

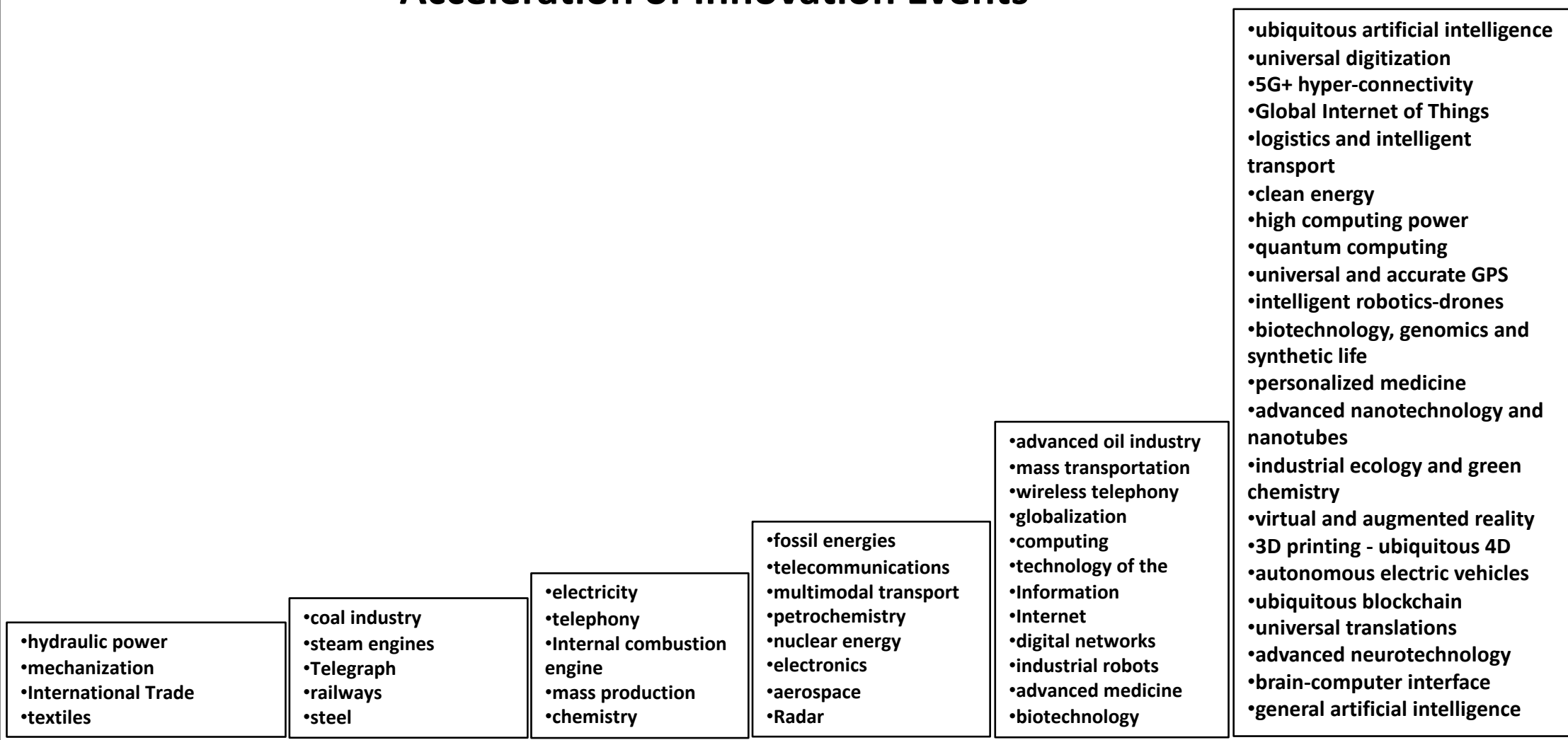
The background of the slide features a complex network of interconnected nodes and lines, resembling a web or a molecular structure. The nodes are represented by small black dots, and the lines are thin, light gray lines connecting these dots. The network is dense and spreads across the entire frame, with a slight gradient from top to bottom, being more prominent in the upper half. The overall aesthetic is clean, modern, and technical.

**Network of Banks of Ideas:
A Global Solution for
Innovation4SDGs**

General Purpose Technologies: Acceleration of Innovation Events

AI is the most disruptive
and ubiquitous GPT

General Purpose Technologies' socioeconomic impact



1785

1845

1900

1950

2000

2020

Capitalism
mechanization

Coal –
steam engines

Electrification -
telephony

Oil economy -
mass production

Globalization -
computerization

Smart digital revolution
physical-cybernetic systems

Main factors driving accelerating technological change and innovation

Global STI ecosystems:

finding solutions to existential problems

Major global powers:

struggle for geopolitical for supremacy

Large corporations:

market dominance, and economic gain

Strength of R&D&i ecosystems:

drive most disruptive innovations

Curiosity and creativity:

drivers of frontier innovation

State-induced value creation:

essential for a robust innovation ecosystem

Competition for cutting-edge innovations

socialise the risks of innovation but not the benefits

Indifference to social inclusion, positive environmental impact and well-being for everyone

