



White Paper

Values and the Fourth Industrial Revolution Connecting the Dots Between Value, Values, Profit and Purpose

Global Agenda Council on Values (2014-2016)



Contents



Foreword	3
Message from the Chair	4
Executive Summary	5
Part 1	6
Introduction	6
Values and the Fourth Industrial Revolution	7
Financial Capital – Fairness	8
Social Capital – Common Good	12
Manufactured and Natural Capital - Stewardship	18
Part 2	22
Measuring Values	22
Draft Questionnaire	23
Part 3	24
Reporting on Values	24
The Evolution of Reporting	24
The Business Case for Reporting	26
Part 4	27
Conclusion	27
Endnotes	29
References	30
Members of the Global Agenda Council on Values	32
Acknowledgements	32

World Economic Forum 91-93 route de la Capite CH-1223 Cologny/Geneva Switzerland

Tel.: +41 (0)22 869 1212 Fax: +41 (0)22 786 2744 Email: contact@weforum.org www.weforum.org

World Economic Forum®

© 2016 – All rights reserved.

No part of this publication may be reproduced or Transmitted in any form or by any means, including Photocopying and recording, or by any information Storage and retrieval system.

REF 120916

The views expressed in this White Paper are those of the author(s) and do not necessarily represent the views of the World Economic Forum or its Members and Partners. White Papers are submitted to the World Economic Forum as contributions to its insight areas and interactions, and the Forum makes the final decision on the publication of the White Paper. White Papers describe research in progress by the author(s) and are published to elicit comments and further debate.

Foreword



Stephan
Mergenthaler
Head of
Knowledge
Networks and
Analysis, World
Economic Forum

This White Paper is an output of the Global Agenda Council on Values at the end of its two-year term (2014-2016). The World Economic Forum convened the council to support its work in shaping the global, regional and industry agendas. In the course of its previous terms, the council's influential work has shaped principles that underpin the operating framework for the Forum's strategy going forward.

These principles reflect the broad consensus across cultures, religions and philosophies involving three shared human aspirations:

- The dignity and equity of human beings whatever their race, gender, background or beliefs
- The importance of a common good that transcends individual interests
- The need for stewardship in the sense of a concern for future generations

An understanding and acceptance of shared human values is critical for a world facing challenges accelerated by increasing complexity and interconnectedness. The World Economic Forum's councils of experts have supported the Forum's multistakeholder activities with powerful insights and world-leading expertise. That framework now shifts to address the global, regional and industry challenges resulting from many "systems" – the global systems affecting the environment and natural resource security, economic growth and social inclusion, education, gender and work, mobility as well as production, among others. To enable sustained, positive change, the Forum works with a broad range of actors and experts through a series of System Initiatives to improve the effectiveness of the international community's response to these challenges.

Those working to shape the future of the world's most complex challenges and to provide systems leadership will find critical input in this publication.

Integrating universal human values into business, government and civil society engagement is a critical function for the Forum. We thank the members of the Global Agenda Council on Values for their work in providing this foundation.

Message from the Chair



Katherine Garrett-Cox Chair, Global Agenda Council on Values (2014-2016)

Why is a Council on Values needed in the 21st century? What should we seek to achieve from bringing a global multistakeholder group together with a common mission? These are questions that we, the Global Agenda Council on Values, asked ourselves when we first met in Dubai in the autumn of 2014. It was clear that we had excellent foundations on which to build. The previous council had introduced the concept of a New Social Covenant, which it had based on three basic pillars – human dignity, common good and stewardship. So we looked to expand the awareness of these three values through various conferences and summits, as well as by introducing new ways of having a "values-based" conversation in a safe environment. Our "Fifteen Toasts" dinners are prime examples.

The past two years have demonstrated that the world is a difficult and emotionally charged place. In such challenging circumstances, it has never been more important to focus on building sustainable and inclusive economic growth. This is not simply the domain of business, but is equally the responsibility of governments and civil society. Ensuring that strong growth is accompanied by strong values-based leadership will be critical for this to take root and bear fruit. In this way, we can create a stronger legacy for the next generation and will have played our part in improving the state of the world.

It has been a great pleasure and honour to have served with such a unique and committed group of people for the past two years. Friendships have been forged, papers penned and conferences coordinated. This White Paper is our working legacy; it presents a common framework for connecting the dots. It shows how values are synonymous with value creation, and how purpose can be profit's natural ally. We urge all who read this publication to live by these principles. This is our moment to decide whether we wish to create history or be consigned to it. Life is a fleeting but valuable gift, and our common purpose has been to strive to make a difference. We hope that as you read and digest our thoughts, observations and suggestions, you will have the courage as a leader to do just that.

Executive Summary

Today, society faces the mammoth task of creating 1.5 billion new livelihoods by 2050 while at the same time exceeding the planet's crucial ecological limits. With the start of the Fourth Industrial Revolution, human progress may either suffer through a catastrophic setback or experience a positive transformation. What will make the difference? Values.

The core values of human dignity, common good and stewardship have been widely endorsed over the centuries. Systemic change based on these values aims to meet people's basic needs, with greatly reduced inequalities and in environments allowing individuals to thrive and live in peace. The required leadership and an understanding of the changes under way across all sectors are low demands compared to the need to rethink economic, social and political systems to respond to the Fourth Industrial Revolution. A common values-driven direction is clearly needed.

Technological developments and social change will impact the way people live, work and relate to one another. Companies operating in a sustainable and responsible manner are better placed to succeed in the long term. Moreover, global trade and investment must grow within a framework that encourages good practice both now and in years to come.

How the world defines infrastructure is changing to include information, the internet, new forms of autonomous transportation, drones and new housing models. In the context of such change, our values must relate to what will be considered infrastructure in the distant future.

The key to economic growth lies in people's talents, know-how, skills and capabilities – society's human capital. Investing in such capital and innovating for education and employment is critical to both the public and private interest. While improving living standards requires economic growth, statistics often show it exacerbates the difference between rich and poor. Public-private collaboration can make a notable difference in realizing both strong growth and broad progress. Closing gender gaps and leveraging the wider economic and societal benefits of gender parity also require a concerted effort between businesses, governments and civil society. Many of the concerns about inequality are rooted in the lack of access to financial capital and the lack of financial literacy. The concept of fairness must underpin discussions regarding financial and monetary systems.

Resources such as clean water, rare earth metals and food sources must be shared, though they have also been monetized and continue to be part of the world economy. A values-based approach to global negotiation and conflict resolution could prove vital to boosting opportunities for inclusive economic growth and security, as opposed to personal, regional and ultimately global devastation. And, as unhealthy people cannot fulfil their true potential, corporations (and governments) are morally obligated to contribute to improving health.

This White Paper aims to:

- Examine the role of values in shaping critical global systems, based on a number of World Economic Forum System Initiatives, and categorized by financial, social, and manufactured and natural capital
- Advance a proposal for an online values self-assessment tool that companies can integrate into their operations
- Review the role of reporting on values for business

Finally, this publication is intended to serve as the basis for the work of the Global Future Councils and the efforts in shaping the future of global, regional and industry agendas with the Forum.

Part 1

Introduction

The world faces unprecedented challenges. For the first time, society is arriving at or exceeding crucial planetary ecological limits. At the same time, it must create some 1.5 billion new livelihoods by 2050 against a backdrop of population growth and increasingly rapid technological change, much of which will replace entire swathes of existing jobs. Furthermore, society faces potential conflict between the goal of creating jobs and living within safe planetary limits, given the current rates of decoupling from carbon and other scarce ecological resources. Added to this mix are growing geopolitical security challenges and intercontinental movements of refugees and economic migrants, the continued rise in global inequalities of wealth and income, and the positive and negative implications of the Fourth Industrial Revolution.¹

As Klaus Schwab, Founder and Executive Chairman of the World Economic Forum, has stated:

The First Industrial Revolution used water and steam power to mechanize production. The Second used electric power to create mass production. The Third used electronics and information technology to automate production. Now a Fourth Industrial Revolution is building on the Third, the digital revolution that has been occurring since the middle of the last century. It is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres.²

Within this context, the world may experience either a catastrophic setback or a positive transformation in human progress. Either way, it means overwhelming systemic change. In this context, the World Economic Forum's focus is to address the global, regional and industry challenges resulting from many "systems" – from those that influence the environment and natural resource security globally, to economic systems that create inequality, regional systems that determine how nations evolve, and industry systems that deal with the effectiveness of supply and demand. With the goal of creating sustained, positive change, the Forum works with its constituents through a series of System Initiatives to understand and influence the systems that affect the challenges and opportunities they are trying to address.

While many potential solutions are available, values themselves will fundamentally determine whether solutions are adopted and whether systemic change is positive.³

Values provide a clear destination – a "true north" – as well as the means of getting there. Under the Industrial Revolution in Western Europe, values shifted towards creativity, trust and enterprise. Major shifts in values accompanied the abolition of slavery and the civil rights movement in the United States. Similarly, value shifts were

behind the two major changes in western economies during the 20th century: first, Keynesianism (mid-century), and then what is crudely called neo-liberalism (1980s, 1990s and the first decade of the 21st century). Since values motivate people to act, a shift in values set a goal in all of these cases and provided the means of achieving it. A clear, positive and strong narrative accompanied by a powerful vanguard for change helped to accomplish the shifts. Only subsequent changes in norms and laws led to a wider shift in values among populations as a whole.

