

Inaugural ECOSOC Forum on Financing for Development

Roundtable E: Trade, Science, Technology, Innovation, and Capacity
Building

Case Study: United Nations Technology Bank

20 April 2016



INTERNATIONAL
INTELLECTUAL
PROPERTY
INSTITUTE

Andrew D. Hirsch

Director General



United Nations



About IIPI

Washington, DC - Nonprofit

Promoting Market Based Global IPR System

Building Innovation Ecosystems

Policy Advice, Training, and Capacity Building

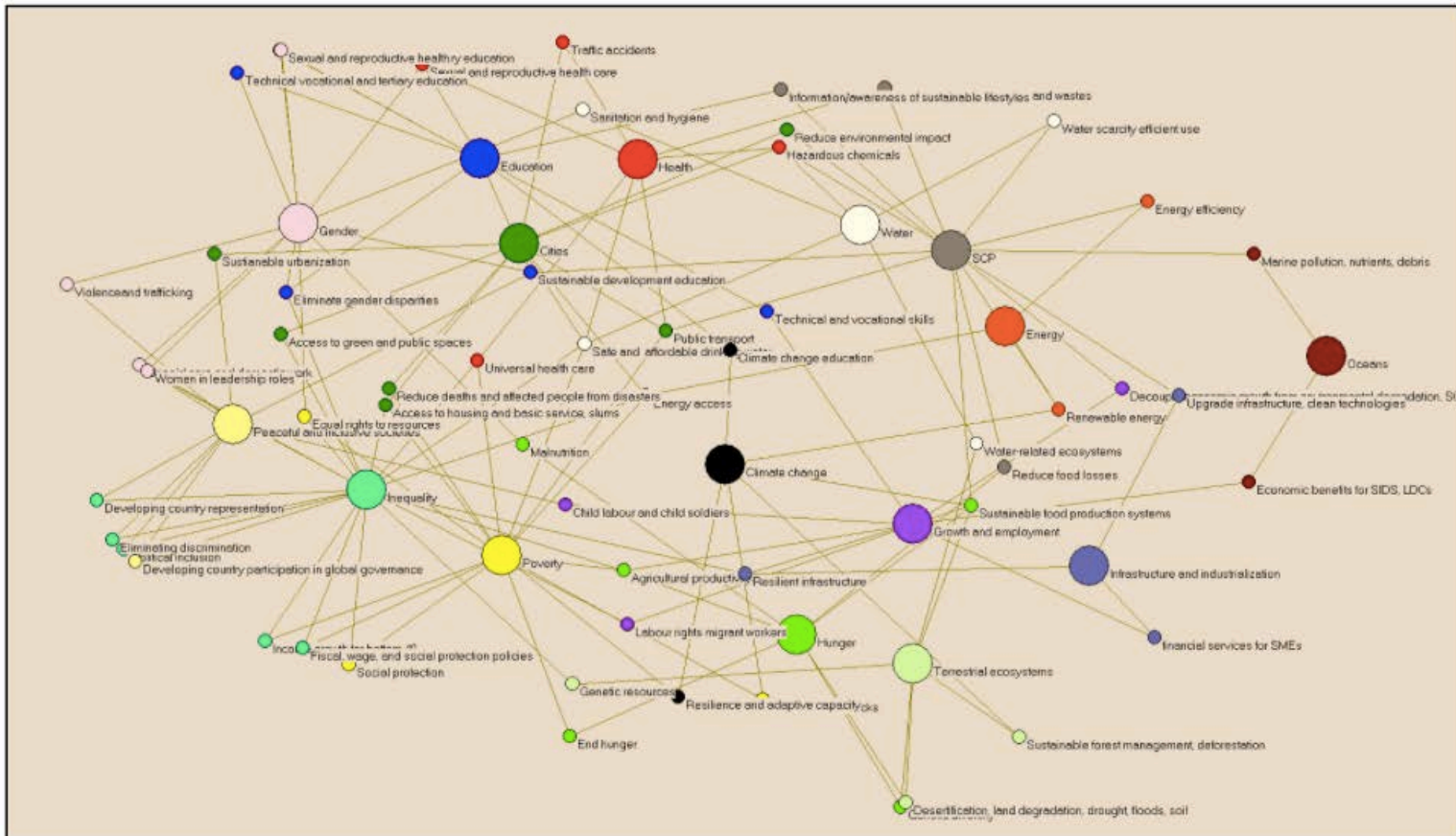
Expertise: Trade, STI, IP, and Tech Transfer

Creating Aligned Stakeholder Consensus

Just, Sustainable, Global Knowledge Based Economy

Sustainable Development Goals

A Complex Ecosystem of Objectives



Source: David Le Blanc (2015), "Towards Integration at Last? The SDGs as a Network of Targets", DESA Working Paper No. 141.

