

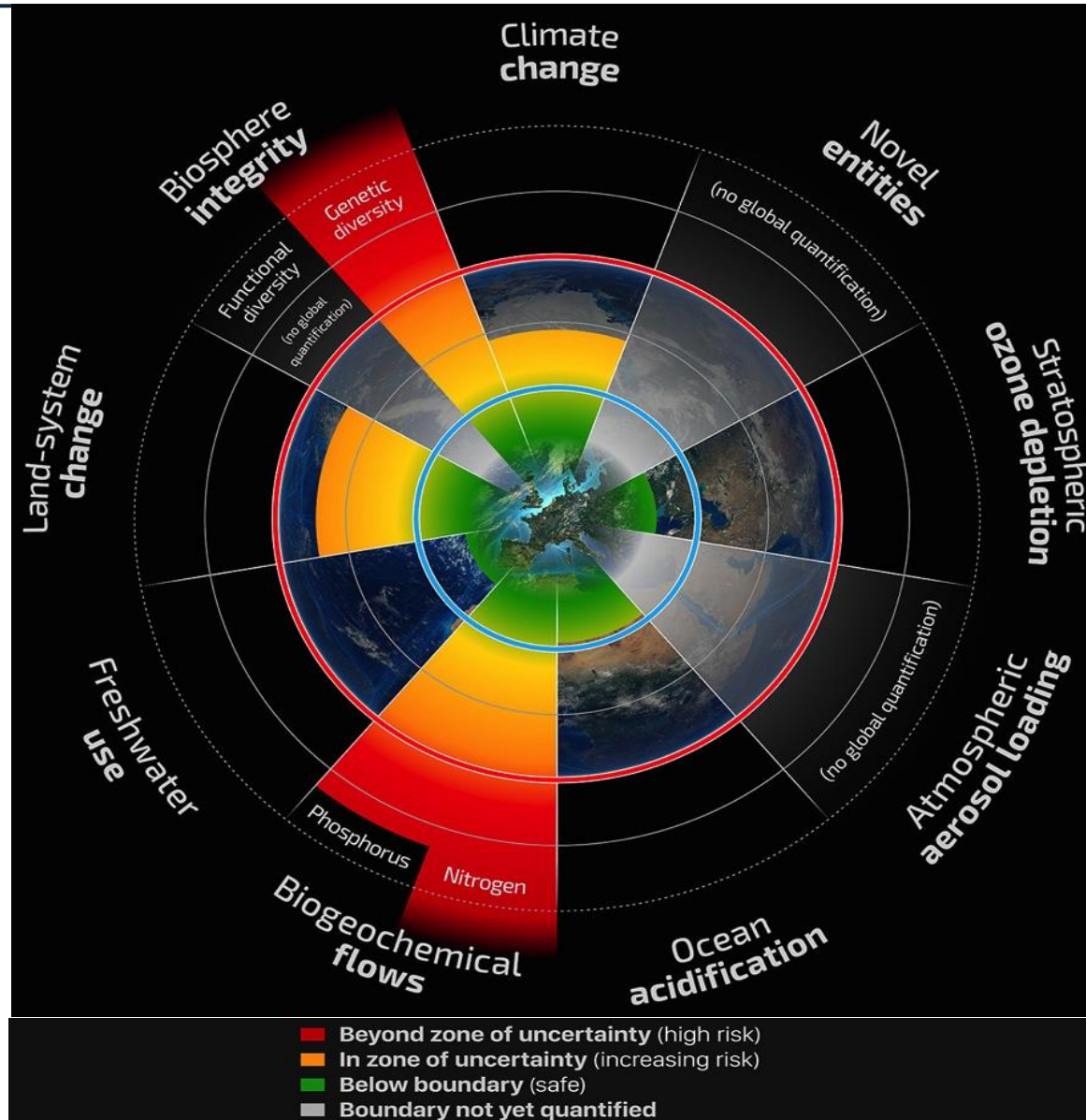
“Natural Capital Accounting *and* Frameworks for our Common Future”

Pavan Sukhdev

**Founder & Trustee, GIST
& Goodwill Ambassador for UN Environment**

2nd December 2016

Planetary Boundaries Framework “Safe Operating Space”



What is the *Structure* for SDG's?