The Fourth Industrial Revolution signals unprecedented change in the way people live, work and relate to one another, brought about by further technological developments such as artificial intelligence (AI), the internet of things, biotechnology and quantum computing. At the same time, these developments are accessible to increasing numbers of people through smartphones and other mobile devices – a very powerful combination. Schwab writes:

We have yet to grasp fully the speed and breadth of this new revolution. Consider the unlimited possibilities of having billions of people connected by mobile devices, giving rise to unprecedented processing power, storage capabilities and knowledge access.⁴

Given the Fourth Industrial Revolution's extraordinarily fast technological and social change, relying only on government legislation and incentives to ensure the right outcomes is ill advised. These are likely to be out of date or redundant by the time they are implemented. Operating with a clear foundation of values is the best way to ensure positive outcomes.⁵

Fortunately, the evidence has strengthened that clarity on values leads to greater value creation. Over the last few years, the World Economic Forum Global Agenda Council on Values held various discussions on whether people should be striving for certain universal values, or whether culture ultimately determines all values. Many advanced cultures and faiths, it was concluded, have indeed widely endorsed some core values over the centuries. These include human dignity, such as respect for human rights and responsibilities, as well as fairness; the importance of a common good that transcends individual interests; and stewardship, both of the planet and for future generations. Buttressed by a series of global discussions following its publication in early 2013, the Forum's New Social Covenant argued:

The social contract between business, government and society seems to be broken. The legitimacy of corporations has reached a new low point, and they run the risk of losing their licence to operate. We are seeing growing

public indignation at the perceived disconnect between perks for a few and the rights of the many. People are demanding more collaborative, sustainable and inclusive ways of creating values.⁶

Based on the core values of human dignity, common good and stewardship, the key goals of systemic change are to create a world where:

- People's basic needs are met across all dimensions
- People live within key ecological limits
- Inequalities are greatly reduced, both within and between countries
- The core goal is human well-being and care towards others so they can thrive or flourish, and providing good livelihoods for all who seek them
- Peace prevails

Society may never achieve such a vision. Yet, without knowing the direction to take, it can easily regress instead of moving forward. A set of core values can provide the direction of travel as well as the means of getting to the destination. Without a common direction and in response to their more narrowly defined goals, decision-makers from different countries and walks of life - business leaders, policy-makers, civil society leaders and others - will probably move in divergent directions. Their proposals for addressing many of the world's challenges, such as inequality, energy insecurity, food insecurity, water shortages and environmental degradation, are likely to lack consistency. Only a common, values-driven direction can motivate decision-makers to overcome these problems. The next section explores the relevance of values for the Fourth Industrial Revolution.

Values and the Fourth Industrial Revolution

The concepts of prosperity and shared value highlight the convergence between value and values, and purpose and profit. Clearly not everyone will agree, but having an inclusive, long-term perspective to ensure the planet's survival is gaining momentum. In crude terms, this often reduces to a debate about the business case versus the moral one: do organizations act only in their own self-interest, or also because it is the right thing to do? Enlightened self-interest sometimes becomes the default choice to avoid committing to one or the other; however, it often fails to address the fundamental ethical issues at stake. According to Adam Smith, the Scottish moral philosopher and pioneer of political economy:

To widen the market and to narrow the competition, is always the interest of the dealers ... The proposal of any new law or regulation of commerce which comes from this order, ought always to be listened to with great precaution, and ought never to be adopted till after having been long and carefully examined, not only with the most scrupulous, but with the most suspicious attention. It comes from an order of men, whose interest is never exactly the same with that of the public, who have generally an interest to deceive and even oppress the public, and who accordingly have, upon many occasions, both deceived and oppressed it.⁷

While distinct from each other, the moral and business cases are not separate. Georges Enderle argues that corporations can be held morally responsible for their acts because, as collective entities, they act with intention.⁸

The types of capital are categorized based on the International Integrated Reporting Framework 2013,⁹ are described in Figure 1 and associated with respective values:

Figure 1: Types of Capital and Associated Values

Financial Capital Value: Fairness	Social Capital Value: Common good	Manufactured Capital & Natural Capital Value: Stewardship
- Financial capital is the pool of funds available to an organization for use in producing goods or providing services. It may be obtained through financing, such as debt, equity or grants, or generated through operations and investments.	- Social capital involves the institutions and the relationships within and between communities, groups of stakeholders and other networks, as well as the ability to share information to enhance individual and collective well-being. It includes shared norms, common values and behaviours.	 Manufactured capital includes the physical objects available to an organization for producing goods or providing services, including buildings, equipment and infrastructure. Natural capital refers to all renewable and non-renewable environmental resources and processes that provide goods or services to support an organization's prosperity, including air, water, land, minerals, biodiversity and ecosystem health.

Source: IIRC (2013)

Financial Capital – Fairness

Many concerns regarding inequality relate to the lack of access to financial capital and the absence of financial literacy. Discussions about the need for systemic change, such as inclusive capitalism, focus on fairness to allow more people to participate in the global economy. According to the World Economic Forum, 10 inclusive capitalism sees two key groups – millennials and women – playing more pronounced roles, which could result in:

- Growing the global economy
- Reducing the retirement savings funding gap
- Decreasing volatility of financial markets
- Increasing innovation
- Improving corporate performance
- Motivating employees to push companies towards greater "meaning and purpose"
- Stimulating investors to encourage companies to define their impact on the world
- Increasing benefits for families
- Reshaping entire industries

Discussions about the common good and fairness are pervasive and relevant for every aspect of society involving relationships. In particular, fairness should underpin discussions about financial and monetary systems, international trade and investment, and long-term investing, infrastructure and development.

How values shape the future of financial and monetary systems

Economic activity is critical for long-term economic growth and development, and the global financial system is its cornerstone. However, the global financial crisis demonstrated the downside of interconnectedness and revealed a range of systemic vulnerabilities. As the world's financial system continues to recover and adapt to significant transformative change, major collaborative efforts are needed to address low public confidence.

The current dynamic between and among politicians, regulators and banks does not help to develop a broadly-agreed concept for the role of banks and banking activity. Leaders from all spheres must convene at national and international levels to discuss banks' role and what they should be held accountable for. For the banking sector to contribute fully to the economy and society, it needs to be

trusted by not only its customers, but also its staff, potential employees, regulators and policy-makers. Only the industry itself can rebuild trust by demonstrating honesty, reliability and competence on a consistent and collective basis.

The Group of Thirty (G30) is working to effect such change. Established in 1978 as a private, non-profit international body, it comprises senior representatives from the private and public sectors as well as academia. The G30 aims to deepen the understanding of international economic and financial issues, explore international repercussions of decisions taken in the public and private sectors, and examine the choices available to business people and policy-makers.

The Impact of Values on this System

From the perspective of values, political and regulatory responses to the global financial crisis have led to various unintended consequences. Regulation is forcing banks to eliminate or reduce their involvement in certain facets of economic life that benefit consumers and society. In addition, banks not only are often told what they should avoid doing, but also are given little governmental guidance on activities they should develop further. According to Pierre Gentin, Partner at Cahill Gordon & Reindel LLP and member of the Global Agenda Council on Values, "you cannot simply hammer companies all the time, you also have to acknowledge where they have done well". Regulation tends to come from a negative "can't do" perspective rather than a positive or "can do" outlook. A lack of uniform regulation around the world further exacerbates the situation. This creates uneven playing fields and inhibits banks' abilities to change.

In terms of fairness (Figure 2), a common blueprint needs to be articulated to address interconnected challenges. Moreover, political leaders, corporates and consumers must agree on the role of banks. Where banks refocus on business activities that add value to society, their efforts should be transparent to consumers, and commended and encouraged by politicians and regulators. All of this requires a broadly understood and agreed vision for financial services' core mission.

Figure 2: Factoring Fairness into the International Financial System



Source: Global Agenda Council on Values

How values shape the future of international trade and investment

Economic and corporate growth depend on international trade and investment as important drivers. The international trade and investment system must become as strong as possible to boost growth, jobs and development,

according to Roberto Azevêdo, Director-General of the World Trade Organization. For this to happen, he believes G20 leaders have to work collectively to find and explore synergies on a range of trade-related issues. With changing geopolitics, business models and societal expectations, the system is tipping into a new phase. As a result, this

creates an opportunity for setting new priorities for global and local trade and investment objectives, and for securing business-led reform that benefits all. Realizing this opportunity will require an understanding of the new dynamics of commerce, a reallocation of resources, and results-oriented leadership.

To reform the international trading system, the Doha Development Agenda seeks to introduce lower trade barriers and revised trading rules. Its fundamental objective is to improve the trading prospects of developing countries. Unfortunately, negotiations have broken down over agriculture, industrial tariffs and non-tariff barriers, services and disagreements over trade remedies. Another effort is the World Trade Organization's Aid for Trade, which helps developing countries to address trade-related constraints through trade and mobilizing resources. It also encourages developing country governments and donors to recognize trade's potential role in development. In addition, the Trans-Pacific Partnership (TPP), a regional free trade agreement, includes twelve countries from the Americas and Asia-Pacific regions. TPP is not just about reducing barriers to trade in goods, but also to trade in services, intellectual property rights and patents, foreign direct investment, harmonization of economic policy and regulation, government procurement, environmental protection and rules for currency manipulation.

A report on the purpose of fiduciary duty in the 21st century, based on research and analysis of over eight countries, 11 aims to end the debate about whether fiduciary duty is a legitimate barrier to investors who integrate environmental, social and governance (ESG) issues into their investment processes. The research began with the question of whether fiduciary duty should be redefined to make it relevant for 21st-century investors. Many of them continue to point to their fiduciary duties and the need to deliver financial returns to their beneficiaries as reasons why they cannot do more for responsible investment.

The Impact of Values on this System

Factoring in fairness (Figure 3) can work towards the aim of increasing global trade and investment without a cost to human capital. As a good example of this, the Fairtrade Foundation certifies plantations that have standards to protect workers' basic rights, keep them safe, allow them freedom of collective bargaining, prevent discrimination and ensure no illegal child labour. To ensure that good practice and a sense of responsibility are at the core of the growth model, further policy guidance is required for those involved in international trade and investment. In this way, companies operating in a sustainable and responsible manner are better placed to succeed in the long term. Global trade and investment must be increased within a framework that encourages good practice both now and in the future.

Figure 3: Factoring Fairness into the International Trade and Investment System



Source: Global Agenda Council on Values

How values shape the future of long-term investing, infrastructure and development

A key driver of growth, competitiveness and social well-being, infrastructure depends on investment. A significant number of economically viable infrastructure investments, however, are not progressing; moreover, much-needed investment is not flowing to infrastructure and development. By increasing its participation, the private sector could do much to close the gaps. In addition,

policy-makers need to express their vision for the system of long-term investing, infrastructure and development, the benefits it could bring to society, and how to share these fairly with investors. As Josh Bivens, Director of Research and Policy at the Economic Policy Institute (Washington DC), states: "In the near term, increases in infrastructure spending would significantly boost economic activity and employment ... Infrastructure investments provide the potential to boost economy-wide productivity growth." 12

Blended Finance, a joint initiative of the World Economic Forum and the Organisation for Economic Co-operation and Development (OECD), identifies the main challenges that prevent private capital from being deployed in emerging and frontier markets. Through the initiative, development funders can help overcome investor barriers and increase the supply of private capital to key sectors and countries; they look to shift the investment risk-return profile with flexible capital and favourable terms.

An estimated \$57 trillion in infrastructure investment between now and 2030 is required to keep pace with projected global GDP growth.13 Practical steps can boost productivity and reduce infrastructure spending by 40%, resulting in \$1 trillion in yearly savings. Choosing the right projects and eliminating wasteful ones could save \$200 billion a year globally, and streamlining delivery presents an opportunity to save up to \$400 billion annually as well as accelerate timelines.14 Rather than invest in costly new projects, governments can also address some infrastructure needs by getting more out of existing capacity.

