College of Integrative Sciences and Arts
ARIZONA STATE UNIVERSITY

INTERNATIONAL HUMANISTIC MANAGEMENT ASSOCIATION

Rethinking Resources:
A Path to More Humanistic Management

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Privileging a Single Type of Resource (Financial Capital)

Promotes:

- **Economistic mindset (profit as end vs. means)**
- **Short-term thinking**
- **Views people as a cost**
- **Doesn't differentiate HOW a profit was made** (value creation vs. value extraction)

The Economy as Nested Systems

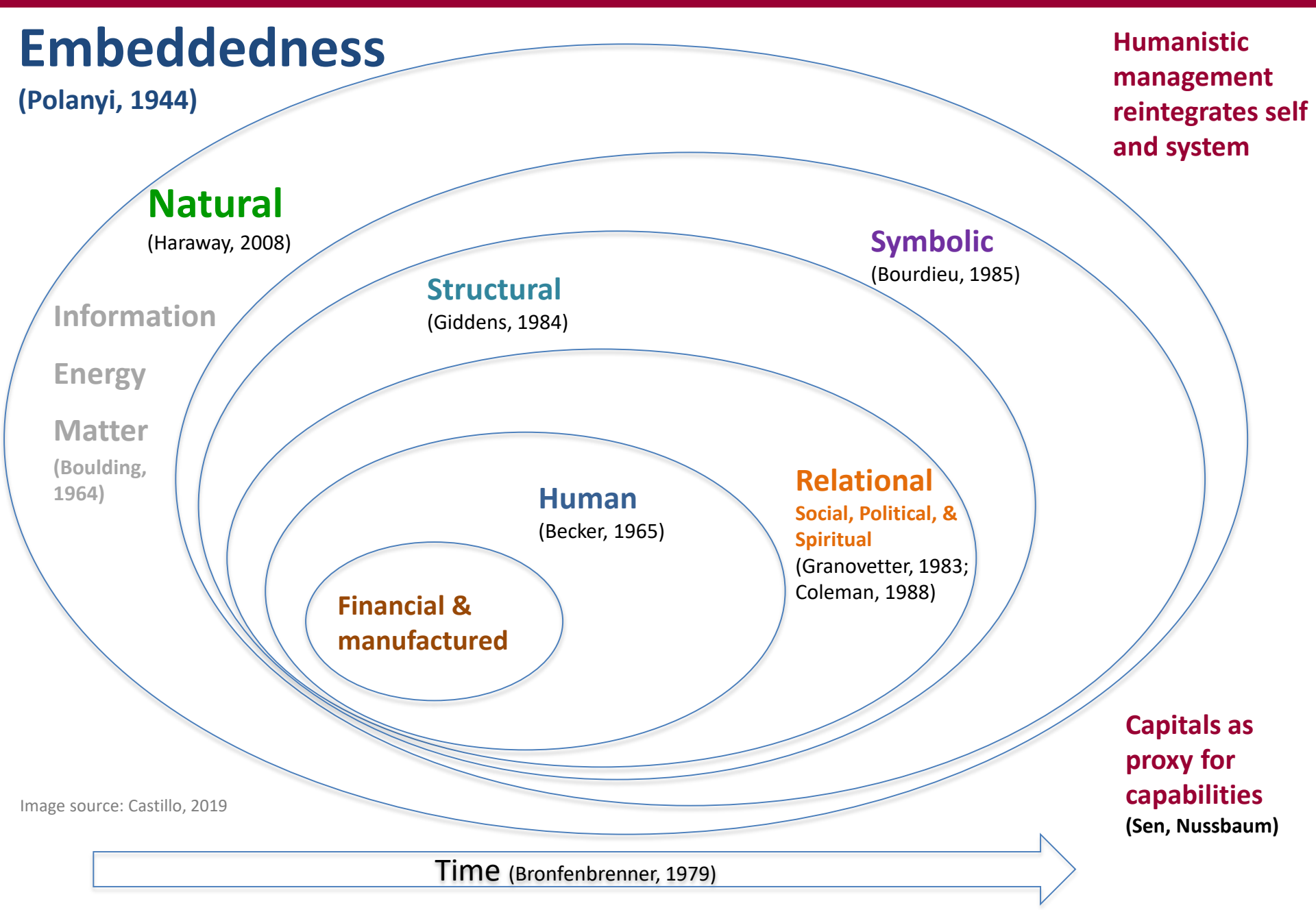


Image source: Castillo, 2019

Social Accounting Illuminates Intangible Resources

- **Financial measures** (revenues, costs, financial statements)
- **Quantitative measures** (metrics that can be counted, e.g., carbon emissions)
- **Qualitative measures** (analysis, descriptions, stories, icons & graphics)

Data are used for decision making by

stakeholders:

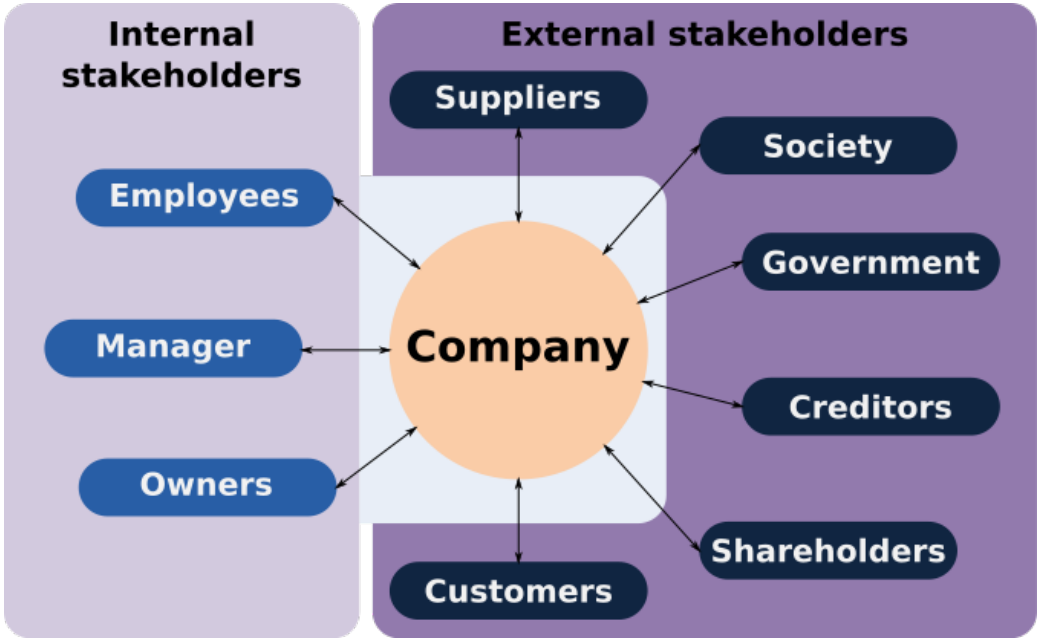
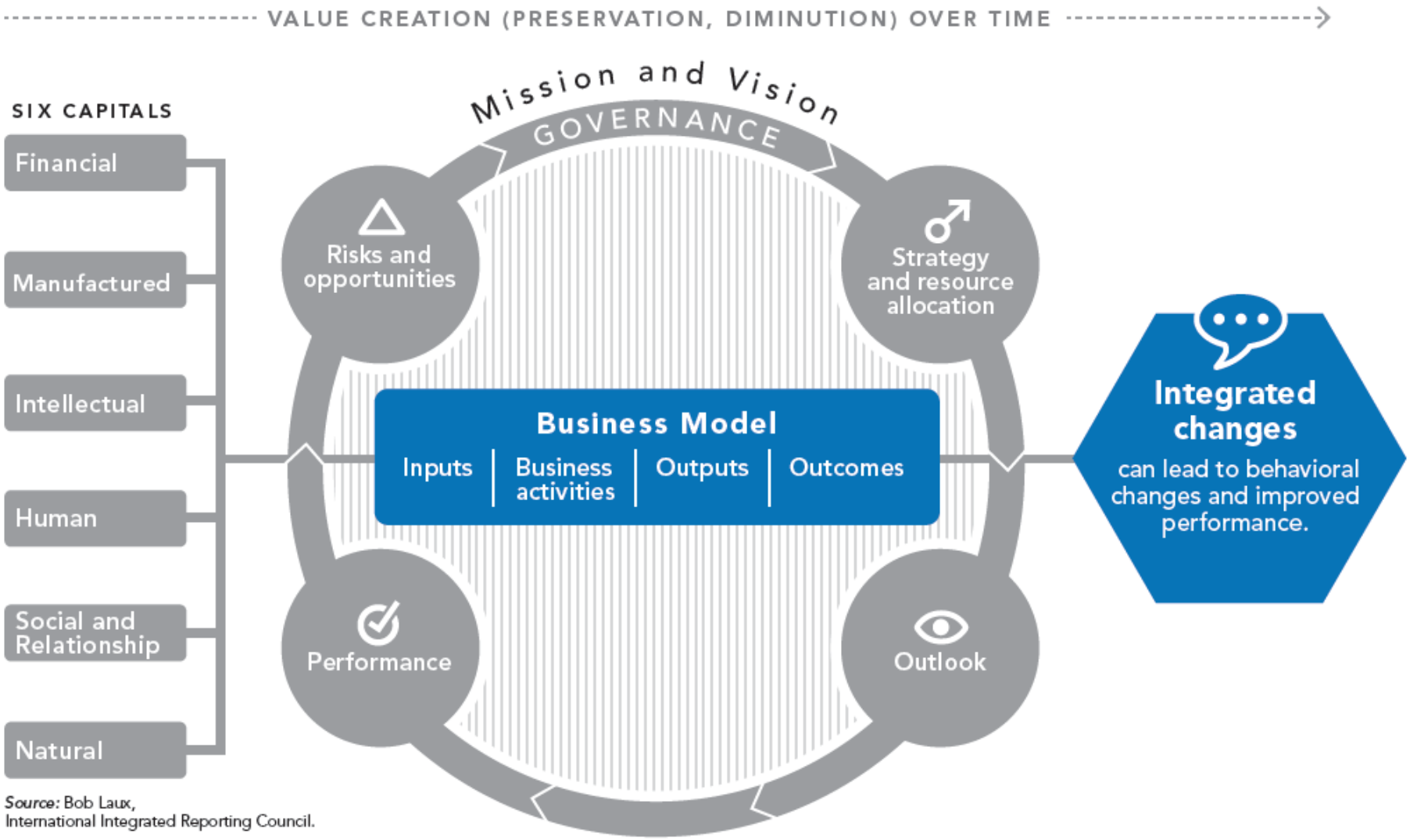


Image source:
Grochim, Wikimedia Commons. Retrieved from https://commons.wikimedia.org/wiki/File:Stakeholder_(en).png

Integrated Reporting

The primary purpose of an integrated report is to explain to stakeholders how an organization creates value over time. Each of the six capitals contributes to the company's current and potential value.



Source: Bob Laux, International Integrated Reporting Council.

Resources as Multiple Capitals

At the heart of integrated reporting is an integrated model, which demonstrates how six types of capital represent the resources organizations use to create value.

