value in tying investments in employee development and retention to delivering business results. Capturing these costs or investment in time identifies part of the associated cost of deploying human capital.
- 5. Engagement and wellbeing:** Feedback from the financial community suggests that there is less trust in engagement data but conceded it is the best data point available to them to reveal the state of the relationship between a firm and its people.

The table on the following page includes the range of indicators that we have concluded are helpful in explaining a company's approach to human capital deployment in the context of long-term value creation.

For these metrics to work across the financial system, we believe that each company should determine which metrics within these five dimensions are most meaningful to their human capital deployment story and include those items in their disclosure. Where they are not able to provide disclosure of metrics against a given category they should provide a rationale for its exclusion and consider providing other information deemed more relevant to their company.

Our research and consultation with companies, asset managers and asset owners has led us to conclude that disclosures like this will benefit each of these participants across the investment chain, and bolster the case for long-termism across our economy. Indeed, the ability of a firm to articulate its HCD story utilizing metrics and narrative discussion speaks directly to investors – and it is a potential bridge allowing investors to recognize the value of HCD in their investment decision-making.

HCD Dimension	Metrics	Narrative reporting recommendations
Workforce cost	Total sum of gross salaries, bonuses and pension benefits of all company employees Other: Guaranteed pay; employer costs; variable pay; benefits; equity-based compensation	- What is the total cost of your employees, including their base salary? - How much are you spending on incentives, including bonuses? - What are your employer costs? (e.g. taxes) Good practice: One clear number of total workforce cost
Attraction, recruitment and turnover	Percentage of employee annual turnover (by region, age and gender) Percentage of voluntary turnover in relation to percentage of overall turnover Percentage of voluntary turnover of high performers Other: Cost per hire (recruitment costs divided by the sum of compensation cost and benefit cost); recruitment effectiveness (rate of satisfaction with hiring process); talent identification (percentage of identified talented individuals per department); rate of retention of new starters	- What are your recruitment trends? - What does your talent pipeline look like? - What are your retention trends? - What are the typical turnover periods? Good practice: Reporting percentage of reduced voluntary turnover or percentage of turnover for high performers
Workforce composition and diversity	Leadership diversity (gender, orientation etc.): Percentage of management Percentage of top leaders Percentage of board of directors Modes of employment: ratio of labor types (e.g. Full-time to part-time labor split) Other: Department gender ratios; percentage of internal hires and external hires; headcount	- What do the employee profiles look like? - What is the total headcount and the role ratios? - What are the various modes of employment? - What are your leading trends around inclusion, such as the diversity in your leadership teams? Good practice: Leadership diversity figures
Training, learning and development	Return on investment in talent (ROIT): (realized benefits minus costs) divided by costs multiplied by 100 Total annual training hours received per employee (per type) Total spend on training per employee or per hour Other: Percentage of employees demonstrating an improved understanding of the topic trained; capability development (change in number of capabilities per employee)	- How has the training led to improvements in employee knowledge? - How has the training led to improvements in employee capability? - What are the hours of training employees have received? Good practice: Where has training led to an improvement for employees
Engagement and wellbeing	Engagement index score Absenteeism rate as a percentage of total hours worked Mental health wellbeing rate: number of lost days per year divided by total days (by department) Other: Percentage of positive opinion engagement survey responses (commitment); percentage of ill-health retirements; employee assistance service usage rate; quality of support received through employee assistance service	- What are your staff survey engagement scores? - What does employee commitment look like within your organization? - Have there been any ill health retirements or voluntary resignations? - Are there employee assistance programs in place? Are they being accessed? What is the outcome of this?

Employee health

Employee health is an important driver for long-term value; the health and wellbeing of a company's workforce is clearly linked to increased engagement, job satisfaction, productivity, as well as its contribution to a decrease in absenteeism, turnover and workplace injuries. But today, few companies disclose employee health as a holistic topic. The disclosures that do exist are rather limited – even ESG and health scorecards currently exclude important wellbeing components.¹⁶ Others believe that having a 'culture of health' as a business leadership imperative brings significant value to firms, and yet health rarely appears as a corporate value.¹⁷

Recognizing the need for a broader view of employee health, several organizations have started to address the lack of frameworks and disclosure guidelines, including Harvard T.H. Chan School of Public Health together with Harvard Business School. These institutions developed and promoted the 'Culture of Health' framework – where they look at health more holistically from the perspective of the consumer, employee, community and environment¹⁸; a perspective broader than traditional occupational health and safety. We have covered some of these elements below, while others are included in the consumer value and societal value sections.

There is a significant amount of evidence that links employee health and financial and economic outcomes. For example, disengaged employees – which include employees absent due to illness or for medical reasons – cost companies USD 3,400 a year for every USD 10,000 in salary. Employee turnover, the inevitable outcome of disengagement, costs companies between 48% and 61% of an employee's annual salary.¹⁹ It has been estimated that these disengaged employees cost the US economy USD 370 billion a year in lost productivity.

There is a similar trend when it comes to 'presenteeism' – workers being present at their workplace, but not fully functioning because of illness or other medical conditions. Presenteeism is often the result of employees being worried about criticism, lost pay, job security and stress – and it can cut individual productivity by one-third or more. It has been estimated that for every USD 1 of cost resulting from absenteeism there is an estimated additional, often hidden cost, of USD 2.50 due to presenteeism that companies bear.²⁰

On the other hand, various studies have shown that effective workplace health programs deliver net positive financial returns. One such study found that every USD 1 invested in health and wellbeing resulted in a decrease of USD 3.27 in medical and pharmacy costs, as well as a USD 2.73 cost reduction from reduced absenteeism. Another study showed that stock portfolios consisting of companies that are recognized for their leading workplace health practices had a 4.5% higher annualized return in comparison to the average market.²¹

Despite the significant body of evidence of positive returns, when it comes to employee health, companies primarily focus on the narrow scope of occupational safety. Privacy concerns and regulations around broader accounting of employee's health data prevent wider outcome-based reporting. As a result, examples of holistic and comparable reporting on employee health, safety and wellbeing are almost impossible to find within any sector.

In addition, we found that asset managers primarily look at occupational safety metrics only if they are material to a traditionally safety focused industry, such as mining where safety is often a proxy for culture. Asset managers and asset owners in other industries rarely consider how employee health might impact the performance of a company.

Other challenges include inconsistencies in scope of reporting (e.g. full time employees vs contractors or geographical differences) and the reliability of data, which make it difficult to benchmark companies across markets and sectors. Some markets, such as the US, use the cost of employee health insurance as the main measure of employee health and wellbeing. Others have indicated that they look at turnover or information scraped from the internet. Given this wide variance in data collection, the working group concluded that most investors do not factor a holistic view of employee health and wellbeing into their investment decisions.

¹⁶ McNeely, E. (2018). Following Footprints: What Corporate Health Can Learn From Environmental Sustainability. *American Journal of Health Promotion*, Volume 32 (4), pp. 1146 - 1149.

¹⁷ Quelch, J., Boudreau, E. (2016). *Building a Culture of Health - a new imperative for business*. Springer.

¹⁸ www.cultureofhealth.harvard.edu accessed October 4 2018.

¹⁹ Schaufenbuel, K. (2013). *Powering your bottom line through Employee Engagement*, s.l.: UNC Kenan-Flagler Business School.

²⁰ ERS Research & Consultancy (2016). *Health at Work: Economic Evidence Report 2016*, Newcastle upon Tyne.

²¹ Fabius, R. (2013). The Link Between Workforce Health and Safety and the Health of the Bottom Line: Tracking Market Performance of Companies That Nurture a "Culture of Health". *JOEM*, 55(9), pp. 993 - 1000.

Metrics and associated narrative for employee health

Based on the aforementioned challenges, opportunities and requirements, we have outlined one metric and accompanying narrative for companies across sectors to use to measure employee health. This metric would be disclosed in addition to widely applied safety metrics.

The proposed metric would measure the percentage of a company's employees that participate in 'best practice' health and wellbeing programs. Those programs are included in the calculation of the metric, when they have the following three components:

- Lifestyle management:** For example, supporting employees with psychological safety, encouraging health assessments, physical and emotional health and wellbeing, stress management, social connectedness, mindfulness, emotional resilience, making healthy food and physical activity choices easier, and supporting smokers to quit.

- Chronic disease management:** For example, supporting employees to manage chronic non-communicable diseases (these include for example, heart disease, hypertension, diabetes, mental health). Following a baseline health assessment (anonymized) the company then supports and intervenes where appropriate (e.g. access to flu shots, helplines).
- Access to healthcare and insurance:** Supporting access to healthcare and if applicable health insurance.

Although the exact content of the best-in-class health and wellbeing programs may differ from company to company (and even within companies based on geographical characteristics) having the above three components consistently allows employees to flourish. Most importantly, this proposed metric is universal and allows for comparability and easy adoption. It also provides insights to investors about how companies are managing their employees' health, while respecting privacy concerns.

	Metrics	Narrative reporting recommendations
Employee health	Percentage of employees participating in 'best practice' health and wellbeing program Supporting this metric the following quantitative information is required: - Number of employees offered a health and wellbeing program that has 3 components: Lifestyle management, disease management, and access to healthcare - Rate of absenteeism	- Describe the content and reach of the health and wellbeing program and specifically how it addresses lifestyle management, chronic disease management and support, and access to healthcare and insurance - Within the description specifically point out how the following drivers for wellbeing are included within the program²²: - Mental and physical health - Meaning and purpose - Happiness and life satisfaction character strengths - Social connectedness/close social relationships - Financial and material stability - Describe how effective your program's participation strategies are in encouraging employees to participate in programs - Describe how you assess employees' health and wellbeing, baseline and or activity levels - Describe other actions aimed at improving their health - Describe any mechanisms in place to track correlations between your wellbeing program and the main associated outcomes (engagement, job satisfaction, turnover, absenteeism, work injury and productivity) and how these outcomes have developed over time - Describe your strategy and monitoring processes to provide a healthy physical working environment (e.g. percentage of buildings certified to Well or LEED)

²² VanderWeele, T.J. (2017). On the promotion of human flourishing. Proceedings of the National Academy of Sciences U.S.A. 31:8148-8156.

Organizational culture

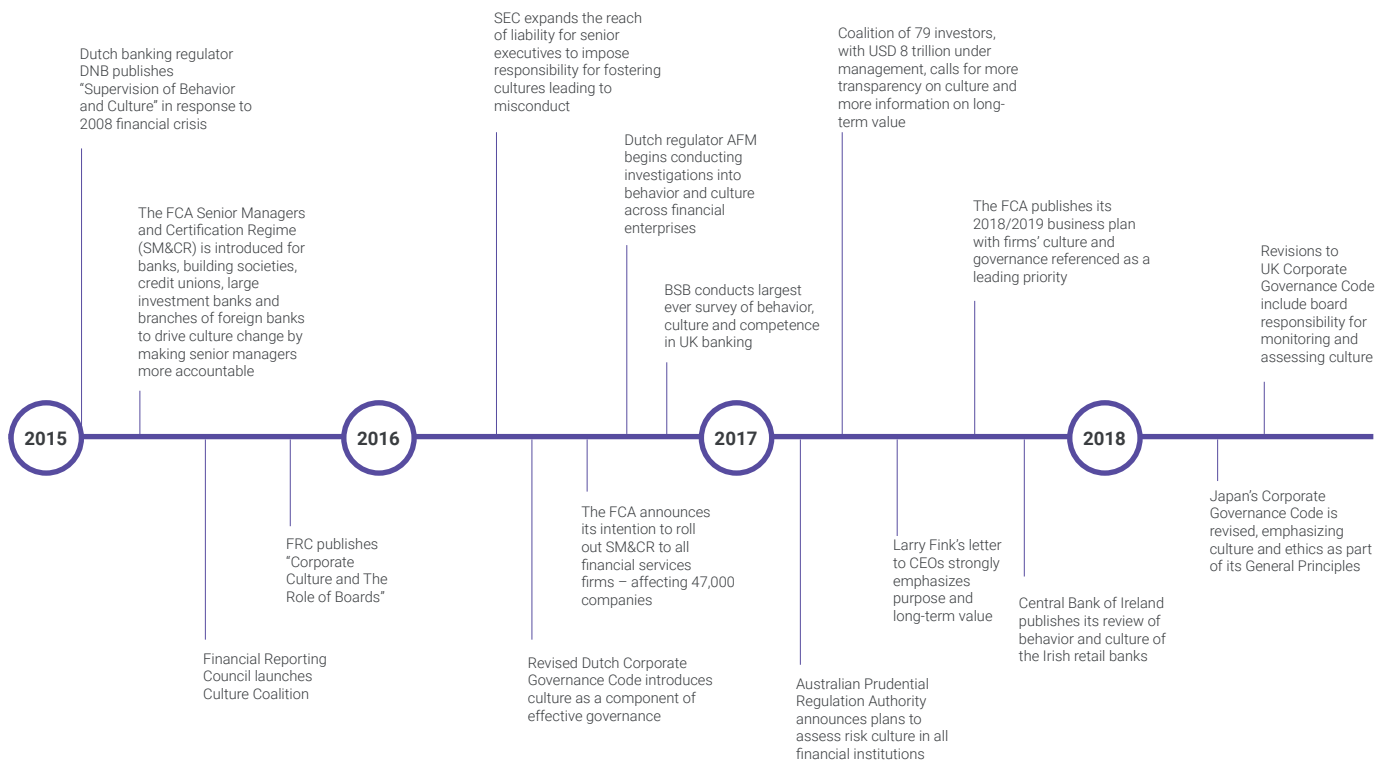
Most of us recognize that culture creates value. Numerous articles and books chronicle how CEOs have turned around failing businesses by focusing not just on strategy and new operating models, but also on culture.^{23, 24, 25} Cultural attributes such as accountability, teamwork, integrity and drive are often considered to be necessary ingredients for high performance and, in turn, long-term value creation.

Conversely, culture is also frequently cited as a significant underlying factor in corporate failings,²⁶ and in this respect presents the potential to destroy value rapidly.

For these reasons, among others, organizational culture, and its alignment with a company's stated purpose is now a subject of broad investor focus. Increasingly, investors expect companies to be able to explain how boards are monitoring culture, and the course correcting activity they take when undesirable behaviors and cultural attributes are identified.

Despite this heightened focus on culture, a common understanding of and widely used framework to measure culture does not exist. That is what we sought to change with our work.

Recent global interest in organizational culture



²³ Collins, J. (2001). Good to Great: Why Some Companies Make the Leap...And Others Don't. United States: Random House Business;

²⁴ Taylor, B. (2010). How One Company's Turnaround Came from the Heart. Harvard Business Review. Available at <https://hbr.org/2010/03/how-one-copmanys-turnaround>. Accessed 12 September 2018;

²⁵ Shatles, B. (2018). How Workplace Culture Leads to Business Success. Forbes.com. Available at <https://www.forbes.com/sites/forbesagencycouncil/2018/01/09/how-workplace-culture-leads-to-business-success/~7171cca6513e>. Accessed 12 September 2018.

²⁶ Collins, J. (2009). How the Mighty Fall: And Why Some Companies Never Give In. United States: Random House Business.

Part of the problem, of course, is that such a subjective quality is difficult to measure. Through desktop research, discussions with investors, human resource and culture professionals and academics, we identified numerous definitions of organizational culture. We discovered areas of broad professional and academic agreement as to dimensions of organizational culture. However, very little research has gone beyond anecdotal evidence to prove that business achievements can be attributed to culture.

We concluded that many existing business metrics, while seemingly related to culture, have the potential to be misleading if interpreted as indicators of culture. As an example, the volume of whistleblowing reports a company receives would, at first glance, appear to be a clear measure of the existence and effectiveness of a company's 'speak up culture.' However, whistleblowing is but a single method by which employees speak up; the volume of less formal communications may be more reflective than whistleblowing records to gauge whether an effective 'speak up culture' exists. Assessing the volume of whistleblowing records as an indicator of culture, we therefore concluded, would be potentially misleading. More relevant would be the ability to capture the extent to which informal 'speak up' conversations are taking place – a data point that is not currently captured by companies.

This is why, in our work, we aimed to collect data points that are both directly relevant and unlikely to be misleading. We identified two existing impediments to overcoming this:

1. An inadequate focus on the specific cultural dimensions that are believed to drive long-term value creation; and
2. A lack of appropriate data and/or the technology to capture it.

Reviews of annual reports and accounts (ARAs) over recent years reflect a clear deficit in meaningful measurement and reporting on organizational culture. A 2015/2016 review of 100 FTSE 350 ARAs found that while 97% of them mentioned culture, only 9% explained how boards measure and monitor culture.²⁷ The same review for 2017/2018 found that 30% now explain how culture is measured and monitored, reflecting an improvement but that still the overwhelming majority of FTSE 350 companies fail to report on this critical activity.

The 2017/2018 review also found that reporting on culture is often generic and limited. Some of the non-survey measurement methods cited include recording regional site visits, workforce turnover, informal engagement across the business and the number of senior appointments made from within the business. While seemingly sensible on the surface, these approaches may not be representative or sufficiently focused on specific dimensions of culture so as to be reliable to investors.

Asset managers and asset owners, for their part, told us that they presently use a relatively unstructured approach to understand companies' cultures. Methods referenced include, but are not necessarily limited to:

- Reviewing Glassdoor posts;
- Reviewing published employee engagement scores;
- Tracking board member history to identify involvement with companies that experienced publicized cultural or behavioral issues;
- Participating in organized 'show and tells' at capital market days and field trips;
- Interacting with middle managers, including asking how matters related to human resources and risk (e.g. attrition, whistleblowing) are addressed; or
- Asking employees how safety issues are dealt with.

Asset managers and asset owners acknowledge that the above methods might be insufficient or misleading, and may use unrepresentative sample sizes or statistically invalid data but have nevertheless relied on these approaches given the absence of more robust cultural data. Our working group aimed to develop higher-quality and harder data for assessing the nature of companies' culture.

²⁷ EY (2018). Annual reporting in 2017/18: demonstrating purpose, creating value. Available at [https://www.ey.com/Publication/vwLUAssets/EY-ARA-2018-report/\\$FILE/EY-ARA-2018-report.PDF](https://www.ey.com/Publication/vwLUAssets/EY-ARA-2018-report/$FILE/EY-ARA-2018-report.PDF). Accessed 21 September 2018.

Metrics and associated narrative for organizational culture

Companies' cultures are defined by the unique blend of attributes and behaviors people experience when at work. Perhaps because of this, there is no single, widely accepted definition of what culture is. Our starting point was therefore to focus the way we approach and communicate culture into ten key dimensions, enabling us to discuss and examine it with greater precision and comparability.

These are:

- 1. Inclusion and wellbeing:** Employee welfare and fulfillment, with an emphasis on diversity, inclusion and personal development;
- 2. Performance and accountability:** A focus on goals and taking responsibility and ownership for achievement;
- 3. Ethics and integrity:** A grounding in and adherence to a set of moral principles, including support for speaking up;
- 4. Engagement and empowerment:** An enthusiasm for work that is leveraged through a license to act;
- 5. Alignment with purpose and values:** The extent that the culture reflects the company's espoused values and enables delivery of its long-term mission;
- 6. Leading by example:** The manner in which the behaviors of leadership and others inform ways of working and decision-making across the business;
- 7. Risk management:** The ways that behaviors and decision-making reflect organizational risk tolerance and outcomes;
- 8. External stakeholder focus:** The level of consideration taken toward the interests of customers, suppliers and society at large;
- 9. Teaming:** Collaboration, support for colleagues and cross-group working; and
- 10. Adaptability and innovation:** Business agility and predisposition for continuous improvement and evolution.

The precise blend of these dimensions and how they play out at different companies depends upon each company's unique purpose and context. Nevertheless, our work has led us to conclude that each of the dimensions is critical to all companies, irrespective of size, sector or locality. Our discussions with asset managers and asset owners validated this view, and confirmed that by providing reliable data points around these dimensions, companies would not only enable a significantly more useful understanding of their cultures, but also support them in ascertaining how leadership teams and boards are monitoring culture, and any actions being taken in response to undesirable findings.

Although we reached broad consensus that the ten dimensions represented a sound framework for measuring and communicating on culture, we heard differing views as to which dimensions were most important. To help resolve this, we polled the project participants on the dimensions considered most relevant to long-term value creation. The top five were:

Cultural dimension	Relevance* (1 to 5)	Why participants believe this creates value
Ethics and integrity	4.50 out of 5.00	• It informs employees as to what 'doing the right thing' looks like in their context, and encourages them to live these behaviors • It drives trust, attracting customers, suppliers and talent, and reducing reputational risk
Alignment with purpose and values	4.32 out of 5.00	• It guides the company's people to act in a way that is consistent with what it stands for • It supports a more balanced approach between achieving short-term targets and pursuing long-term objectives
Leading by example	4.27 out of 5.00	• It demonstrates how company values should be lived, providing a foundation on which the culture is built • It communicates what really matters to leadership, impacting behaviors relevant to strategy delivery
Performance and accountability	4.09 out of 5.00	• It provides clarity on what needs to be achieved for effective execution of strategy • It incentivizes desired behaviors and discourages those that are not
Inclusion and wellbeing	3.95 out of 5.00	• It creates conditions in which employees can thrive • It drives better decision-making, greater talent agility and resilience

*Relevance to long-term value creation on a scale of 1 to 5, where 1 was considered minimally relevant and 5 was considered highly relevant

These aggregated views on the materiality of the cultural dimensions and their link to long-term value creation highlight the areas where better data is likely to have the greatest impact across the investment chain. We therefore prioritized these dimensions. And, in order to measure them in a way that would be consistent across companies, we developed standardized survey questions and narrative reporting recommendations that can enable the collection of 'harder' evidence to assess a company's culture.

The table below sets out the ten standardized survey questions we recommend that companies begin asking of their workforces, as well as our related narrative reporting recommendations:

Cultural dimension	Standardized survey questions*	Narrative reporting recommendations
Ethics and integrity	- I feel encouraged and supported to speak up - I feel conflicted between doing the right thing for our external stakeholders and performing to meet business expectations	- Explain the processes in place to encourage speaking up and how effectiveness is assessed - Explain the steps taken to support employees when they feel conflicted between doing the right thing for external stakeholders and performing to meet business expectations
Alignment with purpose and values	- I feel there is a common understanding as to our purpose as an organization - It is clear to me how my work contributes to our stated purpose	Explain the actions taken to help employees better understand and connect with the company's purpose and values
Leading by example	- Based on my experience, leadership consistently demonstrates the organization's stated values in their everyday behavior - Based on my experience, leadership engages with the workforce about our culture and values in a meaningful way	- Explain how (i.e. with what mechanisms) and how often leadership communicate on the company's values to middle management, all employees, prospective employees and the total value chain - Explain how the company tests for consistency in tone from the top and the middle
Performance and accountability	- I am clear on what is expected of me from a performance perspective - I receive timely feedback that strengthens my performance	- Explain how employee goals are agreed and communicated - Explain the processes in place for providing feedback and how effectiveness is assessed
Inclusion and wellbeing	- I feel that I have an appropriate work/life balance - I feel supported in developing my long-term career	Explain the actions the company takes to develop and take care of its people

*Responses should be provided on a scale of 1 to 5 where;

1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree and 5 = strongly agree

We consider that disclosure of the standardized survey responses is preferable for three reasons:

1. It will enable greater comparability across companies and sectors
2. It will lend significant credibility to the accompanying narrative report
3. It will create data points against which potentially highly meaningful correlations to other relevant business metrics can be identified

To that end, the standardized survey questions have been deliberately written in a manner that will enable their application across sectors. Modification of the standardized language is strongly discouraged, as this will frustrate comparability of the survey results. However, to render survey results more actionable by companies, we would encourage that individual companies consider supplementing the standardized survey questions with follow-on questions developed by and specific to those companies.