The Impact of Values on this System

Wayne Silby, Founder of the Calvert Foundation, which provides community development financing in the United States, put it well: "Money without values can maybe not create the world that we want." 15 From a values

perspective, infrastructure and development investments should arise from a clear-headed vision for the future of civilization, with humanity at its core. Explicitly stated and shared values provide the motivating glue for projects, such as the Blended Finance initiative.

The global definition of infrastructure is changing to include information, the internet, new forms of autonomous transportation, drones and new housing models. This development is important as values must also relate to what will be considered infrastructure in the distant future. Infrastructure must be ecologically sustainable, and consideration must be given to how non-fossil fuel energy sources (made from materials that enhance, store or conduct energy directly to a grid) may relate to buildings and roads; how internet access will be vital to economic development; and how transportation infrastructure and health-focused city design are central to prosperity (Figure 4).

Bringing together action-oriented groups of leaders from around the world at each of the World Economic Forum's regional gatherings – to set goals and document firm commitments for investing – may inspire other groups or countries to do the same. This could raise the profile of arguing for longer-term infrastructure investments and development. It may also encourage countries, corporations and investor funds to compete for the sake of sector or national pride.



Figure 4: Factoring Values into the Long-Term Investing, Infrastructure and Development System

Source: Global Agenda Council on Values

Social Capital - Common Good

According to Schwab, the more the world becomes infused with digitalization and high technology, the greater the need will be to "still feel the human touch, nurtured by close relationships and social connections". He shares the growing concern that, as the Fourth Industrial Revolution deepens individual and collective relationships with technology, it may negatively affect people's social skills and ability to empathize. A publication of the OECD's Insights series defines social capital as the links, shared values and understandings in society that enable individuals and groups to trust each other and, thus, to work together.

Social capital can be divided into three main categories:

- Bonds links to people based on a sense of common identity
- Bridges links that stretch beyond a shared sense of identity
- Linkages links to people or groups further up or lower down the social ladder

It can be argued that an increase in social capital can improve the common good. Discussions about the common good and human dignity focus mostly on social, relationship, human and intellectual capital, and include key questions about the importance and nature of governance. Examples of important areas directly affected are:

- Economic growth and social inclusion/humanitarian system
- Education, gender and work
- Employment, skills and human capital
- Health and healthcare
- Digital economy and society
- Cities and urbanization/mobility/human mobility and migration
- International governance and public-private cooperation/regional governance/international security

A few of these are discussed in more detail below.

How values shape the future of economic growth and social inclusion

In the Fourth Industrial Revolution, "the scale and breadth of the unfolding technological revolution will usher in economic, social and cultural changes of such phenomenal proportions that they are almost impossible to envisage". Coupling economic growth with a broadbased and inclusive advance in living standards is widely acknowledged to be an immense challenge. Leaders of major international economic organizations have repeatedly expressed concern about rising inequality, and have called for new strategies to address it. Two elements are involved in this system: encouraging strong economic growth, and ensuring growth is inclusive.

Economic growth is essential to improve living standards, yet statistics often show that it exacerbates the difference

between rich and poor. Research suggests that inequality dampens growth and aggravates social instability and other global risks. However, many advanced and middle-income countries have seen inequality rise over recent decades. It remains extremely high in developing economies; according to the OECD, the average income of the richest 10% of the world's population is approximately nine times that of the poorest 10%, up from seven times 25 years ago.

Adopting new technologies offers a potential solution to drive growth. However, it can also widen existing inequality by intensifying productivity differences at the country, industry and firm level, and by disproportionately empowering the "winners" of innovation. Policy-making must become even more people-centred, with a greater focus on societal goals. Efforts are needed to accelerate economic activity and to ensure that its benefits reach throughout society. The Scandinavian economies provide what is possibly the best case studies of economic growth and social inclusion.

While the challenge is apparent, concrete policy and business responses are not. To a large extent, policy debates are polarized and removed from evidence. Many businesses are also not focused on developing strategies to strengthen shared economic and societal value. Public-private collaboration, however, can make a notable difference given insufficient demand, persistent unemployment, stagnating productivity and growing inequality. It can achieve the dual objectives of strong growth and broad progress in living standards by:

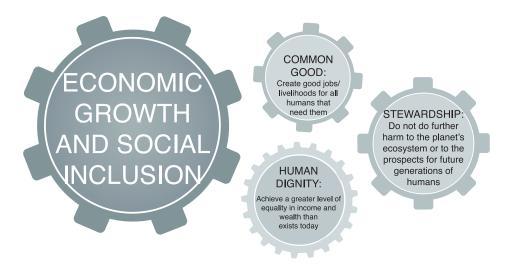
- Researching how the Fourth Industrial Revolution could contain an global-commons element with a basic income for all (patent windfall taxes, golden shares, tax transparency and transaction tax)
- Bringing together potential winners and proxies for the losers from the Fourth Industrial Revolution for a new, powerful and positive narrative
- Coordinating research on the future of work, the areas where greater productivity is required, and how shorter working hours could be financed

The Impact of Values on this System

A values approach is critical for addressing these challenges. As set out in this White Paper's introduction, values provide both a clear destination and the motivation to move towards it. The core values of human dignity and common good point directly to the need to create good livelihoods for all who need them, in addition to achieving a much greater level of equality in income and wealth than exists today (Figure 5).

The Fourth Industrial Revolution must be accompanied by a "values revolution" to ensure it works for the common good. With tremendous diversities in the world, such a revolution requires an immense effort from those dealing with the challenge.

Figure 5: Factoring Values into the Economic Growth and Social Inclusion System



Source: Global Agenda Council on Values

How values shape the future of education, gender and work

Among other factors, a nation's growth depends on whether and how it educates and integrates its talent. Women make up half of the potential workforce in any economy, and the effective use of this talent pool is an important factor for growth, prosperity and competitiveness. While 96% of the health gender gap and 95% of the education gender gap have been closed globally, only 59% of the economic and 23% of the political gender gaps have been eliminated. At the current rate of progress, the economic gender gap will be closed in 118 years. Schwab believes taking into account the Fourth Industrial Revolution's impact on the gender gap is crucial. "The cumulative effect of significant [job] losses across whole job categories that have traditionally given women access to the labour market is a critical concern," he notes.19

Closing gender gaps and leveraging the wider economic and societal benefits of gender parity require a concerted effort between businesses, governments and civil society. Gender equality is emerging as a new social norm, thanks in part to coverage by traditional and new media, and is creating adaptive pressures in governments and organizations. The World Economic Forum's Shaping the Future of Education, Gender and Work System Initiative aims to serve as a partner in global, regional, national and industry transformations through a sustained flow of activities to shape, advance and monitor gender parity.

Women's expectations of themselves in relation to career and breadwinning, as well as men's expectations in relation to the family and caregiving, are both changing, although women still bear a disproportionate share of the unpaid work at home. Access to quality and affordable childcare remains a challenge for many working families. The gender pay gap may lead some women to sacrifice their careers to stay home with their children. To address this at the company level, firms could offer on-site and affordable childcare and make a concerted effort to narrow the pay gap. A scorecard approach may be used to evaluate companies that provide family-friendly environments.

The traditional roles of men and women at work and home need to continue shifting to close gender gaps in pay and leadership. Statistics indicate a strong case for gender diversity. Companies with top-quartile representation of women in executive committees tend to perform better than companies with no women in these positions. Moreover, women's integration into political decision-making has been shown to increase their representation in broader segments of society and to decrease income inequality.

High levels of global unemployment and the rapidly changing nature of work present a growing labour market crisis that is threatening livelihoods and exacerbating inequality and social tensions. While 197 million people around the world were unemployed in 2015,²⁰ 470 million new jobs will be needed globally by 2030. Yet, employers are struggling to find talent with a growing mismatch between available and required skills. Technological, demographic and economic trends are also profoundly changing the nature of work. Existing jobs are displaced by disruptions, such as increased automation and new positions for which current education and training systems are not yet fully equipped. According to Schwab, society must understand technology's two competing effects on employment:

First, there is a destruction effect as technology-fuelled disruption and automation substitute capital for labour, forcing workers to become unemployed or to reallocate their skills elsewhere. Second, this destruction effect is accompanied by a capitalization effect in which the demand for new goods and services increases and leads to the creation of new occupations, businesses and even industries. As human beings, we have an amazing ability for adaptation and ingenuity. But the key here is the timing and extent to which the capitalization effect supersedes the destruction effect, and how quickly the substitution will take.²¹

Hundreds of millions of new workers have entered the global economy over the past three decades, according to Michael Spence, Chair of the World Economic Forum Global Agenda Council on New Growth Models:

They arrived with various levels of education and skill, and over time have generally gained in terms of "human capital" – and in terms of value added and income. This has brought a tremendous, and ongoing, growth in income levels, opportunities and the size of the global economy, but also more employment competition and significant shifts in relative wages and prices, which is having profound distributional effects ... We do not have well developed frameworks for understanding structural change. Nevertheless, the unemployed and underemployed, especially younger people, expect their leaders and institutions to try.²²

The developing world needs policy responses at both the international and national levels to meet the formidable employment challenge facing the world. To improve the employment situation in developing countries, the huge asymmetry in the international distribution of productive resources must be reduced. Globalization's potential role in this needs to be recognized as well. Given this context, international policy must first provide aid for the investment required to address the employment problem; analysis shows that this has been effective in the past. Second, international policy needs to transform brain drain into "brain circulation" in developing countries that lack skilled workers. Consideration must be given to establishing a transparent approach for the fixed-term migration of high-skilled workers.

The Impact of Values on this System

Workplace cultures need to change to embrace workers who take advantage of policies that help balance family responsibilities with work. This requires honest conversation between men and women. For the common good, those educating future leaders, including business schools, must encourage honest dialogue and awareness of family-related challenges at work.

Companies may face practical challenges in implementing family-friendly policies, such as extended leave for both men and women. An employee's extended absence may place a burden on other staff members or stall a company's productivity. Further discourse is needed and lessons could be learned from businesses that successfully implement family-friendly policies for tackling these practical problems. The private sector, governments, nongovernmental organizations (NGOs), universities and other stakeholders, such as labour unions, are at the forefront of how to solve challenges in employment, skills and human capital.

These organizations would be well-served by a values-based approach as they begin to analyse future labour market trends and disruptions in industries, sectors and regions, and the implications for workforce strategy, talent and skills. By filtering their decisions through a "values lens" aimed at enhancing human dignity, common good and stewardship (Figures 6 and 7), the resulting policies will be more humane and sustainable for the longer term.