Table 1: **How six types of capital are used to create company value**

Types of Capital	Description	Value created
Financial	Money needed to seed and maintain a business	Dividends and earnings
Manufactured	Material goods and infrastructure owned, leased, or controlled by an organization that contribute to production or service provision (i.e., tools, technology, machines)	Reduced manual labor costs, increased productivity and efficiency
Intellectual	Organizational, knowledge-based intangibles, including intellectual property, tacit knowledge, systems, procedures, brand, and reputation	Market innovation, ability to stand out from competitors
Human	People's competencies, capabilities, experience, and motivation to innovate	Focus on human creativity, whether in process improvement, design and manufacture of products, or development of new or improved services
Social and relationship	Relationships with employees, communities, and other stakeholders	Values and behaviors, and the trust and loyalty an organization develops, builds, and protects with all stakeholders
Natural	Natural resources or environmental assets (such as soil, water, atmosphere, ecosystems) that provide a flow of useful goods or services, now and in the future	Resources for manufacturing as well as opportunities to protect and sustain earth's resources

Capital	Inputs	Activities	Outputs	Outcomes
Human	People–members, staff	Professional development, diversity and inclusion initiatives, student outreach, committees, volunteer member activities	Skilled members and staff, future CPAs, increased diversity	More competent CPAs, satisfied members and volunteers, diversity awareness, low employee turnover, a staff with the skills to fulfill INCPAS' mission and serve member needs
Intellectual	Knowledge (members and staff), brand reputation, governance structure	Risk management, information sharing which includes CPA Conversations, In the Know webinars, CPA Center of Excellence® online community	Issue awareness, knowledge sharing, thought leadership	Collaboration, informed members who are up to date on the latest trends and issues impacting the profession
Social & Relationship	Member relations, relations with other stakeholders	Networking and collaboration at conferences and member events and through the CPA Center of Excellence® online community, ethics enforcement, advocacy with governmental and regulatory bodies, advocacy and awareness building with academics and students, and with businesses and financial statement users	Ethical behavior, compliance with standards, increased understanding of legislative and regulatory processes, strong member connections, success working with legislators and regulators	Collaboration, enhanced awareness of CPAs and their value, a favorable legislative and regulatory environment
Financial	Dues and fees along with invested reserves	Fiscally responsible budgeting, cost management	Cash flow from operations	Financial stability, business sustainability

Indiana CPA Society
2020 Integrated Report

Business Model p. 16

https://www.incpas.org/docs/default-source/utility/integrated-report.pdf?sfvrsn=4b42f21b_2

Multiple Capitals in Action

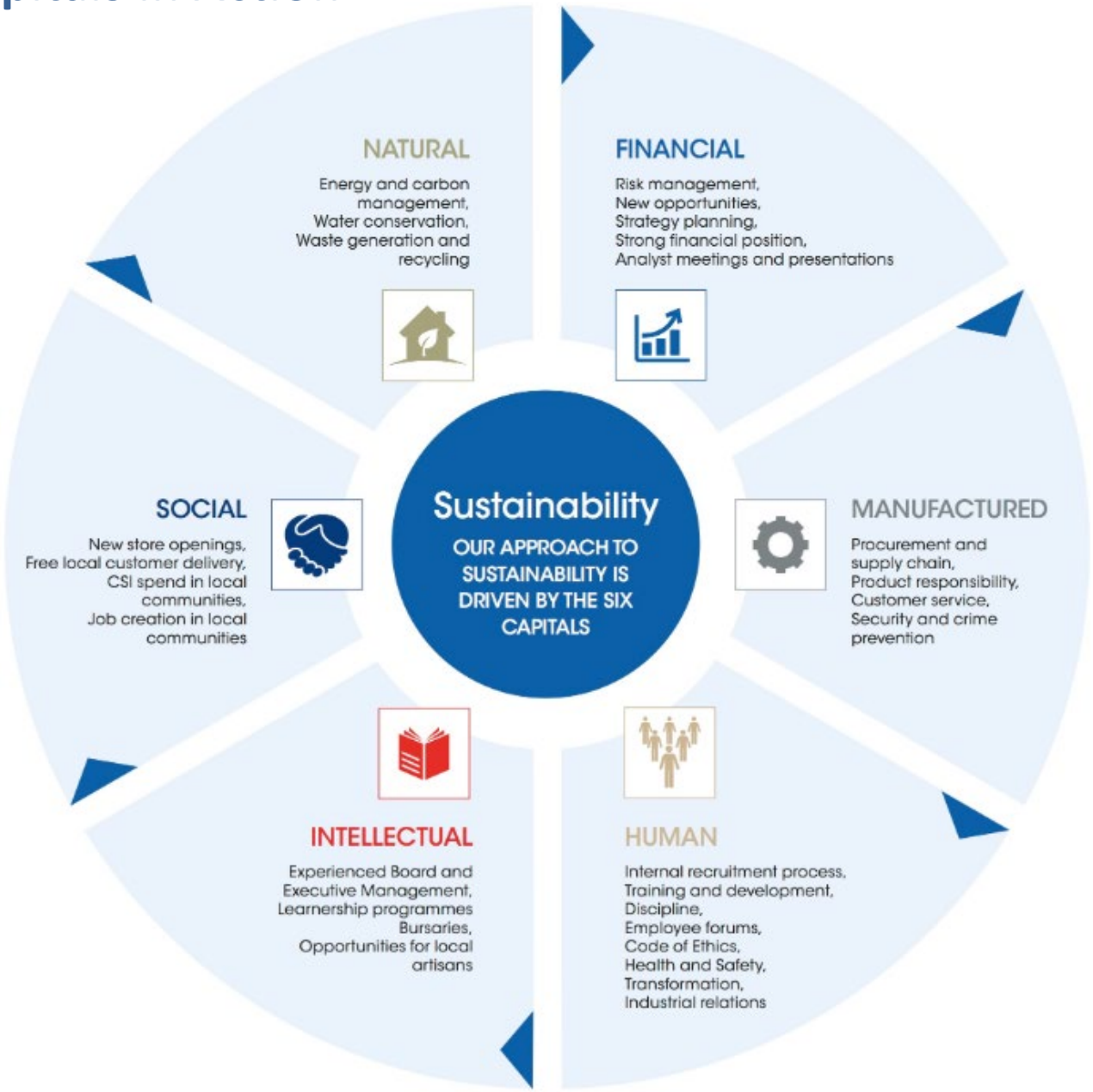
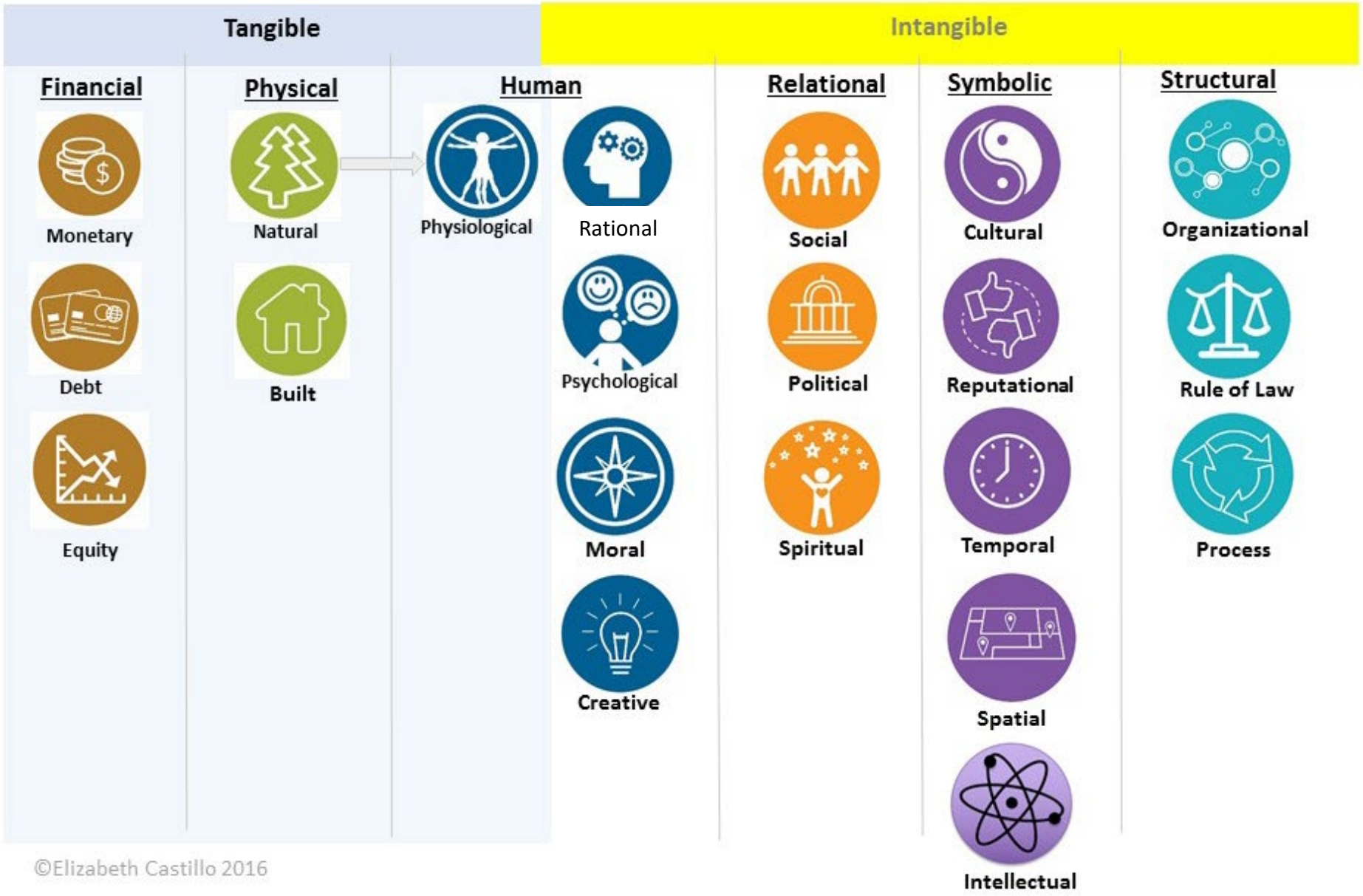


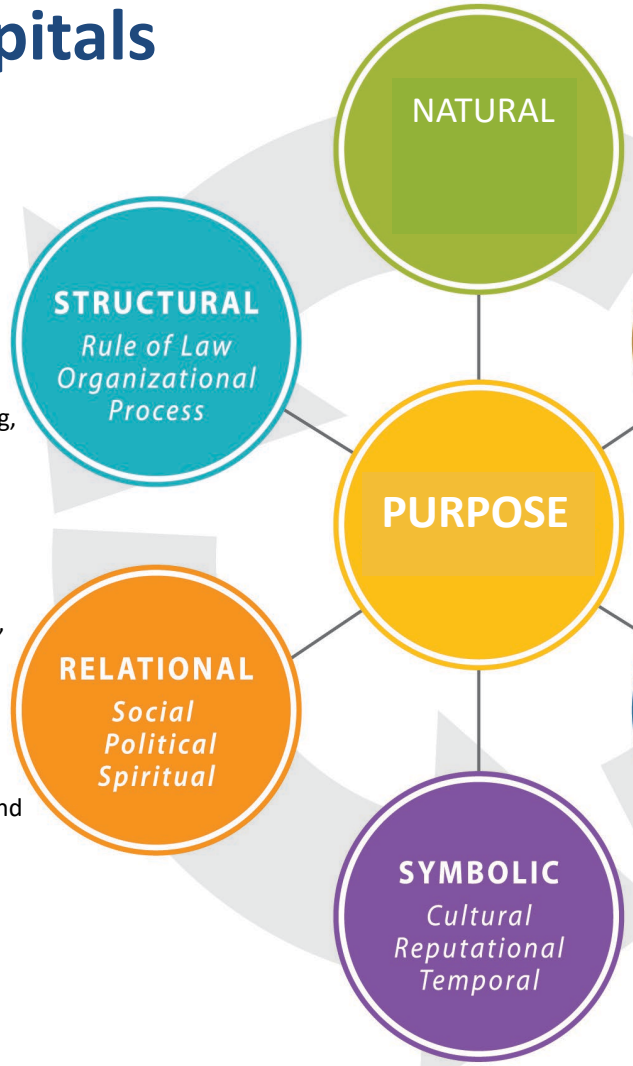
Image source: http://www.cashbuild.co.za/Reports/2017/Interactive/portfolio-item/sustainability-report/

Giving Voice to Values through Social Accounting



A Toolbox of Capitals (Castillo, 2016)

Thinking in Capitals



- Air, water, land, flora, fauna, biodiversity
- Ecosystem services: provisioning, supporting, regulating, cultural

- Governance
- Organizational form: hierarchy, platform, matrix
- Processes: communication, sharing, convening, leading, learning

- Equipment and durable goods

- Relationships—quality, quantity, and diversity
- Relationship to formal authority
- Relationship to something beyond ourselves
- Reciprocity

- People
- Psychological safety
- Emotional intelligence
- Altruism, win-win mentality

- Patterns of how we relate
- Meaning-making, mental models
- Transforming space into place
- Language, narratives, storytelling

Source of flow is energy, information, and matter

(Boulding, 1966)