Growing Disparities and the Power of Innovation

Only a few countries and corporations produce emerging technologies and GPTs

Most countries in the Global South are ill-equipped to face and benefit from technological acceleration

This drives further international disparities and extreme inequality

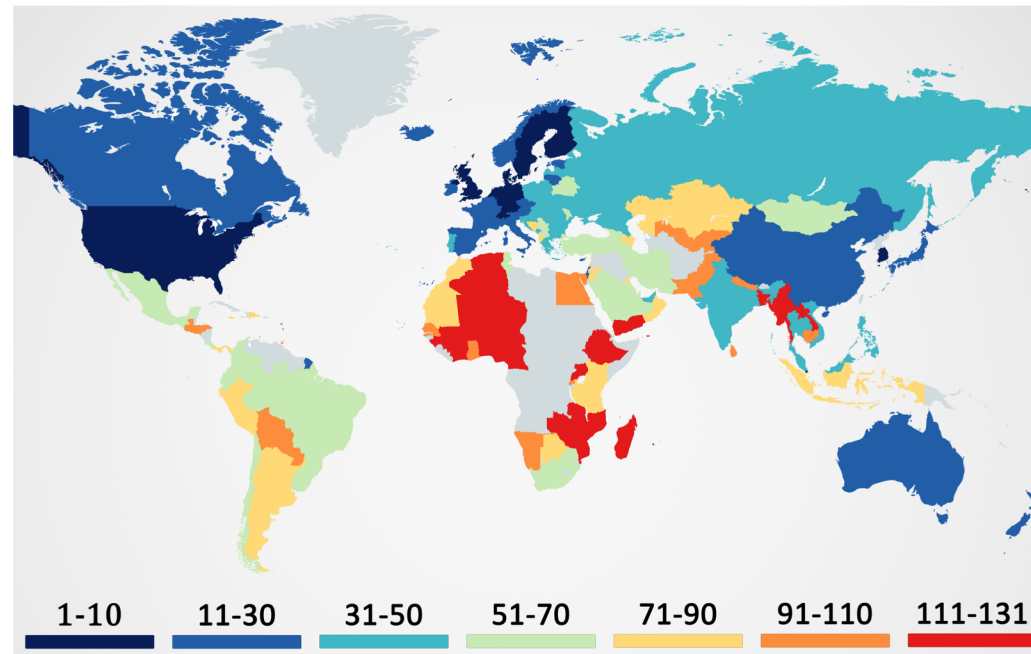
It is crucial to strengthen innovation capacities, skills and global collaboration on equal footing

The power of innovation lies in making quantum leaps in inclusion and sustainable development

Problem-knowledge-based mission innovation to adapt emerging technologies is crucial

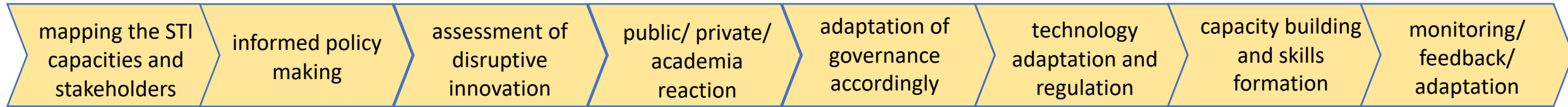
Value-creation and public purpose within the quadruple helix model of science, policy, industry, and society are key

Disparities in innovation capacity are growing



Global Innovation index 2020 by ranking, based on WIPO Global Innovation Index

STI4SDG Roadmaps are crucial



but carry risks and costs that need minimising through:

collaboration

strategic support

economies of scale and synergies

evidence-informed decisionmaking

access to funding and market opportunities

knowledge sharing of best practices and successful examples

persuasion and encouragement of policymakers and entrepreneurs

Innovation4SDG roadmaps should systemically connect:

Problems in search
of solutions

Solutions in search of
problems to solve

Solutions to
problems in search of
expertise support

Solution-ideas in
search of funds

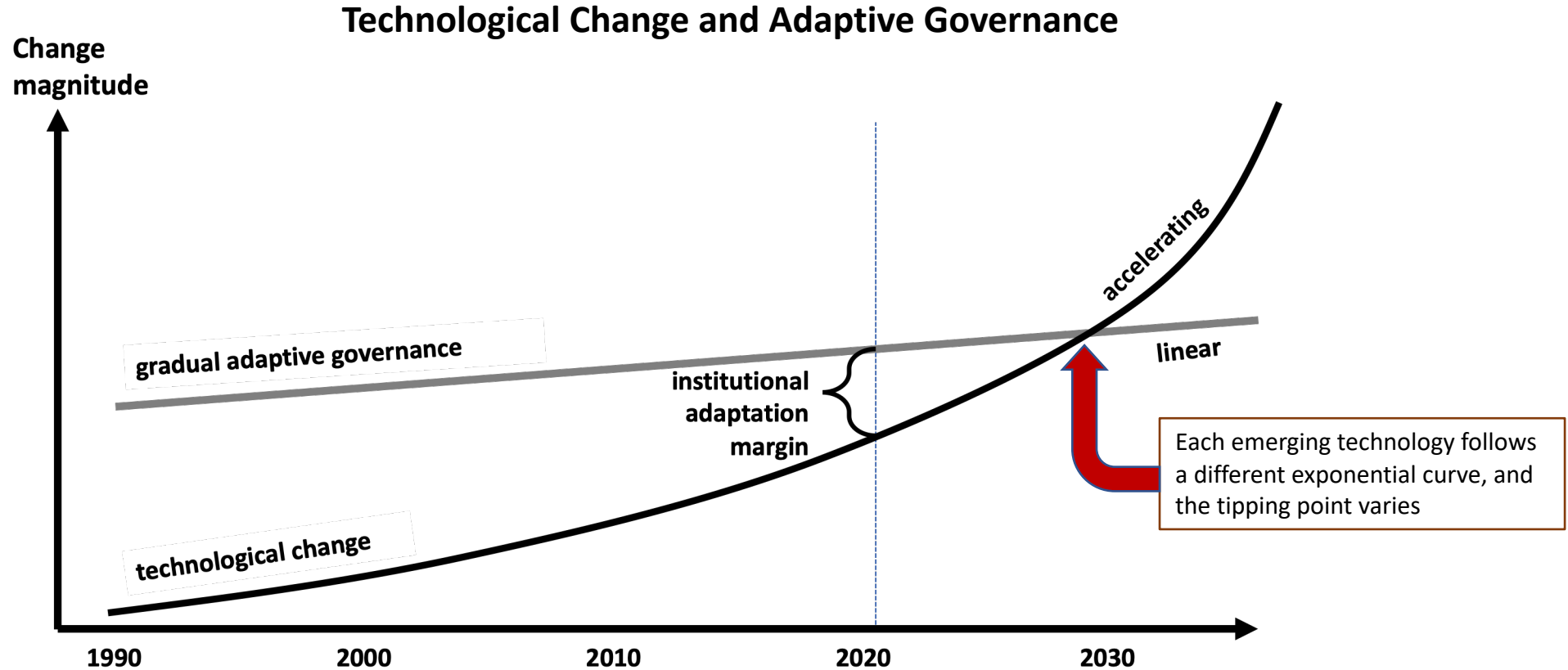
Ethically aligned
design of innovations

A bottom-up and top
down approach

Innovation capacity-
building and
evidence-based
policymaking

Knowledge Sharing through Partnership in Action

But STI4SDG Roadmaps are time sensitive



we need to act now

Context of Innovation

Culture - Traditions - Natural Environment - Economic Characteristics - Social Structure

Political and legal system - institutional strength - technological capabilities - strength of human capital