The key to the world's economic growth lies in the talent, know-how, skills and capabilities of its people – its human capital. Investing in it and innovating for education and employment is critical for both the public and private interest.

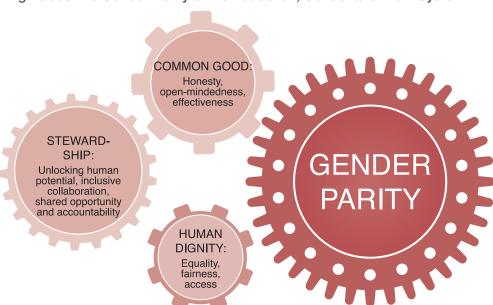
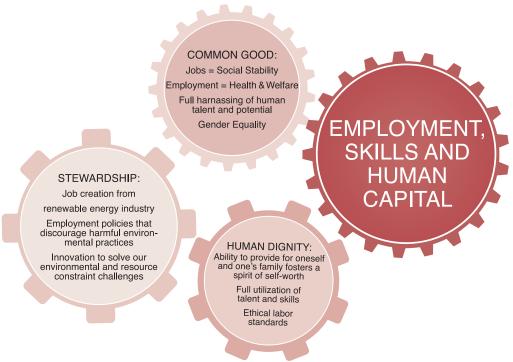


Figure 6: Factoring Values into Gender Parity of the Education, Gender and Work System

Source: Global Agenda Council on Values

Figure 7: Factoring Values into Employment, Skills and Human Capital of the Education, Gender and Work System



Source: Global Agenda Council on Values

How values shape the future of health and healthcare

While advances over the past century have led to people living longer and healthier, delivering healthcare in the global health system has been fragmented and disorganized, growing more expensive by the decade. As chronic and non-communicable disease rates continue to climb, governments, the private sector and NGOs are wrestling with how to provide, disseminate and pay for adequate prevention and treatment.

Growing evidence suggests a positive correlation between the health of a corporation's employees and its financial performance. Often, staff of corporations that invest in workers' health take fewer sick days, are more productive and less likely to take early retirement for health reasons. All of these have clear and direct financial benefits. Nicolas Berggruen, founder and president of Berggruen Holdings, says that happier and healthier employees will most likely be more productive, and organizations that enable healthy environments will also be more able to attract better people. ²³

The Vitality Health Metrics Working Group initiative has been instrumental in advancing organizations' ability to measure and report on their employees' health in a more comprehensive way. The idea of more comprehensive health metrics has attracted the attention of both the Global Reporting Initiative (GRI) and the International Integrated Reporting Council (IIRC). Having such metrics is aligned with the UN Global Compact and captured in

the Sustainable Development Goal 3: "Ensure healthy lives and promote well-being for all at all ages". Recognizing that the United States must build a culture and environment focusing on wellness rather than healthcare, US Healthiest, a non-profit organization, created a signature programme called HealthLead™ Workplace Accreditation. It not only recognizes organizations that demonstrate best practice in employee health management and well-being, but also helps them better align these practices with business sustainability, health, productivity and financial outcomes.

Citing the Health Disparities and Inequalities Report – United States, 2013 of the Centers for Disease Control and Prevention, the National Business Group on Health writes: "People who live in mostly minority communities continue to have lower socioeconomic status, greater barriers to healthcare access, and greater risks for and burden of disease compared to the general population living in the same county or state." As social, economic and environmental factors contribute strongly to health inequities, the group suggests that "employers must design programmes and implement policies to improve where people work and form partnerships to improve where

The Impact of Values on this System

In taking a more active interest in their employees' health, organizations must move beyond traditional occupational health and safety issues and address health and well-being more broadly. In addition, organizations need to measure and report more comprehensively on the health of their workforces. According to Paul Druckman, Chief Executive Officer of the International Integrated Reporting Council, the health of a company's employees is a vital dimension of human capital management and disclosure.²⁵

Although clear and direct operational reasons favour more investment in health, values play an important role because they speak to the issues of care and respect for human dignity (Figure 8). As unhealthy people cannot fulfil their true potential, it can be argued that corporations and governments therefore have a moral obligation to contribute to improving health.

people live, learn and play".24

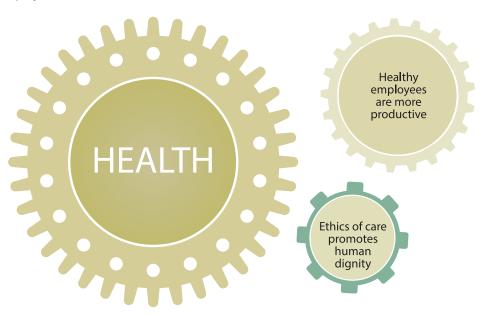


Figure 8: Factoring Values into the Health and Healthcare System

Source: Global Agenda Council on Values

How values shape the future of the digital economy and society

Today's unprecedented connectivity means that the software for it is a primary value driver. In the midst of the second machine age and the Fourth Industrial Revolution, most interactions and transactions are becoming digitalized. As a result, people must evolve or even fundamentally redefine the understanding of concepts such as security, privacy, identity, society and even human agency within this system. People will ultimately determine how they use digital technology, according to John Hagel, Co-Chairman of the Deloitte Center for the Edge and author specializing in the intersection of business strategy and information technology. He asks: "Will we use [technology] to narrowly squeeze out all the inefficiency in the work we do? Or will we use it to catalyse and amplify the imagination ... that could identify entirely new avenues to create fundamentally new sources of value?"26 As

Schwab has noted:

We must have a comprehensive and globally shared view of how technology is changing our lives and those of future generations, and how it is reshaping the economic, social, cultural and human context in which we live. The changes are so profound that, from the perspective of human history, there has never been a time of greater promise or potential peril.²⁷

The shared economy began by promising democratized peer-to-peer platforms, with a smarter, fairer and more sustainable allocation of resources that capitalized on excess capacity. Yet, recent controversies surrounding shared-economy companies, such as Uber and Airbnb, show an aggressive and largely unregulated "uberization" of markets where contractors have diminished leverage. Platform Cooperativism, a counter-movement to these emerging monopolies, proposes "worker-owned cooperatives" that should design their own apps-based platforms and encourage peer-to-peer ways of providing

services.

As personal data (or algorithmic selves) become more valuable to third parties or political agendas, gaining some form of control will become increasingly important. To remain autonomous, people should have the right to have an "algorithmic angel" – a guardian service allowing them to protect their agency over their data. In a capitalist society, this service would also likely be offered by a third, commercial party. How should interests be aligned so that controlling an individual's algorithmic self is both valuable for the person as well as for a business? The answer to this question will shape future individuality and agency.

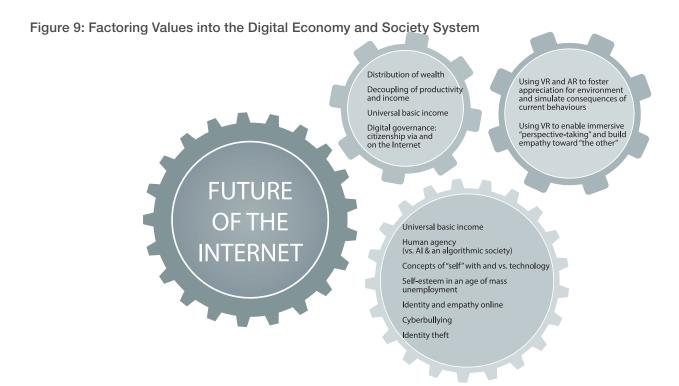
The Impact of Values on this System

Today's tech start-up founders are creating the organizations of tomorrow. Their products and services represent a certain ethos and will be role models for millions of users. A "values toolkit" may help to raise awareness and enable founders to make more conscious values-based decisions early in their entrepreneurial journeys (Figure 9).

Huge numbers of interactions are now taking place online or in digital form. Social networks such as Facebook or LinkedIn have a big responsibility for the values they promote and that shape our behaviour in the private and public arena.

In this period of profound digital transformation (and with technology reflecting underlying ethical positions), a discussion about "silicon values" is paramount for the common good. Importantly, this is not a values-neutral space. Raising awareness of conflicting sets of values will better enable people to use ubiquitous digital technologies to sympathize with and respect one another. It will help to build empathy, tolerance and trust as the foundation of prosperous and peaceful digital societies.

To provide a platform for this, the World Economic Forum is launching the Centre for Interaction Excellence, a timely and important initiative for advancing the discussion.



Source: Global Agenda Council on Values

How values shape the future of international governance and public-private cooperation

As the International Organization for Public-Private Cooperation, the World Economic Forum seeks to uphold world-class corporate governance, where values are as important as rules. The Forum's answer to how the public and private sectors should cooperate responsibly lies in transparent governance, a diverse membership base, a relentless focus on values among people, and efficient processes that drive constituents towards solutions.

Public-private partnerships (PPPs) "combine the best of both worlds: the private sector with its resources, management skills and technology; and the public sector with its regulatory actions and protection of the public interest. This balanced approach is especially welcome in the delivery of public services which touch on every human being's basic needs". Some governments undertake PPPs without an overall PPP policy, which leads to ill-defined goals and potential problems with projects. A PPP policy is needed to set a roadmap for implementation, as without it, no other mechanism can turn aspirations into concrete programmes.

A key driver of more recent efforts to increase public-private cooperation is economic in nature.²⁹ Governments are seeking to save money as they face growing challenges with shrinking resources. Private "managerialism" has become widely regarded as an antidote to the public sector's perceived bureaucracy and inefficiencies. "The idea that Google or Oracle or IBM could or should be state-owned is nonsensical, but their importance to cyber security is unquestionable. In the case of IT security, as with many other contemporary challenges, private and public actors have always been involved and their continued cooperation is essential if the challenge is to be met with any semblance of efficiency or effectiveness."³⁰

Manufactured and Natural Capital - Stewardship

The abuse of natural resources in manufacturing processes constitutes the main concern of climate change and global warming. While responsible stewardship of the planet requires that these resources are managed responsibly, those affected most by climate change often live very far from where the damage is done.

Discussions about stewardship focus mostly on manufactured and natural capital, and include the systems of food security and agriculture, consumption, environment and natural resource security, energy, and production. Several of these are now covered in more detail.

How values shape the future of food security and agriculture

By 2050, the over 9 billion people inhabiting the world will demand 60% more food than what is consumed today. Feeding this expanded population nutritiously and sustainably will require tremendous improvements in the global food system – one that provides livelihoods for farmers as well as nutritious products for consumers. Through a market-based and multistakeholder approach, the New Vision for Agriculture (NVA) aims to achieve a 20% improvement in food security, environmental sustainability and economic benefits to agriculture in each decade until 2050.