Types of Human Capital

Creative

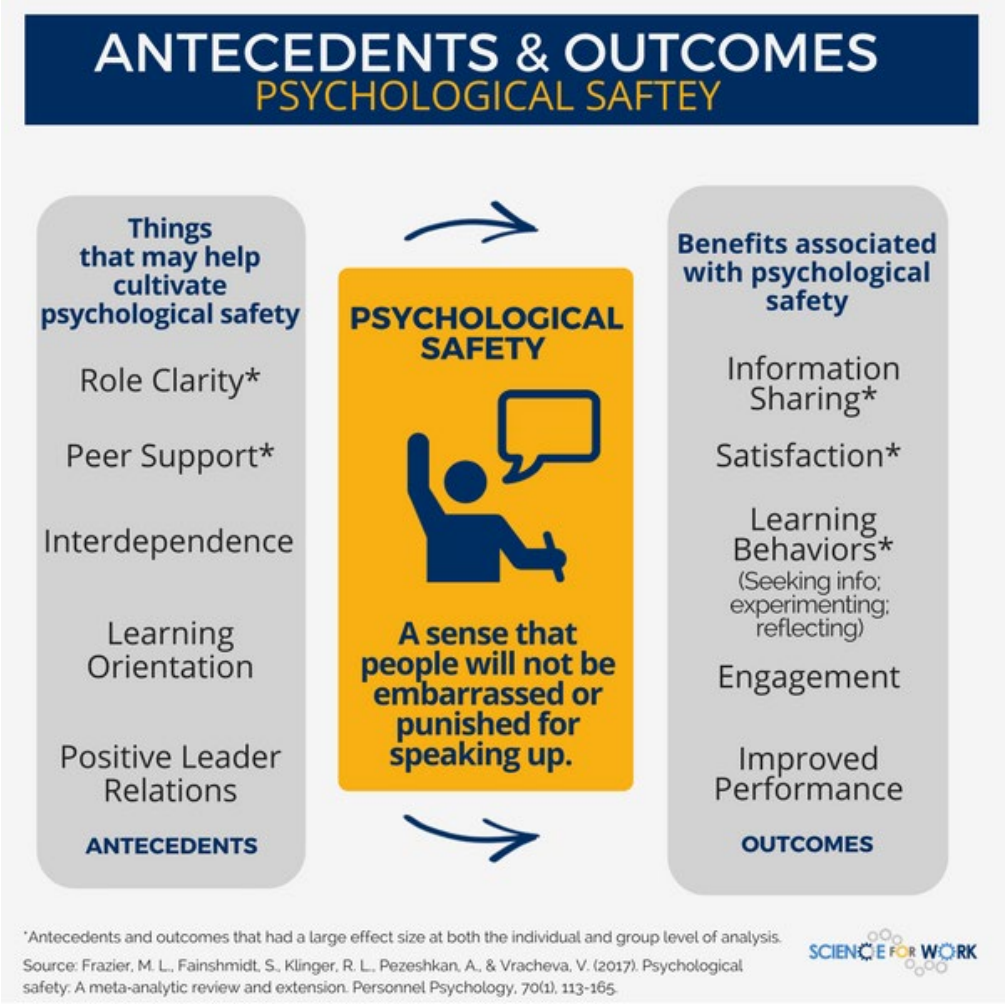
Rational

Physiological

Moral

Psychological

Image source: Castillo (2016)



https://scienceforwork.com/blog/psychological-safety/

Dr. Bronner's
@DrBronner

What Constructive Capitalism means at Dr. Bronner's:

- $19.23 minimum wage
- 5-to-1 cap on executive salaries
- Donate 1/3 of profits to charitable causes
- Free health insurance for all staff & their families
- Certified organic & fair trade sourcing whenever possible

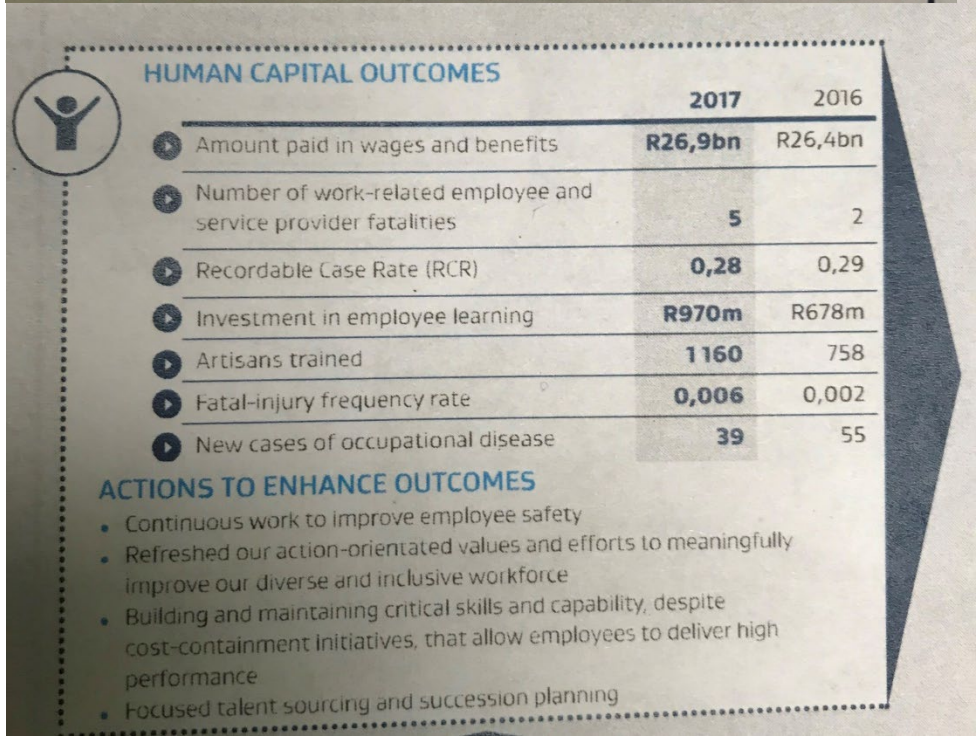
9:43 AM · Feb 25, 2020

How Can We Measure Human Capital?

HUMAN CAPITAL

To grow and steer our business and operate our facilities safely and efficiently, we require high-performing, innovative and diverse people with the right skills and experience.

- A safe, healthy, engaged and productive workforce of **30 900 people** with relevant skills, knowledge and experience
- **A strong leadership team,** driving a culture of high performance
- More than **22 000 service providers,** delivering to agreed terms



HUMAN CAPITAL OUTCOMES

	2017	2016
Amount paid in wages and benefits	**R26,9bn**	R26,4bn
Number of work-related employee and service provider fatalities	**5**	2
Recordable Case Rate (RCR)	**0,28**	0,29
Investment in employee learning	**R970m**	R678m
Artisans trained	**1 160**	758
Fatal-injury frequency rate	**0,006**	0,002
New cases of occupational disease	**39**	55

ACTIONS TO ENHANCE OUTCOMES

- Continuous work to improve employee safety
- Refreshed our action-orientated values and efforts to meaningfully improve our diverse and inclusive workforce
- Building and maintaining critical skills and capability, despite cost-containment initiatives, that allow employees to deliver high performance
- Focused talent sourcing and succession planning

Image source: Sasol Integrated Report 2017

Companies use a variety of measures

- **at the micro, meso, and macro levels**
- **quantitative and qualitative**

- ❑ **Satisfaction & attitude**
- ❑ **Organizational commitment & engagement**
- ❑ **Turnover & retention**
- ❑ **Years employed, experience**
- ❑ **Learning and development expenditures**
- ❑ **Skill and knowledge gained**
- ❑ **Leadership, 360 feedback**
- ❑ **Productivity**
- ❑ **Health and safety**

Types of Relational Capital

Social

Political

Spiritual

Image source: Castillo (2016)

How Does Social Capital Create Value?

Interpersonal relationships provide access to resources

MICRO
- **Information**
- **Influence**
- **Shared identity**
- **Reputation**

MACRO
- **Stability, structure**
- **Social cohesion**

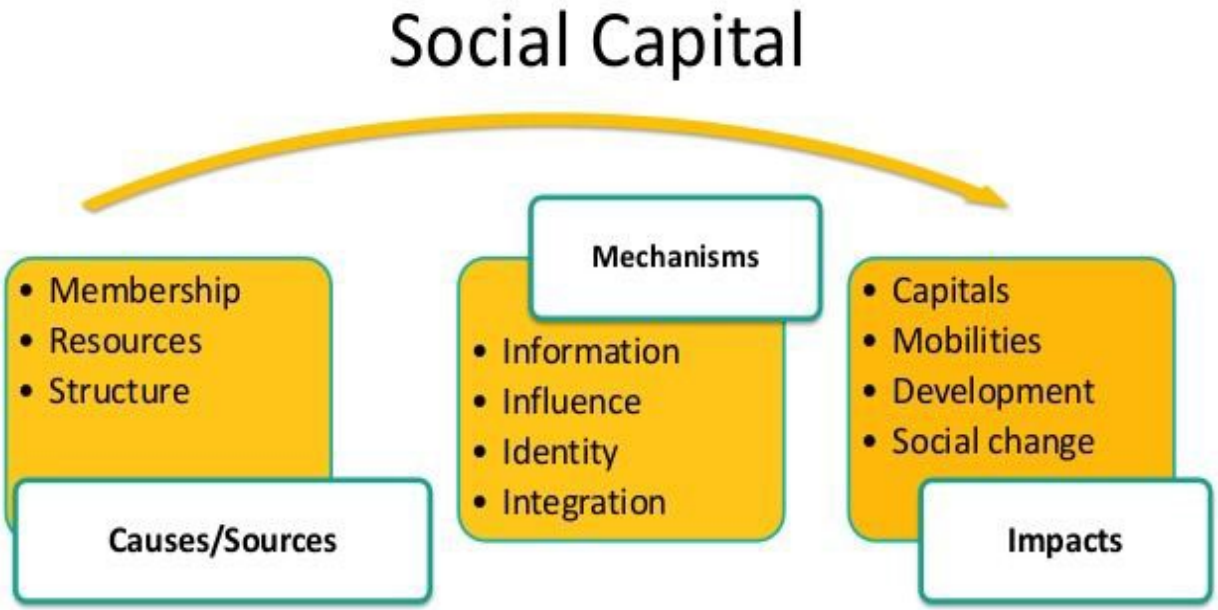


Image source:https://i.pinimg.com/736x/ed/47/6e/ed476eb27e762636b88ed1e40a9402ee--social-capital.jpg

RECIPROCITY (mutual benefit) is key to creating and maintaining social capital

Example—Independent Bookstores

ENTREPRENEURSHIP

Bookstores Find Growth as 'Anchors of Authenticity'

Big chains once posed a threat, but independents are thriving by hosting events, adding nonbook merchandise and becoming community hubs.

Paul Auster reading from his "Talking to Strangers" this month at McNally Jackson Independent Booksellers in Manhattan. Jeenah Moon for The New York Times

By Andria Cheng

June 23, 2019

What is Negative Social Capital?

MICRO LEVEL

- Absence of relational connections (alienation)

MACRO LEVEL

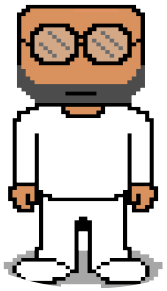
- Social polarization-- relationships that create structures that:
  - Marginalize people, promote inequity & inequality (e.g., cliques, others, out-groups)
  - Constrain autonomy
  - Lead to social exclusion & conflict

Social polarization creates operating risks for organizations

Type	Description
Bonding (Exclusive) **Strong Social Bonds and Trust** 	• An association and trust among neighbors, or strong social bonds, and effective organizations within a community (Putnam, 1993, 2000). • These ties are socially closer (involving few people, usually family, friends, and maybe community) and not always geographically closer (involving people living close to each other) (Putnam, 1993, 2000; Saegart & Winkel, 1998; Larsen et al., 2004).
Bridging (Inclusive) **Cross-Organization Partnerships** 	• A set of cross-cutting and cooperative ties occurs when members of a group connect with members of other groups to seek access or support or to gain information (Saegart & Winkel, 1998; Larsen et al., 2004). • Establishes horizontal ties between associative organizations and supports the formation of alliances and coalitions across communities (i.e., across local institutions, between poor and affluent communities) (Putnam, 1993, 2000; Saegart & Winkel, 1998; Larsen et al., 2004.
Linking (Inclusive) **Cross-Boundary Alliances with External Resource Networks** 	• Refers to "relations between individuals and groups in different social strata in a hierarchy where power, social status, and wealth are accessed by different groups" (Cote & Healy, 2001, p. 42). • Includes the capacity to leverage resources, ideas, and information from formal institutions beyond the community, which facilitates cooperative relationships in which power and control by one side are higher than on the other side (Saegart & Winkel, 1998).

Image source: Mitchell-Brown (2013). Retrieved from http://jces.ua.edu/revitalizing-the-first-suburbs-the-importance-of-the-social-capital-community-development-link-in-suburban-neighborhood-revitalization-a-case-study/

Connectivity—Synergy across levels & sectors



Macro
(Global, societal)

Meso
(organizations)

Micro
(individuals)

How Can Leaders Develop Social Capital?