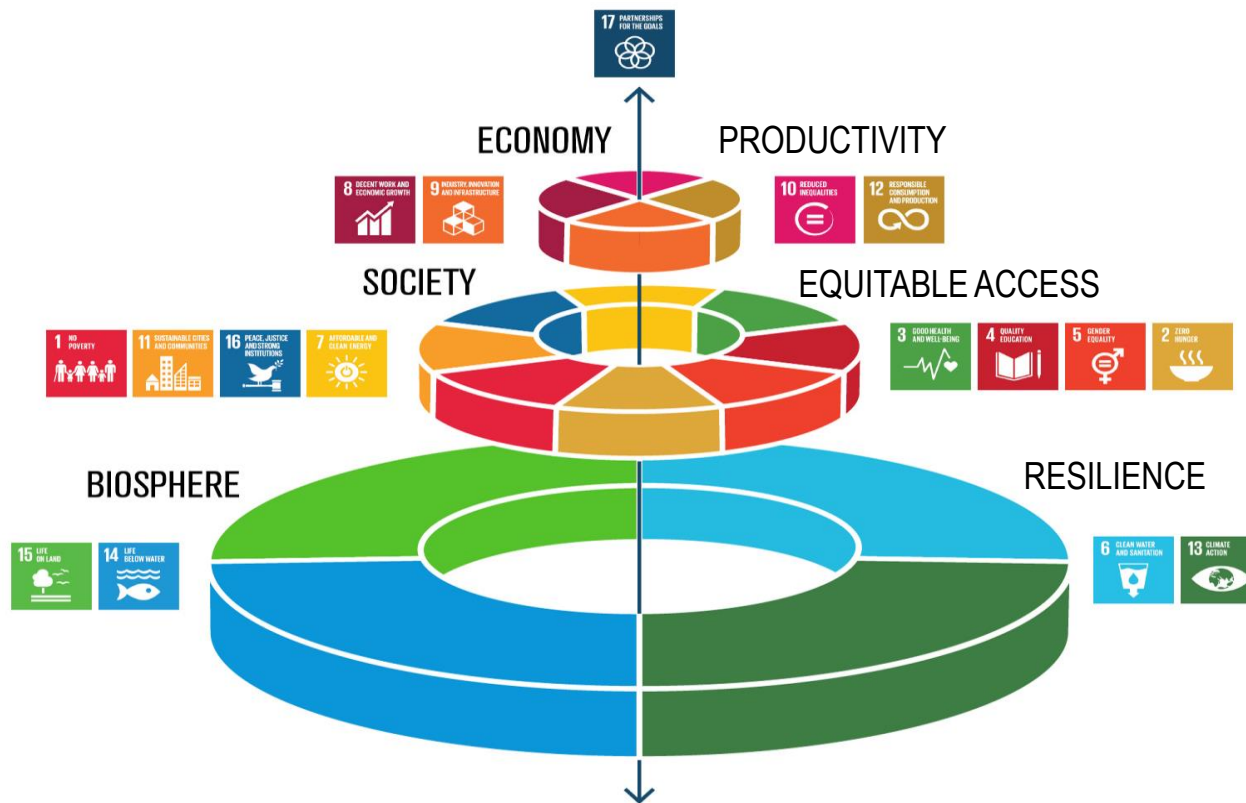
“Development” = “Improving Well Being for All”



- ❖ **Structure: How do SDG's relate to each other?**
- ❖ **In what sequence, and why, should SDG's be implemented?**

“Natural Capital” Base for SDG’s

“Development” = “Improving Well Being for All”



Source: from J. Rockström/ P.Sukhdev presentation to EAT Forum, Stockholm, 2016

Pioneers of Environmental Economics



David Pearce

University College London



Kenneth Arrow

Stanford University



Partha Dasgupta

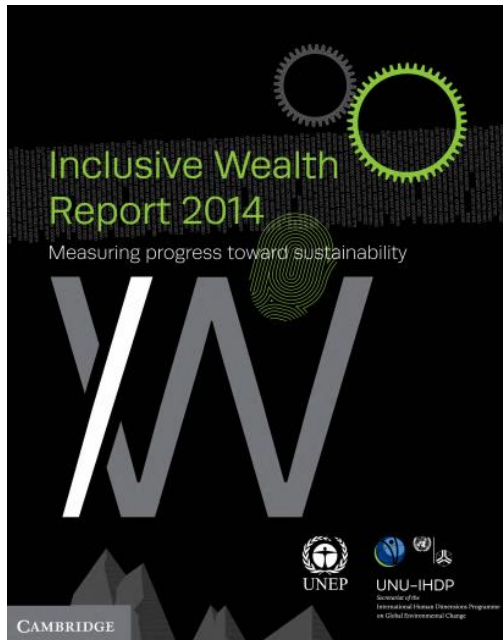
University of Cambridge



Karl-Göran Mäler

Stockholm School of Economics

UN - Inclusive Wealth Report 2014



**From: *Foreword,*
by *Prof. Partha Dasgupta....***

*“Inclusive wealth is the social value of an economy's capital assets. The assets comprise (i) **manufactured capital** (roads, buildings, machines, and equipment), (ii) **human capital** (skills, education, health), and (iii) **natural capital** (sub-soil resources, ecosystems, the atmosphere).*