Furthermore, we recommend the survey launch be aligned with strategic events (i.e. to assess how the culture has responded to these), but that at a minimum it should take place at least once annually.

Given that there may be sensitivity for some companies around disclosure of the standardized survey question responses, we consider that there are two relevant levels of reporting possible: pragmatic and ambitious.

- **Pragmatic approach:** Companies would confirm that the survey had been conducted, indicate the date(s) on which it was conducted and the response level (%) achieved, confirm that the board was advised of the results and set out any responsive action taken but they would not disclose the actual results of the survey
- **Ambitious approach:** Companies would adopt the pragmatic model reporting framework, but also disclose the standardized survey results over a period of at least three years

Finally, we recognize that as workplaces increasingly digitize, data points may become available in the future which will enable greater and more reliable measurement of culture.

Consumer value

Working groups



Innovation



Consumer trust



Consumer health

There is a simple truth at the heart of every commercial business: if people do not want to buy what is being sold, there is no way it can survive. This is why successful companies take steps to ensure their goods and services have continuing functional and emotional relevance to consumers – and why those actions are critical to their long-term value.

The key, of course, is finding a way to measure this value in a way that is useful for investors and businesses alike. To that end, the participants identified three key areas of consumer value and formed three corresponding working groups to explore these areas in depth.

Innovation: A company's ability to innovate can make the difference between its long-term survival or failure. The group recognized that there is no 'secret sauce' for innovation: it takes many forms, springs from many different processes, and has differences between industries. However, the working group concluded that successful innovators do demonstrate a number of common attributes that create long-term value. The working group therefore created an approach that helps to communicate a company's innovation strategy building on the framework and its execution of the strategy at each stage of the innovation process – ideation, development, launch, and maturity. For instance, what is a company's R&D spending in strategic areas as a percentage of sales? What percentage of revenues come from products introduced in the past several years? As an overarching conclusion, it was found when it comes to innovation in relation to long-term value, that providing the right narrative with the metrics is key. It enables a better articulation of the link between a company's operating context and innovation strategy, as well as the execution of that strategy.

Consumer trust: This working group undertook a systematic literature review to identify five key factors associated with trust and then tested existing metrics against those factors. Based on this, it concluded that one metric was most effective at measuring trust: the net trust score. By testing the metric on a representative sample of 20 FTSE companies, the working group's initial findings demonstrated a positive correlation between the net trust score and financial performance. Going forward, the group believes that companies could demonstrate that they are creating trust by using this same methodology to generate a net trust score for themselves. They could then put that metric into context with a narrative that answers key questions proposed by the working group for

each of the five areas of trust – for instance, is the company perceived to operate in line with its stated purpose? Likewise, investors could apply the methodology so that they have a better sense of the company's level of trust and how that might affect future financial performance.

Consumer health: The impact a company's product or service has on consumer health can be a long-term benefit or risk to any business. If they improve health outcomes, there is an opportunity to increase their value. But if they worsen health, they risk regulation, public backlash, and more. Current disclosures, however, do not offer a clear way to articulate the link between consumer health and a company's long-term value, by often being too disease specific. This working group offers two types of metrics to provide to an investor a portfolio-wide overview: pragmatic (which aim to measure how many people's health is impacted by products and services) and ambitious (which aim to more precisely measure the extent to which a population's health improves or decreases due to a product or service).

The firsthand accounts of these working groups, their findings, and how they came to their conclusions can be found on the following pages.

Innovation

In a world of rapid technological change, innovation can be the key difference between whether a company is the disruptor – or the disrupted. It can determine whether a company keeps up with the times – or loses ground to competitors who have the ability to continuously reduce costs by working more efficiently, are better at anticipating the immediate and long-term demands of consumers and society or create new markets to generate demand.

But when innovation takes so many forms in so many industries, how does one consistently measure the factors that make a company a successful innovator? After all, innovation can range from incremental improvements to ground-breaking, industry-changing disruption. It can vary in what exactly is being innovated – from products and services to processes and entire business models. And it can take different forms, from open-source or crowd-sourcing approaches to breakthroughs privately created in a company's R&D department.

Although companies can approach innovation in very different ways, we found that the information investors tend to seek is fairly consistent. This includes how the innovation aligns to the company's purpose, how it links to its strategy, as well as what opportunities the innovation aims to take advantage of or risks it will help to manage. By following the steps outlined in the Long Term Value Framework, companies will have this information to hand. They would have gone through a logical process that led to the identification of the outcomes that their innovation activities need to achieve by reflecting on and analyzing their operating context, purpose, strategy and governance.

These steps are not unique to innovation but the outcomes identified and the capabilities and resources the company requires to deliver them are (e.g. research infrastructure, strategic partnerships, innovation culture). As is the approach we developed to communicate this information based on the innovation process, which we have broken down into ideation, development, launch, and maturity.

We incorporated all of these findings into our approach to enable companies to identify innovation metrics and supporting narrative that are relevant for long-term value creation.

How we determined the metrics for innovation

To get a clear sense of what works and what does not, our working group consulted with practitioners and academics, reviewed existing frameworks (e.g. GRI, SASB, WIC!) and literature on innovation and thoroughly tested our approach using case studies (DowDuPont, Ecolab and a fictitious automotive company). We also sought to gain a better understanding of the metrics that are already disclosed by companies and how well they communicate a company's innovation strategy and capabilities by analyzing the automotive, industrial, and pharmaceutical sectors.

After examining current disclosures on innovation and talking to investors, it became clear that:

- Due to the high level of uncertainty (e.g. disruptors, changing

consumer trends and regulations) innovation cannot be communicated through the use of metrics alone but has to be accompanied by narrative to explain how a company is preparing for different scenarios;

- There are substantial variations in current disclosures, both at a sector and company level;
- Companies track many more innovation metrics internally;
- Company disclosures on innovation and how it relates to their context, purpose, strategy, as well as the related strategic capabilities a company has are very limited; and
- Most disclosed metrics are from early phases of the innovation process (e.g. R&D investments, patents).

The working group sought the views of asset managers on why current disclosures are so limited and what metrics on innovation they would like to see from companies. Asset managers stated that while companies often attribute the lack of disclosures to the need to protect sensitive commercial information, much of the information is already available in the public domain. In fact, investors often use publicly available sources to compile their own metrics. For example, they use patent application information from the European Patent Office and similar databases. They also collect information from customers to assess how innovative a company is.

Despite this, asset managers said the key gap in the currently available information on a company's approach to innovation was the context surrounding that innovation. Public sources and existing metrics could give investors a sense of what the company was currently doing, but these measures tell investors little about the company's long-term trajectory or strategic reasoning. For a full picture, they emphasized that a narrative, especially information about a company's strategy, context and culture, needs to accompany the metrics a company reports. This would enable investors to gauge the ability of a company to stay relevant over time through product or business model innovation, understand how the company is preparing for potential disruptors, understand the company's processes for selecting ideas, and know why and how the company allocates capital to strategic priorities. Asset managers also explained they need historical metrics and context to identify trends and understand where current metrics fit into the bigger picture, as well as more forward-looking metrics such as revenue based forecasts.

All of this feedback helped our working group understand how companies could best demonstrate the long-term value of their innovation activities, helping us create an approach that uses a mix of metrics and narrative that moves beyond the anecdotal evidence that is often relied upon today.

Our approach to measuring innovation

Drawing on feedback from asset managers and academics, we knew the approach to demonstrate how innovation creates long-term value had to result in the disclosure of comparable information, allow enough specificity for meaningful insight without being too detailed as to

disclose commercially sensitive information and provide a contextual narrative to complement the metrics. As a result, our approach to communicating innovation consists of two components:

1. Explaining a company's innovation strategy by applying the Long Term Value Framework
2. Explaining how a company is delivering its innovation strategy by disclosing metrics and a complementary narrative relevant to the stages of the innovation process

In order for companies to effectively communicate their innovation strategy they need to be clear about what stakeholder outcomes that strategy aims to deliver. As with all stakeholder outcomes, those which relate to innovation can be identified by following the steps outlined in the framework, namely analyzing context, purpose and strategy from a multi-stakeholder perspective. However, investors identified a number of points specific to innovation that they would like companies to communicate. These points are as follows:

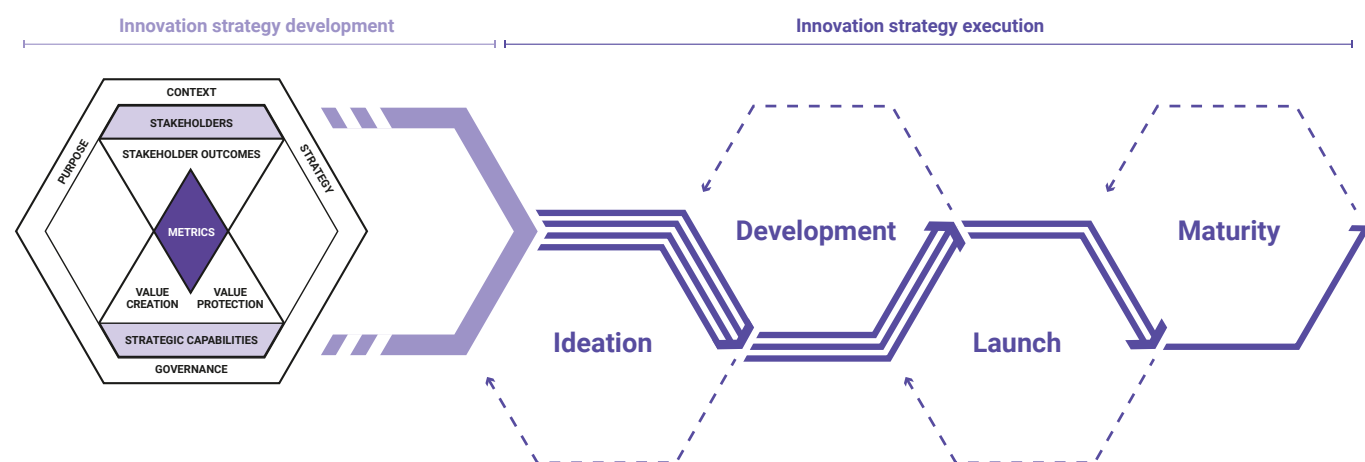
- **Context:** Outline the long-term trends the company believes are relevant for its business model, products and services, as well as the extent to which these trends represent opportunities and risks, including disruption. The company should also outline how prepared it is to take advantage of the opportunities and manage the risks with reference to the specific capabilities and resources it has;

- **Purpose and strategy:** Describe why innovation is important to the company's purpose and strategy, as well as how it will enable the company to deliver its strategy; and

- **Governance:** Demonstrate if and how the corporate governance structures and processes enable the company to adapt to change in a timely manner, as well as whether the right incentives are in place to encourage innovation.

After communicating the above, a company should also explain how well it is executing its innovation strategy. Investors indicated that this explanation would be most insightful if it included both metrics and an associated narrative that are structured around a company's innovation process, namely ideation, development, launch and maturity.

We recognize that there can be no 'one-size-fits-all' approach to innovation. Approaches will always be, at least in part, company or sector specific, which is why the metrics mentioned on the following pages are a suggested starting point and should in principle be almost universally applicable. The metrics that we believe are relevant to a wide range of companies are highlighted as 'primary metrics', while other metrics that were considered potentially useful, depending on the sector or company, are mentioned as 'secondary metrics'. Ultimately, we believe that companies and investors should work to select the metrics that best reflect a company's specific innovation approach, while providing narrative information to relate metrics to the business context they are operating in.

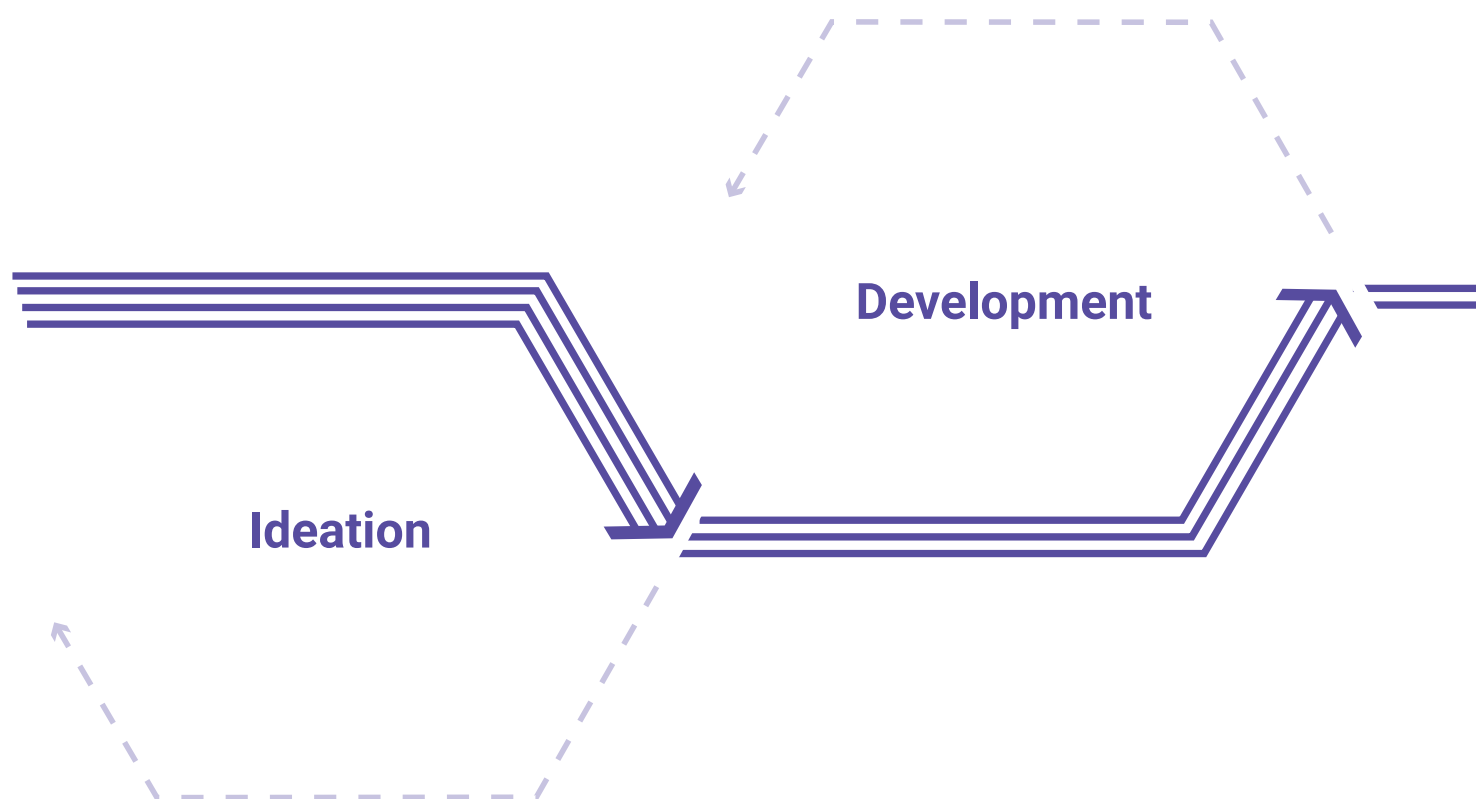


Looking forward

We are confident that the development of our metric and narrative framework is a useful first step in overcoming the lack of relevant and comparable information that investors currently have at their disposal. Further development can make this framework even more useful. Here are some key steps companies can take to do that:

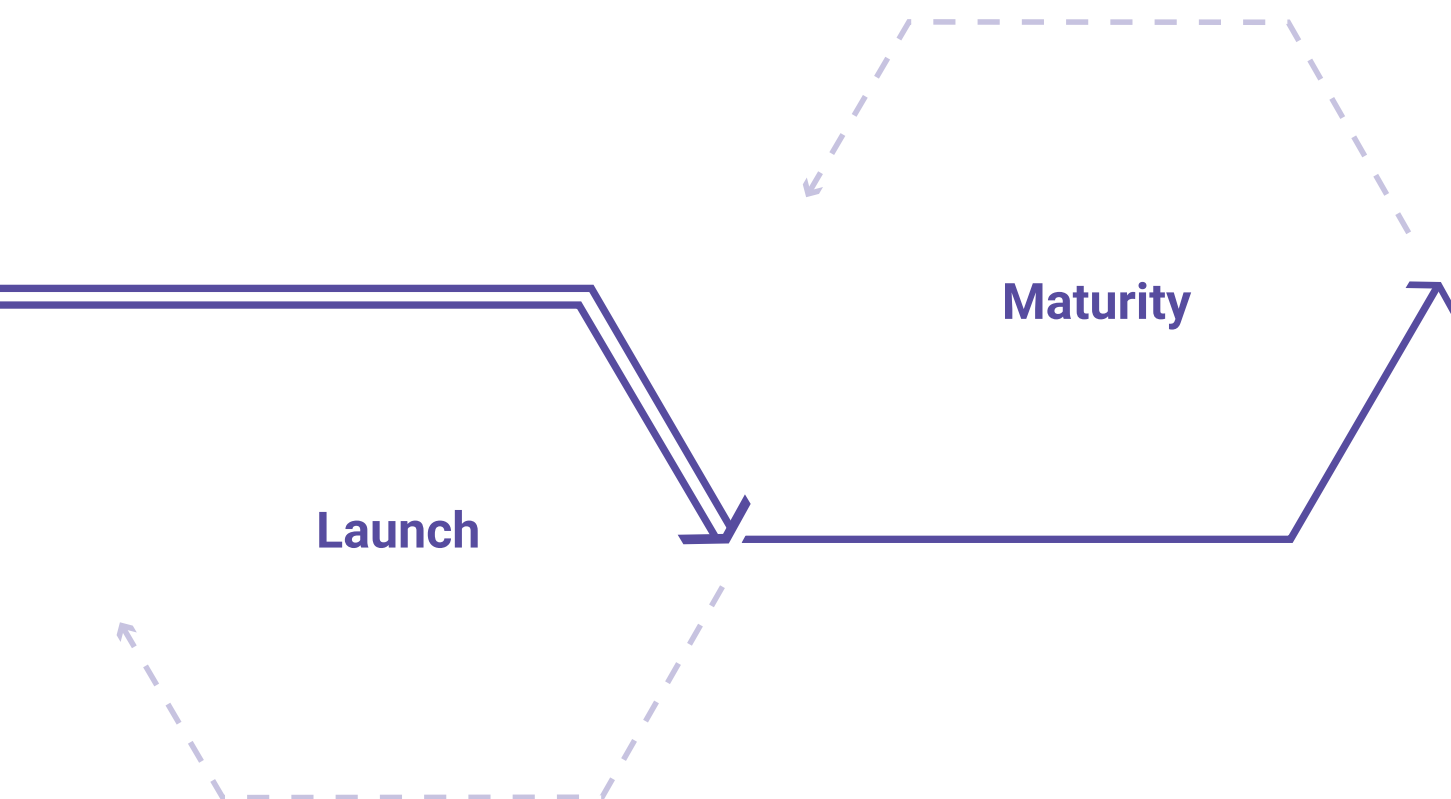
- Reach sector-level consensus on the main innovation metrics
- Develop guidelines for companies with a diverse product portfolio. Since they do not have one company story, it can be difficult for them to answer the narrative questions
- Address confidentiality; ensure that the disclosure of information regarding innovation is useful but at the same time does not threaten a company's competitive advantage

Metrics and associated narrative for innovation



Metric	Narrative reporting recommendations
Primary metrics Idea generation: Number of collected ideas that were implemented during the reporting period according to strategic priorities and/or further categories such as innovations around existing products, new products, services, business models and disruptors	- Describe your idea management process and system: How do you select ideas? Do all ideas have the same chance of being validated, independent from their source and origin? - How are innovative ideas generated (internally, customer driven, partnerships with academia etc.)? If they were created internally, from which seniority level did they originate?
Secondary metrics Innovation time spent: Percentage of aggregate employee time spent on innovation activities	- What processes are available internally for your employees to develop, submit ideas and improvement suggestions? - How do you allocate time and capital towards the most impactful innovative ideas? - Do you reward idea generation by a bonus or other remuneration program?

Metric	Narrative reporting recommendations
Primary metrics R&D spending ratio: R&D spending as a percentage of sales, spending per strategic priority area, spending for sustainability related products or services R&D FTEs: Number of R&D positions in full-time equivalents Patents: Distribution of patent portfolio per strategic priority area	- Describe the development portfolio of your innovation projects with regards to your strategic priority areas and the type of innovation (e.g. products; services; processes; business model). - Describe how you utilize and invest in your innovation capabilities and infrastructure (e.g. the possibility to do open innovation and/or systematic tech management, partnerships with academia, outsourcing innovation)?
Secondary metrics R&D projects: Number of R&D projects pursued during the period of disclosure Market development: Investment in development of new markets (money spent, projects developed) Innovation throughput: Average length of the steps of the innovation process (in months) Customers: R&D projects involving customers IPRs citations: Number of intellectual property rights (IPRs) citations	Describe how you allocate time and capital towards the most impactful and innovative ideas



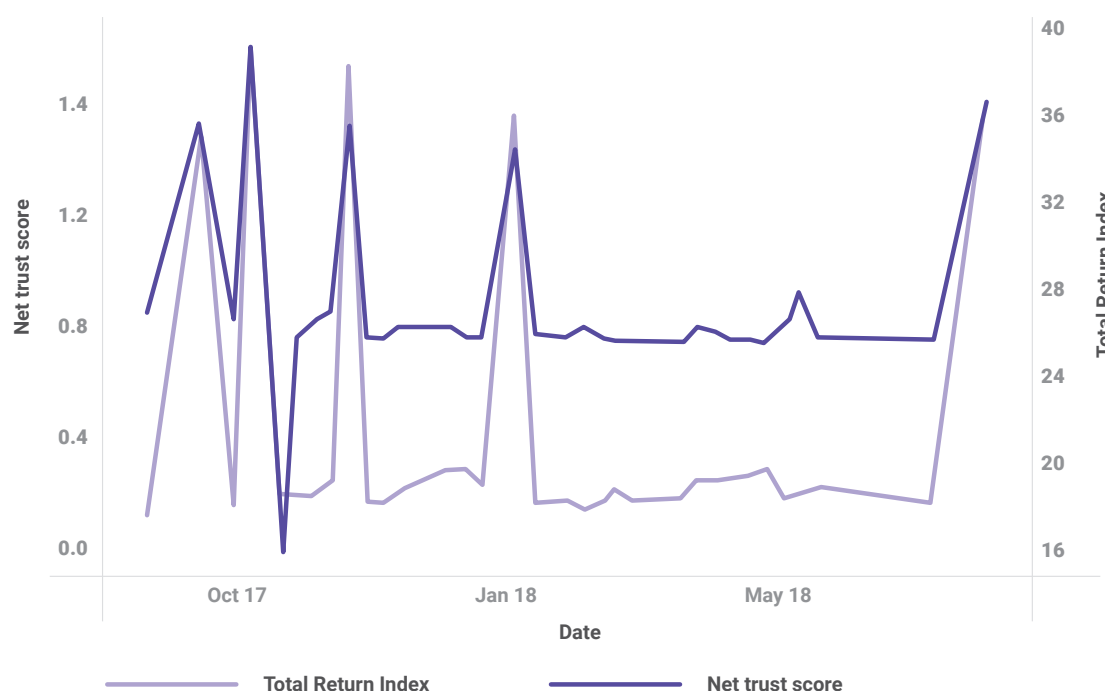
Metric	Narrative reporting recommendations
Primary metrics • Innovation revenue forecast: Revenue forecast from innovation pipeline in the e.g. coming 5 years (in addition to reported credibility rating on forecast based on past experience) • Success rate in percentage per process phase: Average ratio of ideas which moved to the next process phase (ideation, development, launch, maturity or your own process phases) Secondary metrics • Ideas throughput: Number of ideas that made it into the product/service portfolio during the measurement period	• How are you positioning a product, service or new business model in the market? How do you overcome adoption hurdles and market entry hurdles? • Describe the past success rate regarding the revenue forecast • How long does it take from the first approval of a project to its launch on average? Are there processes to decrease the time to market?