Develop trust

- → Employees
- → Shareholders
- → Other Stakeholders

Image source: Ken Blanchard. Retrieved from https://www.kenblanchard.com/KBCPublic/media/Content/Products/building-trust-model-elements.png

Engage Stakeholders

Image source: https://www.bluelabeltelecoms.co.za/online_reports/ar2015/images/pg51-pic1.gif

Explore the Elements of Value℠

Click on any element to learn more

SELF-TRANSCENDENCE

Definition: Helping other people or society more broadly

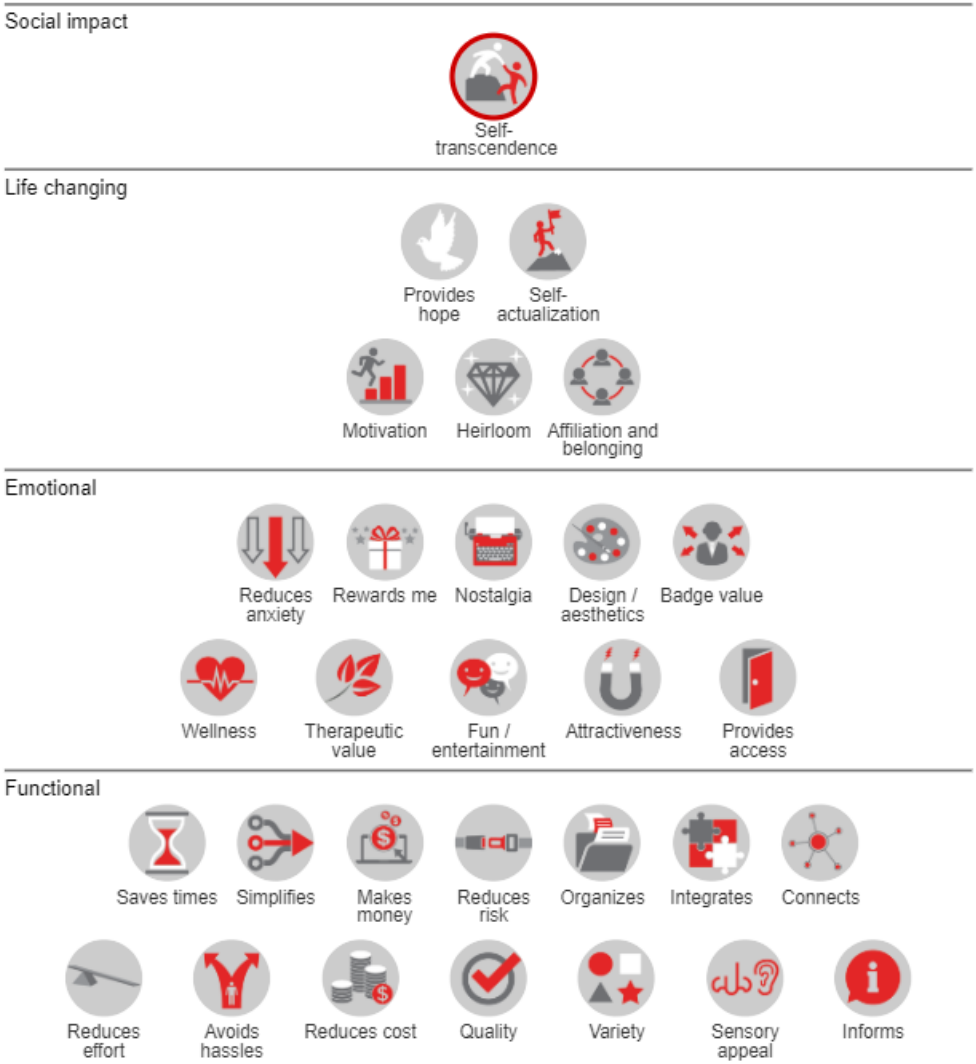
Example: When TOMS sells a pair of shoes or eyewear, a new pair of shoes goes to an impoverished child or part of the profit goes to save the eyesight of people in developing countries.

What elements are most important to consumers in different industries?

Click on each industry below to view the top five elements influencing loyalty for each.

- Apparel retail
- Discount retail
- Grocery
- Food and beverage
- Smartphones
- TV service providers
- Consumer banking
- Brokerage
- Auto insurance
- Credit cards

Reset



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Learn More:
The Elements of Value

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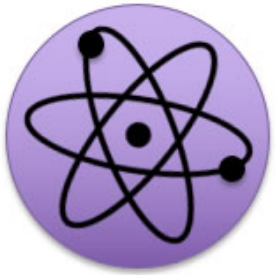
Bain
30
elements
of value

https://media.bain.com/elements-of-value/#

Types of Symbolic Capital



Intellectual

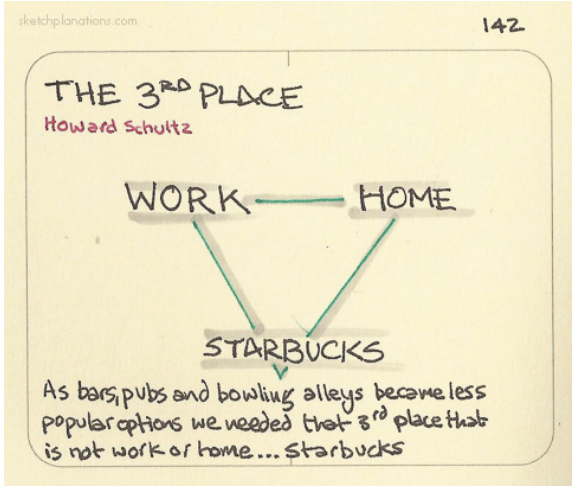
Temporal

Cultural

Spatial

Reputational

Image source: Castillo (2016)



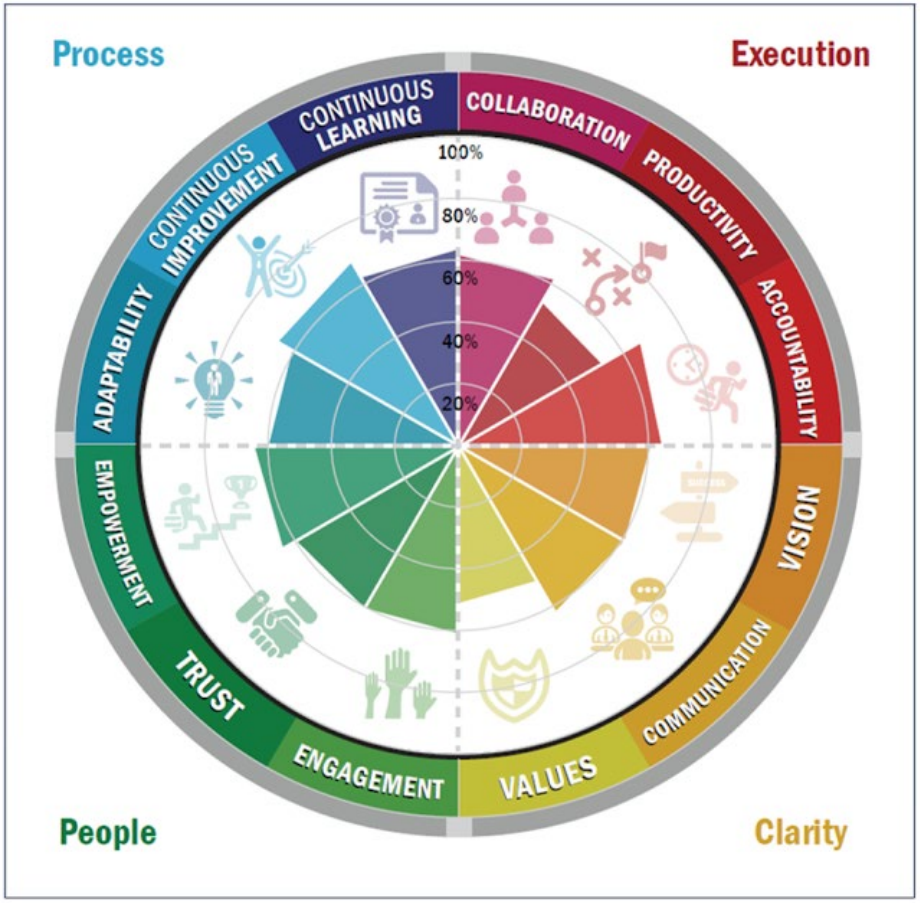


Image source; George Deeb
http://redrocketvc.blogspot.com/2015/10/lesson-222-measuring-your-companys.html

Types of Structural Capital

Organizational

Process

Rule of Law

Image source: Castillo (2016)

Autonomy through Self-Managed Work Teams

Morning Star Farms

Team defines its own social contract—how they want to hold themselves accountable to each other

Memorialized in a Colleague Letter of Understanding (CLOU)

https://medium.com/@DavidStack/a-glossary-of-self-management-terms-from-the-harvard-business-review-79baf97d39cc

Conscious Leadership

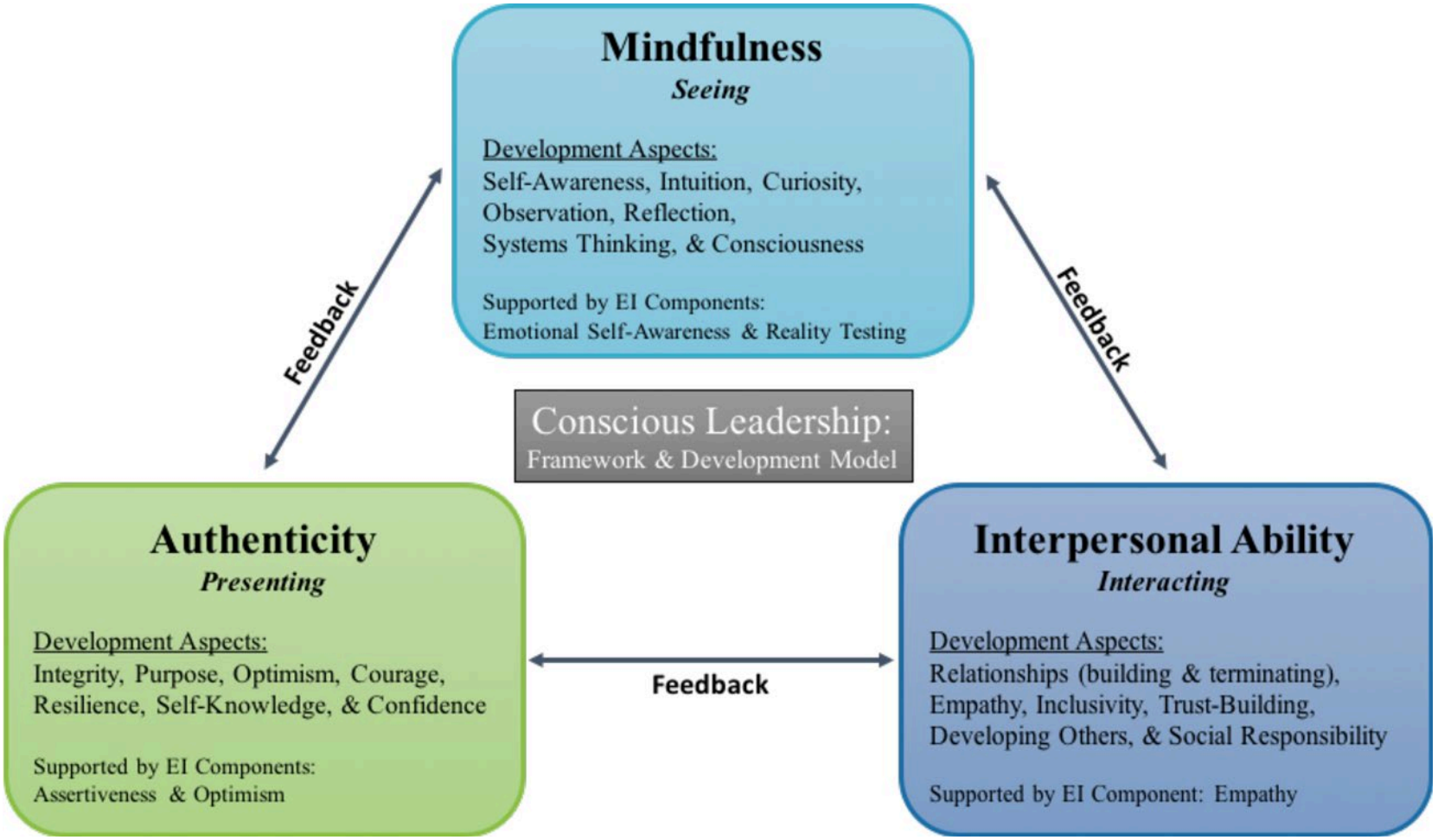


Image source: Voss, 2017
https://d3i71xaburhd42.cloudfront.net/52f79f1f18e1026d7a17bd1e1e2d89ce2e8648dc/177-Figure2-1.png

Governance approach

GOVERNANCE

The board recognises it is the custodian of corporate governance and always strives to ensure that the group aligns with local and international codes of good corporate governance, seeks to apply best practice and follows relevant trends in good corporate governance.

The extent to which Barloworld applies the principles and recommended practices in the King Report on Governance for South Africa (King III) is reviewed regularly. This review identifies the governance principles already being applied and those which the company needs to address or further entrench. The review also identifies areas of improvement or ways in which our governance practices can be enhanced.

ETHICS AND VALUES

Our Worldwide Code of Conduct articulates Barloworld's commitment to doing business the right way, guided by our values of integrity, excellence, teamwork, commitment and sustainability.

Our Code of Ethics requires Barloworld directors, management and employees to obey the law, respect others, be fair and honest, and protect the environment.