Challenges include volatility of commodity production and prices, high levels of poverty and hunger among rural and farming communities, increasing water scarcity, and climate change. To address these, the NVA has designed a distinctive global platform and participative approach with over 500 organizations engaged, and has helped to drive partnerships in 19 countries across Asia, Africa and Latin America. This includes the Grow Africa and Grow Asia regional partnerships, NVA India, the NVA Transformation Leaders Network, and over 90 value chain partnerships focused on increasing productivity, environmental sustainability and farmers' income for a variety of crops.

The challenges related to food security and agriculture are systemic and interconnected, with a need to create synergies and a coordinated response by all role players throughout the value chain. A code of conduct should be established and reviewed regularly, and guidelines elaborated to help build an equitable global food security and agriculture system. Women's status must also be improved, as they play central roles in farming in many developing countries.

The increasing global demand for organic food production is creating an opportunity for small African farmers. Organic agriculture, using more traditional farming practices and at lower risk, has fair trade labels that allow more than 2,150 certified organic farmers to participate in export chains. In fact, in Uganda, export volumes have grown 60% on average over the past couple of years.

The private sector is striving to develop new markets and sustainable supply chains, respond to evolving consumer demands, manage risks and emerging challenges, and adapt to a resource-constrained world. This requires a strategic, long-term vision, coupled with new ways of working with all actors along the value chain. According

to Paul Polman, Chief Executive Officer of Unilever, "As we determine the course of the next fifteen years for sustainable development, we need to acknowledge that those most often living in extreme poverty are those living on small farms; they are also most disproportionately affected by climate change. Regardless of what approaches we take, I see the private sector leading the way."³¹

The Impact of Values on this System

Solving food security and agriculture challenges will be extremely difficult without dealing with ethical issues (Figure 10). Regarding human dignity, world populations have a right to access food; being unable to eat is a great injustice and an unethical act, no matter the reason.

At local and global levels, leaders should encourage ethical agricultural production to feed people and to avoid waste. Natural resources are crucial in food production for human survival. Better use of technology and communication tools can have an important impact on knowledge sharing at all stages of the food chain, especially for people living in the developing world.

Figure 10: Factoring Values into the Food Security and Agriculture System



Source: Global Agenda Council on Values

How values shape the future of consumption

Through its Sustainable Consumption initiative, the World Economic Forum is making a tangible impact in this area. In its 2013 report, *Sustainable Consumption: Stakeholder Perspectives*, the Forum built on the original UN definition of sustainable development to describe it as "consumption that meets the needs of the present without compromising the ability of future generations to meet their own needs". In the initiative's early years, many in the private sector shared the view that "[w]hile consuming less will surely lower the impact on the environment, less consumption could also imply less economic activity, which would deliver less growth, lower incomes and fewer jobs". 33

A breakthrough came in November 2008 at a "design charrette", or workshop, held in New Delhi, India, where a group of 50 participants, including business leaders and students, suggested innovative ideas to change the "product-service system". All solutions offered value

to citizens and firms, with business models radically different from those known in 2013. The report concluded that, while accelerating and scaling progress towards sustainable consumption will require many steps and actions, the ultimate goal is still sustainable prosperity: "By innovating with the goal of sustainable markets and new opportunities, businesses can minimize risks and be the primary driver of sustainable consumption. Along the way, they can enable an expanding global population to consume sustainably, leading the change of consumption patterns in the developed world while creating a model for long-term prosperity in the developing world."³⁴

The Impact of Values on this System

The development model has benefited economies and companies, namely through cheaper and better imports, production efficiencies, and growth from sales at greater scale and volume. However, with a significant anticipated increase in global population, and an expected several-fold depletion and consumption of natural resources, a key question remains: how long can the world sustain the model without further damaging the environment and aggravating existing inequalities?³⁵

Though technological advances are only part of the equation, consumers "will also need to re-evaluate their lifestyle and their environmental, social and economic impact. They will need to assess how they choose and use products and services." In line with the value of stewardship, the new generation's consumption patterns are changing, according to the Forum's Engaging Tomorrow's Consumer project. Millennial consumers are increasingly searching out products that make them look and feel good, but which are also good for the planet and society.

How values shape the future of environment and natural resource security

Sustainable economic growth depends on resource management, whether in energy, infrastructure, healthy workforces or food security. Climate change threatens each of these. Without proper intervention, environmental changes will severely suppress the potential economic growth of emerging economies, and sustainable growth of developed ones. Improper management of natural resources leads to corruption and decreased accountability.

The failed talks at the 2009 United Nations Climate Change Conference in Copenhagen highlighted three issues of the environment and natural resource security system: the differences between developed and developing economies, the varied impacts of climate change felt by each, and the pressures of governments to take into account their own political systems and private-sector interests. Values during the talks were nation-centric, and not grounded in the common good or the need for global stewardship. Governments have to achieve a new vision of sustainable development, according to Jeffrey Sachs, professor of sustainable development, Columbia University (USA) and special adviser to the UN Secretary-General. This means combining economic development, social inclusion and environmental sustainability. As Sachs has underlined: "That's the concept that can keep us safe, that can be a path to fairness in the world, and a path to prosperity. So by taking that holistic vision and putting it front and centre, whether it's for finance, whether it's for new goals or whether it's for climate, we can have success".38

While supporting and developing local economies, multisectoral partnerships take practical realities into account, such as infrastructure challenges. Various opportunities exist for community investment in technology and resource infrastructure to help develop economies. Different technologies (e.g. cellular, satellite) can be leveraged to improve crop yields. Furthermore, approaches such as climate-smart agriculture (CSA) advance local farming practices in several African communities. According to the New Partnership for Africa's Development

(NEPAD), "CSA describes agricultural practices, approaches and systems that sustainably and reliably increase food production and the ability of farmers to earn a living, while protecting or restoring the environment. It aims to build the food and nutrition security of the rural poor so that farm families have access to enough nutritious food at all times, even in the face of a changing climate".³⁹

The Impact of Values on this System

Climate change and resource scarcity present challenges that are likely to cause increasing global havoc, and to beg for a values-based discussion. Climate change threatens individual human dignity as societies across the world struggle to find clean water and reliable food sources, and are additionally challenged by corporate ownership of natural resources.

The interests of the common good are central, since resources such as clean water, rare earth metals and food sources must be shared, though they have also been monetized and continue to be part of the world economy. Stewardship will be critical, as economic development and individual lives of future generations are inextricably linked to the climate and viable solutions. A values-focused perspective (Figure 11) would consider the concepts of ownership; investment; personal, community and global responsibility; and sustainable and equitable growth for economies and resources. A values-based approach to global negotiation and conflict resolution could prove essential to boosting opportunities for inclusive economic growth and security. In contrast, lacking such an approach could lead to personal, regional and ultimately global devastation.

Figure 11: Factoring Values into the Environment and Natural Resource Security System



Source: Global Agenda Council on Values

Shaping the future of energy

The energy industry faces challenges that grow more complex by the day. "Projects are increasing in size, complexity, risks and costs. At the same time, society is transforming and demanding more from both business and government." According to the Forum's Global Agenda Council on Decarbonizing Energy, the possibility of major, future sources of energy being less carbon-intensive and even carbon-free is consistent with the structural change and transformation of energy systems over the long term. 41

Part 2

Measuring Values

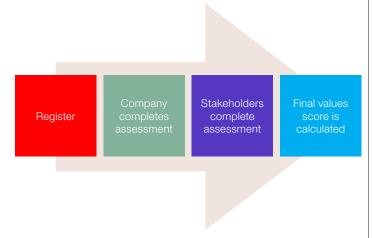
The Global Agenda Council on Values developed a proposal, outlined in this section, for a values self-assessment tool that enables organizations to measure the maturity of values in terms of commitment, governance and performance.

Measurement takes place according to the three core pillars of human dignity, common good and stewardship. The process (Figure 12) also allows organizations to solicit anonymous feedback from their stakeholders. Organizations can decide whether they will publish the results of the measurement or simply use it for internal purposes. The tool is available to all Partners of the World Economic Forum.

The tool's major benefits are:

- Providing comparable data on perceptions about the maturity of values
- Allowing stakeholders to complete the assessment, thereby providing anonymous feedback to organizations about their performance on values

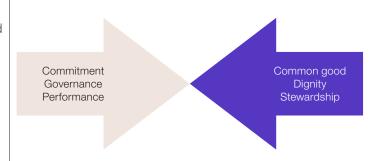
Figure 12: Process for the Values Self-Assessment Tool



Source: Daniel Malan/Global Agenda Council on Values

Once an organization has registered online, one representative is allowed to complete the questionnaire on the organization's behalf. The questionnaire comprises 20 questions covering commitment, governance and performance over the three core pillars (Figure 13).

Figure 13: Measurement Areas



Source: Daniel Malan/Global Agenda Council on Values

Immediate feedback is provided once the questionnaire is completed, and an initial score out of 100 is calculated. The organization can then invite any number of its stakeholders to share their views on the company's performance. Typically, a core group of employees, customers, suppliers and beneficiaries of citizenship programmes will be asked to respond to the questions over a period of six to eight weeks.

Once stakeholders provide feedback, a second score out of 100 is calculated. The gap between the company and stakeholder scores will give some indication whether the company score was realistic. A final values score will be calculated, and will reflect the total scores as well as the gap between them.

Draft Questionnaire

The chief executive officer or designated executive of any organization must complete the draft questionnaire. (A description of the questionnaire's content is shown in the Table.) The option exists for selected stakeholders to complete the survey as well. Only directors and the company secretary can answer certain questions – for example, on the nature of board agendas.

Possible responses are:

- 1. Strongly agree
- 2. Agree
- 3. Unsure
- 4. Disagree
- 5. Strongly disagree

Table: Draft Questionnaire Content

Category	Value	Description
Commitment	Common good	The company is committed to pursuing activities that would benefit all its stakeholders
	Human dignity	The company acknowledges and advances the dignity of all its stakeholders, including employees and the entire supply chain
	Stewardship	The company is committed to contributing to stewardship of the planet
Governance	Common good	Directors display ethical values when interacting with all stakeholders, including investors
	Human dignity	Measuring values, such as fairness and human dignity, forms part of integrated reporting, including reporting on sustainability
	Stewardship	Sufficient resources have been allocated to management to embed values within the company
Performance	Common good	Stakeholders benefit from a fair and transparent business relationship with the organization
	Human dignity	Stakeholders, including employees, customers and suppliers, are always treated with respect
	Stewardship	From its performance, the organization is clearly doing everything possible to be a responsible steward of the planet

Source: Daniel Malan/Global Agenda Council on Values

Part 3

Reporting on Values⁴²

Reporting is of particular importance because it provides the window on all the activities of a corporation. A corporate report shares information – financial and non-financial – with both external and internal stakeholders. It is through the analysis of corporate reports that stakeholders receive insight into how corporations behave and the values on which they base their behaviour.