Metric	Narrative reporting recommendations
Primary metrics • Vitality index: Percentage of revenues from products, services or new processes introduced in recent years • Societal value generated: Number of innovations and associated sales which are addressing sustainability challenges (e.g. innovations related to the SDGs) Secondary metrics • Gross margin: Innovations gross margin for new products or services • Existing product innovation: Number of improvements made to existing products, services or processes • Customer satisfaction: Increase of customer satisfaction by or with new products or services • Process innovation: Cost reductions as a percent of costs of goods sold due to new processes • Incremental product innovation: Average time to profitability for changes to existing products or services	• Describe how your actual product or service portfolio indicates successful innovation in the past. Are the products or services as successful as expected in terms of sales and margin? • Describe how long it takes to fully penetrate the customer base with a new innovative product or service.

Consumer trust

Companies instinctively know that trust matters. When their customers do not trust their products or the company itself, it can negatively affect their performance over the long term. Conversely, a high level of consumer trust can help assure the strength of a company for a long time to come.

Our research supports this. When we derived a net trust score for a sample of 20 companies on the FTSE, we often found a positive correlation between trust and financial performance. As the example below shows, where the trust score fell, financial performance fell; where it rose, performance also rose. Although there were some anomalies in our results that need to be investigated further, we are very encouraged by the findings.



How we determined the key metric for trust

Below we outline how our working group came to a practical definition of trust – and a way to measure it so that markets can understand how actions that create or reduce trust impact a company's value over the long term.

First, we carried out a literature review from 1959 to the present to establish a practical definition of trust. This would allow us to appraise current methods for measuring trust and develop a comprehensive metric informed by the strengths and weaknesses of existing methodologies. We also defined a set of business outcomes through which one might reasonably expect trust to affect long-term business performance.

Our literature review identified the following five commonly cited components which, when combined, provided us with a working definition of trust:

1. Fulfillment of commitment
2. Benevolence of intention
3. Knowledge and skill
4. Truthfulness
5. Sincerity

Then, using the components above and the principles established by the methodology working group for developing effective metrics, we analyzed the usefulness of five common methodologies for measuring trust and closely related concepts.

Analysis of common trust methodologies

Criteria for metric development	Market pricings	Trust across America FACTS framework	Edelman trust barometer	EY trust analytics (or similar approach)	Survey driven e.g. net promoter score
Clear definition of trust					
Provides information about long-term returns					
Lead indicators					
Measuring outcomes and impacts					
Transferability (across companies)					
Comparability					
Investor verified					

Key
 Not applicable
  Unknown/ to be tested
  Applicable
  Partially applicable

Among other things, we concluded that at present, as an explicitly defined metric and lead indicator of future corporate performance, trust is not widely used as a metric at any point in the investment chain. Furthermore, where it is used, the application varies widely between companies and investors.

We also found that the trust analytics model scored highest against the criteria set by the methodology working group and the five pillars of the model broadly correspond to the elements of trust commonly identified in academic literature. As a result, we used the trust analytics model to measure trust and its relationship with financial performance. The underlying methodology for the model is as follows:

1. Large volumes of digital data are gathered from hundreds of thousands of publicly available sources via the internet including social media, online and transcribed audio and visual news, local, national and international news and special interest publications such as trade, scientific and medical journals;
2. Advanced natural language processing (NLP) technology aggregates, filters, and structures the digital data into the appropriate category of trust in the trust analytics methodology;

3. Sentiment analysis is then used to calculate a net trust score for each pillar of trust by determining whether themes identified by NLP are positive or negative and to what degree;
4. The average net trust score for each of the five pillars is calculated to provide a total net trust score for an entity – in this case one of the 20 FTSE100 companies selected as subjects for our hypothesis testing; and
5. Companies' trust performance can then be benchmarked over time and against an appropriate peer group – in this case a representative sample of other FTSE100 companies.

While there are areas in which further investigation will be required – especially in variations between sectors and areas where relationships between variations in trust and total returns over time are not as clearly discernible, we are encouraged by our initial findings using the above methodology.

The associated narrative for consumer trust

The five pillars of our trust analytics model correspond to the elements of trust commonly identified in academic literature, as shown in the table below.

Academic literature	Trust analytics model	Question addressed
Fulfillment of commitment	Delivery consistency	• Does a company's brand or product continue to fulfill its purpose over time?
Benevolence of intention	Integrity	• Is the stated purpose of a company, brand or product in line with the expectation of its stakeholders?
Knowledge and skill	Delivery proficiency	• Does a company, brand or product fulfill its purpose?
Truthfulness	Openness	• Does a company communicate and engage with its core stakeholder groups?
Sincerity	Advocacy	• Is the company perceived to operate in line with its stated ethos?

Given the comprehensive nature of the model and the fact that it scored the highest against the criteria set by the methodology working group it appears to be the most appropriate metric currently available to measure trust. As with the other topics covered by EPIC, we recommend the metric be complemented with a narrative, such as the one outlined below.

	Metric	Narrative reporting recommendations
Consumer trust	Total net trust score Total volume of 'net positive trust' digital conversations specific to an organization, company or brand divided by total volume of digital conversations specific to an organization, company or brand	• Analyze and describe the issues, factors and trends shaping the trust profile under each element of trust and overall • Cluster data to create separate stakeholder perspectives including customer, investor and regulator views • Analyze the impact of both operational and strategic activities and events on the level of trust in an organization, company or brand • Analyze and understand the influence of market structure and competitive landscape on the impact of trust on an organization, company or brand's performance. For example, the less competitive a market the lower impact of fluctuations in trust on consumer decision-making and therefore financial performance.

Although we are pleased with our initial findings and satisfied with the completeness and robustness of the model, there is still work to be done. As a starting point, we would recommend further research to better understand the relationship between trust and other measures of performance. This research should go beyond demonstrating a relationship between trust and financial performance to also assess whether trust can act as a reliable lead indicator for corporate performance. This may entail investigating the relationship between trust and the following common business outcomes:

- **Customer retention:** The likelihood that customers will purchase again in the future;
- **Price inelasticity:** The likelihood that customers will not reduce quantities purchased in response to higher prices;
- **Competitive advantage:** Related to customer retention, this is the ability to gain market share over competitors;
- **Supplier willingness to commit:** A supplier may be more willing to enter into a long-term commitment with a firm if that firm is trusted;
- **Availability of financing:** If investors trust a company they may be more willing to buy shares or lend it money; and
- **Reduced regulatory risk:** There is less political imperative for politicians and regulators to crack down on a firm or industry that is highly trusted than one that is not trusted.

Consumer health

Health is everyone's business. For most companies, the direct or indirect impact their products and services have on consumers can become either a benefit or a risk to their business. Many people are attracted to products that make them healthier. Conversely, when those products harm consumer health, that creates a potential risk for business. Consider, for instance, regulations like a sugar tax, or reduced revenues due to changes in consumer preferences and public opinion.

Using the Global Burden of Disease index, which quantifies the world's major health problems in terms of their impact on disability and mortality, the health working group first sought to understand how much a business could actually impact health outcomes. The index found that, of the global total number of disability adjusted life years (DALYs)²⁸, only 14% is solely attributable to physical risks, while 86% can be attributed to either behavioral, environmental or a combination of these risk factors. That matters a great deal because behavior and environment are key areas where businesses can have a major impact.

Current disclosures

Overall, asset managers recognized the importance of reporting on this topic, as they believe it is often an indicator of how sustainable a business model is and the extent to which corporate strategies are aligned with consumer and broader societal trends. However, there are serious deficiencies in the way we assess consumer health today.

Many companies do not attempt to assess health in relation to consumers – and when they do, it's most often with a very narrow scope (e.g. on a product-by-product or disease-specific basis). Existing disclosures often only revolve around basic product safety and product recalls, disease or health outcomes, or metrics that are specifically covering individual ingredients in food products that either have a positive or negative health outcome (e.g. reduction in salt content in products or percentage of foods with added vitamins). These disease-specific or health-outcomes-specific metrics do not support a comparison across a portfolio of products in different disease areas, nor the comparison of a company's effectiveness in improving health, nor a link back to the context provided by the Global Burden of Disease database.

In our conversations, asset managers have consistently pointed out that such current disclosures only offer limited insights, because they are too specific and do not cover the full portfolio holistically. Current reporting by companies on their impact on consumer health also differs across industries and from company to company, making it more difficult to consistently evaluate different companies side-by-side.

There is also a particular challenge with pharmaceutical companies. Most often, their reporting only focuses on products already being manufactured and sold – or, at most, products that are only 1-2 years away from entering the market. This poses a challenge for investors to draw a clear link between health and a company's long-term value. Moreover, large pharmaceutical and medical device companies are increasingly outsourcing their R&D, making it harder for investors to assess the value of the R&D that these companies are undertaking.

Right now, even ESG and health scorecards do not account for broader wellbeing. But fortunately, several initiatives have started to address this. One example: The Harvard School of Public Health and Harvard Business School, which have started to develop the 'Culture of Health' framework where they look at health from the perspective of the consumer, employee, community, and environment.²⁹ The working group used this framework as a starting point to begin assessing and disclosing health outcomes more completely, considering their broader impact on a wider range of stakeholders.

²⁸ The WHO defines DALY as these as: "one lost year of "healthy" life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability."

²⁹ McNeely, E., (2018). Following Footprints: What Corporate Health Can Learn From Environmental Sustainability. American Journal of Health Promotion, Volume 32 (4), pp. 1146 - 1149.

Metrics and associated narrative for consumer health

As a result of the amount of academic research which is being done around the topic of health outcomes, the potential for developing a number of outcome-based metrics in the near future exists. But the key consideration for such metrics must be their ability to shed more light on broader consumer health from a company's product portfolio instead of the narrow disease-specific focus that limits the usefulness of many existing metrics for investors.

To propose metrics that meet this demand, we have divided them into two categories: pragmatic and ambitious. Pragmatic metrics aim to determine whether products or services contribute directly to improving customers' lives, and then measure how many people those products and services have reached.

These metrics work best when it is possible to draw a clear link between a product and an improvement or reduction in the quality of health of those who use this product. For instance, if someone reduces their consumption of sugar, it lowers their risk of diabetes. Thus, the amount of high or low sugar products in a business's portfolio offers an indication of its capacity to create value for customers, its opportunities for growth, and its protection against future regulation. Businesses and investors can then use this measurement to gauge whether a company's portfolio aligns with the health needs of existing customers and potential consumers.

Ambitious metrics take this measurement a step further. Rather than simply counting how many people have improved or reduced health

because of a product, they measure the exact extent to which a product impacts health in a community. For instance, they can tell that a population gained a specific number of quality-adjusted life years because of a product or service. When this data can be discerned, it helps indicate the degree to which a product portfolio helps to actually solve the health problem itself across the broader community.

Consumer health – pragmatic metric

The pragmatic metrics and associated narrative we propose meet several key criteria:

- They are near-universal; we believe they are applicable for most companies, and comparable across different products and services;
- They indicate an improvement or reduction in the quality of a customer's health, thereby helping to indicate both potential value creation for the customer and protection against future regulation or costs (e.g. reformulation of products);
- They illustrate the relevance of a company's portfolio to the health of existing customers and potential consumers; and
- They are both backward and forward looking, allowing for comparison with previous years and offering the potential to forecast based on a company's market strategy and market potential.

Lastly, while part of this information is already available to investors in some sectors, based on market/disease studies, the pragmatic metrics outlined in the table below will provide a more uniform approach.

	Metric	Narrative reporting recommendations
Consumer health (pragmatic)	Number of people with improved quality of health through sales of products and services	Describe what products are classified as either having an improved or reduced quality of health and the associated long-term marketing and strategy in developing these
	Number of people with a reduced quality of health through sales of products and services	Other supporting quantitative information to be included: • Associated product or service revenues with improved and reduced quality of health • Market potential in terms of people reached for products or services based on existing and long-term going to market strategies

Consumer health – ambitious metric

When it comes to measuring consumer health, there are pockets of excellence where companies have moved beyond output metrics towards comparable outcome and impact metrics. These metrics provide insights on the extent to which a company's product portfolio is able to help in solving consumer health related problems.

For the ambitious metric we have used one such example – the concept of quality adjusted life years (QALY) gained and disability adjusted life years (DALY) avoided. Within the field of health, alternatives such as years of life saved (YLS) or healthy life years (HLY) gained can also be used depending on the purpose of the metric.

Overall this method of measurement for health outcomes is widely accepted by investor analysts, but adopting this metric is only feasible when there is a clear link between a healthy product and the degree of improved health. Proving this link for pharmaceutical and medical device companies is easier than for other industries, due to their vast body of research, as well as the direct causal link.

As an example, Novartis has translated the social impact of its product portfolio into QALYs gained for two pilot countries. Novartis even took it one step further by assessing productivity losses avoided and the beneficial economic impact this would have thanks to Novartis products.³⁰

In other sectors, although there is often a wide body of research, it is more difficult to prove a direct causal link between products and health outcomes of individual consumers. This is due to the large number of other factors that could play a role in determining the health outcome, such as the general state of health of the target population, the individual's fitness regime, and his or her other eating habits.

This outcome-based metric, by putting the metric in relation to the Global Burden of Disease, makes it possible to show how the current health impact of sales stand in relation to the overall health impact of a particular disease. And it allows for aggregation and comparability at the portfolio level. Thus, this metric can potentially provide investors with a clear link between value created for consumers and society, and the financial value created as a result of these positive outcomes. That will help contextualize going to market and innovation strategies, and give investors a clearer picture of how a company is positioned to generate long-term value.

Details of the more ambitious metric are included in the table below.

	Metric	Narrative reporting recommendations
Consumer health (ambitious)	Number of QALYs gained or number of DALYs avoided Alternatively: Social impact of products in monetary terms	Supporting this metric the following quantitative information is required: • Associated product revenues • Market potential for products or services in terms of people reached or burden of disease based on existing and long-term going to market strategies

³⁰ Seddik, A.H., Branner, J., Helmy, R., Ostwald, D.A., Haut, S., (2018). The Social Impact of Novartis Products: Two Case Studies from South Africa and Kenya. Basel/Berlin/Darmstadt.

Societal value

Society and the environment

In recent years the social, environmental and economic value a company creates for its stakeholders has received a lot of attention in the wider business community. And while it has long been recognized that businesses play a unique role in society, in the past, this impact was not seen as central to a company's strategy. It was viewed as an almost indirect consequence of business activities, and unlikely to impact the company or investment returns over any reasonable time frame.

This is changing rapidly. Around the world, companies are increasingly being held accountable for their role in creating societal value. There is mounting evidence that stakeholders expect businesses to play a larger role in addressing social issues. A failure to do so can trigger knock-on effects directly on financial value, or indirectly through consumer and human value. Business leaders are increasingly working to understand how these shifts will impact their companies' ability to create long-term value.

But despite this attention, the conversation around societal value has remained relatively abstract. Businesses still have difficulty quantifying the societal value they create – and it remains unclear what effect it has on a company's bottom line or long-term prospects. As a result, investors have not had the right information to evaluate a business's societal value or factor it into their investment decisions.

This was the challenge the SDGs working group sought to confront. They recognized that, while clear links to long-term value have not been established, there are initiatives and frameworks that seek to better catalog how – and if – businesses are contributing to society in the long term. The most comprehensive framework relating to societal value is the SDGs. The 17 global goals, along with underlying targets and indicators, envision a more sustainable world in 2030. They were developed with broad civil society and business participation to address global challenges, and set out a number of ways that businesses can contribute to society. The SDGs have been widely recognized across the investment chain, not least because achieving the SDGs is believed to open up USD 12 trillion in market opportunities.³¹

While many companies already use the SDGs as a framework to report on environmental, social and governance (ESG) topics, in part because asset owners are asking for this, it became clear during the project that investors need better information to inform decision-making.³² At present, companies do not sufficiently explain the link between their strategy and the SDGs, as well as how their contribution to the SDGs creates long-term value for the company.

The working group focused on developing a method to identify the metrics that explain how SDG-related contributions impact a company's long-term value. For instance, one might measure how efficiently a company uses water. This offers insights into how it is helping to conserve resources, but also about its long-term financial prospects. Since indicators point to more water scarcity in the future, becoming more efficient now is a form of risk management, better positioning a company for the long term.

Ultimately, we concluded that the SDGs provide a good starting point for identifying societal value metrics, and that several existing metrics offer insights into how societal value can contribute to the creation of long-term value for companies. But much work still needs to be done to quantify and articulate this in a way that is useful for investors. Furthermore we recognize that the SDGs are also a useful lens to identify metrics in other value areas, as they cover for example, innovation (SDG 9), governance (SDG 16) and more outcome areas that were addressed by other working groups as part of this project.

The following section offers the SDGs working group's account of the process it developed and tested, which can be applied by individual companies, along with a summary of its findings.

Sustainable Development Goals

Our working group had two objectives. Firstly, to develop an approach that allows companies to use the SDGs as a conduit to identify metrics that are relevant to the creation of long-term value; and secondly, to assist companies in articulating the connection between the SDGs and the creation of long-term value.

To begin our work, we identified the SDGs most relevant to our working group members' sectors. We cross-referenced the selected SDGs with the results of the stakeholder outcomes matrices included earlier in this section. This meant that we focused on 8 of the 17 SDGs, covering topics such as economic growth and job creation, limiting environment impacts, purposeful community engagement, and diversity and inclusion.

We then mapped the eight SDGs to relevant 'business themes' to translate the global goals into outcome areas that are relevant to a company's business model. This enabled us to identify a long list and subsequently a short list of metrics, using qualifying criteria, as defined in the Detailed guidance chapter, which are relevant to the creation of long-term value.

We have summarized this approach on the following page to enable other sectors and individual companies to identify SDGs that are relevant to them.

³¹ Business and Sustainable Development Commission (2017). Better Business Better World – The Report of the Business & Sustainable Development Commission. http://report.businesscommission.org/uploads/BetterBiz-BetterWorld_170215_012417.pdf

³² One initiative that could help do this is the Impact Valuation Roundtable who have brought together dozens of companies seeking to standardize the measurement of societal value and they estimate that over 500 companies already measure their environmental, social and economic impacts to some degree.

SDGs in scope

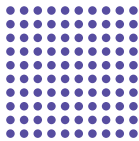
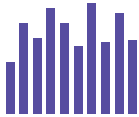
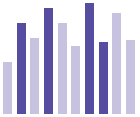


* Suitable metrics were not identified

SDGs out of scope



Steps to identify relevant SDG metrics and narrative

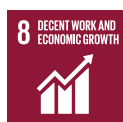
Step 1	Step 2	Step 3	Step 4
Identify relevant SDGs and related business themes - Identify relevant SDGs for the sector/company - For each SDG, identify associated themes based on existing SDGs mapping exercises conducted by e.g. GRI, SASB	Identify the link between business themes and financial value creation For the business themes identified, review existing literature and lead practices to investigate the links between the theme and long-term financial value creation	Identify long list of metrics for prioritized themes Review existing frameworks (e.g. GRI, SASB), literature and best practices to create a long list of metrics that could articulate long-term performance	Identify short list of metrics for prioritized themes - Using the metric qualifying criteria included in the Detailed guidance chapter, refine the long list to a set of fit-for-purpose metrics - Further refine and validate short list through discussions with subject matter experts - Determine the associated narratives that provide context around the short-listed metrics
Output: List of relevant business themes associated with respective SDGs	Output: Prioritized business themes that are clearly linked to financial value creation	Output: Long list of metrics for the prioritized business themes	Output: Validated short list of metrics and corresponding narratives
Working group outputs following the four steps:			
 100 business themes	 57 business themes	 102 metrics	 9 metrics

The process we have outlined builds on the mapping of SDGs to business themes established by existing frameworks (e.g. GRI and SASB), and we believe that it can be followed by others to replicate and extend our work beyond the eight SDGs covered. During the course of our work, the outputs were reviewed and validated by asset managers and asset owners, and other experts such as the advisory council members and portfolio managers from financial institutions. Reviewing and validating the outputs is important to ensure investors' needs are met, and to gain broad adoption of the metrics along the investment chain.

On the following pages we outline our detailed thinking on the example metrics and their narrative link to long-term financial performance for the eight SDGs. For the purposes of reporting our findings in line with the key stakeholder outcomes participants established at the start of the project, we grouped the SDGs under four topic areas – economic growth and job creation, purposeful community engagement, limiting environmental impacts, and diversity and inclusion. We have detailed underlying analysis for each of the SDGs which will be made available via the EPIC website.

Economic growth and job creation

We have identified one metric for the following SDG:



We identified gross value added (GVA) as a relevant metric for SDG 8 (Decent work and economic growth). It indicates the contribution the company makes to economic growth, and correlates to long-term financial performance. Measuring the change in GVA provides a view of how much a company is spending and investing in the countries where

it operates. This metric could support a company's license to operate for its key stakeholders (e.g. regulators, suppliers) in a given geography or market. A number of companies^{33, 34} have already reported on their GVA impact and a few asset managers have started to compare results within sectors.

Metric	Definition	Long-term value link	Business theme (stakeholder outcome)	SDG alignment
Gross value added (GVA)	Gross value added (GVA) describes a company's wider contribution to the gross domestic product (GDP) of the market in which it operates. Calculation: Direct value of gross output (sum of revenue, variation in stock and self-produced equipment, minus goods of resale) less the value of intermediate consumption (sum of raw materials, auxiliary materials and other intermediary inputs). In addition, the indirect GVA impact can be calculated through an economic multiplier derived from e.g. OECD input-output tables which gives additional insight into wider economic contributions.	GVA measures the appreciation in value, less intermediate consumption, which was created by a company. The metric is linked to economic growth and development; both on a company level, in terms of its correlation with long-term financial performance (revenues, EBIT, market capitalization),³⁵ as well as at a macroeconomic level (all companies' GVA results added together sum up to the given market's total GDP).	Economic growth (Job creation)	SDG 8

³³ Scholz, R., Albu, N., Benke, N., Cramer, M., Ostwald, D.A., and Haut, S., (2018). The Global Economic Impact of Novartis. Basel/Berlin/Darmstadt.

³⁴ BASF (2017). Value-to-Society: Quantification and monetary valuation of BASF's impacts on society.

³⁵ Knippel, J., (2015). Der Informationsgehalt der Bruttowertschöpfung für die unternehmerische Praxis. Europäische Schriften zu Staat und Wirtschaft.

Purposeful community engagement

We have identified two metrics for the following SDG:



Community engagement initiatives are seen to support a company's social license to operate, yet investors often find it difficult to understand the real value of the initiatives. This value could lie in helping to empower the brand, maintain relations with key stakeholders, train suppliers to work more efficiently or helping to open new markets. Investors have indicated that when they value companies, they do not significantly factor in community engagement, even when initiatives are closely related to a company's purpose and products or services. This is partly because corporate disclosures generally contain qualitative information about individual initiatives and limited quantitative information, preventing a broad and holistic view of the value of community initiatives.

For the companies participating in this project, health-focused community initiatives were particularly relevant. We therefore focused on identifying two metrics for SDG 3.

Firstly, the 'people engaged through community health initiatives' metric can be used as a proxy for the overall scope of the initiative's contribution to health solutions, indicating the reach of a specific health initiative. This metric is applicable for initiatives that make a clear improvement to the quality of health (e.g. engagement in physical activity, education on sanitation, provision of nutrients to the malnourished).

Secondly, the 'social return on investment of health-related community initiatives' metric, can indicate how much the initiatives are helping to solve community health-related problems, and how effective corporate investments are. This quantified metric for investors helps to articulate how the initiatives add value. This metric could also be used to communicate the value of non-health-related initiatives to investors, for example, supplier capacity building programs.