RISK

Identifying risks and opportunities through a robust and systematic process is central to our strategic planning process.

A comprehensive risk management policy is in effect throughout the group and is complemented by the Barloworld Limited risk management philosophy.

REMUNERATION

Barloworld has adopted a holistic approach to its remuneration philosophy for senior executives and employees and has implemented a balanced structure which consists of both monetary and non-monetary components.

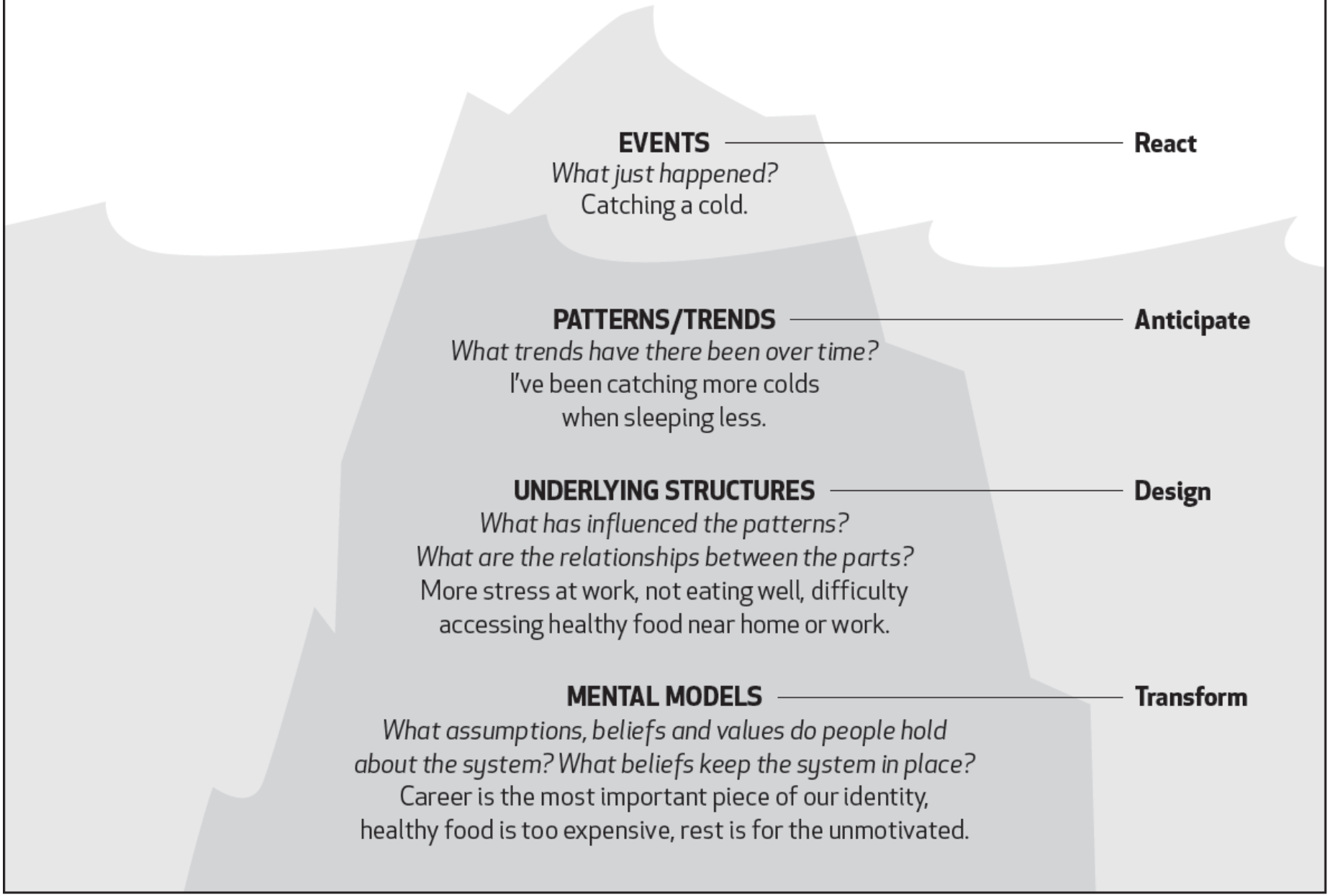
Our business strategy concentrates on six strategic focus areas, which are supported by performance indicators. How we reward our employees, in particular our executive directors and prescribed officers, is in line with our dedication to achieving our strategic objectives. Our remuneration approach and practices link into these focus areas.

Integrated Reporting Promotes Integrated Thinking

Image source: http://www.visionsforireland.com/strategy/

THE ICEBERG

A Tool for Guiding Systemic Thinking



Value Creation Process:
Transforming Inputs into Outcomes, Impact, and SDGs

* United Nations, Sustainable Development Goals

Source: Royal DSM Integrated Annual Report 2018, pp.32-33.

Connect the Capitals Across Levels and Sectors to Promote Synergy

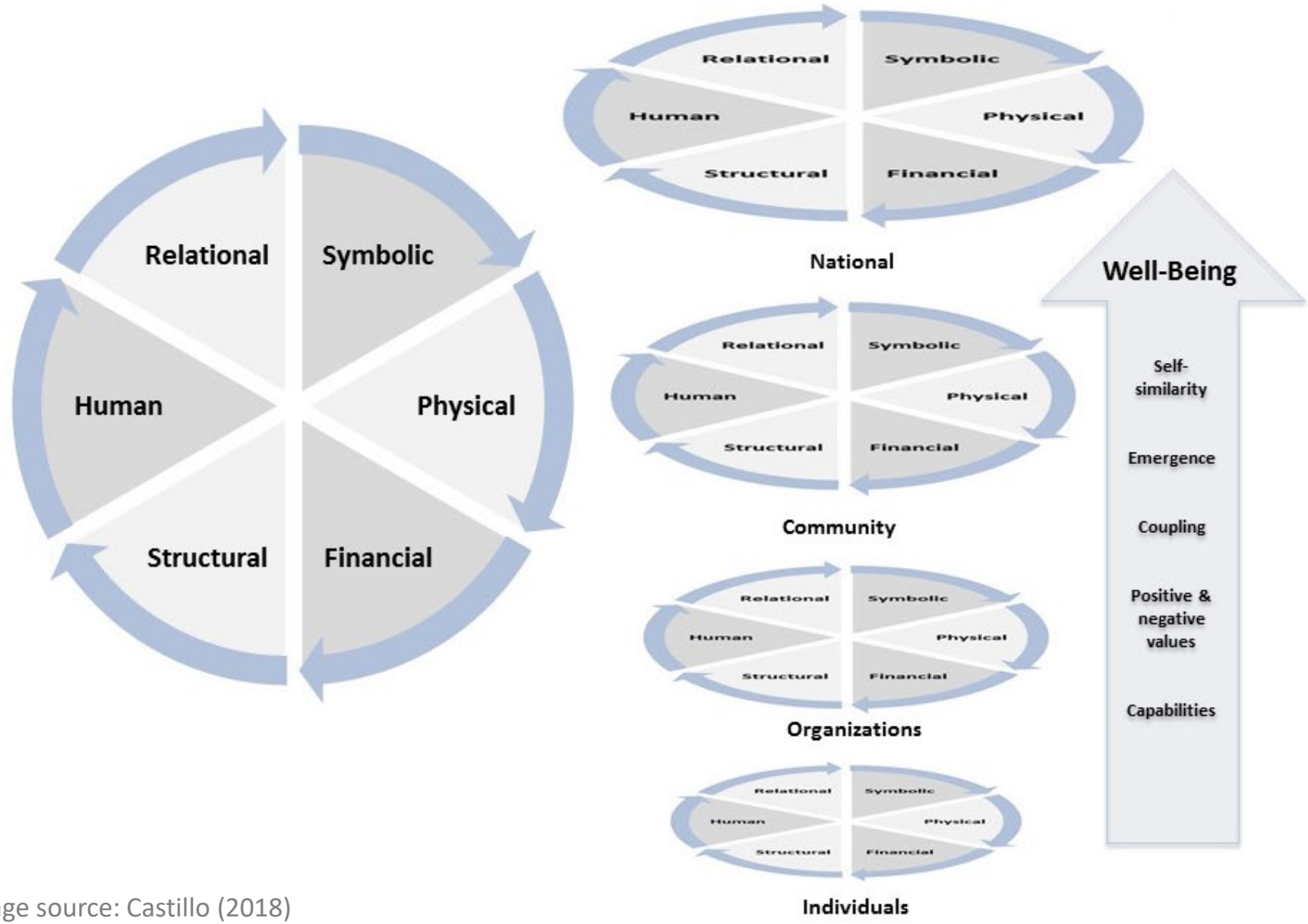


Image source: Castillo (2018)

An Economy Rooted in Reciprocity

Resources {

- can be created
- converted
- some monetized
- return benefits to both the organization and community

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Value Creation = Values Creation

Image source:
http://paramountbusinessdevelopment.com/our-team-values/

Economic exchange is constitutive, not just instrumental

- **It shapes culture and power relations**
- **Fosters or thwarts human development** (Bowles, 1991)

Resources

Introduction to Integrated Reporting (IR)

Indiana CPA Society (2020). Exemplar report https://www.incpas.org/docs/default-source/utility/integrated-report.pdf?sfvrsn=4b42f21b_2

Ernst Young (2014). Integrated Reporting: Elevating value. https://www.ey.com/Publication/vwLUAssets/EY-Integrated-reporting/%24FILE/EY-Integrated-reporting.pdf

U.S. International Integrated Reporting community—monthly webinars, case studies, exemplar reports https://iruscommunity.org/

Deloitte (2012). Integrated Reporting: The new big picture. https://www2.deloitte.com/us/en/insights/deloitte-review/issue-10/integrated-reporting-the-new-big-picture.html

KPMG (2013). Integrated Reporting—Introduction and the Case for Better Business Reporting https://home.kpmg/xx/en/home/insights/2013/04/integrated-reporting.html

Integrated Reporting as a tool for sustainable wealth creation. https://www.manilatimes.net/2019/05/28/business/columnists-business/integrated-reporting-as-a-tool-for-sustainable-wealth-creation/560929/560929/

Introduction to the Capitals

Natural:

- CGMA (2014). Accounting for Natural Capital in the Value Chain https://www.cgma.org/Resources/DownloadableDocuments/Accounting-for-natural-capital-in-the-value-chain.pdf
- Natural Capital Coalition's Natural Capital Protocol https://naturalcapitalcoalition.org/natural-capital-protocol/

Human:

- IIRC (2015). The value of human capital reporting. https://integratedreporting.org/wp-content/uploads/2015/12/CreatingValueHumanCapitalReporting_IIRC06_16.pdf
- Human Resources Management Association (2015). Integrated Reporting and Human Capital: Next steps for the private and public sectors in BC. https://cphrbc.ca/wp-content/uploads/2012/05/whitepaper-integrated-reporting-human-capital.pdf

Social:

- Social Capital Research & Training. Sources of social capital: What causes or creates social capital? https://www.socialcapitalresearch.com/sources-of-social-capital/
- Human and Social Capital Protocol https://docs.wbcsd.org/2019/02/Social_and_Human_Capital_Protocol.pdf

Cultural:

- Society of Human Resource Management (2019). Understanding and developing organizational culture. https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/understandinganddevelopingorganizationalculture.aspx
- Garvin, D.A., Edmondson, A.C., & Gino, F. (2008). Is yours a learning organization? Harvard Business Review. Retrieved from https://www.alnap.org/system/files/content/resource/files/main/r0803h-pdf-eng.pdf. Also see accompanying Learning Organization survey—scored results also provide benchmark data to see how your firm compares to others. https://surveys.hbs.edu/perseus/se.ashx?s=381B5FE533C282FF
- Kegan, R. & Lahey, L.L. (2016). An everyone culture: Becoming a deliberatively developmental organization. Boston, MA: Harvard Business Review Press.

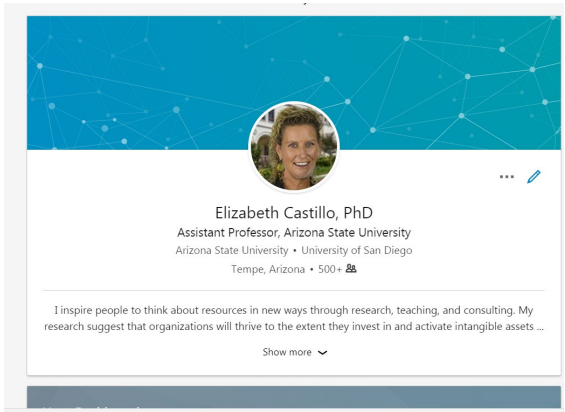
Creating Value for Stakeholders

Bain & Co. 30 elements of value interactive graphic https://media.bain.com/elements-of-value/#

Conscious Capitalism (2018). Exemplary stakeholder maps. https://www.consciouscapitalism.org/stakeholder-maps

Keep the Conversation Going

LinkedIn



https://www.linkedin.com/in/elizabeth-castillo-phd/

HuMaN | INTERNATIONAL HUMANISTIC MANAGEMENT ASSOCIATION

http://humanisticmanagement.international/membership/

Twitter

@eac_asu

What is Negative Social Capital?