Knowledge Base

Intersectoral Collaboration for Innovation Congruent with National Priorities

Public sector

national priorities / socio-economic impact

Private businesses

products and services / efficiency / added value / profitability

Academic Entities

knowledge / human capital formation / academic rigor

Subsystem of public policy, regulation and public support

Production and innovation subsystem

Research and education subsystem

Financial markets

Financing and private funds

Markets for goods and services

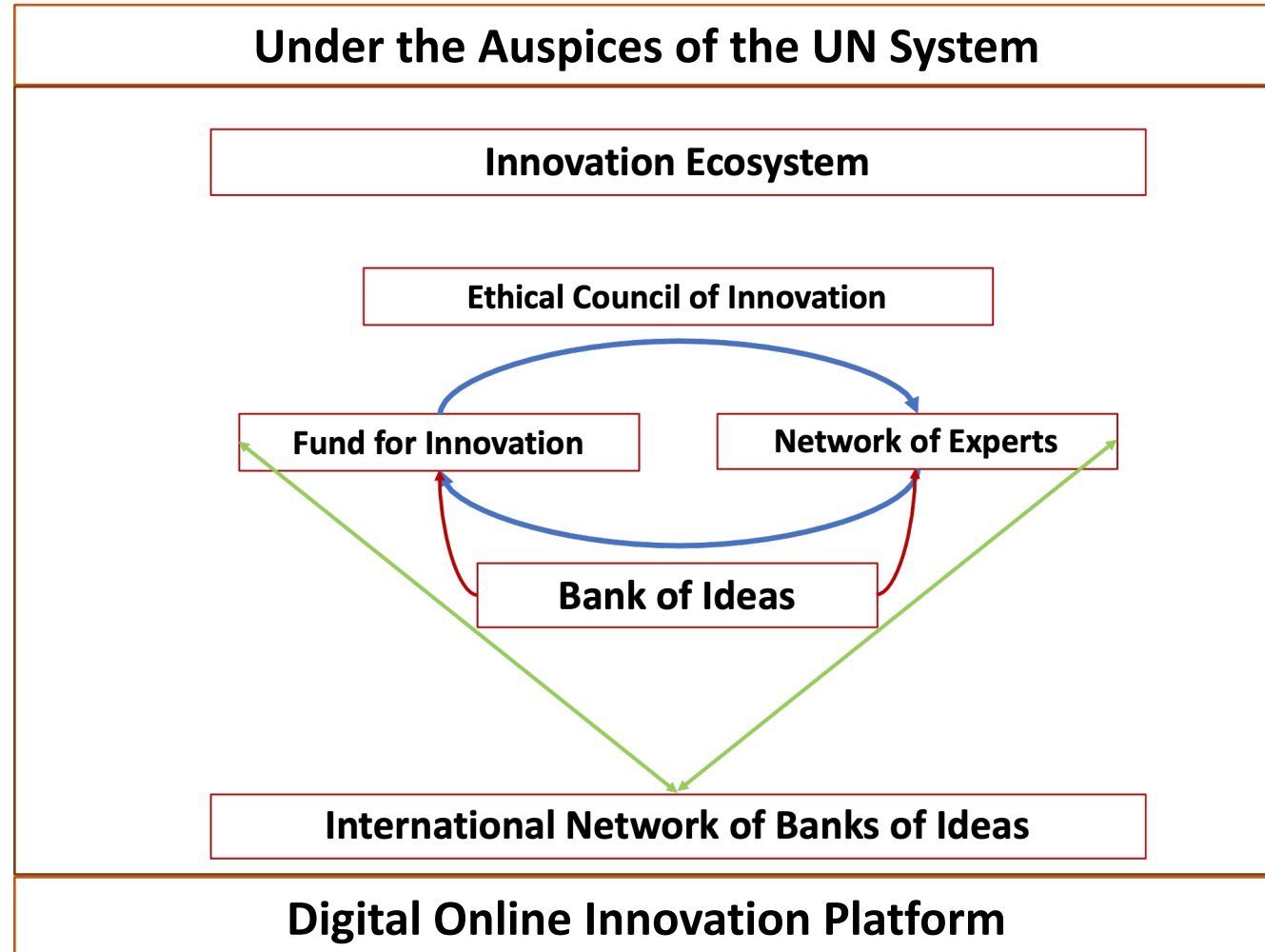
Guidebook on Innovation4SDG Roadmaps

self-financing

self-adapting

respect and use of IPR regulations

respect of national legal frameworks



SDG Governance for Innovation

Policy, Regulatory and Data Governance Frameworks

Funding and Investment

Partnership & collaboration

Skills

IPRs

Evaluation and Monitoring

globally coherent

accessible

collaborative

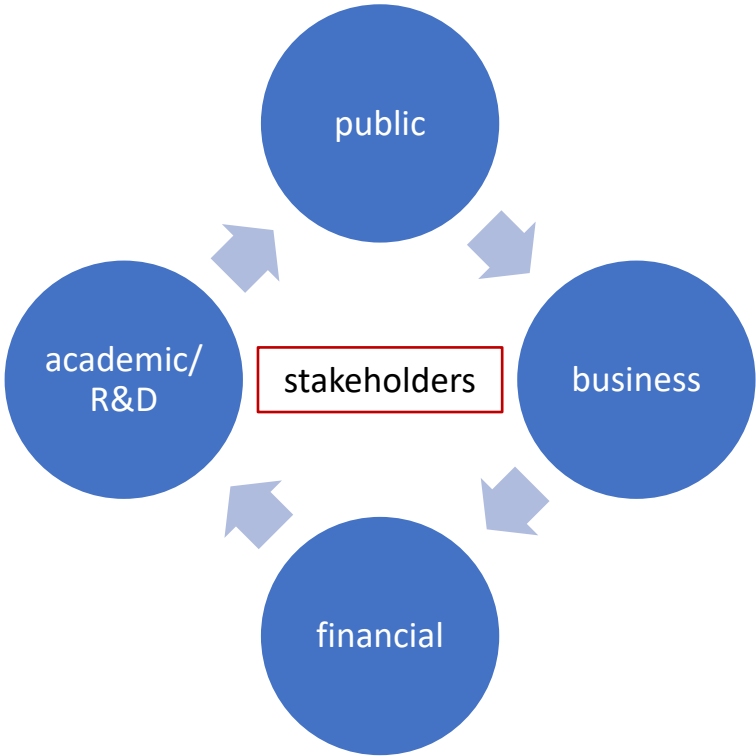
inclusive