Metric	Definition	Long-term value link	Business theme (stakeholder outcome)	SDG alignment
Number of people engaged through community health initiatives³⁶	For well-researched areas, such as the importance of physical activity for improved health, it is already insightful to track the number of actual participants per initiative rather than trying to measure the health impact of the intervention. Calculation: Number of people engaged through community initiatives.	Community initiatives are important for a company's long-term value creation, particularly if it is aligned with a company's purpose in maintaining its societal license to operate. Also, it can offer opportunities to engage with other stakeholders such as new customers.	Healthy communities (Purposeful community engagement)	SDG 3
Social return on investment (SROI) of health-related community initiative³⁷	This metric measures the monetized social impact of community health initiatives. Calculation: Social return on investment for health-related community initiatives equals total social return on investment divided by initial total investment.	Indicates how companies are spending their funds on community initiatives, which is important for a company's long-term value creation. Particularly if this spending is aligned with the company's purpose, as an indication of how it is maintaining its societal license to operate.	Healthy communities (Purposeful community engagement)	SDG 3

^{36,37} These metrics were developed by the Health working group. For additional contextual information around why health matters and additional metrics see Employee health and Consumer health.

Limiting environmental impacts

We have identified four metrics for the following SDGs:



For SDGs 6, 12 and 13 we found water intensity, which measures the efficiency of a company's direct and indirect use of water, to be a relevant metric. The proposed metric goes beyond simply reporting water use – investors have clearly stated that water use needs to be contextualized (either by revenues, production, or the risk of water scarcity). Water intensity can be directly linked to cost management and margin growth potential, as increasing water scarcity in some regions means using more water to produce the same output, at a greater cost.

We also identified 'energy and carbon efficiency of building stock' as a relevant metric for SDGs 11, 12 and 13. This metric helps to measure the environmental impact resulting from a company's investment in or use of its buildings. This can be an indication for future operating costs or potential costs of complying with regulations. We also identified carbon price risk as a useful metric to measure the long-term financial impact of different carbon pricing scenarios, by estimating the effect of a potential carbon price on a company's operating profit.

A number of companies have already started disclosing in line with this metric. Standardization of measurement has come a long way, and investor uptake has increased given recent initiatives such as the Task Force on Climate-related Financial Disclosures (TCFD). Some companies have also started using this metric for internal CAPEX-investments decision-making processes.

Finally, we identified the resource efficiency score to measure how efficiently a company uses resources in its operations. This can indicate how a company manages potential sourcing risks (in terms of CO₂, water and waste), in relation to SDGs 11, 12 and 13. These resources are in principle applicable to most companies and are therefore already benchmarked by some investors.

Metric	Definition	Long-term value link	Business theme (stakeholder outcome)	SDG alignment
Water intensity	Water intensity directly measures the efficiency of a company's water management, including its supply chain. Calculation: Total amount of water use in m³ (direct in own operations and indirectly through suppliers, differentiated by level of water scarcity) divided by revenue or profit.	Water intensity can be directly linked to revenue growth potential, production costs and profits. Measuring water intensity contributes to improved water risk management (increasing water scarcity, long-term risk-adjusted water pricing).	- Water management - Resource efficiency (Limiting environmental impact)	SDG 6 SDG 12 SDG 13
Energy/carbon intensity (efficiency) of building stock/real estate portfolio	Energy and carbon efficiency link back to the environmental impact of a company's building portfolio. Two possible calculations are proposed: - Total volume of CO₂e divided by real estate portfolio in m² or number of occupants; - Total quantity (e.g. in kWhs) of energy usage divided by real estate portfolio in m² or number of occupants.	Energy and carbon efficiency measure a company's ability to conduct its business in an efficient manner and indicate future growth and value creation potential (e.g. operational cost savings, long-term growth potential). Energy and carbon efficiency relate to a company's ability to manage exposure to climate-related regulatory risks.	- Air quality - Climate change - Resource efficiency - Sustainable buildings (Limiting environmental impact)	SDG 12 SDG 13
Carbon price risk	Carbon price risk reports on the long-term financial impact of different carbon pricing scenarios, by estimating the effect of a potential carbon price on a company's operating profit through direct pricing of a company's own emissions (scope 1), indirect pricing through purchase of electricity (scope 2), purchase of suppliers (scope 3 – upstream) or revenues at risk due to emissions of sold products (scope 3 – downstream). Calculation: Carbon emissions (scope 1, 2 and 3) multiplied by carbon price scenario (USD 25, USD 50 and USD 100 per tonne CO₂e) in relation to revenue or operating profit.	Metric is linked to long-term financial performance through its influence on costs, revenues, profits or investment returns. Metric is intended to provide information on a company's strategic proposition to be successful over the long term in a carbon constrained world and contributes to improved risk management (increased environmental regulation or supply chain risks).	Climate risks and opportunities (Limiting environmental impact)	SDG 12 SDG 13
Resource efficiency score	The resource efficiency score expresses how efficiently a company uses resources in its production processes. Calculation: Average of firm's efficiency in CO₂e, water use and waste production. Composite score is calculated by equally weighting (industry standardized) efficiency rates (total amounts of carbon emissions, water and waste divided by a firm's total revenue or profit).	Metric provides indication for a company's ability to limit its environmental impacts and to generate future growth. Companies with low efficiency scores may face increased risks from environmental regulation, increased operational costs, and lower growth potential in the long term. If further strategic resources would be included – on a company by company basis – the score could become even more indicative of long-term performance.	Resource efficiency (Limiting environmental impact)	SDG 11 SDG 12 SDG 13

Diversity and inclusion

We have identified two metrics for the following two SDGs:



The metrics are in line with those discussed in more detail in the human capital deployment and corporate governance sections.

We identified employee turnover – by selected diversity categories such as age and gender – as a metric. This provides insights into how companies reduce inequalities and offer productive work environments, which can translate into higher employee productivity and other aspects of long-term value.

We have also identified the diversity of a company's governance bodies as a metric. This can be an important proxy for good governance, by indirectly measuring performance in terms of risk management and innovation. Good governance is a prerequisite for both fair working conditions and long-term growth and therefore this metric is relevant for both SDGs 8 and 10.

Metric	Definition	Long-term value link	Business theme (stakeholder outcome)	SDG alignment
Employee turnover³⁸	This metric shows the rate of employee turnover by different diversity categories such as age, gender or regional distribution. Calculation: Total number of leavers (total of number of voluntary and involuntary ones) divided by the total number of employees.	Metric links back to employees' perception of work (e.g. development, remuneration, diversity and culture) measured through retention. Metric serves as a proxy for long-term value creation through multiple direct and indirect linkages (e.g. effects on talent recruitment and development costs or employee productivity).	- Diversity and inclusion - Equal opportunity - Training and education (Employee development)	SDG 8 SDG 10
Diversity of a company's governance bodies³⁹	Metric expresses the heterogeneity of corporate governance bodies. Calculation: Percentage of individuals within the company's governance bodies⁴⁰ in multiple diversity categories.	Diverse teams have been found to perform better in strategic and operational decision-making and are more likely to drive innovation.	Diversity and inclusion (Diverse leadership)	SDG 8 SDG 10

³⁸ The Human capital deployment working group has further developed this metric; please find additional detail on their work on page 42. The fact that this metric suggestion has come up in both working groups only attests to its relevance to measure long-term value – and to the relevance of the SDGs as a comprehensive value framework beyond societal value.

³⁹ The Corporate governance working group has further developed this outcome area and associated metric(s); please find additional detail on their work on page 70 and perspective in the foregoing footnote.

⁴⁰ Committee or board responsible for the strategic guidance of the company, the effective monitoring of management, and the accountability of management to the broader company and its stakeholders.

Learnings from our work

Following numerous discussions with advisory council members, academics and professionals along the investment chain, as well as the process we went through to identify metrics for the eight SDGs, our working group came to three key conclusions:

1. We found the SDGs are a useful framework for identifying business themes that are relevant to long-term value creation. But we also found that the relationship between an individual SDG and the relevant metrics for a specific company is not always clear. The strength of the link between business themes and the creation of long-term value, and the availability of research to support these links, varied widely across themes. More established themes, such as diversity, health and safety, and climate change had significant literature and empirical research establishing clear connections to business performance. Other fields, such as training and education require further research, as laid out in the Human value section.

We also found there are multiple overlaps between the business themes identified for different SDGs, which considerably complicates the picture. For example, diversity and fair compensation is a theme across both SDG 8 and SDG 10. The climate risks and opportunities theme relates to SDGs 6, 11, 13 and indirectly affects other SDGs as well. While this reconfirms the all-encompassing nature of the SDGs, it also means that companies need to be diligent in scoping and articulating contributions to the SDGs and long-term financial performance.

2. Despite a plethora of existing potential metrics, we found very few off-the-shelf, comparable, insightful investor-grade metrics. More than 100 existing metrics were identified across the six SDGs we looked at based on existing frameworks, such as GRI and SASB as well as metrics widely used in the participants' sectors. However, few metrics qualified as fit-for-purpose based on the criteria developed by the methodology working group. The majority of metrics measured inputs and outputs (e.g. millions spent on research or training, number of projects completed), rather than outcomes and impacts which indicate long-term financial consequences.

Another common issue was the lack of comparability of metrics across industries and sectors. The working group identified a range of potential metrics which need further development or need to be contextualized with a compelling business narrative.

3. While we identified relevant metrics for the business themes we looked at, more work is needed to quantify the impact of business themes on the SDGs. For each business theme associated with the SDGs, various academic studies and frameworks indicate correlations between investments in them and value creation in line with the SDGs agenda. Despite this, very few studies go as far as quantifying the actual impact of the themes on SDG outcomes – a clear next step. One exception being the ongoing work of the Cambridge Institute for Sustainability Leadership,⁴¹ which has established some linkages to long-term performance. Furthermore, our limited coverage of themes and SDGs means it remains challenging for firms to articulate a holistic SDG narrative.

Looking forward

We believe that our methodology has been thoroughly tested by the working group members and that these findings can serve as examples and constitute investor-verified general guidance for companies to better understand the linkages from the SDGs (including underlying targets and indicators) to metrics. Nevertheless, we recognize there is still more work to be done to address additional SDGs and business themes, as well as conduct the analysis for other sectors, to encourage broader adoption and enable more effective business performance reporting.

In addition to the nine validated metrics, we for example identified a number of other outcomes (i.e. business themes) that have the potential to improve communication along the investment chain. However, as part of our validation process in step 4 of the approach, the investors in the working group decided that the metrics for these areas are not yet sufficiently robust enough to be recommended at this stage, but they could be further developed and potentially become validated metrics in the future. The business themes and their respective initial metrics for these areas are:

- **Remuneration and benefits:** Percentage of employees paid a living wage;
- **Climate change risks:** Financial return in relation to carbon footprint (revenue per non-renewable carbon input);
- **Resource efficiency:** Percentage of water reused/recycled;
- **Healthy and affordable food:** Percentage of popularly positioned products fortified with iron, iodine, zinc or vitamin A;
- **Sustainable buildings:** Certified sustainable buildings (as part of building stock); and
- **Diversity:** Inclusion score.

⁴¹ University of Cambridge Institute for Sustainability Leadership (CISL). (2016). In search of impact: Measuring the full value of capital. Cambridge, UK: Cambridge Institute for Sustainability Leadership.

Corporate governance

There is no universally accepted definition of corporate governance, however agreement generally exists that it is a system by which all of the activities of a company are directed, controlled and monitored. The board's oversight role is distinguished from management's day to day operational execution. This means that corporate governance in itself is not a direct value driver or an outcome but can facilitate or hinder the creation and protection of value.

Views on what constitutes good corporate governance vary across jurisdictions. Although more recently there has been some convergence, material differences between the major capital markets remain. Our working group objective was to identify globally relevant disclosures, which will allow for a better assessment of governance as it pertains to supporting stakeholder outcomes and provides relevant information about the context within which the company operates.

Current disclosures in this area are already extensive – and for many years, regulatory trends have pushed companies to disclose even more about their board structures and processes. Indeed, disclosures relating to board members' skills, experiences, independence, tenure, gender diversity, board committee structures, board size and frequency of meetings are generally mandated or already voluntarily provided by companies, but are in practice often process and not action oriented. This is true also for information that is presented about the board's engagement with investors and other stakeholders.

Despite this trend, investors assert that many companies could better articulate how their governance structure supports their ability to create and protect value in the long term. A large part of this perceived shortfall reflects the fact that the role of the board continues to evolve, with greater input sought from non-executives on an increasing number of areas. However, while skills and experiences of board members are generally disclosed, some investors have requested more disclosure about the depth of these skills and their direct connection to strategy. Investors also expressed interest in greater communication about how needs will be reassessed based on expected future developments and the impact this has on succession planning.

Similarly, our research found that asset managers consider that externally available information relating to board strategy oversight

is often limited to a discussion of short-term performance measures such as annual EPS, cash flows, etc. Frequently it does not provide adequate commentary on the achievement of annual milestones relative to long-term strategic goals, or the actions taken by the board. Furthermore, the asset managers consider that many boards do not adequately explain how executive remuneration structures are reflective of long-term performance. They would like to see boards explain the alignment between historic long-term performance and pay and consider extending the length of the performance evaluation period (e.g. from three years to five) thus rewarding the creation of long-term value.

In looking at corporate governance, we considered the link with organizational culture. Increasingly, boards are viewed as having responsibility for the oversight of the culture within their companies and expected to take steps to address any misalignment between culture, behaviors and the organization's stated purpose and values. This aspect is being addressed in the organizational culture section.

Corporate governance disclosures

To bring structure and simplicity to our analysis, we developed an approach that groups corporate governance into categories, and attributed each of the categories to one of four dimensions: who, how, what and constraints, as outlined on the following page.

Constraints

Operating environment

Existing ownership structures of the company and the laws and regulations of a particular jurisdiction

Who?

Right individuals on the board at the right time

People with the right skills, experience, knowledge and time/capacity to effectively discharge their obligations.

Categories

- Board composition

How?

Working together effectively as a highly performing leadership team

An effective team, using the right information, which is cognitively diverse and supportive of the sharing of dissenting/challenging views to avoid the risk of group think.

Categories

- Board dynamics
- Board diversity
- Board structures
- Provision of information to the board

What?

Focusing on activities that will positively impact long-term value creation

Set the tone at the top and provide the right balance between effective oversight over culture, strategy and risk and monitoring activities.

Categories

- Tone at the top/leading by example
- Stakeholder engagement
- Strategy oversight
- Risk oversight
- Monitoring
- Remuneration/compensation
- External audit and audit committee oversight

'Constraints' are the conditions of a company's operating environment that the company cannot directly control, such as laws and regulations or who its shareholders are. For instance annual re-election of all directors may be legally required in a certain jurisdiction, even if a company has a preference for a staggered board. We focused our recommendations on the 'who', 'how' and 'what' dimensions being those within the direct control of a company.

Our research clearly demonstrated that the most effective corporate governance practices depend on a company's specific circumstances;

to be effective the 'who, how and what' mechanisms must be responsive to the 'constraints' relevant to a company, but also evolve to respond to change.

The working group recommends companies consider the following additional disclosures for corporate governance, which could complement, rather than replace, existing ones, to better inform stakeholders on the quality of governance at a given company (particularly in the context of long-term value creation).



Who? Right individuals on the board

With the demands on directors increasing, their ability to effectively prepare for, and participate in meetings becomes more important. Boards need high quality information, the time to assimilate it and the right environment in which to openly debate, robustly challenge and voice any dissenting views. This is why it is standard practice for the time commitment expected of a non-executive director to be agreed at the point a director joins the board and for this to be re-assessed over time.

'Overboarding' considerations and requirements to disclose a director's other commitments and meeting attendance are driven by wanting to ensure that a director spends adequate time performing their role.

Relevant disclosures:

Expected non-executive time commitment

- Each year the board establishes and, as part of the skills matrix, discloses the total number of hours (or days) that it expects each non-executive director to spend during the year performing their duties in respect of the company.
- Explanation of changes to agreed minimum commitment between periods, and, where not clear from roles, differences between the commitment expected from each of the directors given their individual committee roles.

Enhanced skills matrix

- A skills matrix with detail about the nature of the board members' skills, not just experiences, and the relevance of these skills to the current and evolving strategy.
- Disclosure about which skills need to be added to the board and which may no longer be needed in the context of the evolving landscape and strategy.



How? Working together as a highly performing team

With a lack of objective metrics for cognitive diversity, team dynamics, quality of board papers and succession planning, outputs from a regular board effectiveness assessment can provide insight into these aspects of board effectiveness. The involvement of a third party in the process and the disclosure of the results may be sensitive in certain capital markets.⁴²

Relevant disclosures:

Board evaluation

Option 1: A more pragmatic approach that is relatively easy to implement compared to option 2

- The company confirms that it has conducted a board evaluation, discloses the process followed and that the evaluation considered amongst other matters:
 1. Cognitive diversity of board members (of which gender, ethnicity, age, background are important indicators);
 2. Team dynamics of the board;
 3. Specific skills, background, experience, other qualities of each director;
 4. The quality and timeliness of information provided to the board; and
 5. An assessment as to whether non-executive directors have spent no less than the committed amount of time performing their duties.

Option 2: A more ambitious disclosure for board evaluation. Requiring more effort to implement but providing more insight

- Companies may choose to have the evaluation facilitated or conducted by an objective and independent third party, with direct access to at least one board meeting, allowing for direct assessment of board dynamics. The company discloses the name of the third party used to facilitate the evaluation, and whether they conducted the evaluation to any professional standards.
- The company may choose to disclose key changes to board structure or process made after consideration of the evaluation results, as well as any key observations and recommendations arising from the evaluation and progress on agreed actions.

⁴² In the UK, the Governance Code requires such an external evaluation once every three years, but such a review is not a requirement in the US



What? Focusing on the correct activities

Articulation of progress against strategy in the form of milestone achievement provides a different perspective to earnings targets and is also evidence of monitoring.

There was general consensus within our working group that companies need to better articulate how the creation of long-term value is being incorporated into pay structures and that structuring executive pay continues to be seen as one of the key mechanisms the board has at its disposal to influence the actions of management. Research refers to the existence of the CEO horizon problem whereby short-term behaviors intensify in the last years of office and supports the view that incorporating a longer-term horizon and stronger linkage to strategic execution can reduce earnings management tendencies. An extended evaluation period for share-based remuneration, whilst still driven by measures linked to shareholder returns, allows for the impact of strategic execution to be reflected in the share price.

Relevant disclosures:

Milestone reporting against a clear long-term strategy

- Company discloses the strategic milestones expected to be achieved in the following year and milestones achieved from the previous year.
- The company provides balanced updates on the milestones disclosed prospectively in the prior year, allowing readers to assess progress against long-term strategy. Board oversight of milestones monitoring is described in an action, not process, oriented manner.

Length of performance evaluation period for executive variable compensation

- The company succinctly explains the alignment of the length of the performance evaluation period for share-based variable executive remuneration with the term of the strategy and industry context, i.e. why the board believes this is the most appropriate period. It also explains how the bonus element of management's variable compensation is driven by the current year delivery of the milestones of the company's long-term strategy.

Variable compensation lookback analysis

- The board provides a comparison, covering a consistent period year on year, between the CEOs realized direct compensation and the company's performance, by reference to peer group total shareholder returns (TSR) in one graph ('lookback analysis'). This could be achieved in the form of a relative pay versus relative TSR scatterplot for example.
- The narrative provides an explanation of the level of pay for performance alignment and discloses:
 1. The basis for the length of the lookback period;
 2. The peer comparator group used in assessing alignment of remuneration with performance and explains how the comparator group was established;
 3. Whether or not the company has met the related strategic milestones and other metrics in the period; and
 4. Any other measures that the remuneration committee considers when assessing the alignment of pay and performance.

General narrative

Companies should also consider disclosing more general narrative in their reporting, including:

- An overview of the strategic context of the organization; emphasizing long-term vs short-term considerations;
- The appropriateness of board composition in view of the company's purpose, business environment, short and long-term strategy;
- The company's capital allocation framework – i.e. how does the board make decisions between capital allocation options;
- How the company's board and management engage with its investors and stakeholders and what key actions arose from that engagement over the year reported on;
- Any other material constraints that the board is operating within; and
- The governance response to significant changes in the period (e.g. acquisitions that have taken place, fraud, activist interventions).

Recommendations

08

Our work is just the beginning

The project has come a long way since the first meeting of CEOs in London in early 2017. What began as an exploratory discussion between players across the investment chain, has grown into a robust endeavor: building on existing initiatives, academic work, and the advice of an advisory council, the EPIC participants have identified and developed metrics which will begin to help businesses better articulate the value they create for investors and other stakeholders.

The Long Term Value Framework, which was further developed over the course of EPIC, lies at the heart of these efforts. It provides principles, guidance and tools for companies to better articulate their long-term performance. And today, it is open-sourced for any company to use and build upon.

The progress made during this project is tremendously important, but it is just a first crucial step towards our vision of a world where long-term thinking is the norm, and organizations are empowered to create sustainable, inclusive growth. To reach this goal, we need companies and investors everywhere to play their part over the coming years.

Below the Coalition for Inclusive Capitalism sets out specific recommendations for each group of players along the investment chain to make our vision a reality.

Companies

We encourage companies to:

Select and develop metrics and narrative appropriate to their business

Companies need to go beyond talking generally about long-term value creation. They need to more precisely explain how they create value in key areas of interest for investors and other relevant stakeholders. Using the Long Term Value Framework, companies can identify and develop metrics to better articulate their long-term equity narrative to investors, while simultaneously helping other stakeholders understand how they create value.

Review and change current reporting practices

More disclosure is not necessarily the answer. But better reporting might be. So, rather than increasing the volume of reporting, we encourage companies to report more relevant and comparable information on the things that really matter in the long term. Such reporting should provide insights into a company's long-term plans by periodically reporting consistent metrics and supporting narrative. Also, in order for the metrics and narrative to be used by investors,

an appropriate level of assurance needs to be provided on the information reported. As datasets, methodologies and technologies improve over the coming years, so should the level of assurance on the associated information reported by companies.

To change reporting practices more broadly, we urge companies in every sector to adopt the EPIC metrics that are appropriate for them and create a critical mass for change. Some of the participating companies in the healthcare, consumer goods and industrials sectors have already started to review and amend their current reporting practices as a result of the project findings. We need more peers in these industries and others to join them and help expand this work. By doing so, companies will create the data that will enable academics to conduct research on the relationships between financial value and the other value areas, publish the empirical evidence of these relationships and effectively reinforce the learning and adoption process.

We are mindful that the project outputs do not represent a final, comprehensive answer. But we believe that the proposed metrics, founded on the practical experience of 31 companies and endorsed by global business leaders, will help catalyze wider change.

Asset managers

We encourage asset managers to:

Engage more strategically with companies

Asset managers, individually and collectively through initiatives like EPIC, have a critical role in urging corporations to articulate how they will create value over the long term. We recommend that they be more specific in their information requirements and ask for comparable metrics and assured data. We believe that the development of meaningful metrics is important as asset managers may not be able to incorporate, integrate or consider these metrics until they have been disclosed and tested for materiality and relevance to their asset class and investment strategy.

Over the course of the project, asset managers and companies invested significant time to understand each other's perspectives; both said they mutually benefited from this dialogue. These discussions yielded important recommendations: asset managers indicated they would benefit from more standardized metrics being disclosed by companies in each sector. Portfolio managers told us that at the very least this will allow them to ask better questions and engage in a more meaningful way with management. It will also facilitate a more meaningful comparison of companies' performance over the short, medium and long term.