- Creates **operating risks** for organizations
- Can constrain autonomy
- Create structures that marginalize people, promote inequity & inequality
- Create cliques
- Promote social polarization

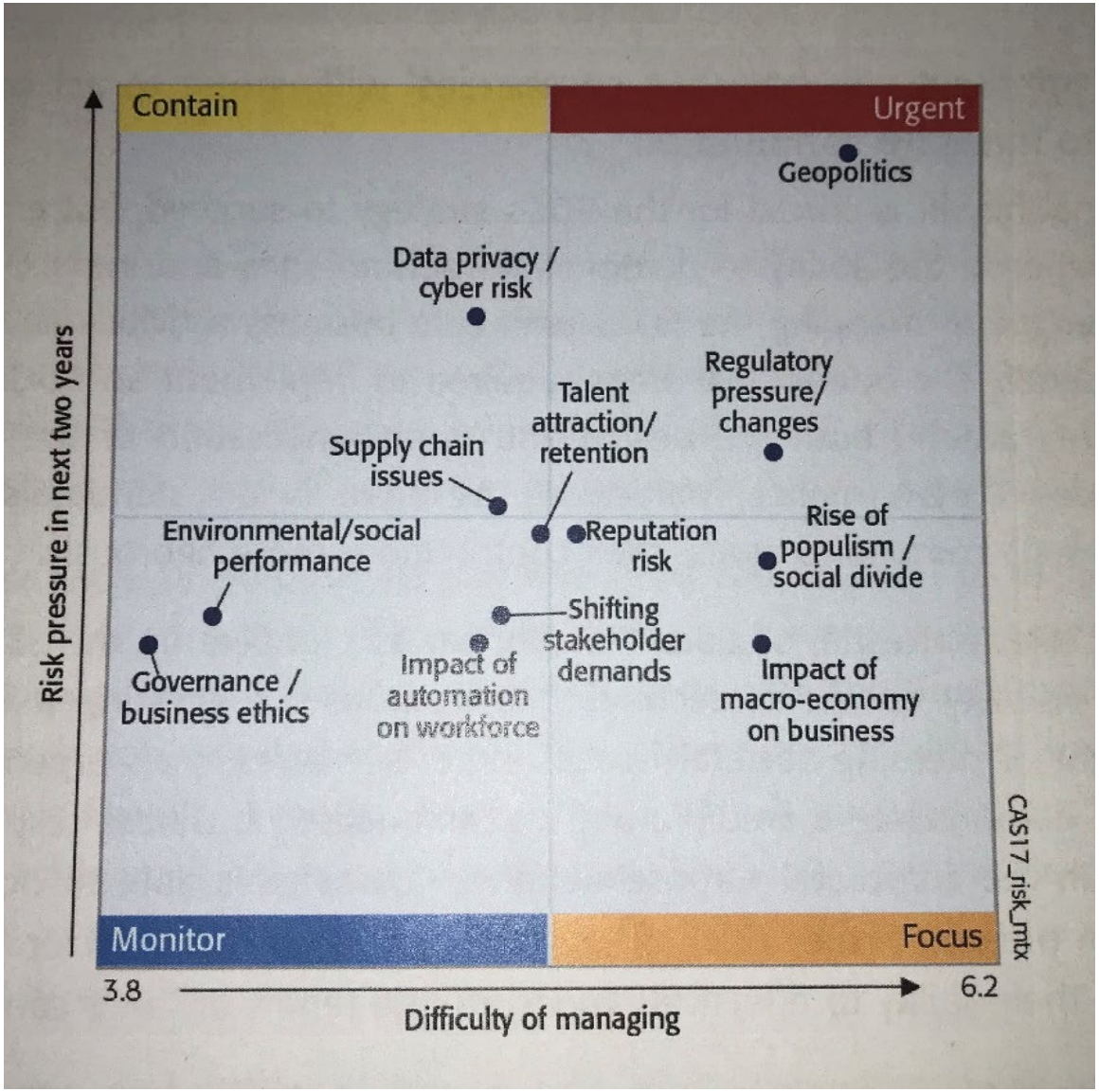


Image source: GlobeScan Survey (2017).
Retrieved from https://globescan.com/social-polarisation-report-corporate-opinions/

Social Capital—Creates or Depletes Value

Reciprocal exchange creates structures the encourage future positive exchanges

Extractive exchange makes people less likely to exchange broadly

→ Erodes norms of trust
→ Reduces social cohesion

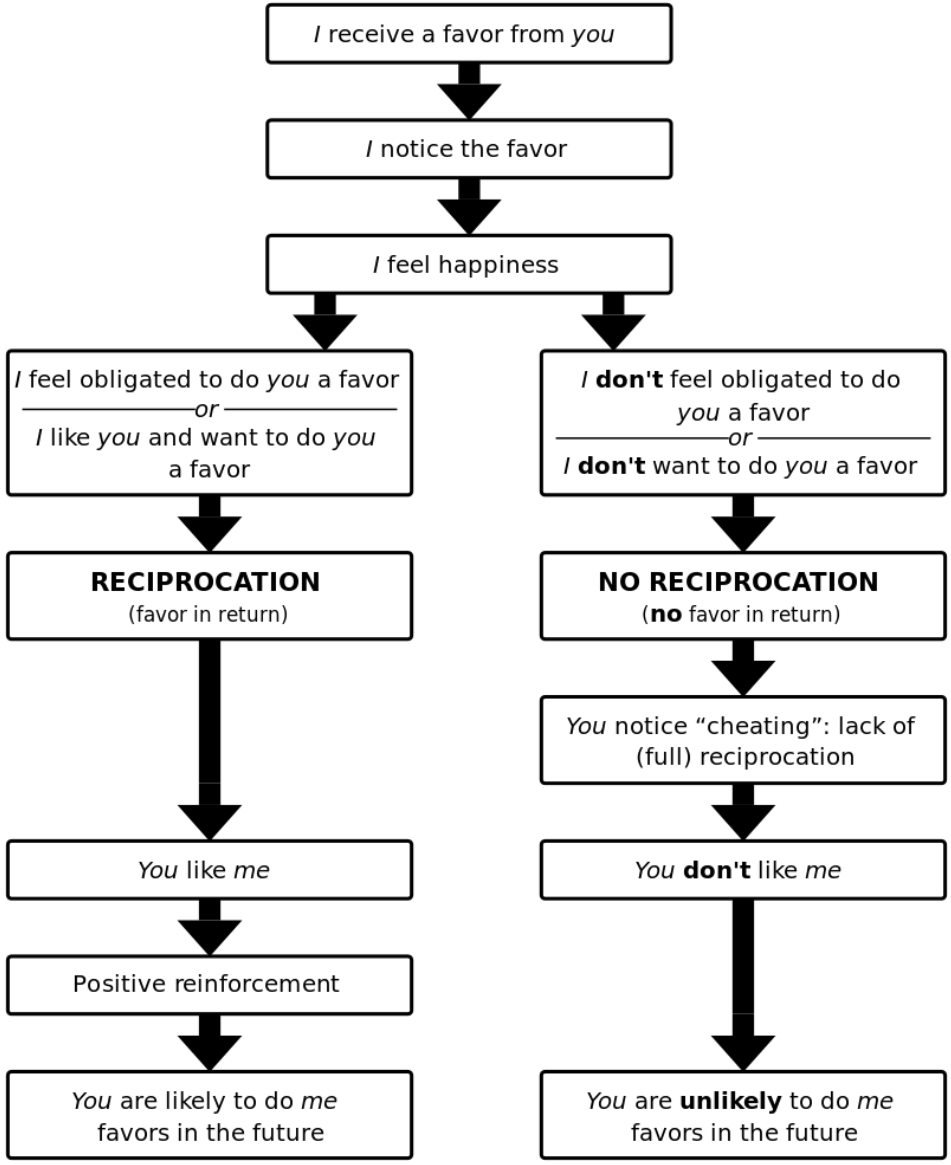


Image source: Tomatose https://commons.wikimedia.org/wiki/File:Reciprocal_altruism_summary.svg

How Can We Measure Social Capital?

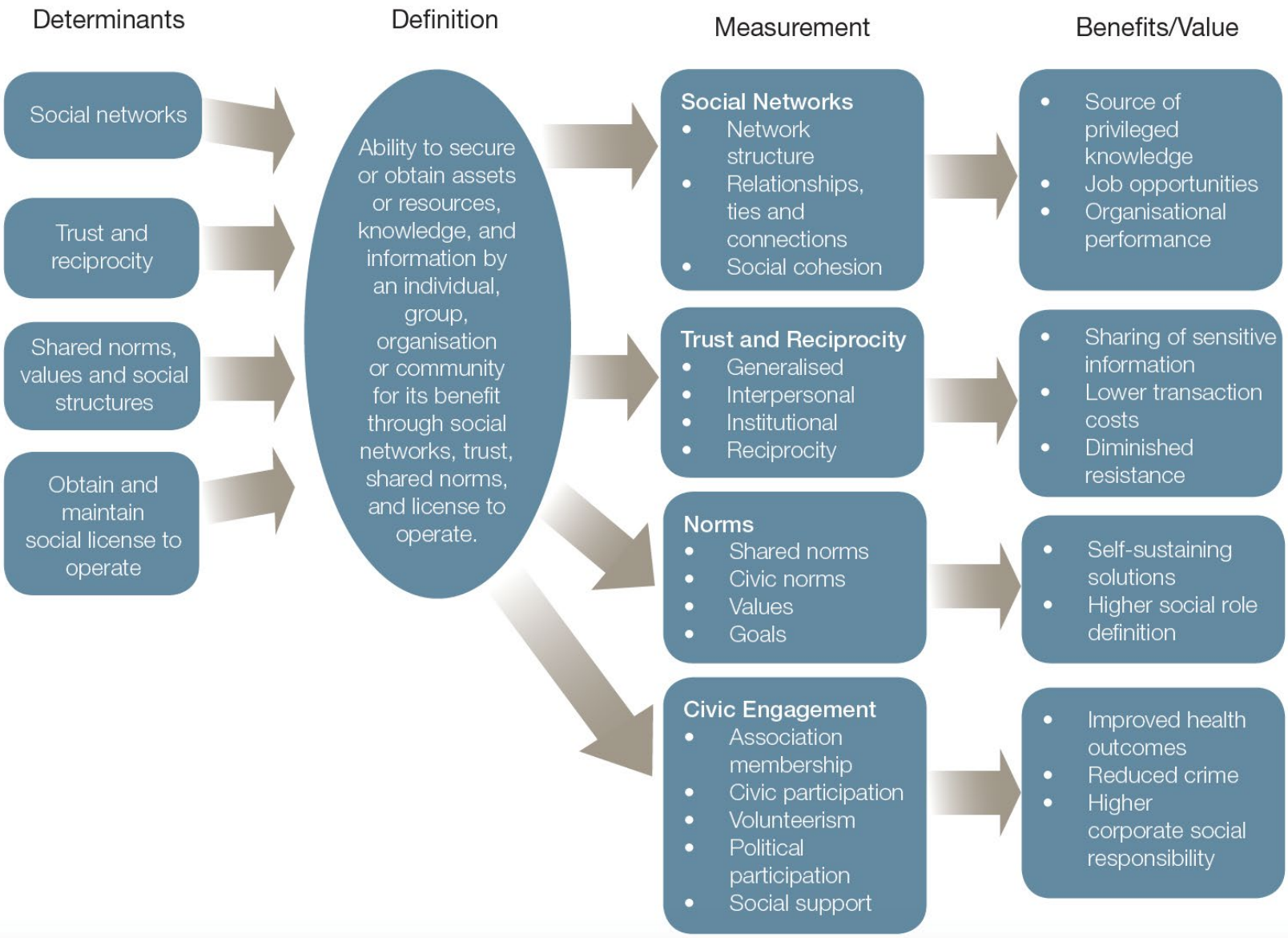


Image source: Tristan, Social capital Research. Retrieved from http://www.develop-project.eu/sites/default/files/inline-images/Figure%201%20An%20integrative%20model_0.png

Assessing Reputational Capital

Whose opinion counts?

- Stakeholders who are important to your success (e.g., vendors, employees, regulators, customers)
- Stakeholders you give you **legitimacy**

What is important to them?

What dimensions are important in your **industry**?

What are your **strategic priorities** to develop those dimensions?

What issues will be important in the **future**?