This part provides a brief historical overview of sustainability reporting and contextualizes the recent emergence of the concept of integrated reporting. The business case for reporting and the main role of players and standards are discussed, with specific reference to the work of the GRI and the IIRC.

The Evolution of Reporting

Corporate responsibility reporting has been around for longer than many people might think. Over time, the focus has shifted from social components to environmental components to a "triple bottom line" approach, and is currently moving rather rapidly towards integrated reporting. The roots of reporting can be traced back to the 1940s, when the term "social audit" was used for the first time by Theodore Kreps, professor at the Stanford Graduate School of Business (1930-1962), in relation to companies reporting on their social responsibilities. This concept was further developed during the 1950s and beyond, but mostly within academic circles, and was focused on the broader concept of corporate social responsibility (CSR), as opposed to the activities of measurement and reporting.

During the 1980s, ethical investment funds in the United Kingdom and the United States began screening companies based on their social and ethical performance. The 1990s brought increased reporting. A good example is the Body Shop International, which voluntarily published its first Values Report in 1995. The report included environmental, animal protection and social statements. The 1990s were described as the "transparency decade" by the globally recognized think tank, SustainAbility. This was a period when a series of major incidents forced pioneering companies to "come clean" and issue reports. At the same time, sustainability reporting standards were formalized through the GRI. These guidelines are currently in their fourth iteration and will soon be transformed into a set of formal reporting standards. SustainAbility argued that the first 10 years of the 21st century might become the "trust decade", based on ever-increasing transparency, accountability and reporting. Ironically, this decade turned

out to be one of fundamental distrust, starting with the collapse of Enron and ending with the aftermath of the global financial crisis. It could be argued that distrust arose as a result of increased disclosure and transparency. However, a more plausible reason is that poor or questionable corporate performance (rather than increased disclosure) was the main culprit.

Over the last two decades, the most important identified changes include the growth in the number of reporting companies (from a few dozen to a few thousand), the shift from environmental disclosure to triple-bottom-line disclosure to integrated reporting, and the rapid increase in the volume of information (both printed and online).

However, even a few thousand reporting companies still constitute a small percentage. In June 2016, approximately 9,000 reporting organizations were listed on the GRI website, and many of these are not multinational corporations. ⁴³ According to the World Health Organization, there are more than 60,000 multinational corporations in the world, and trade between these corporations and their subsidiaries or affiliates accounts for two-thirds of total world trade. ⁴⁴

The challenge identified by SustainAbility some time ago remains relevant today, namely the need to link sustainability issues with business performance and corporate identity. More recently, the positions of financial institutions and institutional investors have made a substantial contribution to highlighting the business case for reporting, with the UN Principles for Responsible Investment, an initiative of the UN Global Compact and UNEP Finance Initiative, and the International Corporate Governance Network being particularly active in this regard.

Over the years, there have been increasing requests for governments to make some form of sustainability reporting compulsory. A few years ago, this culminated in the GRI's Report or Explain campaign. Extensive lobbying also succeeded in putting reporting on the agenda for the United Nations Conference on Sustainable Development (Rio+20, or the Earth Summit) in 2012. In the end, a relatively watered-down paragraph was inserted in the final declaration signed by 114 heads of state. Paragraph 47 of the final declaration reads:

We acknowledge the importance of corporate sustainability reporting, and encourage companies, where appropriate, especially publicly listed and large companies, to consider integrating sustainability information into their reporting cycle. We encourage industry, interested governments as well as relevant stakeholders with the support of the UN system, as appropriate, to develop models for best practice and facilitate action for the integration of sustainability reporting, taking into account the experiences of already existing frameworks, and paying particular attention to the needs of developing countries, including for capacity building.⁴⁶

Following agreement with this wording, the governments of France, Denmark, South Africa and Brazil cooperated to form an initiative called the Group of Friends of Paragraph 47.47

In addition, the OECD Guidelines for Multinational Enterprises recommend the following:

Enterprises should ensure that timely and accurate information is disclosed on all material matters regarding their activities, structure, financial situation, performance, ownership and governance. This information should be disclosed for the enterprise as a whole, and, where appropriate, along business lines or geographic areas. Disclosure policies of enterprises should be tailored to the nature, size and location of the enterprise, with due regard taken of costs, business confidentiality and other competitive concerns.⁴⁸

In a March 2014 speech to the Institute of Chartered Accountants in England and Wales, Mervyn King, Chairman of the IIRC, explained the responsibility of the

board to ensure that traditional reporting is translated into a more accessible format:

To be accountable, the board must report in an understandable manner. Financial and non-financial reporting are each critical but neither alone nor in their silos is sufficient. The system of [integrated reporting] requires the board to apply its collective mind to those reports prepared, to the average user, in incomprehensible language, understand them and explain "the state of play" of the company in clear, concise and understandable language. Such a report enables all stakeholders to make an informed assessment about the company's stability and sustainability.⁴⁹

The 2016 report, *Carrots and Sticks: Global trends in sustainability reporting regulation and policy* (published by the United Nations Environment Programme (UNEP), the Centre for Corporate Governance in Africa at the University of Stellenbosch Business School, the GRI and KPMG), indicated a surge in reporting instruments in place: almost 400 instruments in 64 countries, out of 71 countries researched.⁵⁰ Although this shows increased commitments and efforts to achieve transparency and accountability, the large number and variety of instruments can also pose challenges for reporting organizations.

Government regulation accounts for the largest proportion of sustainability reporting instruments worldwide, with over 80% of the governments of those countries studied introducing some form of regulatory sustainability reporting instrument. Around two-thirds of the identified instruments are mandatory. There is a clear underlying trend of an increasing volume of reporting instruments, with an average of six instruments per country studied in 2016 versus 4.1 per country in 2013.⁵¹ According to the GRI:

The findings in the 4th edition of Carrots & Sticks reflect a commendable effort by governments, regulators, stock exchanges and others to implement sustainability reporting policies through regulation, guidance and other instruments. However, the publication also paints a picture of a rapidly growing, increasingly complex and fragmented landscape of reporting instruments.⁵²

The Business Case for Reporting

Corporate responsibility reporting is important because it is good for business and it is the right thing to do. This is the classic argument of enlightened self-interest – doing well by doing good. As already described, companies in the early years reported on so-called non-financial matters in order to appease stakeholders who wanted more information and complained heavily if it was not provided. Many companies that did this type of reporting did so not because they thought it was material to business performance or that it was their moral obligation, but because they perceived a reputational risk if they did not.

Today, there is growing consensus that stakeholders, and not only shareholders, have a legitimate interest in obtaining material information about company performance. This includes ESG information. Some companies recognize the moral imperative to provide this, based on the fundamental governance values of honesty, transparency and accountability.

However, the business case is currently the main driver for reporting. Material information on company performance has to focus on both financial and non-financial information. In terms of the correlation between responsible business and corporate performance, the work on shared value by Porter has received significant attention. In terms of integrated reporting, the work of Eccles has been very influential. For example, Eccles, loannou and Serafeim⁵³ have demonstrated that (what they call) "High Sustainability" companies significantly outperform their counterparts over the long term. Based on a detailed analysis of a sample of 180 companies, they state clearly that sustainable firms generate significantly higher profits and stock returns.⁵⁴ In terms of the contributing factors that might provide this competitive advantage, they list a more engaged workforce, a more secure licence to operate, a more loyal and satisfied customer base, better relationships with stakeholders, greater transparency, a more collaborative community and a better ability to innovate.55 They also highlight the importance of measurement and disclosure, stating: "Reporting on such nonfinancial performance measures to the board [as with regards to sustainability topics] is an essential element of corporate governance so that the board can form an opinion about whether management is executing the strategy of the organization well."56

By engaging in corporate responsibility reporting, companies benefit through improved understanding of the business model and better decision-making, increased investor confidence, improved reputation, and stakeholder support. Integrated reporting emphasizes the link between management information and external communication, as well as the need for integrated thinking.

The role of investors is critical. The need for investors to have comparable and standardized data has been a major driver behind reporting standards. This point is highlighted in an article published in the *Financial Times*, where Michael Bloomberg and Mary Schapiro, Chairman and Vice-Chairman, respectively, of the Sustainability Accounting Standards Board, wrote: "Standardizing disclosure of sustainability information could bring significant financial benefits for shareholders and potential investors – and help strengthen the global economy's long-term health". For Probably the most significant development in the area of disclosure is integrated reporting.

An integrated report is defined by the IIRC as "a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term". The integrated report should not be confused with integrated reporting, which is defined as "a process founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation". 59

Part 4

Conclusion

The revaluation of creativity, trustworthiness and innovation that drove the Industrial Revolution has helped to coordinate the activities of entrepreneurs and consumers within international networks of trade and knowledge sharing. The recognition that individuals have ultimate worth underpinned the drives to criminalize slavery and establish civil rights. Moreover, the values of care for the vulnerable and liberty were central to the Keynesian and neoliberal movements, respectively, of the 20th century.

The world faces unprecedented disruptions – demographic, social, geopolitical, technological and natural. It must again implement core values to coordinate an adequate and decentralized response to them across social boundaries. Responding with self-interest alone will not be enough because it is inherently incapable of tackling the underlying disruptions that generate a multitude of externalities and inequalities, waves of interconnections and uncompensated influences.

Self-interest responds to extrinsic incentives, such as regulations, taxes and subsidies, which may drive out intrinsic incentives to pursue prosocial values for their own sake. A wealth of evidence shows that people whose intrinsic values are triggered tend to be more prosocial and pro-environmental, and they tend to live longer. For a vanguard of decision-makers seeking new approaches who know that self-interest on its own will not overcome the proliferating global problems – the key trigger is a powerful and positive new narrative, accompanied by social and institutional mechanisms that ensure they will collaborate. The narrative, as well as the mechanisms. build on common values rather than policies. For the rest of the population, the values shift occurs once their norms, rules, regulations, incentive schemes and institutions have changed accordingly. In short, the creation of a powerful narrative based on core values and backed by a coordinated, pioneering movement for change is critical.