*Such other durable assets as knowledge, institutions, culture, religion – more broadly, **social capital** – were taken to **be enabling assets**; that is, assets that enable the production and allocation of assets in categories (i)-(iii). The effectiveness of enabling assets in a country gets reflected in the shadow prices of assets in categories (i)-(iii)”*

“Inclusive Wealth”: a True Balance Sheet of Nations

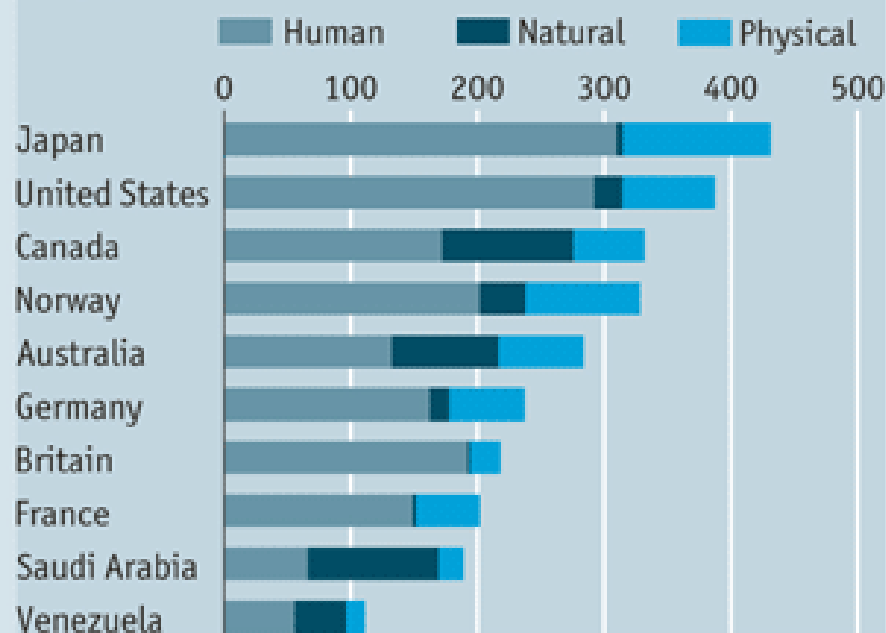
The balance-sheet of wealth

Inclusive wealth

Country	2008, \$trn*	1990-2008 growth†, %
United States	117.8	0.7
Japan	55.1	0.9
China	20.0	2.1
Germany	19.5	1.8
Britain	13.4	0.9
France	13.0	1.4
Canada	11.1	0.4
Brazil	7.4	0.9
India	6.2	0.9
Australia	6.1	0.1

Source: UN

Inclusive wealth per person 2008, \$'000*



*Constant 2000 \$ †Average annual rate

The UN (“Inclusive Wealth Report, 2014”) calculates human capital based on average years of schooling, work wages, and the number of years they can expect to work before they retire (or die)¹.

Dimensions of Wealth

**Ownership
Categories**

**Capital
Classes**

**Physical
Capital**

**Human
Capital**

**Natural
Capital**

**Social
Capital**

**Private
Ownership:
(‘Private Goods’)**

- Factories
- Securities
- Software
- Patents

- Health
- Education
- Job Skills

- Mines
- Fields
- Private Forests

- Market design, regulations, rules, etiquette
- Civil & Criminal Laws; Judicial systems

**Social
Capital**

**Community
Ownership:
(‘Club Goods’)**

- Community Centres
- Community Schools

- Traditional Community Knowledge

- Community Forests
- Grazing Commons

- Community rules, norms, customs, culture

**Social
Capital**

**Public
Ownership:
(‘Public Goods’)**

- Roads
- Bridges
- Public Hospitals

- Public Databases
- Non-patent Knowledge

- High Seas Fisheries
- National Parks/ Forests

- Constitutions; Judiciaries; Law & order; Tax systems
- Social equity; Communal harmony; Cultural diversity