scalable

transparent

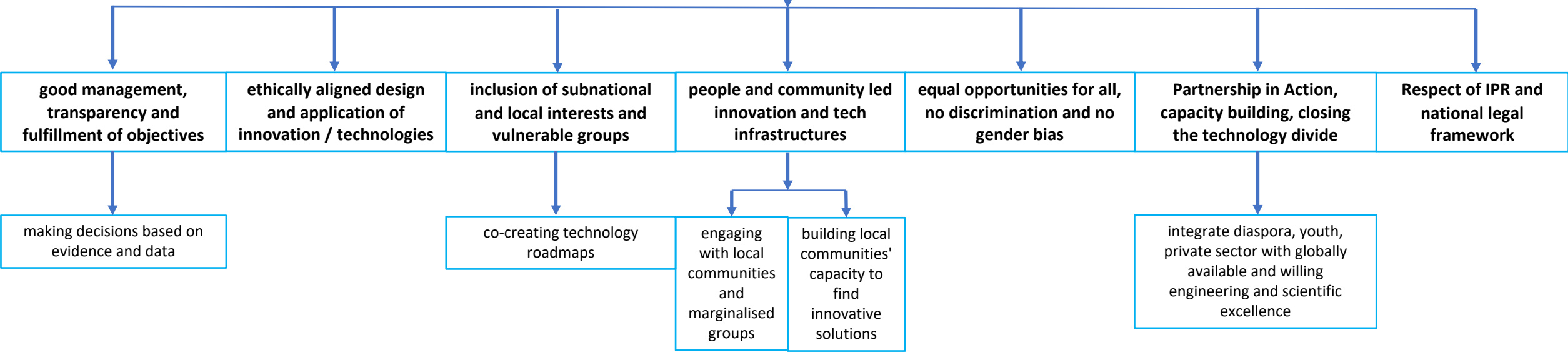
SDG innovation network

Partnership in Action: virtuous exchange cycles



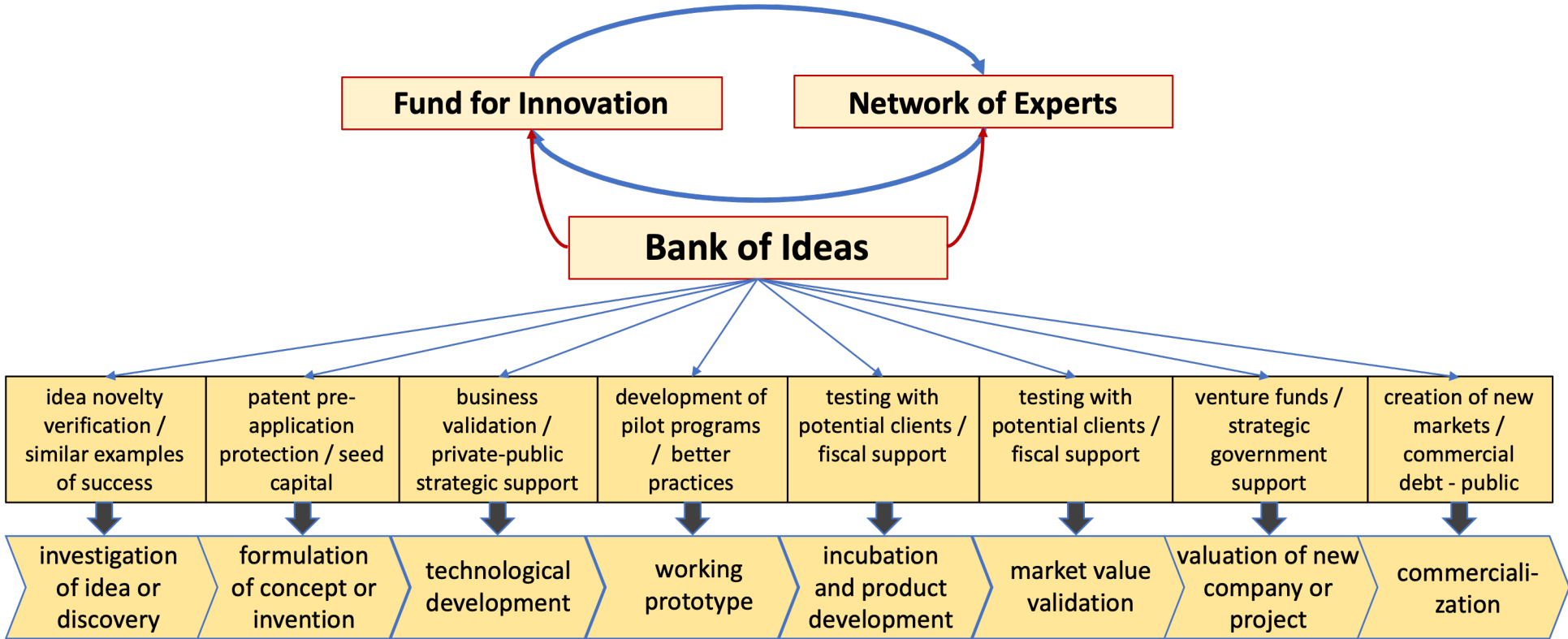
SDG Governance for Innovation: Ethical Council for Innovation

SDGs - national priorities – social impact – transparency – integrity – economic value – training – academic rigor

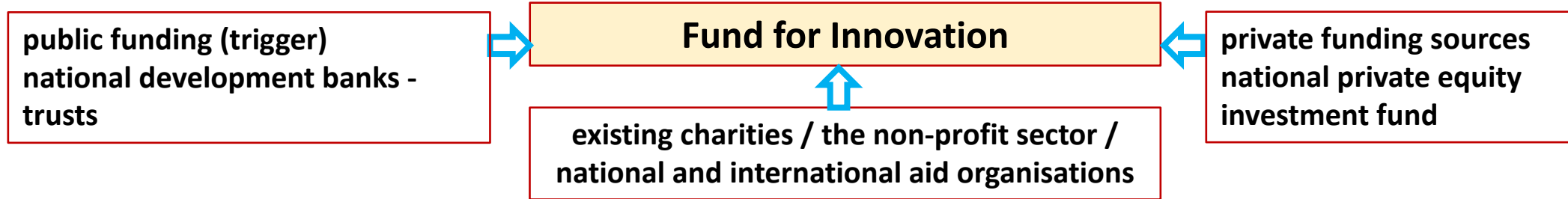


SDG Governance for Innovation: Banks of Ideas

- prevent ideas being ignored, stolen, sabotaged, or exploited by more powerful third parties
- protect vulnerable and underfunded innovators and their ideas, mainly in the Global South
- overcome innovation pessimism and that innovation will continue to occur elsewhere
- build innovation capacity, skills and global synergies toward innovation for the SDGs
- access expertise and financing to help develop and commercialise innovation projects
- ensure subnational and local innovation within a bottom-up and top-down approach