The values of human dignity, common good and stewardship are potentially vital drivers of the new narrative that the current global challenges call for. Such a narrative, communicated to the wider public by a vanguard living this narrative, appears essential to dismantle current social boundaries and thereby generate a willingness to cooperate. The dismantling can occur only through taking the appropriate perspective. In social in-groups, people take the perspectives of others into account alongside their own. In so doing, they are automatically induced to cooperate. The challenge nowadays is to extend this interchangeability of perspectives beyond their current ingroups. Only a new narrative, built on socially integrative values, can rise to this challenge.

Having interchangeable perspectives persuades people to apply core values in a coordinated way to address global problems. Sharing perspectives is a matter of degree. The first level is *tolerance* – the ability to acknowledge the legitimacy of beliefs and attitudes different from one's own. The next level is *respect*, or the esteem shown to those who differ. The highest level is *service*, widening one's circle of care and compassion – the drive to promote the well-being of others and alleviate their suffering. The past revaluation of slavery, as well as the present revaluation of gender roles, have involved climbing this ladder of interchangeable perspectives.

Much evidence exists that the greatest source of human well-being is service and giving one's time, talents and love; moreover, this is key to promoting the core values of human dignity, common good and stewardship. Such traits of prosocial service can be developed or trained. Service-based leadership must become the norm for good leadership at all levels. A values-based approach to global problem-solving involves expanding people's circles of tolerance, respect and service beyond immediate in-groups to "others" – outsiders, refugees, those dispossessed. The various approaches for achieving this can be divided into three broad categories:

The voice of reason: This allows deficiencies in cooperation to be viewed as problems to be overcome, rather than as wrongdoings to be avenged. It involves challenging ingrained prejudice that gives rise to antagonisms and conflict, and creating awareness for the long-term consequences of one's actions. It also entails "systems thinking", which enables people to understand interconnections among their behavioural patterns as well as the feedback effects. As they understand how their behaviour generates externalities and inequities, they may be induced to act in a more socially responsible way. Psychologists, sociologists and anthropologists widely appreciate that reason alone is generally a weak driver of cooperation across social boundaries. When people believe they are worth more intrinsically than others, reason cannot induce them to pursue the global public interest. In evolutionary terms, reason serves people's motivations (whether cooperative or antagonistic) rather than vice versa. In the words of John Rawls:

[A society] ... is typically marked by a conflict as well as by an identity of interests. There is an identity of interests since social cooperation makes possible a better life for all than any would have if each were to live solely by his own efforts. There is a conflict of interests since men are not indifferent as to how the greater benefits produced by their collaboration are distributed, for in order to pursue their ends they each prefer a larger to a lesser share.⁶⁰

The voice of socialization: This involves encouraging direct reciprocity ("I will help you if you help me"), promoting reputation building ("When I help others, I gain a reputation for being helpful, which encourages others to help me, in the expectation that I will help them"), encouraging cooperative social norms (so that following norms elicits rewards, and violating norms exhibits punishments from others), and setting bounds on the scope of competition (thereby limiting people's opportunities to make gains at each other's expense). Bringing people of different countries and cultures into such social relations with each other will induce them to cooperate more. However, the voice of socialization, by itself, is also a weak driver of cooperation. This approach works much more effectively within one's social groups than across them.

The voice of tolerance, respect and compassion/ service: As the final, most encompassing and effective approach, this entails acknowledging the legitimacy of others, as well as promoting their interests and holding those interests in esteem. It ensures a genuine and broad-based interchange of perspectives, and widens people's circles of care to include out-groups. With this voice, violence and atrocities become impossible. In this area, the centrality of a values-based approach to global problem-solving becomes particularly compelling. Thus far, the World Economic Forum and other international organizations have not explicitly applied this approach to global problem-solving.

Meeting the world's unprecedented challenges will require a values-driven approach. Only common values, deployed in common practical endeavours, can coordinate the actions of diverse decision-makers in business, government and civil society across national, cultural and religious boundaries. Values provide both the direction and the motivation for common action. In stable times, legislation and incentives can help to coordinate action. But in times of unparalleled uncertainty and change, values are an essential driver for harmonious, decentralized decision-making.

This White Paper has demonstrated how values underpin – implicitly and explicitly – the decisions made across a wide variety of global challenges, and with specific reference to the Fourth Industrial Revolution. Society can either embrace this or accept it reluctantly, but it cannot deny it. A world in which people can satisfy basic needs, live within key ecological limits, care for each other and live largely in peace is only possible when values guide behaviour.

Endnotes

- For a more detailed presentation on the Fourth Industrial Revolution, see http://bit.ly/10xsm1e, accessed 7 June 2016.
- 2 Schwab, K. 2015.
- 3 The origin of both value and values can be found in old French (valoir) and Latin (valere), both referring to the intrinsic worth of something, and only sometimes expressed as a quantified amount equivalent to its worth. Over the years, value and values became decoupled in the business world, but more recently discussions about the purpose of business are starting to address convergence.
- 4 Schwab, K. 2016.
- 5 Pierre Gentin, Partner at Cahill Gordon & Reindel LLP and member of the Global Agenda Council on Values, sees the need to guard against using morally loaded language, since this might confuse some of the distinctions between right and wrong. While accepting the need for flexibility, he favours using clinical language to avoid misinterpretation.
- 6 World Economic Forum. 2013a.
- 7 Smith, A. 1776, Vol. 1, Book I, Chapter XI, Conclusion of the Chapter.
- 8 Enderle, G. 2014, p. 172.
- 9 IIRC. 2013, pp. 11-12.
- 10 Krawcheck, S. 2014.
- 11 UN Global Compact et al.
- 12 Bivens, J. 2014.
- 13 Dobbs, R. et al. 2013.
- 14 Ibid.
- 15 Luu, P. 2014.
- 16 Schwab, K. 2016, p. 100.
- 17 Keeley, B. 2009.
- 18 Schwab, K. op. cit., p. 28.
- 19 Ibid, pp. 42-43.
- 20 ILO. 2016.
- 21 Schwab, K., op. cit., pp. 35-36.
- 22 Spence, M. 2011.
- 23 Malan, D. et al. 2016.
- 24 National Business Group on Health. 2015.
- 25 Malan, D. et al. 2016.
- 26 Hagel, J. 2015.
- 27 Schwab, K., op. cit., p. 2.
- 28 UN Economic Commission for Europe. 2008.

- 29 According to Buckland and Winkler. 2015.
- 30 Ibid.
- 31 Polman, P. 2015.
- 32 World Economic Forum. 2013b, p. 10.
- 33 Ibid, p. 12.
- 34 Ibid, p. 166.
- 35 Navyar, S. 2016.
- 36 Ibid.
- 37 World Economic Forum, 2013c.
- 38 UN Sustainable Development Goals. 2015.
- 39 NEPAD. N.d.
- 40 World Economic Forum. N.d. "Energy Technologies".
- 41 World Economic Forum. N.d. "Global Agenda Council on Decarbonizing Energy".
- 42 Part 3 is largely based on a discussion document entitled Health Reporting and a Healthy Bottom line: Why Comprehensive Health Metrics Should Be Incorporated into Corporate Responsibility Reporting by D. Malan and produced in collaboration with the Vitality Institute.
- 43 See Global Reporting Initiative (GRI). N.d. Sustainability Disclosure Database.
- 44 Ibid.
- 45 GRI. "Report or Explain Campaign Forum".
- 46 United Nations Conference on Sustainable Development. 2012; "The Future We Want", UN General Assembly Resolution A/RES/66/288, para. 47, adopted on 27 July 2012.
- 47 United Nations Environment Programme (UNEP). "Group of Friends of Paragraph 47" [web].
- 48 OECD. 2011, p. 27.
- 49 King, M. 2014.
- 50 UNEP et al. 2016.
- 51 Ibid.
- 52 GRI. 2016.
- 53 Eccles, Ioannou and Serafeim, 2012.
- 54 Ibid, p. 30.
- 55 Ibid, p. 30.
- 56 Ibid, pp. 22-23.
- 57 Bloomberg and Shapiro. 2014.
- 58 IIRC. 2013.
- 59 Ibid.
- 60 Rawls, J. 1971, p. 126.

References

Allen, W. T. 1993. "Contracts and Communities in Corporation Law. *Washington and Lee Law Review*, 50: 1395-1407.

Aristotle. 1962. *Nicomachean Ethics*. M. Ostwald, trans. New York: Macmillan Publishing Company.

Bivens, J. 2014. The Short- and Long-Term Impact of Infrastructure Investments on Employment and Economic Activity in the U.S. Economy. Economic Policy Institute, Briefing Paper No. 374.

Bloomberg, M. and Shapiro, M. 2014. "Give investors access to all the information they need". *Financial Times*, 19 May.

Buckland, B. S. and Winkler, T. H. 2015. *Public Private Cooperation: Challenges and Opportunities in Security Governance*. Geneva Centre for the Democratic Control of Armed Forces (DCAF), DCAF Horizon 2015 Working Paper No. 2. See http://bit.ly/28MtObP, accessed 21 June 2016.

Cone Communications. 2013. 2013 Cone Communications Social Impact Study: The Next Cause Evolution. See http://www.conecomm.com/2013-cone-communications-social-impact-study-pdf, accessed 18 August 2016.

Dobbs, R. et al. 2013. *Infrastructure productivity: How to save \$1 trillion a year.* McKinsey Global Institute.

Donaldson, T. and Walsh, J. P. 2015. "Toward a theory of business". *Research in Organizational Behavior*, 35: 181-207.

Eccles, R. G., Ioannou, I. and Serafeim, G., 2012. *The Impact of a Corporate Culture of Sustainability on Corporate Behavior and Performance*, Harvard Business School, Working Paper 12-035.

Enderle, G. 2014. "Some Ethical Explications of the UN Framework for Business and Human Rights". In Williams, O.F. (ed.) Sustainable Development. The UN Millennium Development Goals, the UN Global Compact, and the Common Good. Notre Dame: University of Notre Dame Press.

Flyvbjerg, B. 2001. *Making Social Science Matter:* Why social inquiry fails and how it can succeed again. Cambridge, UK: Cambridge University Press.

Frankena, W. K. 1973. Ethics (second edition).

Global Reporting Initiative (GRI). N.d. "Report or Explain Campaign Forum". See http://bit.ly/28Pww47, accessed 8 June 2014.

Global Reporting Initiative (GRI). N.d. Sustainability Disclosure Database. See http://database.globalreporting.org, accessed 18 August 2016.

Global Reporting Initiative (GRI). 2016. "New research shows a surge in reporting policies. What does it mean for business and the future of reporting?", 1 June. See http://bit.ly/28KwNGv, accessed 21 June 2016.