Reputation Driver	*Is it met?*
Overall	
Generates value for all constituencies	Yes No n/a
Follows the spirit as well as the letter of the law	Yes No n/a
Combats corruption and bribery	Yes No n/a
Respects human rights in all countries of operation	Yes No n/a
Promotes economic and social development in the Third World	Yes No n/a
Is environmentally friendly	Yes No n/a
Vision and Leadership	
Has credible leadership	Yes No n/a
Has leaders with clear vision for future	Yes No n/a
Has leaders who recognize and seize market opportunities	Yes No n/a
Clients and Customers	
Offers quality that meets/exceeds customer expectations	Yes No n/a
Offers good customer service	Yes No n/a
Ensures health and safety of customers, discloses risks	Yes No n/a
Doesn't create products that harm the environment	Yes No n/a
Shows respect for people in products, marketing, and advertising	Yes No n/a
Employees and Associates	
Provides jobs and compensation that allow good living conditions	Yes No n/a
Preserves employee health, safety, and dignity	Yes No n/a
Listens and responds to employee concerns	Yes No n/a
Handles workplace conflicts/negotiations in good faith	Yes No n/a
Accords equal treatment and opportunity regardless of age, gender, race, religion, disability	Yes No n/a
Helps employees develop transferable skills and knowledge	Yes No n/a
Sensitive to unemployment and dislocation problems	Yes No n/a
Shareholders and Investors	
Shows prospects for future growth	Yes No n/a
Maintains strong record of profitability	Yes No n/a
Obtains a fair and competitive return on investment	Yes No n/a
Discloses accurate, relevant information	Yes No n/a
Conserves, protects, and increases investors' assets	Yes No n/a
Respects investors' input (suggestions, complaints, formal resolutions)	Yes No n/a
Deploys corporate assets for business, not personal, use	Yes No n/a
Business Partners	
Has valuable attributes worth "renting," (e.g., expertise, loyal customer base)	Yes No n/a
Honors promises	Yes No n/a
Is candid and honest	Yes No n/a

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Image source: Jackson (2004, Chapter 4)

Why Does Rule of Law Matter?

Improves decision making, performance, and equity

- Promotes accountability & legitimacy
- Protects against arbitrary decisions
  - → reduces hegemony, unfair wielding of power
  - → Can reign in political cronyism (Schuetz, 2009)

Who gets to sit at table matters

- How are views of: non-shareholders, those not present, those with no positional power, represented?
- Can informal norms be developed?
  - → Increase equity, adaptability (Ostrom, 1990)
- If not, how are rules formalized?
- Are they applied consistently, fairly?
- Does everyone understand the rule's purpose (why it exists, how it makes org. better)?

(DeHart-Davis, 2008)

Image source: https://sites.google.com/site/pearlabtoliara/civicecology/the-curriculum-model/evolution-as-content-context-for-k-16-civic-learning/prosocial-group-design

Multiple Capitals in Practice—Intel's 2018 10K

HUMAN CAPITAL

Given the highly technical nature of our business, our success depends on our ability to attract and retain talented and skilled employees to create the technology of the future and delight our customers. Our global workforce of 107,400 is highly educated, with approximately 85% of our people working in technical roles. We invest in creating a diverse, inclusive, and safe work environment where our employees can deliver their workplace best every day. This environment fosters a rich and powerful culture that allows us to make a profound impact on the world.

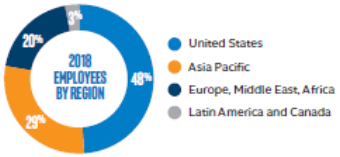
All employees are responsible for upholding the Intel Values, Intel Code of Conduct, and Intel Global Human Rights Principles, which form the foundation of our policies and practices. We also place value on providing a wide range of opportunities to support the ongoing career development of employees. For over a decade, we have tracked and publicly reported on key human capital metrics, including workforce demographics, diversity and inclusion data, turnover, and training data.

"In 2018, we met our U.S. diversity and inclusion goal—two years ahead of schedule. We are proud of our progress but not satisfied. We view diversity and inclusion as a business imperative that drives innovation and future growth. Every voice matters."

—Barbara Whye, Intel's Chief Diversity and Inclusion Officer and Vice President of Human Resources

DIVERSITY AND INCLUSION

Building an inclusive workforce, industry, and ecosystem is critical to helping us drive our business forward. We committed $300 million to advance diversity and inclusion in our workforce and in the technology industry, and met our goal to achieve full representation of women and underrepresented minorities in our U.S. workforce in 2018—two years ahead of schedule. We have a long-standing commitment to inclusive workplace policies. For example, to help ensure employee concerns are openly and transparently resolved, Intel does not seek arbitration of sexual harassment and other employment claims.



GROWTH AND DEVELOPMENT

We invest significant resources to develop the talent needed to keep the company at the forefront of innovation and make Intel an employer of choice. We deliver training annually and provide rotational assignment opportunities. During 2017 and 2018, we trained our managers in inclusive management practices. Over the past five years, our undesired voluntary turnover rate has been below 5%.

COMMUNICATION AND ENGAGEMENT

Our success depends on employees understanding how their work contributes to the company's overall strategy. We use a variety of channels to facilitate open and direct communication, including open forums with executives; quarterly Organizational Health Polls; and engagement through more than 30 different employee resource groups, including the Women at Intel Network, the Network of Intel African American Employees, the Intel Latino Network, and others.

COMPENSATION AND BENEFITS

We strive to provide pay, benefits, and services that help meet the varying needs of our employees. Our generous total rewards package includes market-competitive pay, broad-based stock grants and bonuses, a popular Employee Stock Purchase Plan, healthcare and retirement benefits, paid time off, flexible work schedules, sabbaticals, fertility assistance, and on-site services. For more than a decade, we've performed an annual compensation analysis in the U.S. to ensure pay equity by gender and race/ethnicity. In 2018, we began globalizing our analytics and recently announced that we've achieved gender pay equity globally.

HEALTH, SAFETY, AND WELLNESS

Our ultimate goal is to achieve zero serious injuries through continued investment in and focus on our core safety programs and injury-reduction initiatives. We provide access to a variety of innovative, flexible, and convenient employee health and wellness programs, including on-site health centers.

SOCIAL AND RELATIONSHIP CAPITAL

We are committed to operating with transparency, and through open and direct communication, we work to develop trusted relationships with all stakeholders, including employees, customers, suppliers, governments, and communities. We also empower our employees to give back to the communities where we operate and engage them in corporate responsibility and sustainability initiatives. Our commitment to stakeholder collaboration and investments in social impact initiatives, including support of the United Nations Sustainable Development Goals, has resulted in our reputation as a leading corporate citizen, which has created value for Intel in terms of social license to operate and a positive operating environment. Each year, we receive third-party recognitions for our corporate responsibility leadership and ethical business practices. In 2018, recognitions included the Fortune 2018 Change the World List, Ethisphere's World's Most Ethical Companies, and Forbes/Just Capital's America's Most "Just" Companies.

ECONOMIC IMPACT

The health of our company and local economies depend on continued investments in innovation. We provide high-skill, high-paying jobs at Intel sites around the world and also impact economies through our R&D ecosystem spending, sourcing activities, consumer spending by our employees, and tax revenue. Many of these are manufacturing and R&D jobs located in our own domestic and international factories. In addition, we make sizable capital investments and provide leadership in public-private partnerships to spur economic growth and innovation.

SOCIAL IMPACT

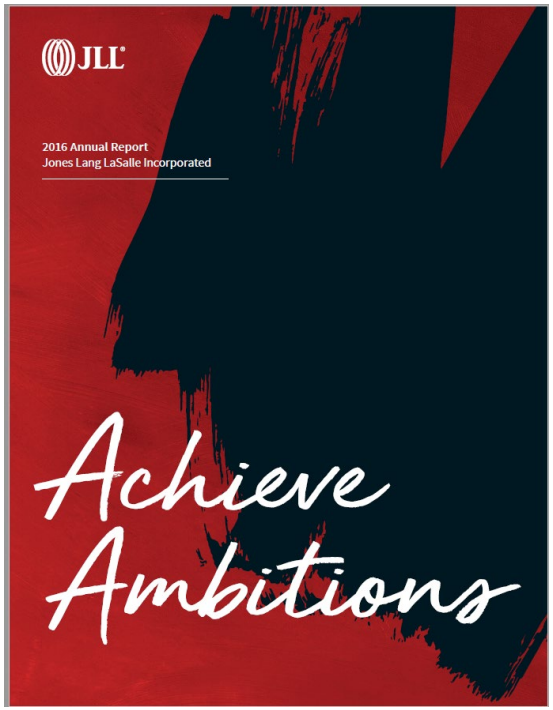
We are at the forefront of new technologies—such as AI, autonomous driving, and 5G wireless broadband—that are increasingly being used to empower individuals, companies, and governments around the world to solve major societal challenges. Simultaneously, we are empowering people through education and advancing social impact initiatives, helping us build trust with key external stakeholders and support the interests of our employees. Through the Intel® She Will Connect program, we have collaborated with global and local partners to empower millions of women and girls through technology skills training. Our employees actively share their expertise and skills through technology-related volunteer initiatives, and over the past 10 years have contributed more than 10 million hours of service in the communities where we operate. In celebration of our 50th anniversary, we set a goal to have 50,000 employees donate 1 million volunteer hours during 2018. We exceeded the goal with more than 68,000 employees contributing approximately 1.5 million hours.

SUPPLY CHAIN RESPONSIBILITY

Actively managing our supply chain creates business value for Intel and our customers by helping us reduce risks, improve product quality, achieve environmental and social goals, and raise the overall performance of our suppliers. Over the past five years, we have completed more than 500 supplier audits using the Responsible Business Alliance Code of Conduct standard and have expanded training and capacity-building programs with our suppliers. We actively collaborate with others and lead industry initiatives on key issues such as advancing responsible minerals sourcing, addressing risks of forced and bonded labor, and improving transparency around climate and water impacts in the global electronics supply chain. We also continue to work toward our goal of reaching $1 billion in annual spending with diverse-owned suppliers by 2020, and are investing in programs to create new career pathways into the technology industry.

Image source: http://intel2019or.q4web.com/Y2018/default.aspx

Who's Using IR? *JLL -- Jones Lang LaSalle*



Type of Capital	Global Trends	JLL Activities
Financial	Continued risk of financial crises	Maintaining our financial strength as a differentiator; Financial Risk Factors
	Potential increase in disruptive market cycles	Enterprise Risk Management; Strategic Risk Factors; Financial Risk Factors
	Shift towards emerging markets	Building our Leading Local and Regional Service Operations Strategic focus on potential growth markets and cities
	Regulatory reform in banking & other sectors	Enterprise Risk Management; Operational Risk Factors; Legal and Compliance Risk Factors
	Growth increasingly dependent on productivity gains	Strategic focus on productivity
	Global push against tax avoidance	Enterprise Risk Management; Strategic Risk Factors; Financial Risk Factors; Legal and Compliance Risk Factors
Human	Changing demographics affects workplace profiles	Enterprise Risk Management; Operational Risk Factors
	Shift of business model to technology-based which demands: · different capabilities, digital capability of who we hire, who we train, needs to appeal to a younger generation, · drives different needs in leadership, demands a truly global way of leading, more flexibility, a focus on social values	Leadership development programs Acquisitions of technology platforms such as Corrigo Data & technology and social media programs Yammer platform encouraging employees to share and exchange online
	Diversity is equated with "good business"	Business leaders as diversity champions in all JLL regions Annual Diversity and Inclusion Report (on our website) Annual Global Sustainability Report, published July 2016 (on our website)
Intellectual	Increased risk of cyber-attacks and data theft	Enterprise Risk Management; Operational Risk Factors
	Intellectual capital becomes increasingly disseminated	Strategic focus on technology, digital and social media Enterprise Risk Management; Operational Risk Factors
	Digital technology transforms how people live and work	Strategic focus on technology, digital and social media
Manufactured	Urbanization trends, including rapid urbanization and 'megacities'	Build our Leading Local and Regional Service Operations Strategic focus on potential growth markets and cities JLL Cities Research Centre (on our website)
	Changing levels of demand for different types of real estate	Strategic focus on most lucrative potential services JLL Research
	Expansion of the global investable real estate universe	Strategic goal to capture the leading share of global real estate capital flows Strengthen LaSalle Investment Management's leadership position
Social	Unprecedented levels of transparency	Code of Business Ethics and Corporate Sustainability Transparency Report 2016 (on our website) Enterprise Risk Management; Strategic Risk Factors
	Increasing political instability and conflict	Enterprise Risk Management; Strategic Risk Factors
	Businesses need to demonstrate social contribution	Annual Global Sustainability Report, published July 2016 (on our website)
	Increase in extreme weather events	Enterprise Risk Management; Strategic Risk Factors Global Sustainability & Cities Research

Multiple Capitals as Key Performance Indicators

SCOREBOARD OF OUR SIX CAPITALS

KEY INPUTS

HUMAN CAPITAL

To grow and steer our business and operate our facilities safely and efficiently, we require high-performing, innovative and diverse people with the right skills and experience.