Investor initiatives such as FCLTGlobal⁴³ and the Investor Stewardship Group have created tools to help asset managers with strategic engagement. Investors could, for example, engage more strategically with specific companies, as opposed to engaging in the same manner with all companies. That might mean focusing on the largest exposures, the most time sensitive or challenging issues, or on specific regions or investment themes.

In addition, asset managers should ask more questions about long-term performance on investor calls and encourage management to better balance reporting between short-term and long-term metrics.

Further explore the link between intangibles and financial value

Despite increased attention and greater sophistication in understanding intangible value, there is still much progress that needs to be made to clearly link these aspects of business to long-term financial performance. So, going forward, we urge asset managers to play a role in testing the metrics in different categories of value and long-term financial performance. Academic research is focused on this area, but the business community has an important role to play, too.

The role of academics

During EPIC we had a number of academics working with the participant-led working groups. All of the feedback indicated that it was very useful to have the support of academics, as they brought a wealth of knowledge to the table and delivered robust analysis to support the working groups' conclusions. We believe academics have an important role to play going forward. By collaborating with asset managers and others along the investment chain they can provide academic rigor to future work by testing correlation and causation between the long-term value metrics and financial performance to encourage widespread adoption.

⁴³ FCLTGlobal (2018). We Need to Talk: Driving Long-term Value Through the Investor/Corporate Dialogue. https://www.fcltglobal.org/docs/default-source/idea-exchange/we-need-to-talk---driving-long-term-value-through-the-investor-corporate-dialogue.pdf?sfvrsn=d7ec278c_2

Asset owners

We encourage asset owners to:

Set and communicate longer-term mandates to asset managers

Asset owners, like asset managers, are far from homogeneous. They include sovereign wealth funds, pension funds and institutional investors. They may also manage some of their assets internally, and as such act in a similar way to asset managers.

But ultimately, they all have an important role in setting the tone of the debate and promoting long-term thinking in the investment chain. One way they can embed long-term thinking with asset managers is by setting the length of investment mandates. Currently, mandates are often considerably shorter than the asset owners' long-term commitments. Encouragingly, some of the participating asset owners have already started to change their mandates.

Actively engage in the debate

A number of asset owners acknowledge that they need to play a more active and vocal role in encouraging the investment community to focus more on long-term time horizons. In addition to joining the debate, this can also help create standards, clarify fiduciary responsibilities, and invest in research to encourage companies to amend their mandates so that they focus more on the long term.

Some asset owners have already started to take a long-term approach through various initiatives, including the Strategic Investor Initiative, One Planet Sovereign Wealth Funds and FCLTGlobal.



Looking forward

While EPIC has made significant progress, we know that our work is just the beginning. This project is only an intermediate step on a much longer journey toward embedding long-term value in the business and investment community.

To succeed in fully realizing our vision, more sector-specific metrics are needed – and we need more businesses across the investment chain to make a clear and consistent case for applying them. We need asset managers to further test the metrics, use them to evaluate companies, and specify their information requirements. And we need asset owners to mandate their asset managers to use the metrics. This is the level of engagement we need if we want these metrics to be more widely adopted.

Participants agree that they have greatly benefited from the open dialogue over the course of the project. Companies, for example, were keen to understand which data and metrics asset managers are using in their investment process.

Given the importance of this open and ongoing dialogue, companies should invest in strategic engagement with their key investors – and vice-versa.

More broadly, we believe existing initiatives in this space would benefit from further convergence and collaboration to provide an open forum to move the EPIC work forward. It should enable ongoing dialogue between companies, asset managers and asset owners, and bring other players into the conversation.

The findings of the project do not represent a comprehensive or definitive solution to all the problems we outlined in the introduction. But we believe that, by proposing real metrics founded on the practical experiences of some of the world's top companies and investors, these findings are an important step toward addressing the challenges ahead.

Detailed guidance

09

Introducing the guidance

What is the framework?

The Long Term Value Framework aims to enable companies to better measure, compare and communicate the value they create for investors and other stakeholders.

The framework helps companies identify metrics to communicate how their business creates long-term value. It also provides a guide for companies to develop a narrative explaining the context of their business and the metrics chosen.

Ultimately, the metrics and narrative will help investors to better assess a company's future long-term performance, beyond traditional short-term financial measures.

Who developed the framework and how will it evolve?

The framework was initiated by EY in collaboration with the University of Cambridge and further developed during the Embankment Project for Inclusive Capitalism. It has been rigorously applied and tested by the members of this project to ensure the outcome is robust and useful for both companies and investors. The framework builds on a wealth of existing initiatives, standards, methodologies and best practices.

The framework and guidance is open source. We expect it to evolve as it is applied, extended and improved in the future.

Who is the framework and guidance for?

The framework can be applied by many users and in a range of contexts, including by companies and investors alike.

The detailed guidance in this section is primarily aimed at companies. Practitioners in the following business functions can use the guidance, for instance:

- **Corporate and public affairs professionals:** To inform stakeholder (e.g. regulator) dialogues or annual reporting
- **Finance professionals:** To identify measures of performance in financial and non-financial terms
- **Investor relations professionals:** To better articulate the long-term equity narrative
- **Strategy and operations professionals:** To inform strategy, investment or supply chain decisions

This list is not exhaustive and practitioners in other functions can benefit from applying the framework.

We appreciate that users of this guidance may be familiar with components of the framework, and may have worked on elements that the framework draws on for a number of years or even decades (e.g. classical value driver analyses, valuation techniques).

How can the guidance be used?

This section provides an overview of the four steps of the framework, followed by detailed guidance on each step.

We explain how to identify, develop and validate metrics for long-term value. It includes approaches, methods, templates and best practices companies can use to apply the four step approach.

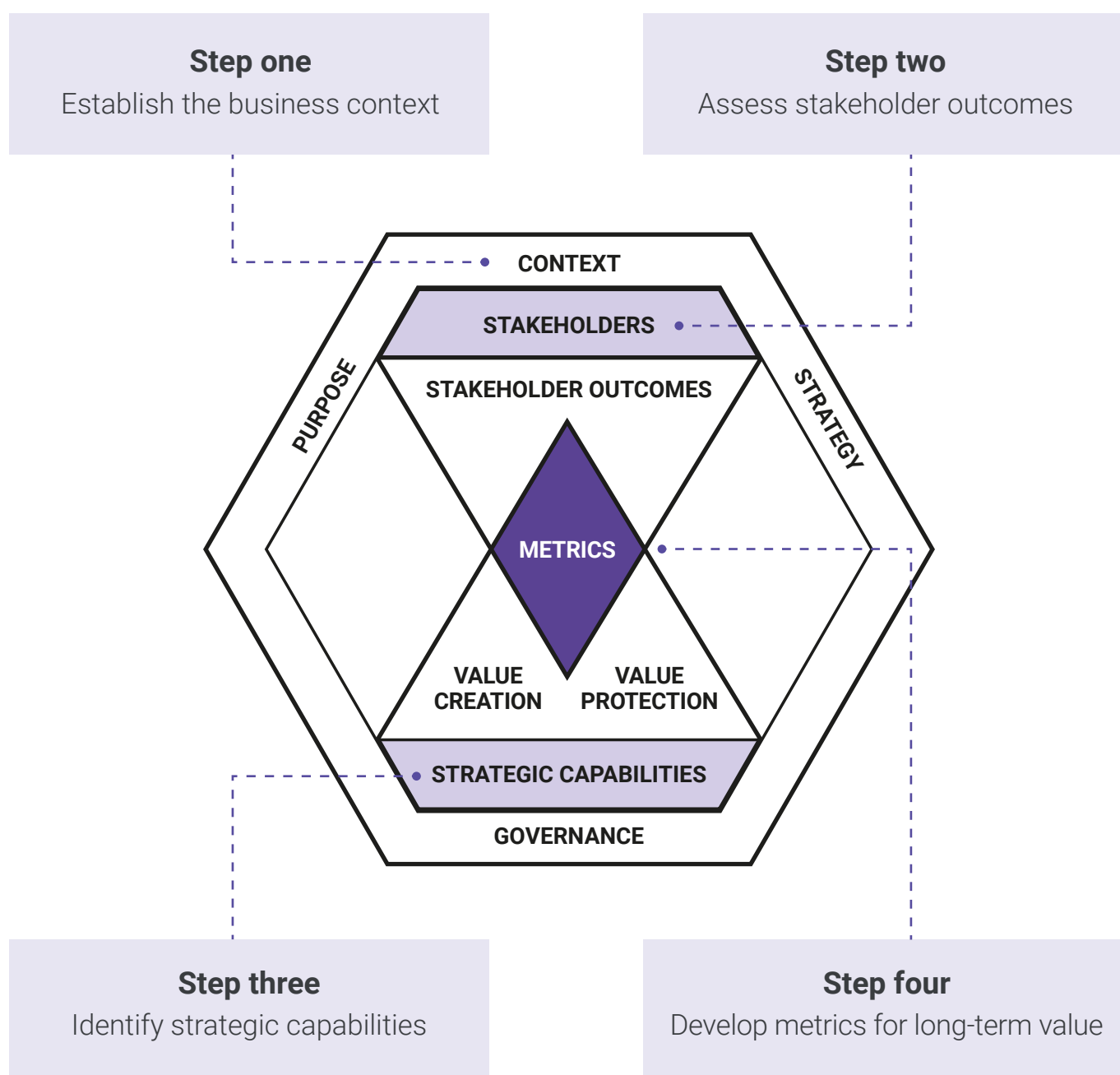
We recommend users start at step one of the guidance and follow the steps in order. However, practitioners from companies that already have some of the components in place (e.g. outcomes-focused stakeholder engagement) may choose to apply specific steps of the guidance only.

All terms used in the guidance are clarified in the glossary.

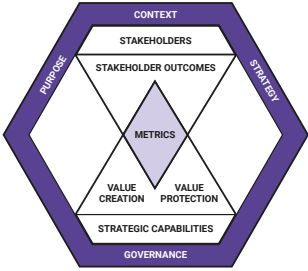
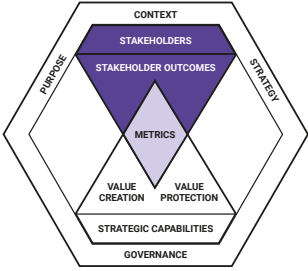
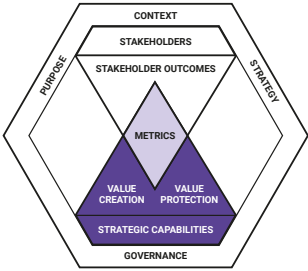
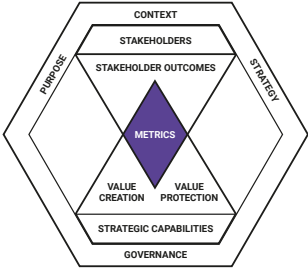
Overview of the guidance

A four step process to develop metrics for long-term value

Companies can use this approach to better articulate to investors how they create and measure long-term value.

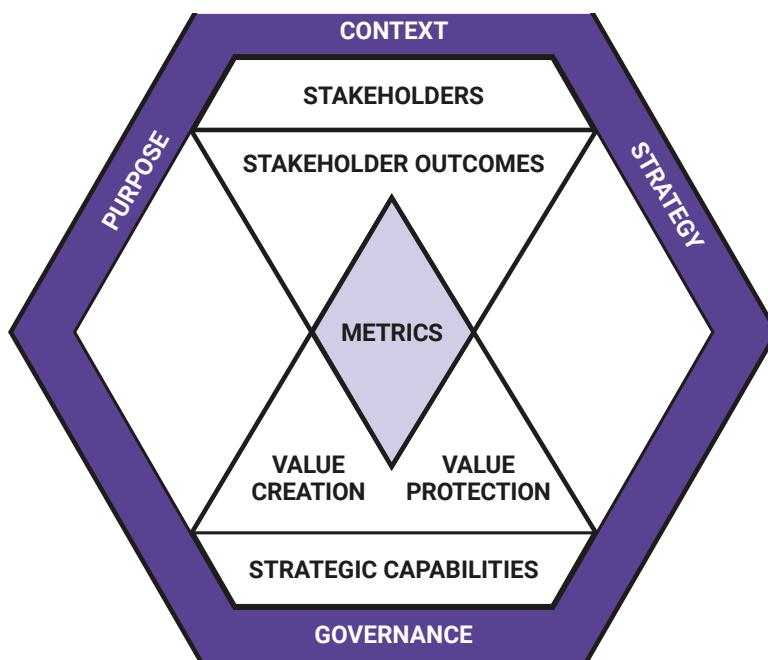


Detailed view of the guidance

	Step	Output
	Step one: Establish the business context - Review the context the business operates in using existing analyses of global megatrends and relevant drivers of change - Review the company's purpose and its implications for stakeholders - Review the company's strategy, governance and business model	- Clear view of the company's strategic priorities and operating context - First draft of stakeholder outcomes
	Step two: Assess stakeholder outcomes - Identify the stakeholders that are most material to the company by drawing on existing stakeholder analyses - Map stakeholder outcomes to the value framework using a stakeholder outcomes matrix - Prioritize and validate the stakeholder outcomes	Validated stakeholder outcomes matrix
	Step three: Identify strategic capabilities - Identify the value levers required to deliver stakeholder outcomes - Identify the strategic capabilities required to deliver on stakeholder outcomes	- Value levers mapped against stakeholder outcomes - Strategic capabilities mapped against value levers
	Step four: Develop metrics for long-term value - Identify metrics for long-term value based on stakeholder outcomes and strategic capabilities - Validate the metrics using five qualifying criteria and seven principles to ensure robustness and completeness - Further develop the metrics and narrative to provide context for investors	- Long list of metrics - Validated short list of metrics - Narrative to support metrics - Metric improvement and development plans

Step 1: Establish the business context

In step 1, we review the business context, purpose, strategy and governance to understand the major drivers of value within the company. Each of the three sub-steps can be completed by drawing on existing information. The goal is to review the business context and kick-start thinking to inform the stakeholder analysis carried out in later steps of the framework.



In this step:

Output

1a	Context What trends will impact the company's business model?	 Clear articulation of the current and potential future context the company operates in
1b	Purpose Why does the company exist?	 Clear articulation of the company's purpose and its possible implications for stakeholders
1c	Strategy and governance Has the company incorporated appropriate leadership structures, policies and incentives to achieve its purpose and strategy?	 Clear understanding of the company's strategy and governance

Key terms

Context: The context within which the company operates, encompassing macroeconomic, societal, technological, political and market trends, as well as its business model and those of its competitors.

Purpose: A clearly defined purpose is an aspirational affirmation for being in business, grounded in a broader societal context.

Strategy: Strategy lies at the heart of a company's growth story by guiding its short, medium and long term purpose, goals and objectives. A company's strategy provides the best indication of its future direction, and communicates this direction to investors and other stakeholders.

Governance: The structures and processes designed to direct and control a company. It defines the rights and responsibilities of a company's stakeholders and the procedures to ensure transparency and accountability of the business.

Step 1a: Context

In step 1a we analyze the external macro environment that companies operate in, to answer the question 'which trends will impact the effectiveness of the business model?'. Relevant external factors include macroeconomic, social, technological, political and market trends. By analyzing this context, companies can deepen their understanding of trends that may affect the business and its stakeholders over time.

Objective – Why are we doing this?

- To identify and act on emerging risks and opportunities arising from the environment in which the business operates.
- To understand the business context and provide critical input into identifying stakeholder outcomes and corresponding value levers.

Scope – What are we doing?

- Broad analysis of the drivers of change within the sector, as well as global megatrends across political, economic, social, technological, legal and environmental spheres.
- Understanding how these megatrends will change over time and the potential impact on stakeholders.

Approach – How can we do this?

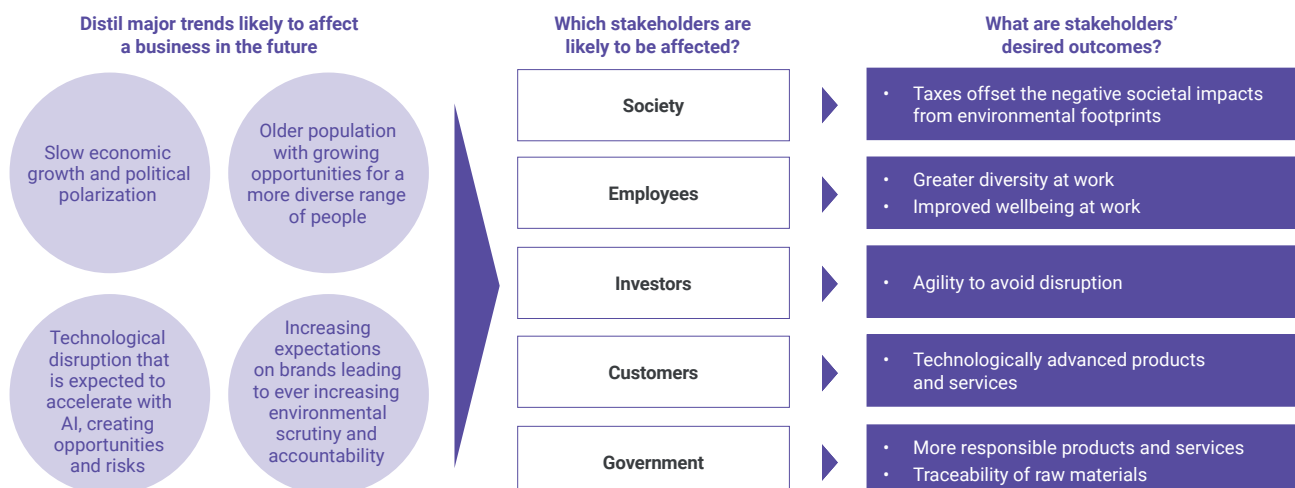
- Draw on any existing internal analyses where possible. These might include:
 - Established context analysis tools such as Political, Economic, Social Technological, Legal and Environmental (PESTLE) analysis; Committee of Sponsoring Organizations' (COSO) frameworks; Porter's Five Forces analysis;
 - Future scenarios analysis, particularly on megatrends; and
 - Company or sector-specific approaches using internal proprietary knowledge and external data.

Output – What are the outputs?

- Clear articulation of the current and potential future context the business operates in.
- This early thinking on the changing business environment and its potential impact on stakeholders will inform step 2 (stakeholder outcomes) and step 3 (strategic capabilities).

Example – Analyzing business context to understand stakeholders' outcomes

In this example, a business has analyzed the context in which it operates over a 5-10 year time frame. The analysis considers political, economic, social, technological, legal and environmental (PESTLE) factors to identify the current and future trends potentially affecting the business, as well as identifying the desired outcomes of its stakeholders as a result of these trends. The approach below builds on insights from existing analysis.



Step 1b: Purpose

A clearly defined company purpose is an aspirational affirmation of why a business exists. While there can be significant differences in the meaning of 'purpose' from one business to the next, a more expansive, human-centered, aspirational definition of purpose is emerging across industries and geographies. This broader understanding of corporate purpose includes bringing value to customers, benefiting employees and even wider society. In this step, we review the existing company purpose to assess the extent to which it drives outcomes for a range of internal and external stakeholders.

Objective – Why are we doing this?

- To understand the company's existing purpose and inherent 'reason for being' and why it exists.
- To articulate how it meets the needs of different stakeholders and the problem it is trying to solve.

Scope – What are we doing?

- Deepening understanding of a company's purpose and how it is relevant for its key stakeholders.

Approach – How can we do this?

- Review the company's existing purpose and mission statement.
- Develop an initial list of stakeholders who are integral to a company's purpose.
- Consider what outcomes the purpose aims to deliver to these stakeholders.

Output – What are the outputs?

- Clear articulation of the company's purpose and its possible implications for stakeholders.
- This early thinking on purpose will help inform the stakeholder analysis conducted in steps 2 and 3.

Example: Analyzing business purpose to understand stakeholders' outcomes

In this example, a company has a clearly defined purpose. It is able to measure and communicate how successful it is at fulfilling its reason for being, as well as identifying the desired outcomes of its key stakeholders.

What is the company's purpose?

“ Enhancing quality of life and contributing to a better working world through our innovative products ”

Which stakeholders are affected by the purpose?

Society
Employees
Investors
Customers
Government

What are the outcomes for each stakeholder if the purpose is fulfilled?

- Improved wellbeing through healthier living
- Longer life
- Innovative working environment
- Improved wellbeing from work
- High dividends as a result of innovative products
- Reduced healthcare expenditure resulting from healthier population
- Healthier population resulting in increased productivity and improved wellbeing

Step 1c: Strategy and governance

Strategy lies at the heart of a company's growth story and provides the best indication of the future direction of the business.

Governance structures are equally important to deliver the company's strategy. A well-functioning governance structure also gives comfort to investors and other stakeholders that a business is fulfilling its purpose and that its strategic objectives are aligned.

Understanding both the company's strategy and governance structure helps to identify how the business creates and protects value, and delivers outcomes for stakeholders.

Objective – Why are we doing this?

- To articulate how the company's strategy and business model are used to deliver its purpose, and allow it to operate successfully in the short, medium and long term.
- To understand how the company creates and protects different types of value.

Scope – What are we doing?

- Review of the business strategy and deepening understanding of:
 - The business model and its key components, and how competitive advantage is created;
 - The strategy and how it is focused on portfolio and positioning;
 - How the company is investing in capabilities that support longer-term growth; and
 - What is being done to build resilience in the business model.

Approach – How can we do this?

- Answer key questions on the business model, and the short, medium and long-term strategy of the business.
- Apply established strategy concepts such as Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, the UK Financial Reporting Council's (FRC) Guidance on the Strategic Report and governance concepts (e.g. South Africa's King IV Code).
- This will support thinking for step 2 on stakeholders and the outcomes they expect from the business strategy. This will also support thinking for step 3 on the value levers and strategic capabilities needed to deliver the business strategy.

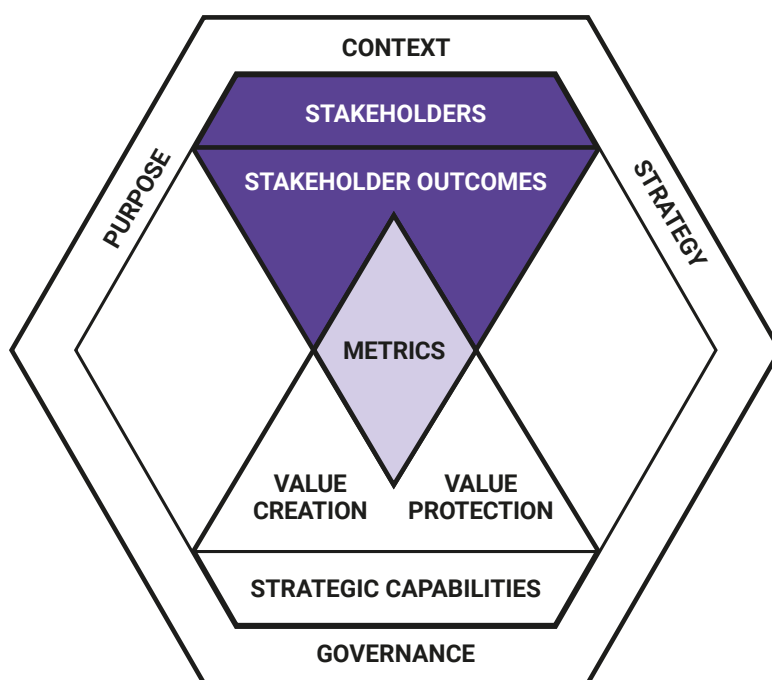
Output – What are the outputs?

- Analysis of the company's strategy to be used as:
 - Input for step 2 (key stakeholders and their desired outcomes); and
 - Input for step 3 (value levers and strategic capabilities).

Please see the glossary for an explanation of key terms including 'value levers' and 'strategic capabilities'.