SDG Governance for Innovation: Fund for Innovation



How to fund Banks of Innovation, Network of Experts and R&D to commercialisation of SDG-relevant innovations?

generate innovation-project-portfolio / promote tax benefits / minimize costs / attract investors and private fund managers

Invite innovators and specialists within Banks of Ideas to participate in solution-finding and opportunity-seizing projects

Non-value or low-value Innovations4SDG

Fund for Innovation

How to give economic value to those who do not have it?

How to generate an incentive towards innovativeSDG-relevant ideas that lack value in the market?

How to use market mechanisms to generate that value and incentives towards the SDGs?

How to invest in communities and individuals that are not economically viable and give them a market value (open market valuation)?

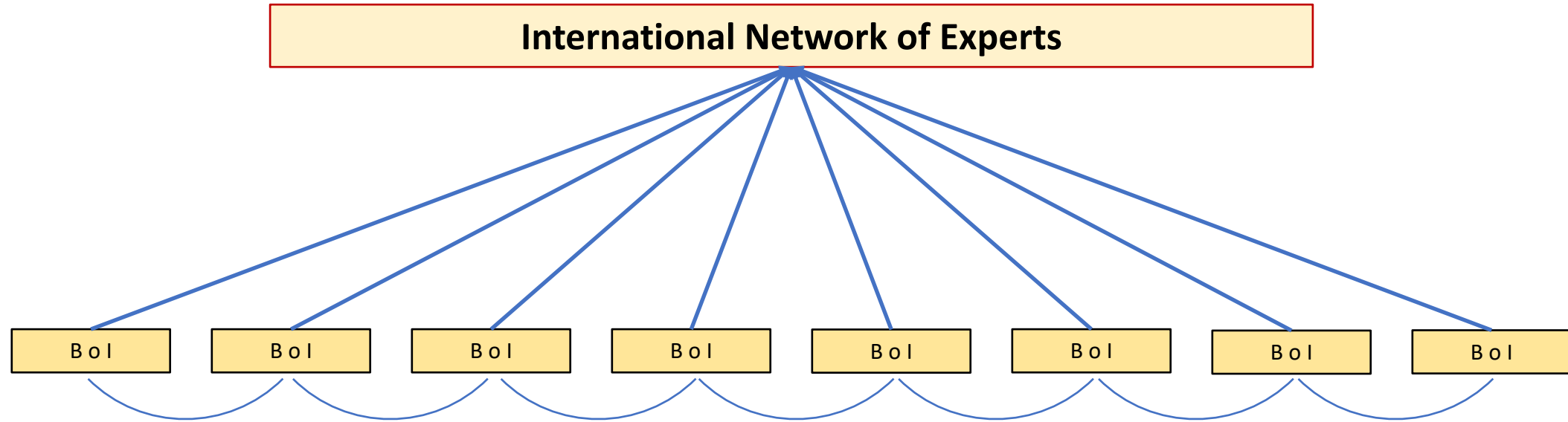
Even when companies include non-market values in their models, those that do, and those that survive, are the ones that perceive it as financially convenient

There is less innovation and effectiveness in solutions to problems faced by vulnerable communities. If these premises are accepted, then, to modify the conclusion, at least one of the premises must be broken.

One solution: Attract and coordinate charities, the non-profit sector, aid organisations, national development banks, public / private funds

SDG Governance for Innovation: Network of Experts

The Banks of Ideas would invite and register a vetted national and international list of experts in innovation projects