- A safe, healthy, engaged and productive workforce of **30 900 people** with relevant skills, knowledge and experience
- **A strong leadership team,** driving a culture of high performance
- More than **22 000 service providers,** delivering to agreed terms

SOCIAL AND RELATIONSHIP CAPITAL

To create an enabling environment for operations and investment, we integrate the needs of our stakeholders into our business and we deliver on our commitments.

- An **employee relations culture** that encourages engagement with employees and recognised trade unions
- The **sustained confidence of investors**
- **Effective partnerships** with customers, suppliers, business peers as well as sector and research bodies
- Engagement with our **fenceline communities, governments and regulators**

NATURAL CAPITAL

We require natural gas, shale gas, coal and crude oil as well as air, water, land and energy to convert hydrocarbon reserves into value-adding product streams.

- Coal to process (dry ash-free basis) (kilotons): **17 961**
- Crude oil processed (mm bbl): **32**
- Natural gas to process (bscf): **97**
- Total water used (thousand cubic meters): **137 061**
- Total energy usage (thousand GJ): **396 844**

FINANCIAL CAPITAL

We use cash generated by our operations and investments as well as debt and equity financing to run our business and fund growth.

- Market capitalisation of **R239 billion**
- Debt raised to execute capital investments of **R13 billion**
- Finance income of **R1,6 billion**
- Funding facilities of **R136 billion,** of which **R82 billion** has been utilised

MANUFACTURED CAPITAL

Investing in plant and equipment allows us to convert hydrocarbon resources into high-value product streams and operate reliably. It also helps reduce our environmental footprint and enables us to comply with regulatory requirements.

- Property, plant and equipment of **R159 billion** (carrying value)
- Assets under construction of **R131 billion**
- Exploration, development, production, marketing and sales operations in **33 countries**

INTELLECTUAL CAPITAL

Our proprietary or licensed technologies, software, licences, procedures and protocols support Sasol's competitive advantage.

- Skilled, experienced and technically qualified employees, **industry thought leaders and experts** that enable Sasol to respond to the constantly changing environment
- Our patented **technologies**
- Our business processes and **management systems**

CREATING VALUE FOR OUR STAKEHOLDERS

HUMAN CAPITAL OUTCOMES

	2017	2016
Amount paid in wages and benefits	**R26,9bn**	R26,4bn
Number of work-related employee and service provider fatalities	**5**	2
Recordable Case Rate (RCR)	**0,28**	0,29
Investment in employee learning	**R970m**	R678m
Artisans trained	**1 160**	758
Fatal-injury frequency rate	**0,006**	0,002
New cases of occupational disease	**39**	55

ACTIONS TO ENHANCE OUTCOMES

- Continuous work to improve employee safety
- Refreshed our action-orientated values and efforts to meaningfully improve our diverse and inclusive workforce
- Building and maintaining critical skills and capability, despite cost-containment initiatives, that allow employees to deliver high performance
- Focused talent sourcing and succession planning

INTELLECTUAL CAPITAL OUTCOMES

	2017	2016
Number of new patents issued	**190**	239
Total worldwide patents held	**2 216**	2 023
Investment in research and development	**R1 077m**	R1 105m
Investment in bursary scheme	**R53m**	R49m
Number of bursaries	**473**	369
Number of mentoring coaches	**429**	410

ACTIONS TO ENHANCE OUTCOMES

- Investing in research and development and partnerships to reduce our environmental impact and develop new technologies despite the low oil price environment and RP
- Providing training and skills development for Sasol artisans, accountants and engineers
- Driving excellence in science, technology, engineering and mathematics education
- Focusing on continuous improvement to address the structural shift in energy prices by sustainably improving our margin contribution and cost base delivery

MANUFACTURED CAPITAL OUTCOMES AND OUTPUTS

	2017	2016
Capital expenditure (including capital accruals, excluding Canada settlement)	**R60,3bn**	R70,4bn
Capital expenditure in South Africa	**28%**	24%
Sustenance capital expenditure	**R17,2bn**	R17,0bn
Depreciation and amortisation	**R16,2bn**	R16,4bn
Net impairment of assets	**R1,3bn**	R12,3bn
Record production volumes at Secunda Synfuels Operations	**7 834kt**	7 779kt

ACTIONS TO ENHANCE OUTCOMES

- In the US, progressing construction of the LCCP and joint venture HDPE plant
- Advancing project to reduce VOC emissions in South Africa
- In Mozambique, drilling first six wells in PSA licence area and debottlenecking PPA plant, supporting our Southern African growth drive
- Complete first phase of sixth fine ash dam in South Africa

SOCIAL AND RELATIONSHIP CAPITAL OUTCOMES

	2017	2016
Taxes (direct and indirect) paid to South African government	**R35,6bn**	R36,8bn
Spending on skills development and social investment	**R1,6bn**	R1,2bn
Broad-Based Black Economic Empowerment status	**Level 8**	Level 8
Person-days production lost to strike action	**63 119**	13 016

ACTIONS TO ENHANCE OUTCOMES

- Leveraging job-creation projects to bring basic services to communities
- Investing in numerous educational programmes from early childhood and teacher development to bursaries
- On-the-ground engagement by joint CEOs with all major stakeholder groups
- Supporting entrepreneur development, municipality capacity-building in Secunda
- Facilitating local recruitment drives to register job seekers with Department of Labour in towns around Secunda
- Acknowledging that some traditional ways of engaging are no longer appropriate
- Launching formal complaints framework for local community engagement
- Fostering positive employee and union relationships informed by trust and respect
- Committed to contribute meaningfully to transformation in South Africa through B-BBEE initiatives

NATURAL CAPITAL OUTPUTS

	2017	2016
Total greenhouse gas emissions (CO_2 equivalent) (kilotons)	**67 632**	69 250
Greenhouse gas (GHG) emissions intensity (CO_2 equivalent/ton product)	**3,66**	3,68
Nitrogen oxides (NO_x) (kilotons)	**152**	156
Sulphur oxides (SO_x) (kilotons)	**202**	223
Particulates (fly ash) (kilotons)	**10**	10

ACTIONS TO ENHANCE OUTPUTS

- Committing to promoting sustainable ambient air quality improvement in South Africa
- Progressing our South African volatile organic compound emissions abatement and coal tar filtration projects
- Setting targets for water and energy efficiency
- Supporting the UN Paris Agreement 2016
- Working on water conservation and demand management projects
- Improving on-site waste disposal practices

FINANCIAL CAPITAL OUTCOMES

	2017	2016
Operating profit	**R31,7bn**	R24,2bn
Cash generated by operating activities	**R44,1bn**	R54,7bn
Net debt to EBITDA (ratio)	**1,13**	0,56
Net borrowings to shareholders' equity (gearing)	**26,7%**	14,6%
Headline earnings per share	**R35,15**	R41,40
Earnings attributable to shareholders	**R20,4bn**	R13,2bn

ACTIONS TO ENHANCE OUTCOMES

- Entering into commodity and currency hedges as part of our financial risk mitigation strategy, to protect the balance sheet
- Intensifying our risk management processes to enable us to better understand the risks we face
- Defined a capital allocation model to enhance shareholder returns
- Considering alternatives to fund our capital growth investments

Image source: http://examples.integratedreporting.org/resources/11425/page13.png

Example—Value Creation Process Explained

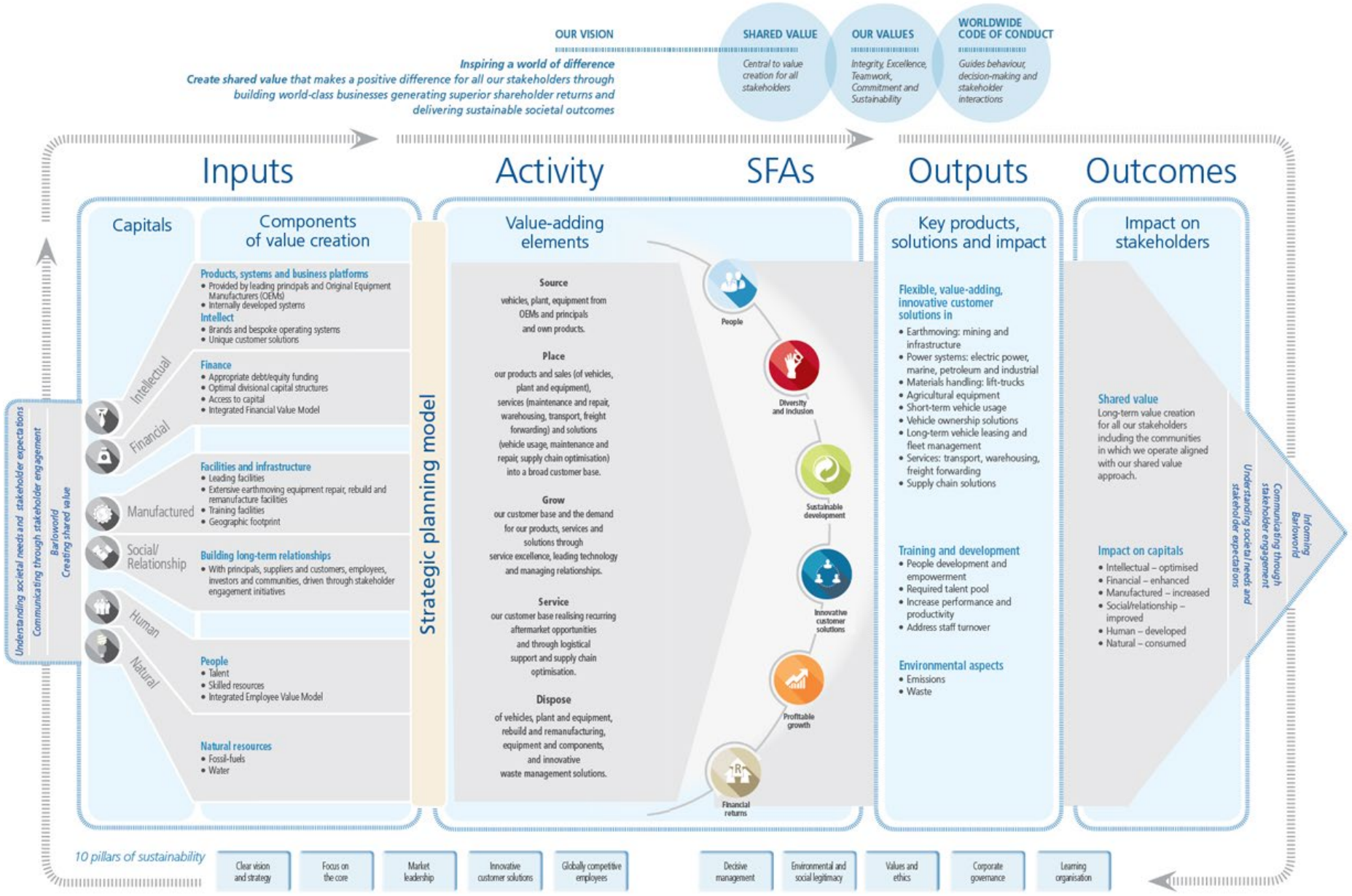


Image source; http://www.barloworld-reports.co.za/integrated-reports/ir-2015/bar-business-model.php

Multiple Capitals for Community Development

wealthworks

The eight capitals

www.wealthworks.org

WealthWorks simplifies things by organizing these local features into eight discrete capitals, which are defined in the table below and share the following characteristics: each capital is a collection of one category of related resources; every region has a stock of each type of capital—meaning the combined quantity and quality of the many components of that capital in the region; and taken together, the existing stocks of these capitals constitute a region's current wealth.

The capital	The definition
Individual	The existing stock of skills, understanding, physical health and mental wellness in a region's people.
Intellectual	The existing stock of knowledge, resourcefulness, creativity and innovation in a region's people, institutions, organizations and sectors.
Social	The existing stock of trust, relationships and networks in a region's population.
Cultural	The existing stock of traditions, customs, ways of doing, and world views in a region's population.
Natural	The existing stock of natural resources—for example, water, land, air, plants and animals—in a region's places.
Built	The existing stock of constructed infrastructure—for example, buildings, sewer systems, broadband, roads—in a region's places.
Political	The existing stock of goodwill, influence and power that people, organizations and institutions in the region can exercise in decision-making.
Financial	The existing stock of monetary resources available in the region for investment in the region.

Root wealth in local people, places and firms through local ownership, control and influence

Capitals that are "owned" locally build wealth.

Benefits —income, know-how, better technology — flowing from local ownership of capitals can be re-invested and re-circulated locally, enriching many.

Preserving local ownership & control over your capitals can increase the chances of preserving local jobs. n Local ownership is an anchor that helps wealth stick.