**Social
Capital**

Focus: Natural Capital

Ownership Categories	Capital Classes	Physical Capital	Human Capital	Natural Capital	Social Capital
Private Ownership: (‘Private Goods’)		<ul style="list-style-type: none"> Factories Securities Software Patents 	<ul style="list-style-type: none"> Health Education Job Skills 	<ul style="list-style-type: none"> Mines Fields Private Forests 	
		<ul style="list-style-type: none"> Market design, regulations, rules, etiquette Civil & Criminal Laws; Judicial systems 			Social Capital
Community Ownership: (‘Club Goods’)		<ul style="list-style-type: none"> Community Centres Community Schools 	<ul style="list-style-type: none"> Traditional Community Knowledge 	<ul style="list-style-type: none"> Community Forests Grazing Commons 	
		<ul style="list-style-type: none"> Community rules, norms, customs, culture 			Social Capital
Public Ownership: (‘Public Goods’)		<ul style="list-style-type: none"> Roads Bridges Public Hospitals 	<ul style="list-style-type: none"> Public Databases Non-patent Knowledge 	<ul style="list-style-type: none"> High Seas Fisheries National Parks/ Forests 	
		<ul style="list-style-type: none"> Constitutions; Judiciaries; Law & order; Tax systems Social equity; Communal harmony; Cultural diversity 			Social Capital

Focus: Natural Capital



Our theory of change

No individual organization will solve the enormous problems we face by itself, and it is only by working together that we will find the solutions we need. The sum is greater than the parts...