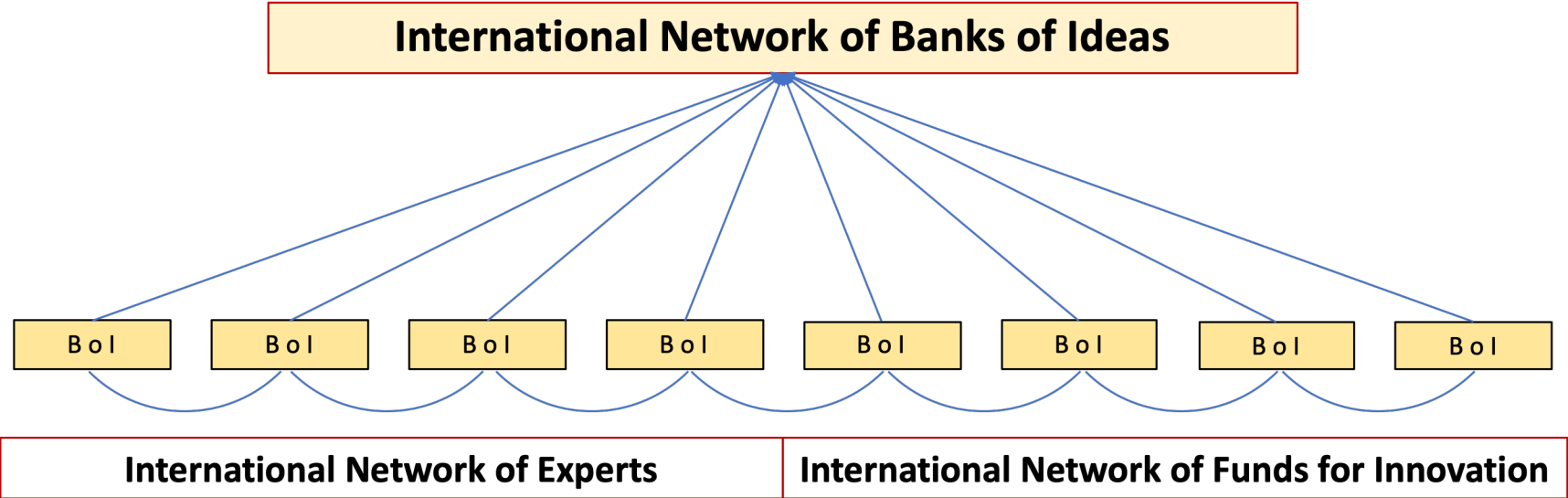
tutoring and management services and assess innovation projects selected at Banks of Innovation and help incubate and commercialise them

analysis and collation of registered R&D projects and ideas, rejecting those that are unviable, duplicated, biased or that violate IPRs

help innovators move from their conception stage, to prototyping, proof of concept and commercialisation stage towards the SDGs

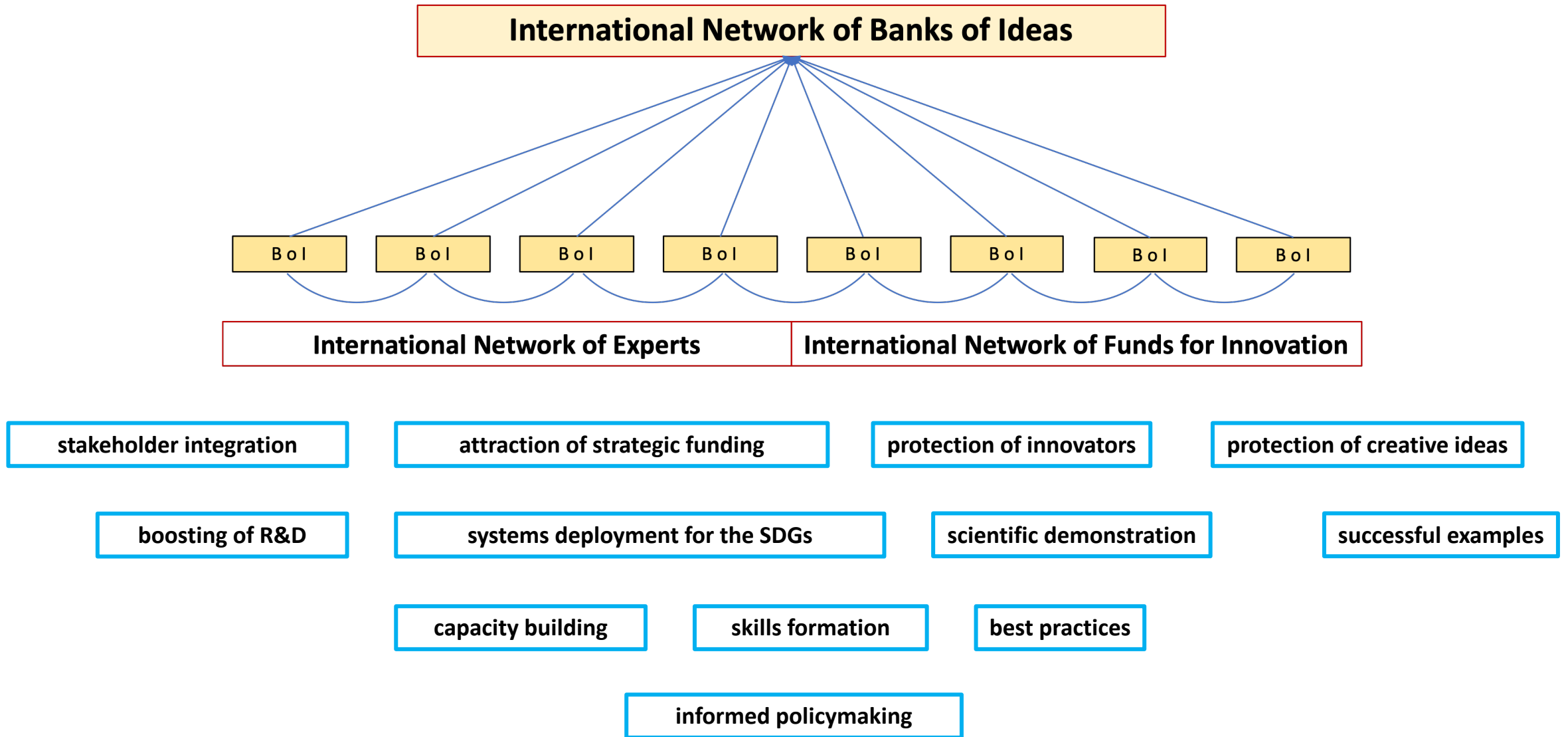
Expert services would be paid with a percentage of the profits from any successful idea and project they evaluate