Step 2: Assess stakeholder outcomes

In step 2 we identify which stakeholders are at the core of the company's value creation model and outline their expectations and desired outcomes. Draw on the business's existing understanding of stakeholders' needs to do this. Following the three sub-steps will deepen one's understanding of the relationship between stakeholder outcomes and the business's long-term value creation model across four types of value: financial, consumer, human and societal.



	In this step:	Output
2a	Identify stakeholders Which stakeholders are at the core of the company's value-creation model?	List of key stakeholders
2b	Map stakeholder outcomes What outcomes is the company aiming to deliver to meet stakeholder expectations?	Draft stakeholder outcomes matrix
2c	Validate stakeholder outcomes Do any stakeholders want the same outcomes? Are some outcomes more important than others?	Validated stakeholder outcomes matrix

Key terms

Stakeholder outcomes: the fundamental dimensions of performance that matter to stakeholders and are therefore most important (or 'material') to the business. The terms 'outcome' and 'impact' are used interchangeably in this guidance. For more information about outcomes and impacts, see page 105.

Step 2a: Identify stakeholders

All businesses have a wide range of stakeholders; some are considered to be more important ('material') than others to the business model or strategic objectives. In step 2a we identify the company's key stakeholders. Draw on any existing stakeholder analysis completed by the business. The thinking done in step 1c will be a useful starting point for this step.

Objective – Why are we doing this?

- To have a clear understanding of the company's key stakeholders.

Scope – What are we doing?

- Review of all key stakeholders, grouped together based on their value perspectives.
- Examples of stakeholder groups (under which several stakeholders with similar value perspectives may be grouped) include: Customers; investors; employees; suppliers; regulators; and communities.

Approach – How can we do this?

- Review the company's understanding of who its material stakeholders are to make a stakeholder list.
- Use existing internal or external stakeholder analyses and materiality assessments. If there is no internal stakeholder analysis to draw on, use external analysis done by industry peers.
- The following are examples of frameworks that could be used to identify stakeholders:
 - GRI (Global Reporting Initiative) Standards for sustainability reporting; and
 - The Social Capital Protocol.
- Complete a structured evaluation of the company's context, purpose, strategy and governance, using the key questions to the right.
- Define and categorize between three and ten material stakeholder groups.

Output – What are the outputs?

- Short list of grouped stakeholders.

Key questions

Identifying stakeholders and their outcomes

Business model

- Based on its business model, who are the company's key stakeholders?
- What are their desired outcomes?
- What value do the company's activities add?

Short-term strategy

- Based on its short-term competitive strategy, are the company's key stakeholders changing?
- Are key stakeholders' desired outcomes expected to change over the short term?

Medium-term strategy

- How will key stakeholders view the business in the next three to five years?

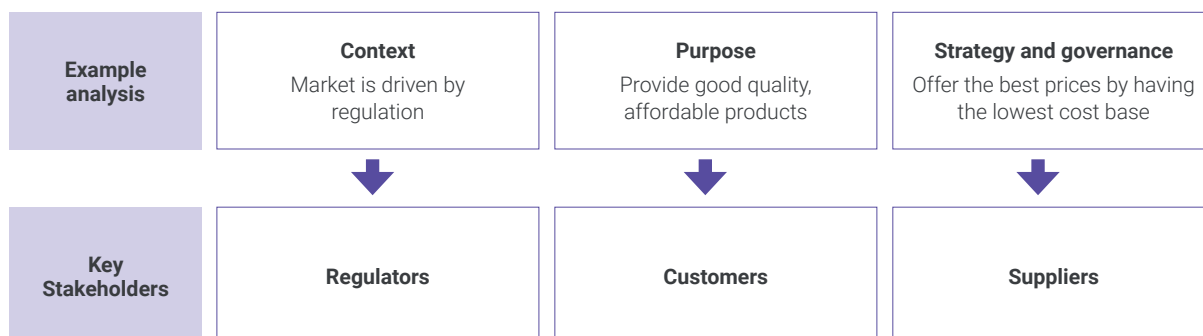
Long-term strategy

- What is the long-term vision for key stakeholders?

Example: Identifying and prioritizing stakeholders

In this example, a company has identified the stakeholder groups that are most material to its business model. The analysis draws on established materiality assessment techniques and considers the company's context, purpose, strategy and governance to draw up a list of possible stakeholder groups.

1 Consider **context, purpose, strategy** and **governance** along with established stakeholder analyses and materiality techniques



2 Long list of possible stakeholder groups

- Investors
- Consumers
- Suppliers
- Patients
- Customers
- Employees
- Governments and regulators
- NGOs and charities
- Scientific institutions
- Partners
- Others

3 Example of prioritized stakeholder groups

1. Investors
2. Customers
3. Regulators
4. Employees
5. Suppliers

Step 2b(i): Map stakeholder outcomes

The aim of this step is to understand how the company creates value for stakeholders, and how that in turn creates value for the business. This step builds on the work done in step 1c and 2a to identify stakeholders and their outcomes.

Objective – Why are we doing this?

- To analyze how the company creates value for its key stakeholders by meeting their desired outcomes, and how this contributes to the company's long-term value.

Scope – What are we doing?

- Map the stakeholders identified in steps 1 and 2a and their associated outcomes to the four underlying categories of long-term value identified in this framework (the four categories of value are explained on the next page).

Approach – How can we do this?

- Continue to identify stakeholder outcomes.
- Review existing frameworks and initiatives to identify further outcomes. Examples include: the IIRC framework; UN Sustainable Development Goals; Natural Capital Protocol; Social Capital Protocol; NYU Stern Center for Sustainable Business Monetization Methodology; and Boston Consulting Group Total Societal Impact methodology.
- Plot stakeholder outcomes on a matrix against the four categories of the long-term value framework (financial, consumer, human and societal).

Output – What are the outputs?

- Draft stakeholder outcomes matrix (see page 91).

Example: Mapping stakeholder outcomes

In this example, the company has identified what stakeholders expect the business to deliver on, in order to create value. The company has drawn on internal and external sources, including direct stakeholder feedback.

Investors

Consider investor interviews, analyst reports or event analyses (e.g. on stock price) to identify outcomes such as:

- Insulation from economic cycles
- Strong cash flows
- High and stable dividends

Employees

Research employer review sites (e.g. Glassdoor) or employee engagement surveys to establish outcomes such as:

- Career progression and satisfaction
- Competitive remuneration
- Flexible working, good holiday allowance and rewards for overtime

Customers

Perform customer surveys, complaints data or review sales data to identify outcomes such as:

- Affordable products
- Reliable service
- Product innovation

Governments

Establish outcomes through lobbying and other interactions with policy makers, such as:

- Regulatory requirements are met
- Contribution to the wider economy
- Considered tax policies
- Low carbon emissions

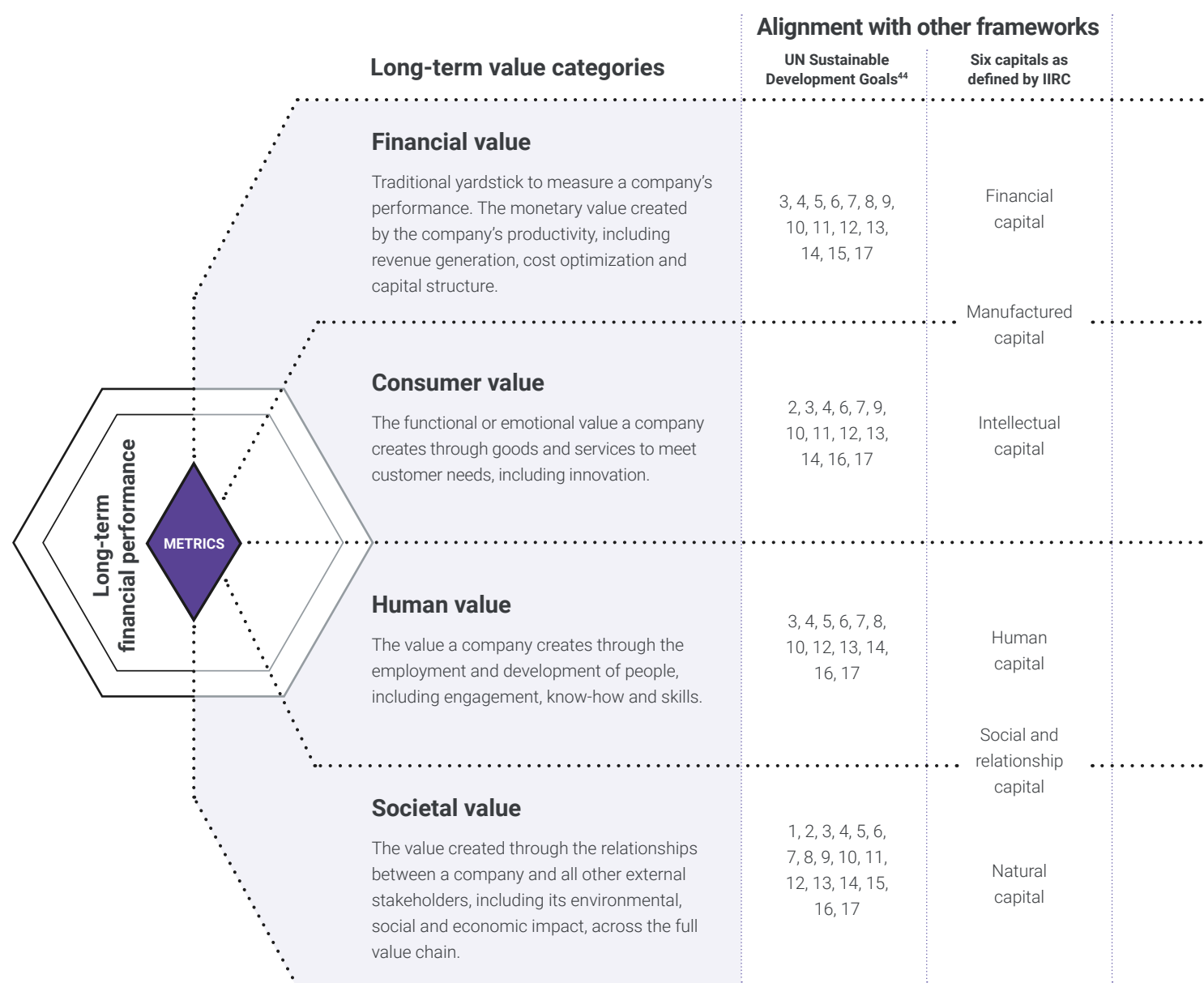
Suppliers

Identify outcomes by conducting supplier interviews or analyse purchasing data, for example:

- Established long-term relationship with buyer
- Consistently meeting payment terms
- Supporting attempts at innovation

Step 2b(ii): Map outcomes to the value framework

In this step we map the company's key stakeholder outcomes against four categories of long-term value that we have identified: financial, consumer, human and societal. This is designed to encourage companies to think beyond traditional concepts of financial value and identify other measures of long-term value. We recognize that some companies are already using other frameworks, such as the 'six capitals' identified by the International Integrated Reporting Council (IIRC). Our approach is designed to complement and build on existing initiatives and below we show how the four value categories align with other frameworks including the IIRC and the UN SDGs.



⁴⁴ Please see the following source for the mapping of the SDGs against the six capitals: http://integratedreporting.org/wp-content/uploads/2017/09/SDGs-and-the-integrated-report_summary2.pdf.

Example: Stakeholder outcomes matrix

Here we map stakeholder outcomes against the four categories of value within the framework. The aim is to consider how the company creates value for stakeholders beyond purely financial terms, to include wider consumer, human and societal outcomes. The results are summarized below in the stakeholder outcomes matrix. The matrix helps to identify gaps in the types of value delivered for different stakeholder groups.

	Investors	Customers	Suppliers	Employees	Governments
Financial value	- Insulation from economic cycles - Strong cash flows - High and stable dividends		Consistently meet payment terms	Competitive remuneration	Considered tax policies
Consumer value		- Healthy products - Reliable service - Product innovation/ category leadership	Support attempts at innovation		
Human value				Flexible working opportunities	
Societal value					- Contribution to the wider economy - Low carbon emissions

Step 2c: Validate stakeholder outcomes

In step 2c we prioritize and finalize the draft stakeholder outcomes matrix. This is an opportunity to identify any interdependencies (where one outcome is shared by multiple stakeholder groups, or the outcome is dependent on achieving another). One may also identify stakeholder outcome gaps, flagging up areas for further analysis and validation of stakeholder outcomes.

Objective – Why are we doing this?

- To confirm that the outcomes identified are correct, and that they are the most material ones to stakeholders.
- To understand which outcomes may have a higher priority than others, which will help to determine strategic priorities and resource allocation.

Scope – What are we doing?

- Review and prioritize the outcomes identified in the draft stakeholder outcomes matrix.
- Spotting any potential interdependencies or gaps in stakeholder outcomes.

Approach – How can we do this?

- Validate the draft stakeholder outcomes matrix by interacting directly with stakeholders, management and by reviewing public statements made by the company.
- Existing tools may be useful for weighing stakeholder views and preferences, which include: multi-criteria decision-making models (such as ELECTRE (Elimination and Choice Expressing Reality), PROMETHEE (Preference Ranking Organization Method for Enrichment Evaluation), TOPSIS (Technique for Order of Preference by Similarity to Ideal Solution)) or the Analytical Hierarchy Process (AHP), a structured technique for organizing and analyzing complex decisions.
- Investigate any interdependencies and gaps such as missing stakeholder groups or outcomes.
- Order the outcomes from highest to lowest priority for each stakeholder grouping.

Output – What are the outputs?

- Prioritized stakeholder outcomes matrix

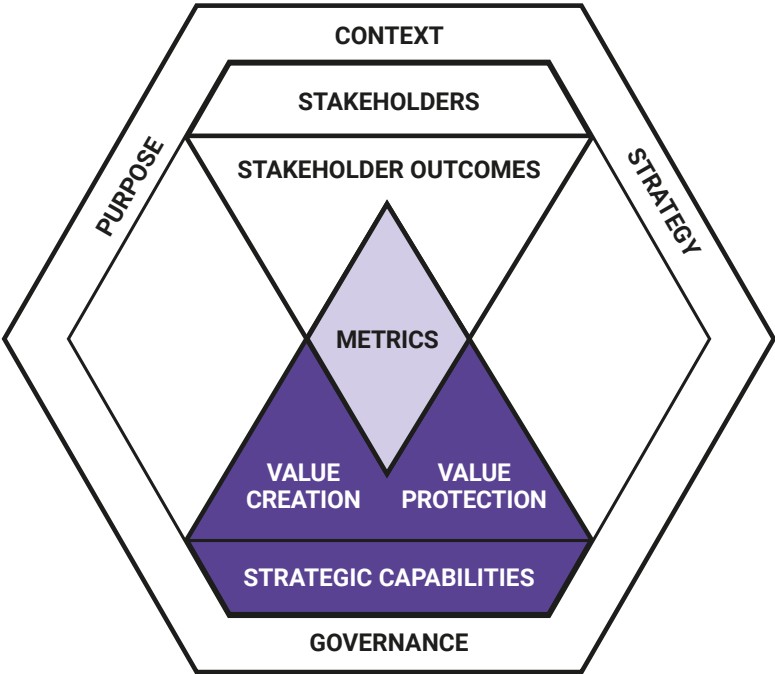
Example: Prioritized stakeholder outcomes matrix

This examples shows how the draft stakeholder outcomes have been validated and prioritized. The outcomes are numbered in order of priority and potential gaps and interdependencies surfaced as part of this process. Further stakeholder outcomes were identified and added to the original draft matrix such as brand trust and health outcomes.

	Investors	Customers	Suppliers	Employees	Governments
Financial value	i. Strong cash flows ii. High and stable dividends iii. Insulation from economic cycles	i. Competitive pricing	i. Consistently meet payment terms	i. Competitive remuneration	i. Considered tax policies
Consumer value	i. Brand trust ii. Robust new product pipeline	i. Reliable service ii. Healthy products iii. Product innovation/ category leadership iv. Global network	i. Support attempts at innovation	i. Voice of the customer	i. Competitive/anti-trust market
Human value	i. Employee satisfaction ii. Employee turnover iii. Strong innovation culture	i. Fair and respectful employment practices	i. Highly trained workforce	i. Employee satisfaction ii. Flexible working opportunities iii. Diversity and inclusion culture	i. Fair and respectful employment practices
Societal value	i. Health outcomes ii. Low carbon intensity	i. Health outcomes	i. Low carbon intensity ii. Local sourcing	i. Community investment	i. Contribution to the wider economy ii. Low carbon intensity

Step 3: Identify strategic capabilities

In step 3 the goal is to understand how a company can deliver the stakeholder outcomes identified in step 2. We consider the underlying drivers of value creation and protection ('value levers') and the resources ('strategic capabilities') needed to deliver stakeholder outcomes.



In this step:		Output
3a	Identify value levers What underlying drivers can a company use to create or protect long-term value?	Value levers mapped against stakeholder outcomes
3b	Identify strategic capabilities What resources and capabilities are needed to create long-term value?	Strategic capabilities mapped against value levers

Key terms

Value lever: A factor that influences or affects value. Also known as a 'value driver'.

Strategic capability: Strategic capabilities refer to bundles of strategic skills that companies can deploy to create long-term value for stakeholders. They are created through effective development, preservation and deployment of resources in line with the company's stated purpose. Strategic capabilities are also known as 'strategic assets', and are identified by Professor Baruch Lev and Feng Gu in 'The End of Accounting and the Path Forward for Investors and Managers'.⁴⁵

Value creation: To create value, the value of outputs is greater than the value of inputs consumed, and therefore more than the value transferred between two parties.

Value protection: The physical and financial protection of tangible and intangible value by companies themselves, or by a third party in the long term. It can be helpful to think of value protection as different categories of risk that need to be managed. For more information on the link between value protection and risk, see page 97.

⁴⁵ Lev, B. and Gu, F. (2016). The End of Accounting and the Path Forward for Investors and Managers. John Wiley & Sons, Inc., New Jersey.

Step 3a: Identify value levers

In this sub-step, we define value levers – the underlying drivers and risks a company can use to create and protect long-term value. The four types of value (financial, consumer, human and societal) are broken down further into individual value levers and sub-levers. Identifying value creation and protection levers helps a company to understand its ability to meet its goals and create long-term value. We recognize that the value a company generates is not always positive: companies can also decrease value, which means they create negative value. For example, a company that causes environmental damage is creating negative environmental value.

Objective – Why are we doing this?

- To identify and define value levers required to deliver stakeholder outcomes.

Scope – What are we doing?

- Develop a set of value levers specific to the company, based on suggested categories provided in the framework.

Approach – How can we do this?

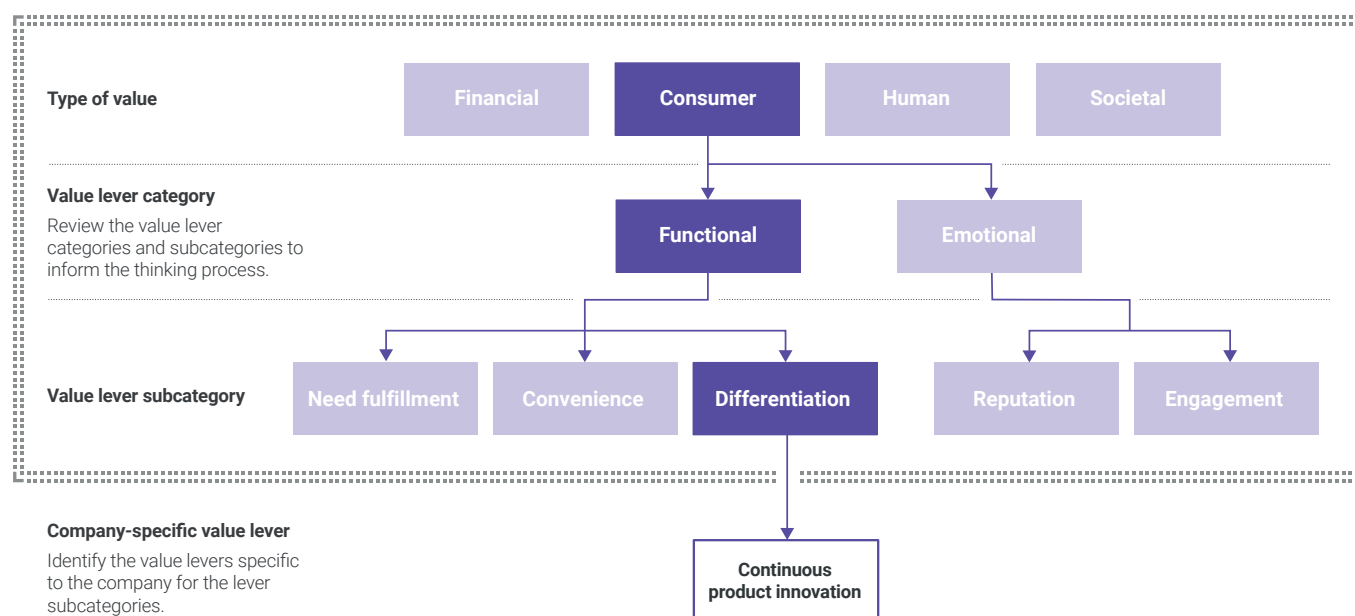
- Each of the four categories of value are broken down into underlying levers that deliver financial, consumer, human and societal value.
- The goal is to identify specific value levers for the company. We provide a detailed list of value lever categories and subcategories across the four types of value to inform the thinking process. Below we work through an example of a company-specific value lever for a sample company. A full list of value lever categories and subcategories are provided on pages 98-101.
- Refer back to the stakeholder outcomes matrix created in step 2 which can be found on page 91. Consider how each stakeholder outcome can be delivered, and what is needed for the company to deliver them.

Output – What are the outputs?

- Company-specific value levers mapped against stakeholder outcomes.

Identifying value levers

Use a value creation and value protection lens to understand how the company creates and protects value for stakeholders. Here we provide an example of one company-specific value lever (continuous product innovation), identified for one value category (consumer).



A full list of 13 value lever categories and 30 subcategories is provided on pages 98-101 for all four value categories.

Step 3b: Identify strategic capabilities

In step 3b we identify the resources needed to deliver stakeholder outcomes – known as ‘strategic capabilities’. These capabilities create competitive advantage for the business, and help it to create value over the long term. Strategic capabilities are **valuable, rare and difficult to imitate**.^{*}

Strategic capabilities are identified by determining the value creation and protection levers needed to deliver stakeholder outcomes. We recommend using a risk lens to identify the strategic capabilities needed to protect value.

Objective – Why are we doing this?

- To identify the strategic capabilities the company needs in order to ‘pull’ the value levers and achieve stakeholder outcomes.
- To understand the risks and threats that may prevent the company from delivering stakeholder outcomes (i.e. how it can protect value).

Scope – What are we doing?

- Identify a set of strategic capabilities for each value lever outlined in step 3a.
- Explore how the company can create and protect value.
- Use a risk lens to understand value protection.

Approach – How can we do this?

- Build on the output from step 3a, and use the questions on the right. For each value lever identified, determine the strategic capabilities required to ‘pull’ the lever.
- Use two lenses to identify the strategic capabilities the business needs:
 - Value creation lens:** how will the company create value for stakeholders? How can it deliver stakeholder outcomes?
 - Value protection (risk) lens:** how can the company protect value? What risks and threats need to be mitigated in order to meet stakeholders’ needs? See the next page for more guidance on this.
- Use existing in-house risk analyses (such as the Enterprise Risk Management Framework) or various external frameworks (such as the IIRC framework).

Output – What are the outputs?

- Strategic capabilities mapped against each of the value levers identified in step 3a. The final output from this step will be used as a basis for step 4.

Key questions

Business model

- How does the company differentiate itself? What is the operating model?
- What are the key value levers that are used to create different types of value?
- How does this differ to other companies in the same sector?