**NATURAL
CAPITAL
COALITION**

Natural Capital

- Mines
- Fields
- Private Forests

, etiquette
systems

- Community Forests
- Grazing Commons

s, culture

- High Seas Fisheries
- National Parks/ Forests

order; Tax systems
y; Cultural diversity

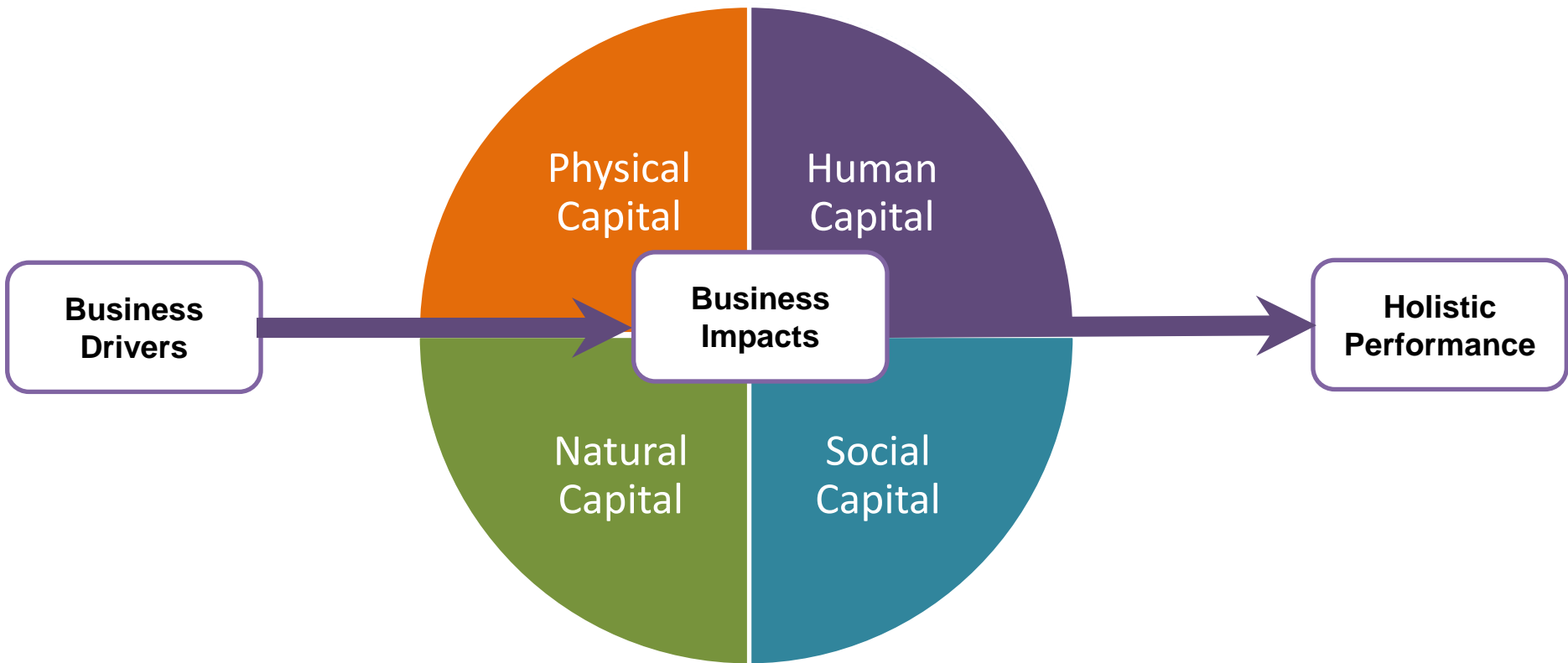
Social Capital

Social Capital

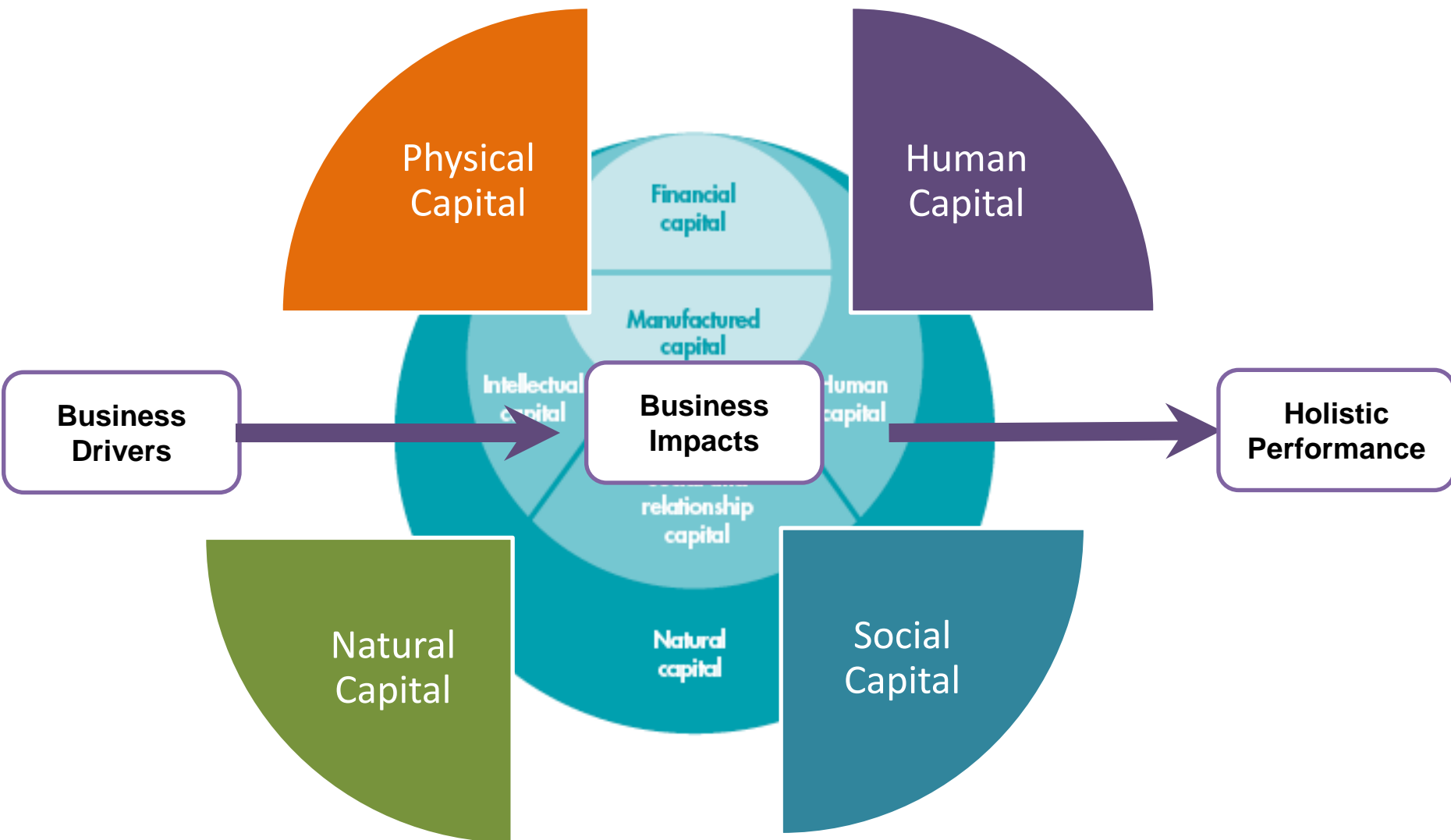
Social Capital

Social Capital

IIRC vs Mainstream Categorization of Capitals



IIRC vs Mainstream Categorization of Capitals



Thank You!

www.gistadvisory.com

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