SDG Governance for Innovation: International Network of Banks of Ideas



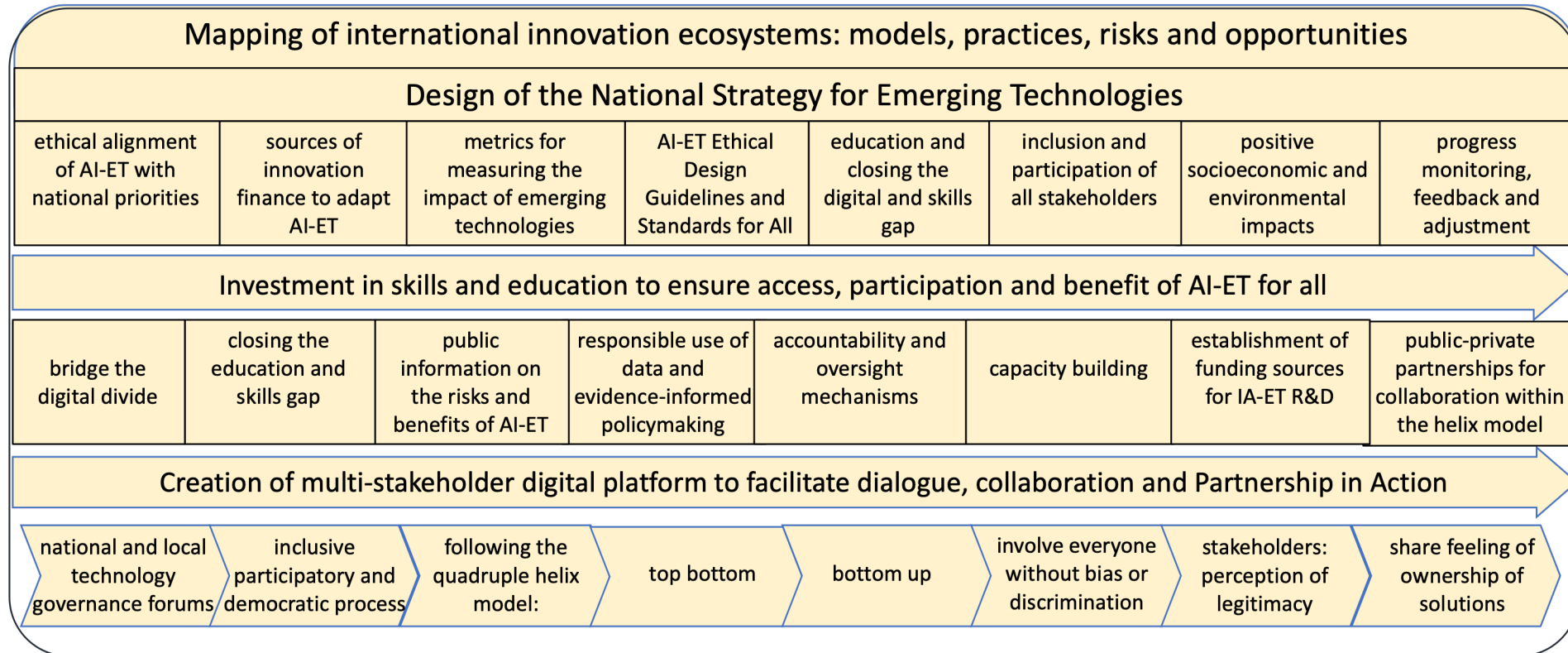
- coherent
- accessible
- standardised
- interconnected
- far-reaching
- resilient
- scalable
- self-adapting
- widely informative

SDG Governance for Innovation: Functions of the International Network of Banks of Ideas



Elements of the Bank of Ideas Innovation Strategy towards the SDGs

Adapting Artificial Intelligence and Emerging Technologies (AI-ET) to the achievement of the SDGs



Pragmatic Path towards SDG Governance for Innovation

Environmental, Social and Governance (ESG)

A pragmatic step towards implementing Innovation4SDG roadmaps is incorporating ESG social, sustainability and ethical performance of innovation initiatives

ESG practices can be tailored to each innovation initiative's specific circumstances, industry, and stakeholders

Governance of the SDGs for innovation can benefit from incorporating the practice of ESG principles and enticing businesses to follow them

Applying ESG can help align Innovation4SDG roadmaps with sustainability, inclusiveness, equality, societal needs, and ethical considerations

ESG can help include risk management and mitigation, stakeholder engagement, and long-term value creation



Dr José Ramón López-Portillo R.

jrlopezportillo@aol.com