Short-term strategy

- How well positioned is the company’s portfolio (what is its market attractiveness or competitive position)?
- How is the company addressing competitive threats, including from new tech-enabled entrants?
- Does the company plan on making any strategic acquisitions in the next 12-18 months?

Medium-term strategy

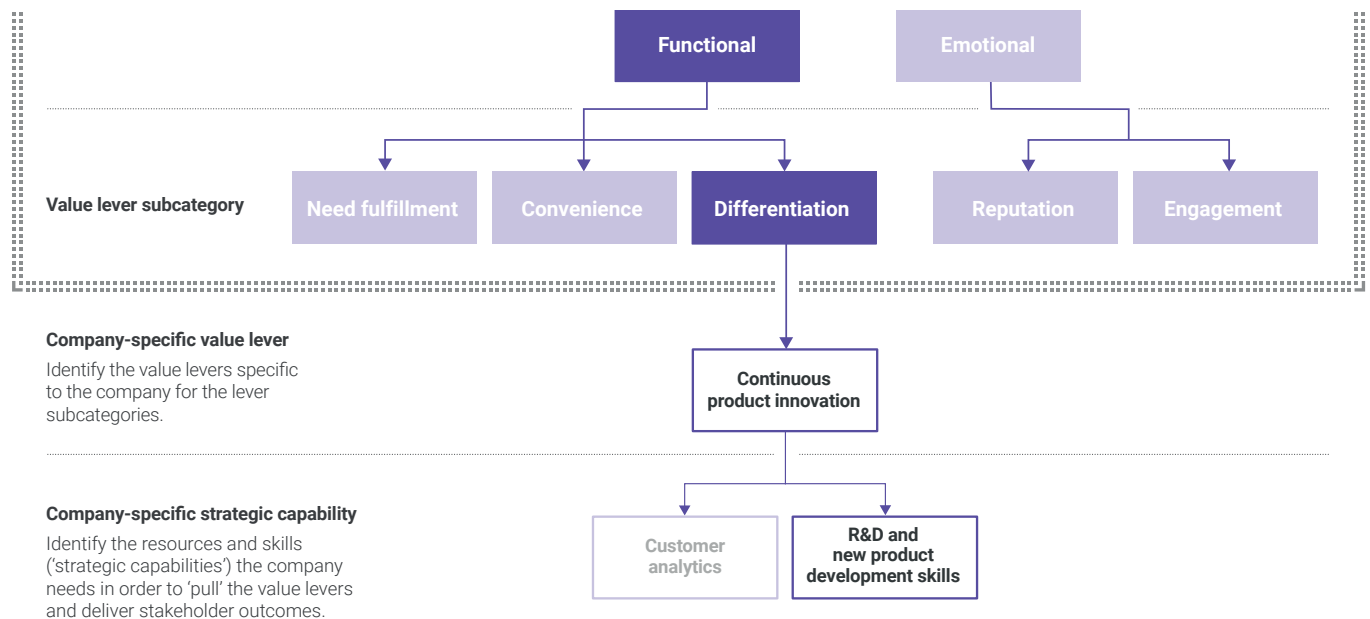
- How is the company investing in capabilities that support medium and longer-term growth?
- How is the company transitioning its portfolio to exploit or avoid the negative impacts of global megatrends?
- What are the key strengths, capabilities, and sources of competitive advantage that the company is creating in the medium term?

Long-term strategy

- What is the company doing to build resilience into its business model. How will it protect its reputation and maintain trust and capability?
- How will the company overcome challenger brands and disruptor business models and technologies?

⁴⁶ For more information on the concept and its value for performance measurement purposes please see Lev, B. and Gu, F. (2016). The End of Accounting and the Path Forward for Investors and Managers. John Wiley & Sons, Inc., New Jersey.

Identifying strategic capabilities



Using a value protection (risk) lens

As part of the process of identifying strategic capabilities, it can be helpful to use a risk lens to understand how the company protects value. Protecting the business from material risks is critical for the longevity of the business model and for improving the quality of earnings.

Different categories of risk need to be managed to protect value; these can be defined as preventable, strategic or external. For each type, identify the material risks that could have a significant impact on the company if they occurred. Input from other risk management frameworks (such as the Enterprise Risk Management Framework) can be used to identify risks that are significant enough to impact stakeholder outcomes and therefore affect company value.

	Preventable	Strategic	External
Definition	The objective of managing this category of risks is to prevent them. These risks emerge from within the company's sphere of influence or control. Management can take action to avoid the risk occurring, or reduce the likelihood of a risk materializing, for example by implementing policies and standards.	The objective of managing these risks is to strike a balance between uncertainties and unexploited opportunities in the company's strategy.	The objective of managing these risks is to limit their impact. These risks emerge from outside the company's sphere of influence or control. The likelihood of risk cannot be controlled, however the impact can be mitigated through scenario, contingency planning and threat scanning.
Example risks	The prospect of loss resulting from inadequate or failed procedures, systems or policies, employee errors, systems failures, product quality issues, health and safety incidents, data security, fraud.	Inability to innovate, lag in new product development, internal resources not allocated appropriately, inability to respond to market dynamics, inability to deliver the business growth plan.	Natural disasters, crossing planetary boundaries (see Planetary Boundaries Framework), terrorism, political and regulatory instability, pandemics, unexpected major macroeconomic shifts.
Example strategic capabilities	- Health and safety culture - Culture of continuous improvement - Hedging of resources used and supply chain resilience - Due diligence procedures - Internal and external audit function	- Ability to respond to changing consumer preferences - Strong R&D function - Culture of adopting innovations - Ability to respond to changing regulatory environments - Readiness to adopt and use digital technology	Comprehensive mitigation and business continuity plans in the event of external risks

The following tables contain detailed lists of value levers and their subcategories for each of the four types of value: financial, consumer, human and societal. These categories and subcategories are fixed, and are designed to help identify specific value levers and strategic capabilities for the company. Example company-specific value levers, and example strategic capabilities needed to 'pull' each lever are also listed. The stakeholder outcomes identified in step 2 are influenced by a range of value levers, and require different strategic capabilities to deliver the outcomes.

Financial value lever categories

Predefined long-term value categories applicable to all companies		Company-specific examples	
Value lever category	Value lever subcategory	Example value levers	Example strategic capabilities
Revenue Value generated through sales of goods and services	➔ Market size The future size of markets which are addressable by the company with its current or potential products or services	➔ Exposure to high growth/emerging markets	➔ Distribution footprint in key markets
	➔ Market share Evolution of the share the business has of the total addressable market value, as defined above		➔ Customized product portfolio
			➔ Customer spend
	➔ Sales and marketing expertise		
Margin Value generated by the efficiency of the company's operational structure through its production of goods and services	➔ Value chain Adjustments to any element of a company's value chain that impact margin through changes in costs or price realization	➔ Acquisition of raw materials	➔ Procurement scale
	➔ Process improvement Changes to a company's operational processes which impact its margin through increasing productive efficiency or price realization		➔ Mature procurement function
			➔ Throughput (waste, downtime, complexity)
Capital allocation Value created by a company's ability to generate cash above its capital requirements	➔ Asset allocation efficiency Optimized deployment and utilization of assets to maximize cash flow delivery over the long term for an equivalent risk level	➔ Utilization	➔ Global leverage over capital allocation
	➔ Net working capital Management of the aggregate amount of all current assets and current liabilities to reduce cash requirements		➔ Effective demand planning
			➔ Current liabilities
		➔ Aligned incentives for cash management	
Capital structure Value generated from use of different capital structures to impact financing cost and risk	➔ Debt Adjustments in the level and type of a business' borrowings to minimize financing costs for a given level of risk	➔ Debt types by risk level (loans, bonds, debentures)	➔ Access to corporate finance expertise
	Equity Adjustments in the value of the shares issued by an organization to maximize financial returns for a given level of risk	➔ Share types by risk level (ordinary, preferred)	➔ Access to corporate finance expertise

Consumer value lever categories

Predefined long-term value categories applicable to all companies		Company-specific examples	
Value lever category	Value lever subcategory	Example value levers	Example strategic capabilities
Functional The extent to which the product/service meets the functional consumer's need	→ Need fulfillment Measure of the functionality, durability, style, workmanship, usefulness or benefits of a product or service	→ Product effectiveness in meeting basic consumer needs → Product durability or reliability	→ Customer insights
			→ R&D and new product development skills
			→ Quality assurance protocols
	→ Convenience Measure of the access, availability, and ease of purchase of a product or service	→ Customer access → Digital or mobile environment → Ordering simplicity → Order to delivery time	→ Distribution footprint in key markets
			→ Available inventory and supply chain
			→ Digital or mobile presence
	→ Differentiation Act of creating unique and valuable points of difference for products and services versus current options (through innovation) or competitors (for example using price as a differentiating factor)	→ Relative specification → Product model age → Service level or in-store experience → Innovation → Price premium or discount	→ Cross-functional product teams
			→ Customer research and analytics
			→ R&D and new product development skills
			→ Sales and pricing expertise
	→ Reputation Measure of consumers' trust in and perceptions of product/service credibility	→ Responsible leadership → Brand promise	→ Brand growth strategy
			→ Effective governance
Emotional The extent to which the product/service (i.e. brand) meets the emotional consumer's need	→ Engagement Measure of the benefits the consumer perceives are associated with a product/service beyond a single purchase (such as a sense of identity and belonging)	→ Social media engagement → Celebrity endorsement	→ Engaged workforce
			→ Social media presence
			→ Customer research and analytics

Human value lever categories

Predefined long-term value categories applicable to all companies		Company-specific examples	
Value lever category	Value lever subcategory	Example value levers	Example strategic capabilities
Leadership Value generated by leaders' capacity to develop and deliver strategy, and inspire people	→ Performance cadence Embedding a reliable performance management structure at multiple levels of the company	→ People management KPI design and reporting	→ Leadership training
			→ People management data analytics
	→ Top team diversity The more diverse a top team, the better the performance and quality of decision-making. By diversity we mean the mix of skills and backgrounds	→ Succession planning	→ People management data analytics
			→ Leadership talent pipeline
Workforce alignment Value generated by the stock, flow and development of people	→ Workforce planning Having the right capability to meet operational, service and financial objectives and coherent plans to achieve future resource needs	→ Team optimization	→ Performance management
			→ Planning and resourcing function
	→ Employee development The elements of the employee lifecycle (attraction, on-boarding, performance management, career development and retention) that contribute to developing employees to achieve current and future business goals	→ Personal development programs	→ Employee education and training function
			→ Individual professional development plans
Workforce performance The optimal and sustainable level of value generated by people	→ Output gearing Ensuring the optimum productivity of people, that it is focused on the right outputs, and is sustainable. Organizational agility in response to changes in the context and environment	→ Occupational health and wellbeing	→ Health and wellbeing reporting systems
			→ Health and safety programs
	→ Internal progression The ability to meet employee expectations for growth, recognition of high performance and retention of knowledge and capability	→ Career management	→ Human resources information system
			→ Effective line management
Engagement Value released from people's commitment to a company's goals and purpose	→ Culture A positive culture contributes to the individual's affinity with the place that they work, the people they work with and the values that they hold, resulting in increased performance and discretionary effort	→ Culture development program	→ Cultural alignment analysis
	→ Employee enablement The provision of facilities, tools and resources to achieve objectives	→ Flexible working	→ Mobile technology
			→ Human resources policies and processes

Societal value lever categories

Predefined long-term value categories applicable to all companies		Company-specific examples	
Value lever category	Value lever subcategory	Example value levers	Example strategic capabilities
Economic Economic value generated through the company's activities	→ Economic impact of products or services Economic value generated through the use and disposal of the company's products or services*	→ Increased economic productivity* → Economic efficiencies	→ Customer-centric R&D capabilities → Strong corporate governance
	→ Economic impact of operations and suppliers Economic value generated through the company's direct operations**	→ Procurement and supplier spending → Jobs created for employees and contractors → Taxes and other government revenues	→ Local sourcing and production model → Talent development programs → Strong corporate governance
	→ Other economic spill-over effects External economic value that can (indirectly) be attributed to the company's business activities	→ Infrastructure investment → Clustering (benefits of similar businesses grouped together in one location e.g. high-tech companies in Silicon Valley).	→ Transparent tax value chain → Relationships with industry peers and government
Social Social value generated by the company's activities for external stakeholders	→ Social impact of products or services Social value generated through the use of the company's products or services	→ Health and wellbeing → Capacity building → Privacy	→ Awareness in product development of human rights, health and wellbeing, capacity building and privacy-related matters
	→ Social impact of operations and suppliers Social value generated by the company's direct business activities for its external stakeholders (note: value creation for internal stakeholders is captured as part of the human value levers)	→ Capacity building, training and education** → Health and safety → Employment** → Human rights	→ Talent development program → HSE function → Human rights due diligence process
	→ Other social spill-over effects External value generated in the social domain that can (indirectly) be attributed to the company's business activities	→ Community investment (such as training and education) → Capacity building → Diversity leadership	→ Relationships with local communities and authorities → Philanthropic spending aligned to corporate strategy
Environmental Value generated through a company's activities in relation to the natural environment	→ Environmental impact of products or services Value generated through the use and disposal of a company's products or services in relation to the natural environment	→ Resource use (energy and water) through product use → Reusability, recycling and circularity of products → Waste → Biodiversity and land use	→ Innovative product design → HSE function
	→ Environmental impact of operations and suppliers Value generated through company's operations in relation to the natural environment	→ Resource use (energy and water) through suppliers' operations → Biodiversity and land use → Waste → Emissions to air, water and soil	→ Environment and waste management systems → Ability to re-engineer value chains to create closed-loop or circular economies
	→ Other environmental spill-over effects External value generated in relation to the natural environment that can (indirectly) be attributed to the company's business activities	→ Self-regulation or industry standard-setting (i.e. sector leadership) → Resource scarcity	→ HSE function

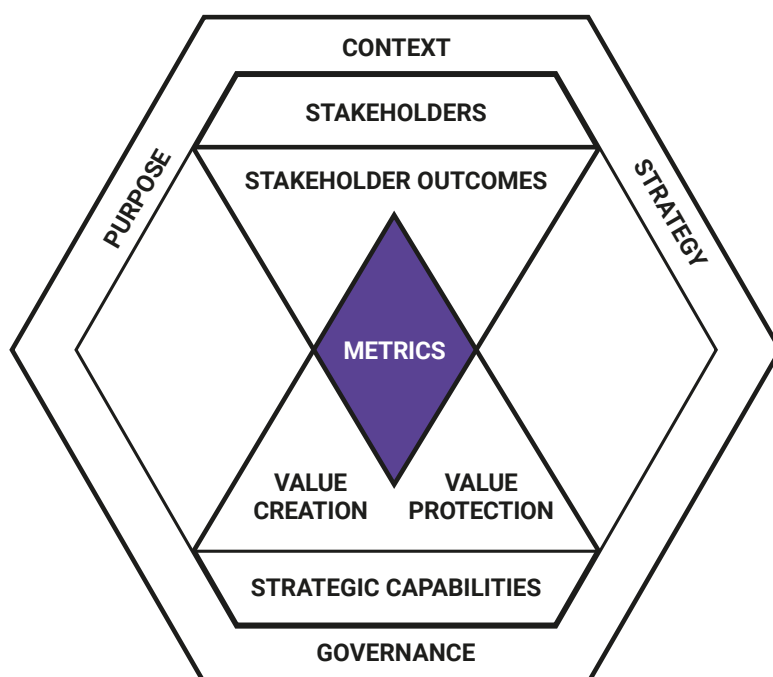
* Likely to be related to identified Consumer value levers

** Likely to be related to identified Human value levers

Step 4: Develop metrics for long-term value

In this final step, we present a process that companies can use to identify and develop metrics for long-term value, based on the strategic capabilities outlined in step 3. The metrics are either sector specific, universal or bespoke, and they measure to what extent stakeholder outcomes are met. They should be effective lead indicators for a company's ability to create long-term value.

To do this, we identify a long list of potential metrics, which are refined down to a short list using a set of five qualifying criteria and a further seven principles for metric development. We also encourage companies to develop a supporting narrative around the metrics chosen, to aid investor understanding.



	In this step:	Output
4a	Identify the metrics What existing metrics could potentially be used to demonstrate long-term value?	Long list of metrics
4b	Validate the metrics Do the metrics meet the five criteria and seven principles for metric development, as outlined in this guide?	Validated short list of metrics
4c	Develop the metrics and narrative What further context do investors need to understand the metrics? How can the metrics be developed and improved?	1. Narrative providing context for the metrics 2. Metric improvement and development plans

Step 4a: Identify a long list of metrics

In this step we pull together a long list of all the potential metrics a company could use to communicate how it creates long-term value. This work should draw on both internal and external sources, and be based on the stakeholder outcomes and strategic capabilities identified in steps 2 and 3.

Objective – Why are we doing this?

- To identify potentially relevant and comparable metrics using an established logic trail as outlined in this guide.
- To identify a long list of metrics based on identified stakeholder outcomes and strategic capabilities in step 3b.

Scope – What are we doing?

- Develop metrics that could help a company communicate to the financial markets how it protects and creates value. The metrics should draw on any of the company's analyses on its context, purpose, strategy and governance.
- Further evaluation and validation is required to assess their suitability as metrics for long-term value (see step 3b).

Approach – How can we do this?

1. Start with the stakeholder outcomes matrix developed in step 3b. Identify the metrics within each value category. Consider how they could measure the strategic capabilities needed to achieve stakeholder outcomes. By following step 3b, the metrics will be categorized by outcome type and value lever. The company may already use some of the metrics to track and report progress.
2. Conduct a gap analysis to identify which metrics the company already uses, and the new metrics needed.
 - Are there any metrics currently being used internally for outcomes measurement that could also meet external stakeholder needs?
 - What available data could be used to calculate new metrics to measure identified outcomes?
 - What systems and processes are currently in place to collect data that could feed into new metrics?
3. If there are no, or insufficient internal sources for metrics, use external sources to identify new metrics. This can include, but is not limited to, existing frameworks and standards, databases, peer and leader practice, white papers and peer-reviewed literature, and direct interviews. A list of suggested resources is available on the next page as a starting point.
4. Use the key questions on the right to identify long-term value metrics.

Output – What are the outputs?

- Long list of metrics for measuring stakeholder outcomes and strategic capabilities.
- A list of additional metrics that are still needed, but that are not currently available.

Key questions

Identifying metrics

1. What is the objective of the company's measurement plan?
2. Who is the audience and what metrics would align best with their needs?
3. What aspects need to be measured or captured by the metric? There's no need to measure everything – only what is most important for measuring progress towards the company's objectives and communicating progress.
4. What metrics are most relevant for capturing and communicating outcomes and strategic capabilities in key areas?
5. Is there alignment with standards or frameworks that already exist (such as GRI for sustainability reporting or IRIS for impact investors)?
6. Is the metric time-bound? Does it capture conditions in a desired outcome over a specific time frame?
7. Does the metric allow peer-to-peer comparisons?
8. Does the metric inform internal or external decision-making?
9. Does it help steer the company's target-setting?
10. Does the metric measure multiple outcomes and/or related capabilities?

Feature: Resources for identifying metrics

Examples of resources for selecting and developing metrics are shown below. This list is illustrative only and is not intended to be an exhaustive list of all possible resources available.



Existing frameworks and standards

Review current metrics/targets available in relevant frameworks and standards:

- GRI
- Sustainability Accounting Standards Board (SASB)



Databases

Consult publicly available tools, sources and databases relevant to the topic:

- SoPact
- Impact Reporting & Investment Standards (IRIS)



Peers and leaders

Identify metrics that peers are currently using as a result of their materiality assessments and performance measurement processes:

- Corporate sustainability reports
- ESG ratings and reports



White papers and peer-reviewed literature

Use peer reviewed literature and white papers to identify commonly used metrics for each type of outcome and/or strategic capability. Sources of information include:

- Google Scholar
- DeepDyve



Direct interviews

Interview practitioners or academics who have experience in outcomes measurement in the topic areas the company is investigating

Step 4b: Validate the metrics

In this step we refine the long list of potential metrics down to a short list. We set out five qualifying criteria and seven principles to help do this. These are described in more detail on the next two pages.

Objective – Why are we doing this?

- To refine and validate the long list of potential metrics and develop a short list of metrics.

Scope – What are we doing?

- Apply five qualifying criteria to all long listed metrics identified in step 4a.
- Apply a further seven principles to the metrics that fulfill all the qualifying criteria.

Approach – How can we do this?

- Use the five qualifying criteria on each long listed metric. A template for applying both the criteria and principles is available.
- For the metrics that meet the criteria, assess the metrics against the seven principles for metric development.
- Include supporting commentary for why the metrics meet the criteria and principles and are short-listed.

Output – What are the outputs?

- A short list of validated metrics.
- A list of next steps for each metric (e.g. disregard metric, further assess metric by applying principles in step 4c).
- A list of any further potential gaps where additional research is needed to identify suitable metrics.

Feature: Measuring outcomes and impacts

The example impact chain and associated metrics below explains the difference between inputs, outputs, outcomes and impacts, and how this classification relates to the scope of the framework.

	Inputs	Outputs	Outcomes	Impacts
	Resources used by a company for its business activities	The direct immediate results associated with business activities, products and services	The medium to long-term causal effects or changes as a result of business activities	The medium to long-term effects resulting from business activities, such as changes in wellbeing
Impact chain	Resources used by a company for its business activities	- Water filtration products - Employees trained in safe installation and distribution practices	- Consumers have access to cleaner water - Skilled workforce who become industry knowledge leaders	- Improved health and increased lifespan of continual users - Enhanced safety and livelihood of employees
Metrics	- Production costs (costs incurred to produce and sell products or services) - Investments in employee training and R&D	- Number of units produced or sold - Number of employees trained or training hours	- Water quality improvements from installations - Employee turnover rate	- Improved health: quality adjusted life years (QALY) - Economic impact: gross value added (GVA)

Scope of this framework: metrics should measure performance at least beyond output; outcome and impact metrics convey results of business activities for the intended scope over the long term.

Criteria and principles for metrics of long-term value

We have identified five qualifying criteria and seven principles to develop metrics for long-term value. The five criteria define minimum requirements that a metric should meet. Beyond these minimum criteria, metrics should also be assessed based on a further seven guiding principles. These principles explain how to use the metric, position supporting narrative and develop the metric further over time.

Consider how aligned each metric is to the seven principles – it is unlikely that metrics will be fully aligned to every element from the start. The principles are designed to guide the thinking process and highlight areas to improve and develop the short-listed metrics. Metrics that are only partially aligned to some of the principles do not need to be discarded; this simply highlights opportunities to further strengthen them.

The criteria and the principles are defined below. The glossary provides further information on some of the concepts explored here.

Feature: Five criteria for metrics



1. Lead indicators

The metric represents a backward or forward looking indicator that serves as a proxy for **future value creation** (>5 years). It relates to the company's ability to create value in the short, medium and long term.



2. Measuring outcomes and impacts

The metric measures performance at least beyond output. **Outcome and impact metrics** convey results of business activities for the intended scope over the long term.



3. Materiality

The metric reflects a company's significant economic, environmental, and social impacts and substantively influences the assessments and decisions of stakeholders. It conveys information that **substantively affects** the company's ability to create value.



4. Comparability

The metric can be applied **consistently** over time; the definition and calculation methodology remains the same to aid comparability. It is transferable to most companies within or across industries to enable meaningful (peer-to-peer) comparisons.



5. Investor verified

The metric is **relevant to investors**. It has been validated by investors (or is at least considered to be potentially relevant for investors' decision-making).



1. Aligned

The metric is **connected to the purpose** of the company. It is aligned with the business model and strategy and influences internal decision-making. The metric is **stakeholder outcome-oriented** and reflects the health of the strategic capabilities the company needs to invest in to achieve those outcomes.