Gordon-Reed, A. 2008. *The Hemingses of Monticello: An American Family*. New York: W. W. Norton & Company.

Greve, H.R., Palmer, D. and Pozner, J.-E. 2010. "Organizations Gone Wild: The Causes, Processes, and Consequences of Organizational Misconduct". *The Academy of Management Annals*, 4: 53-107.

Hagel, J. 2015. "The Choice Ahead Regarding Digital Technology". GPDF Blog, 21 September. See http://www.druckerforum.org/blog/?p=1020, accessed 18 August 2016.

International Integrated Reporting Council (IIRC). 2013. *The <IR> Framework*. See www.theiirc.org, accessed 13 June 2016.

International Labour Organization (ILO). 2016. World Employment Social Outlook, Summary. See http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_443472.pdf, accessed 23 June 2016.

Kant, I. 1959. Foundations of the Metaphysics of Morals. L. W. Beck, trans. New York: Library of Liberal Arts.

Keeley, B. 2009. "A Bigger Picture", in *Human Capital: How what you know shapes your life*, OECD Publishing. See http://bit.ly/280Uo8z, accessed 21 June 2016.

King, M. 2014. Speech given by Mervyn King to the Institute of Chartered Accountants in England and Wales (March).

Krawcheck, S. 2014. "Will 2015 be the year of inclusive capitalism?" *Global Agenda*, World Economic Forum, 17 December. See http://bit.ly/28KshDE, accessed 21 June 2016.

Luu, P. 2014. "Impact Investing 101". Net Impact, 12 December. See https://www.netimpact.org/blog/impact-investing-101, accessed 18 August 2016.

Malan, D., in collaboration with the Vitality Institute.

N.d. Health Reporting and a Healthy Bottom Line: Why
Comprehensive Health Metrics Should Be Incorporated
into Corporate Responsibility Reporting.

Malan, D., Radjy, S., Pronk, N. and Yach, D. 2016. Reporting on Health: A Roadmap for Investors, Companies, and Reporting Platforms. The Vitality Institute.

Margalit, A. 1996. *The Decent Society*. N. Goldblum, trans. Cambridge, MA: Harvard University Press.

Margolis, J.D. and Walsh, J.P. 2003. "Misery Loves Companies: Rethinking Social Initiatives by Business". *Administrative Science Quarterly*, 48: 268-305.

Markussen, T., Reuben, E. and Tyran, J.-R. 2014. "Competition, Cooperation and Collective Choice". *The Economic Journal*, Vol. 124, Issue 574: F163-F195.

National Business Group on Health. 2015. "Achieving Health Equity and Reducing Disparities", 30 December. See https://www.businessgrouphealth.org/resources/topics/health_disparities.cfm, accessed 16 August 2016.

Nayyar, S. 2016. "Sustainable consumption and the Fourth Industrial Revolution". *Industry Agenda*, World Economic Forum, 1 June. See http://bit.ly/280Vh13, accessed 22 June 2016.

NEPAD. N.d. "Climate Smart Agriculture". See http://www.nepad.org/programme/climate-smart-agriculture, accessed 16 August 2016.

Organisation for Economic Co-operation and Development (OECD). 2011. *OECD Guidelines for Multinational Enterprise*, OECD Publishing.

Perry, R. B. 1914. "The Definition of Value". *Journal of Philosophy, Psychology and Scientific Method*. 11: 141-162.

Perry, R. B. 1926. *General Theory of Value: Its Meaning and Basic Principles Construed in Terms of Interest.* New York: Longmans, Green and Company.

Polman, P. 2015. "Growing Food in a Resource Scarce World". Olam International, Blog, 15 June. See http://olamgroup.com/blog/growing-food-challenging-world/.

Rawls, J., 1971. *A Theory of Justice*. Cambridge, MA: Belknap Press.

Rosen, M. 2012. *Dignity: Its History and Meaning*. Cambridge, MA: Harvard University Press.

Ross, W. D. 1930. *The Right and the Good.* (P. Stratton-Lake, ed.) Oxford: Oxford University Press.

Scanlon, T. M. 1998. What We Owe to Each Other. Cambridge, MA: Belknap Press.

Schlag, P. 1985. "Rules and standards". *UCLA Law Review*, 33: 379-430.

Schwab, K. 2015. "The Fourth Industrial Revolution: what it means, how to respond". *Foreign Affairs*, 12 December; republished by the World Economic Forum, 14 January 2016. See http://bit.ly/1ULs72D, accessed 7 June 2016.

Schwab, K. 2016. *The Fourth Industrial Revolution*. Geneva: World Economic Forum.

Smith, A. 1759/1982. *The Theory of Moral Sentiments*. (D. D. Raphael and A. L. Macfie, eds).

Smith, A. 1776. An Inquiry into the Nature and Causes of the Wealth of Nations.

Spence, M. 2011. "Global employment challenge". *China Daily*, 19 October. See chinadaily.com.cn.

Stalk, G. 2006. "Curveball strategies to fool the competition". *Harvard Business Review*, 84(9): 114-122.

Stalk, G. and Lachenauer, R. 2004. "Hardball: Five Killer Strategies for Trouncing the Competition". *Harvard Business Review*, April: 62-71.

UN Economic Commission for Europe. 2008. *Guidebook on Promoting Good Governance in Public-Private Partnerships*. New York and Geneva: United Nations. See http://bit.ly/28N63F, accessed 21 June 2016.

UN Global Compact, United Nations Environment Programme Finance Initiative (UNEP FI), Principles for Responsible Investment (PRI) and UNEP Inquiry into the Design of a Sustainable Financial System. N.d. *Fiduciary Duty in the 21st Century*. See http://www.unepfi.org/fileadmin/documents/fiduciary duty 21st century.pdf, accessed 23 June 2016.

UN Sustainable Development Goals. 2015. "Economist and UN adviser Jeffrey Sachs on why 2015 is critical to setting the world on safer, more prosperous path", 4 May. See http://www.un.org/sustainabledevelopment/blog/2015/05/jeffrey-sachs-interview/, accessed 18 August 2016.

United Nations Conference on Sustainable Development. 2012. "The Future We Want". See http://bit.ly/1dBuz75, accessed 8 June 2014.

United Nations Environment Programme (UNEP), "Group of Friends of Paragraph 47". N.d.
See <a href="http://www.unep.org/resourceefficiency/Business/SustainableandResponsibleBusiness/CorporateSustainabilityReporting/GroupofFriendsofParagraph47/tabid/105011/Default.aspx, accessed 18 August 2016.

United Nations Environment Programme (UNEP), KPMG International, Global Reporting Initiative and the Centre for Corporate Governance in Africa (of the University of Stellenbosch Business School). 2016. Carrots & Sticks: Global trends in sustainability reporting regulation and policy, 2016 edition. See https://assets.kpmg.com/content/dam/kpmg/pdf/2016/05/carrots-and-sticks-may-2016.pdf, accessed 18 August 2016.

Warner, W.K. and Havens, A.E. 1968. "Goal displacement and the intangibility of organizational goals". *Administrative Science Quarterly*, 12(4): 539-555.

Wittgenstein, L. 1953. *Philosophical Investigations* (third edition). G. E. M. Anscombe, trans. Oxford: Blackwell.

World Economic Forum. N.d. "Energy Technologies". See http://bit.ly/280Vz8f, accessed 22 June 2016.

World Economic Forum. N.d. "Global Agenda Council on Decarbonizing Energy". See http://bit.ly/28N5b1Q, accessed 22 June 2016.

World Economic Forum. 2013a. *The New Social Covenant*. See http://bit.ly/28Td708, accessed 7 June 2016.

World Economic Forum. 2013b. *Sustainable Consumption: Stakeholder Perspectives*. See http://bit.ly/28VWmT5, accessed 22 June 2016.

World Economic Forum. 2013c. *Engaging Tomorrow's Consumer: Project Report 2014.* See http://bit.ly/28MTupD, accessed 22 June 2016.

Members of the Global Agenda Council on Values

Council Chair:

Katherine Garrett-Cox, Member of the Supervisory Board, Deutsche Bank, United Kingdom

William Boulding, Dean and J.B. Fuqua Professor of Business Administration, Duke University, USA Stephen van Coller, Chief Executive, Corporate and Investment Banking, Barclays Africa Group, Absa Group, South Africa

John J. DeGioia, President, Georgetown University, USA

Mary Galeti, Executive Director, Tecovas Foundation, USA

Pierre Gentin, Partner, Cahill Gordon & Reindel, USA

Michael Gerson, Senior Adviser, One International, USA

Julian Ha, Practice Leader, Government Affairs Practice, Heidrick & Struggles, USA

Birama Konaré, Founder and Managing Director, Binthily Communication, Mali

Tim Leberecht, Founder, Leberecht and Partners, USA

Daniel Malan, Director, Centre for Corporate Governance in Africa, University of Stellenbosch Business School, South Africa

Priya Parker, Founder, Thrive Labs, USA

Tomas Sedlacek, Chief Macroeconomic Strategist, Ceskoslovenská Obchodní Banka, Czech Republic

Daniel Shapiro, Founder and Director, Harvard International Negotiation Program, Harvard University, USA

Antonio Simoes, Chief Executive, HSBC Bank, United Kingdom

Dennis J. Snower, President, Kiel Institute for the World Economy, Germany

Gayatri Chakravorty Spivak, Professor, Columbia University, USA

Jim Wallis, President and Founder, Sojourners, USA

Stewart Wallis, Independent Thinker, Speaker and Advocate for a new Economic System, United Kingdom

Kyle Zimmer, President and Chief Executive Officer, First Book, USA

Council Manager:

Michèle Mischler, Lead, Swiss Strategy and Development, Swiss Government Relations, World Economic Forum, michele.mischler@weforum.org

Forum Lead:

Nicholas Davis, Head of Society and Innovation, Member of the Executive Committee, World Economic Forum, nicholas.davis@weforum.org

Acknowledgements

Values and the Fourth Industrial Revolution White Paper Contributors

Lead author:

Daniel Malan

Contributors:

William Boulding, Stephen van Coller, Mary Galeti, Katherine Garrett-Cox, Julian Ha, Birama Konaré, Tim Leberecht, Daniel Malan, Dennis J. Snower, Gayatri Chakravorty Spivak, Jim Wallis, Stewart Wallis

Supported by:

Barclays Africa Limited



COMMITTED TO IMPROVING THE STATE OF THE WORLD

The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.

The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.

World Economic Forum

91–93 route de la Capite CH-1223 Cologny/Geneva Switzerland

Tel.: +41 (0) 22 869 1212 Fax: +41 (0) 22 786 2744 contact@weforum.org www.weforum.org