2. Completeness and balance

The metric is **comprehensive** and measures financial or pre-financial outcomes in an **unbiased** way, including the net change in both positive and negative outcomes or impacts.



3. Empirically tested

The metric is **supported by evidence** and credible data assured to an appropriate level. The metric is based on an **established methodology**, with no significant deviations or alterations that compromise the integrity of the data or its interpretation.



4. Accuracy

The **underlying data quality** behind the metric is high and based on credible internal and external data sources, with few estimations. The metric's underlying methods and approaches are robust, publicly available, and follow accepted approaches and best practice data-gathering procedures. The data **reporting process is standardized** with automated collection where possible and **data security** is high so corrections are rarely required.



5. Credibility

The metric is founded on **reliable underlying processes** with high standards of internal governance and effective controls. The **data is verified**, preferably by both an internal second party and an external third party to an appropriate level of assurance. Assumptions and underlying information can be traced back to their sources.



6. Clarity

The metric presents results in a **transparent** manner that is clear and understandable for stakeholders in the context of the company's operations. The criteria, concepts and assumptions are **accessible** and can be easily explained and understood by stakeholders.



7. Additionality

The metric uses data before and after an action (e.g. investment) to monitor outcomes versus the baseline and any change in outcome can be **attributed** to that action. The metric measures a result that would not have otherwise happened. The metric's **scope is defined** as relevant to a part of the company's value chain and is **monitorable** at the relevant scale, in the relevant location and across a relevant time-bound period.

Step 4c: Develop the metrics and narrative

In this final step of the guidance, we encourage companies to consider what further context and information investors might need to understand the chosen metrics. Companies should develop a narrative associated with each metric that aids investor understanding. This narrative will also help guide the company's thinking as it uses the metrics and further develops and evaluates them within the business.

Objective – Why are we doing this?

- To further qualify the metrics and develop a narrative (including metric context, use, calculation, assumptions and limitations).
- To improve the metrics and achieve greater alignment with the seven principles of long-term value metric development.

Scope – What are we doing?

- Develop a supporting narrative for short listed metrics for measuring long-term value creation.

Approach – How can we do this?

- Assess each metric's context and develop its supporting narrative by exploring its strategic alignment to the business. Consider how each metric will be used, the calculation methods, assumptions and limitations.
- Identify potential improvement plans for the metrics or the supporting narrative.

Output – What are the outputs?

- Supporting narrative that provides context for each metric.
- Metric improvement and development plans that help to identify next steps, including how to:
 - Further develop (e.g. standardize), update or improve metrics; and
 - Start applying, measuring or evaluating metrics.

Developing narrative to support the metrics for long-term value

Here we outline four elements to consider when building a narrative around the chosen metrics. The narrative should include information on the underlying calculations and assumptions, provide context on the metrics, and explain how they can be used by companies, asset owners and asset managers.

1. The context of the metric

- **What is the nature and applicability of the metric?**
Explain if the metric is a universal indicator, sector, or a company-specific indicator.
- **What stakeholder outcomes is the company trying to achieve?**
The outcome should be aligned with the themes that the metric supports and should focus on solving a problem, improving a stakeholder group experience or reducing a negative impact.
- **Why is this metric material to the company?**
Explain why the company has decided to focus on this metric and how it links to strategic priorities.
- **What strategic capabilities will help to achieve the outcome?**
Describe the value levers and strategic capabilities that the company needs to drive progress on stakeholder outcomes.
- **Are there interdependencies between metrics?**
Consider how metrics interrelate and how one metric might impact another. Is the metric part of a set of interdependent metrics that together demonstrate long-term financial value?

2. How the metric can be used

- **How can the metric be used by companies to drive decision-making?**
- **How can the metric be used by asset managers to inform decision-making?**
- **How can the metric be used by asset owners to inform decision-making? Could the metric inform investment mandates?**

Refer to the five criteria for metrics listed on page 106.

3. Underlying data and calculations

- **What outcomes/impacts does the metric measure?**
Explain how the metric measures performance in terms of either outcomes or long-term impacts (see page 105 for further detail).
- **How is the metric calculated?**
Include the formula for metric calculation.
- **What internal data is used to calculate the metric?**
Note any sources of internal data used to calculate the metric.
- **What external data is used to calculate the metric?**
Note any sources of external data used to calculate the metric. Are third parties providing underlying data for the metric?
- **What are the data, system and process requirements?**
What systems and processes are in place to ensure the data sources, assumptions and metrics are credible?
- **How frequently is data collected for the metric?**
Explain the frequency of data collection (daily, monthly or yearly time frames).

4. Assumptions and limitations

- **What assumptions is the metric based on?**
Explain any assumptions underlying the metric, such as discount rates in the calculation.
- **Are there any limitations to be aware of?**
Explain any limitations associated with the metric. For example, could the metric incentivize or signify unwanted or unintended outcomes?
- **What is the scope of the metric?**
Explain the metric's scope and whether it relates to part or all of the value chain (upstream, own operations, downstream).
- **What time frame does the metric relate to?**
Explain the time frame the metric indicates value creation for. This could be a 5 or 10 year time frame, or it could include a more short-term perspective as well.

Final output of the framework

By following the four steps of the Long Term Value Framework outlined in this document to arrive at the relevant metrics and supporting narrative, our aim is that:

Companies can:

- Develop metrics to better articulate their long-term value equity narrative to investors.
- Report more focused, reliable and comparable information over time

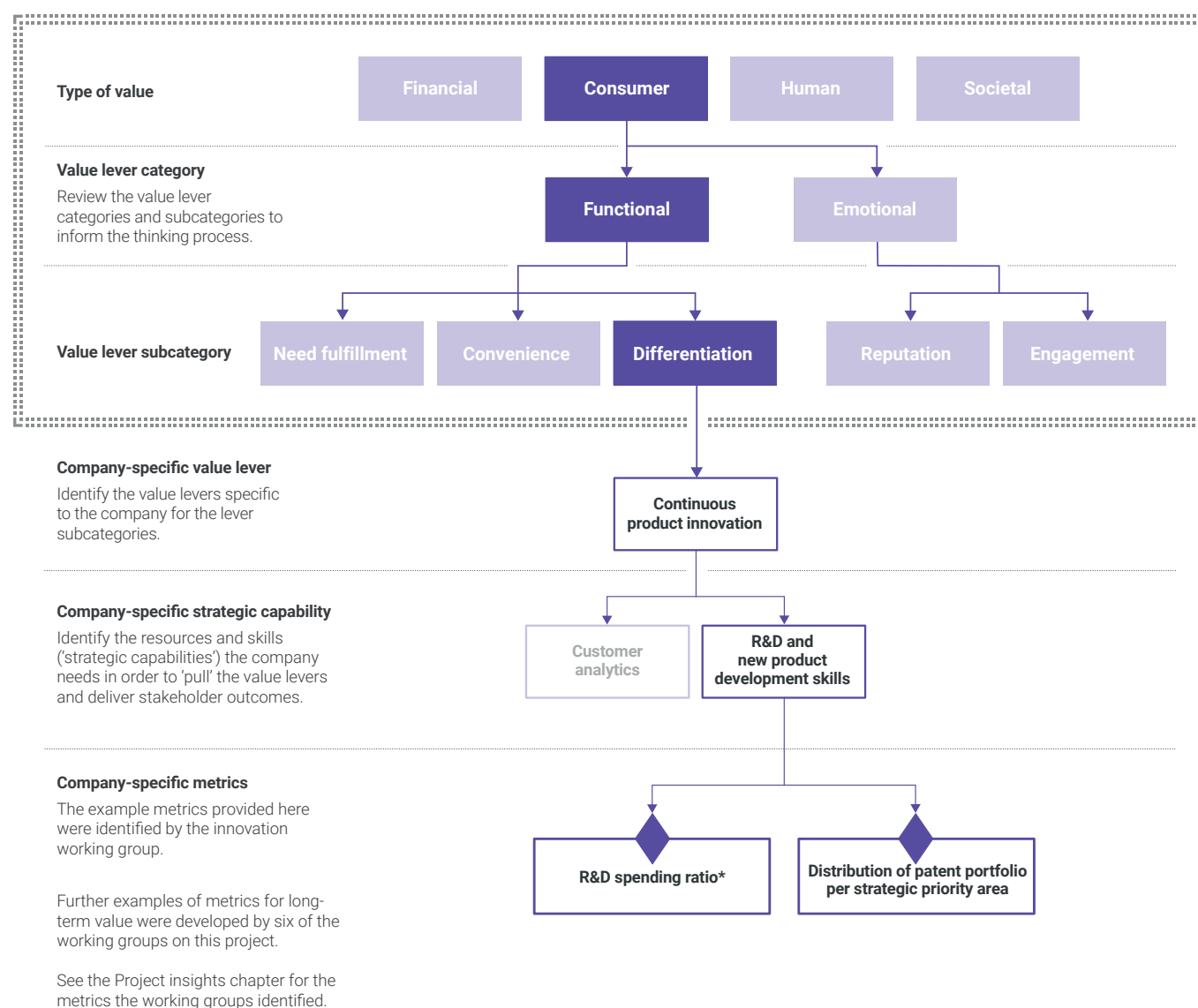
Asset managers can:

- Benefit from more standardized metrics and make more meaningful comparisons of companies' performance
- Engage more strategically with the companies they invest in

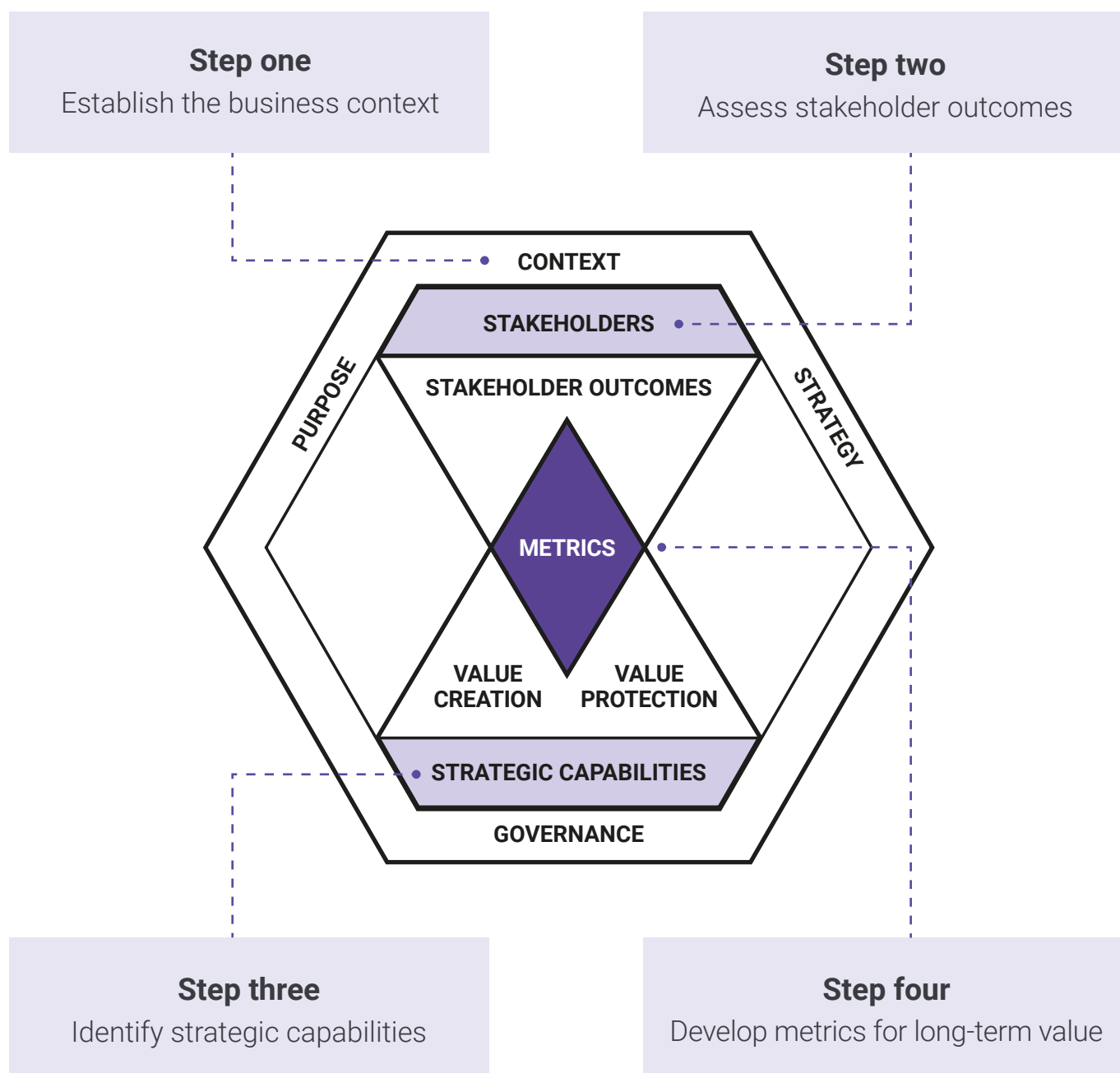
Asset owners can:

- Leverage their understanding of the metrics to inform their investment strategies
- Embed long-term perspectives with their asset managers by setting the length of investment mandates

Identifying metrics based on the company's stakeholder outcomes and strategic capabilities



* R&D spending as a percentage of sales, spending per strategic priority area, spending for sustainability related products/services



Looking forward

The Long Term Value Framework that we have outlined in this document is not a definitive solution to making capitalism more inclusive and we know there is significant further work to be done. Yet we are of the opinion that the metrics and the framework provide a useful step for many companies in their journey to better articulate the long-term value their business creates. Our objective is for the framework to be open-source, allowing it to be applied, developed and improved by many organizations beyond those who have piloted the framework as part of this project. The insights and experiences of these early adopters can be found in the project insights chapter. More detailed project recommendations can also be found in the recommendations chapter.

Glossary

10

Asset manager

The companies participating in EPIC who are responsible for managing different financial instruments (e.g. shares, bonds, commodities or property) on behalf of asset owners and make decisions on how, when and where to invest based on the financial goals and investment guidelines of their clients.

Asset owner

The legal owners of assets who are participating in EPIC and make asset allocation decisions based on their investment objectives. Asset owners can manage assets directly and/or delegate asset management to asset managers. Asset owners include pension funds, insurers, banks, sovereign wealth funds, and endowments.

Capitals

The six types of capital identified by the International Integrated Reporting Council (IIRC). The IIRC defines capitals as stocks of value that are affected or transformed by the activities and outputs of an organization. The six capitals as defined by the IIRC are:

- **Financial capital:** The pool of funds that is a) available to an organization for use in the production of goods or the provision of services, b) obtained through financing, such as debt, equity or grants, or generated through operations or investments;
- **Manufactured capital:** Manufactured physical objects (as distinct from natural physical objects) that are available to an organization for use in the production of goods or the provision of services (including buildings, equipment, infrastructure);
- **Intellectual capital:** Organizational, knowledge-based intangibles, including intellectual property (e.g. patents, copyrights, software, rights and licenses), 'organizational capital' (e.g. tacit knowledge, systems, procedures and protocols) as well as the intangibles that are associated with the brand and reputation that an organization has developed;
- **Human capital:** People's competencies, capabilities and experience, and their motivations to innovate, including a) their alignment with and support for an organization's governance framework, risk management approach, and ethical values, b) the ability to understand, develop and implement an organization's strategy, c) loyalties and motivations for improving processes, goods and services, including their ability to lead, manage and collaborate;
- **Social and relationship capital:** The institutions and the relationships within and between communities, groups of stakeholders and other networks, and the ability to share information to enhance individual and collective wellbeing; and
- **Natural capital:** All renewable and non-renewable environmental resources and processes that provide goods or services that support the past, current or future prosperity of an organization. It includes air, water, land, minerals and forests, biodiversity and ecosystem health.

Company

Companies including those participating in the Embankment Project for Inclusive Capitalism (EPIC) in the consumer goods, healthcare and industrials sectors.

Context

The context within which the company operates, encompassing macroeconomic, societal, technological, political and market trends, as well as its business model and those of its competitors.

Criteria (for identifying metrics)

A set of five minimum requirements that a metric should be assessed against to be considered a metric of long-term value.

Embankment Project for Inclusive Capitalism (EPIC)

31 companies, asset managers and asset owners brought together by the Coalition for Inclusive Capitalism and EY to identify new metrics to measure and articulate long-term value to investors and other stakeholders. We refer to the Embankment Project for Inclusive Capitalism as 'EPIC' or 'the project' throughout this report.

Financial performance

The monetary value generated by an organization in terms of direct outputs compared to direct inputs (e.g. sale revenues compared to costs incurred to produce and sell a product or service).

Governance

The structures and processes designed to direct and control a company. It defines the rights and responsibilities of a company's stakeholders and the procedures to ensure transparency and accountability of the business in terms of its strategy execution in the first place.

Impact

The medium to long-term effects resulting from business activities, such as changes in wellbeing.

Input

Resources used by a company to conduct its business activities (e.g. investment in safety training).

Investment chain

All of the players involved in creating value through capital markets. This includes companies, asset managers and asset owners and other intermediaries such as rating agencies and data providers.

Long Term Value Framework

An open-source framework and supporting methodology to identify and develop metrics to better articulate the long-term value created by business. It is referred to throughout this report as 'the framework'.

Material

A measure of how important or significant a factor is to a stakeholder group. A material factor can substantively affect an organization's ability to create value over time.

Measurement

Calculating an input, output, outcome or impact in qualitative or quantitative terms.

Metric

A standardized quantitative indicator, which can be used to measure inputs, outputs, outcomes or impacts. For the purposes of this report, 'metric' refers to an indicator of long-term financial performance that measures an outcome or impact.

Narrative

A qualitative explanation of a metric that provides further context and information to stakeholders. Narrative includes data calculations, assumptions, limitations and information about how the metric can be interpreted.

Non-financial

See 'pre-financial'.

Outcome

The medium to long term causal effect or change as a result of business activities (e.g. enhancement of workforce skills)

Output

The direct immediate result of business activities, products and services (e.g. number of employees trained).

Pre-financial performance

The value generated by an organization that is not included or reflected in financial performance today. This could include both positive and negative outcomes or impacts. Governments and other material stakeholders may take actions which could change non-financial impacts into financial ones (e.g. by levying a tax on carbon). Also known as 'non-financial performance'.

Principles (for defining metrics)

A set of seven principles to apply when evaluating metrics for long-term value. The principles explain how to use the metric, how to determine the narrative to support the metric, and how to develop the metric further over time.

Purpose

A clearly defined purpose is an aspirational affirmation for being in business, often grounded in a broader societal context.

Stakeholder

A group or an individual who can directly or indirectly affect, or is directly or indirectly affected by, a company's activities. Examples of stakeholders include shareholders, customers, suppliers, employees, governments and communities.

Stakeholder outcomes

The fundamental dimensions of performance that matter to stakeholders and are therefore most important (or 'material') to the business. The terms 'outcome' and 'impact' are used interchangeably in this guidance. For more information about outcomes and impacts, see page 105.

Strategic capability

Strategic capabilities refer to bundles of strategic skills that companies can deploy to create long-term value for stakeholders. They are created through effective development, preservation and deployment of resources in line with the company's stated purpose. Strategic capabilities are also known as 'strategic assets', and were clearly articulated by Professor Baruch Lev and Feng Gu in 'The End of Accounting and the Path Forward for Investors and Managers'.

Strategy

Strategy lies at the heart of a company's growth story by guiding its short, medium and long-term purpose, goals and objectives. A company's strategy provides the best indication of its future direction, and communicates this direction to investors and other stakeholders.

Value

Denotes the degree of importance or worth of something to someone. Value generation can be positive or negative. In the economy, value is mostly perceived as a monetary measure attached to a good or service. The value attached to a good or service can be different depending on the perspective of the evaluator (e.g. companies, capital providers, or society as a whole).

Value categories

The four types of value identified in the Long Term Value Framework. The selection and categorization of the value categories was inspired by IIRC's six capitals and traditional corporate value driver analyses.

- **Financial value:** Traditional yardstick to measure a company's performance. The monetary value created by the company's productivity, including revenue generation, cost optimization and capital structure.
- **Consumer value:** The functional or emotional value a company creates through goods and services to meet customer needs, including innovation.
- **Human value:** The value a company creates through the employment and development of people, including engagement, know-how and skills.
- **Societal value:** The value created through the relationships between a company and all other external stakeholders, including its environmental, social and economic impact, across the full value chain.

Value creation

The process of generating tangible and intangible outcomes and impacts for stakeholders over the long term. To create value, the value of outputs is greater than the value of inputs consumed, and therefore more than the value transferred between two parties. Companies can also be responsible for decreasing value, which means they create negative value (for instance by damaging the environment).

Value lever

A factor that influences or affects value. In this report and in the framework, we use value 'driver' and value 'lever' interchangeably.

Value protection

The physical and financial protection of tangible and intangible value by companies themselves, or by a third party in the long term. It can be helpful to think of value protection as different categories of risk that need to be managed. For more on the link between long-term value and risk, see page 97.

Acknowledgments



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I am sincerely grateful to everyone that has participated in the Embankment Project for Inclusive Capitalism (EPIC). Together, we have taken an important step to make capitalism more inclusive.

This project would not have happened without the extraordinary support of each organization's CEO and the invaluable time, intellect and teams they contributed. I would also like to thank EY's Global Chairman and CEO, Mark Weinberger, for his personal leadership and dedication to the project, as well as the Ford Foundation for their amazing support and sponsorship of this project.

I am deeply appreciative of the enormous effort made by every participant, the Coalition for Inclusive Capitalism team and the EY staff, the academics, and the advisory council members listed here. Without their dedication, insights and expertise, we would not have made the progress we did.

Lady Lynn Forester de Rothschild

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Mark Bertolini, Aetna
Martin Brudermüller, BASF
Edward Breen, DowDuPont
Doug Baker, Ecolab
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Vasant Narasimhan, Novartis
Indra Nooyi, PepsiCo
Paul Polman, Unilever

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Laurence Fink, BlackRock
Abigail Johnson, Fidelity Investments
Hendrik du Toit, Investec Asset Management
Mary Erdoes, J.P. Morgan Asset & Wealth Management
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Vijay Advani, Nuveen
Peter Harrison, Schroders
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Deanna Mulligan, Guardian Life
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Isabel Beitia, EY
Loree Gourley, EY
Scynthea Ratliff, EY
John Tato, EY
Mary Karol Cline, EY

We would also like to thank the following organizations and individuals for their support:

Ford Foundation
The Boston Consulting Group
Velislava Ivanova, EY
Brandon LeBlanc, EY
Juan Costa Climent, EY
Mathew Nelson, EY
Mike Sills, EY
Céline Bilolo, EY
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Chris Bonnet, Allianz
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Erik T. Wedershoven, EY
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Sonja Haut, Novartis
Andy Howard, Schroders



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Andy Hedberg, Ecolab
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Nishesh Kumar, J.P. Morgan Asset & Wealth Management
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Andy Hedberg, Ecolab
Graham Burr, EY-Parthenon
Michaela Proissl, EY
Varuni Dharma, Investec Asset Management
Tom Nelson, Investec Asset Management
Christian Vousvouras, Nestlé
Jennifer Signori, Neuberger Berman
Jon Banner, PepsiCo
Rianne Buter, Unilever



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Sue Hohenleitner, Johnson & Johnson
Robert Hardy, J.P. Morgan Asset & Wealth Management
Nishesh Kumar, J.P. Morgan Asset & Wealth Management
Jon Banner, PepsiCo
Andy Howard, Schroders



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Sabine Dettwiler, EY
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Charlie Hough, Novartis



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Christian Heller, BASF
Anu Gurung, CPPIB
James King, EY
Rianne Buter, Unilever
Becky Pearce, Unilever