Addis Ababa Action Agenda

Trade, Science, Technology and Innovation: Section G, Paragraphs 114-124

Select Phrases

Technology Transfer on mutually agreed terms are powerful drivers of economic growth and sustainable development (114)

Digital Divide (114)

Capacity Development with multistakeholder partnerships (115)

Country Driven to address the specific needs and conditions of countries (115)

National sustainable development strategies and priorities (115)

Strengthen institutional capacity and human resource development (115)

Craft policies that incentivize the creation of new technologies, research, and innovation (115)

Enabling environments at all levels, including regulatory and governance frameworks, in nurturing science, innovation, and dissemination of technologies (116)

Knowledge Sharing, promotion of cooperation and partnerships between stakeholders, including between Governments, academia and civil society, in sectors contributing to the achievement of the sustainable development goals. (117)

Public and private portfolio approach – investing in diverse set of projects (118)

Scale up investment in STEM, technical, vocational, and tertiary education and training, (119)

Equal access for women and girls (119)

Development, dissemination, and diffusion and transfer of environmentally sound technologies, as mutually agreed (120)

Research for health of people and oceans (121)

Strengthen coherence and synergies, eliminating duplicative efforts in S&T initiatives in the United Nations system (122)

Technology Facilitation Mechanism (123)

Technology Bank for

Addis Ababa Action Agenda - LDCs

An 'LDC package' to support the poorest countries, Paragraphs, 8, 14, 27, 28, 34, 44, 45, 46, 49, 51, 52, 58, 61, 65, 68, 73, 76, 77, 78, 80, 82-87, 90, 91, 93, 100, 102, **114, 115, 120, 121, 124.**

ODA: As part of the Action Agenda, developed countries commit to reverse the trend of declining allocation of ODA to LDCs.

The Action Agenda encourages increasing the ODA target for the world's poorest nations to 0.2 per cent of national income, with the European Union promising to do so by 2030.

Countries also agree to adopt or strengthen LDC investment promotion regimes, including with financial and technical support.

Governments aim to **operationalize the technology bank for the LDCs by 2017. (124)**

Seek to promote synergies with the Technology Facilitation Mechanism

Solving Complex Problems Requires: A Systemic Reimagination Of The Future In Order To Build A Just And Sustainable Global Knowledge Based Ecosystem

"The mere formulation of a problem is far more often essential than its solution, which may be merely a matter of mathematical or experimental skill.

To raise new questions, new possibilities, to regard old problems from a new angle requires creative imagination and marks real advances in science."

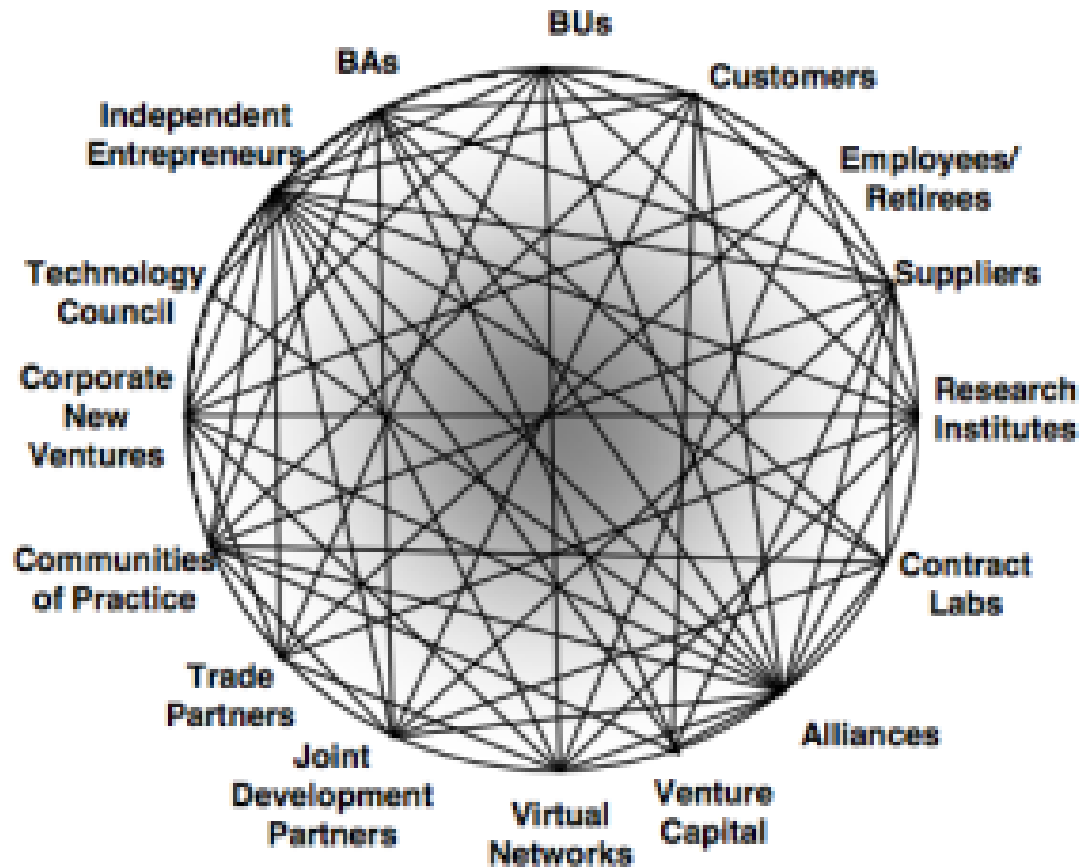
Albert Einstein

An Example of the Developed World Innovation Ecosystem Participants (Local, National, Regional, Global)

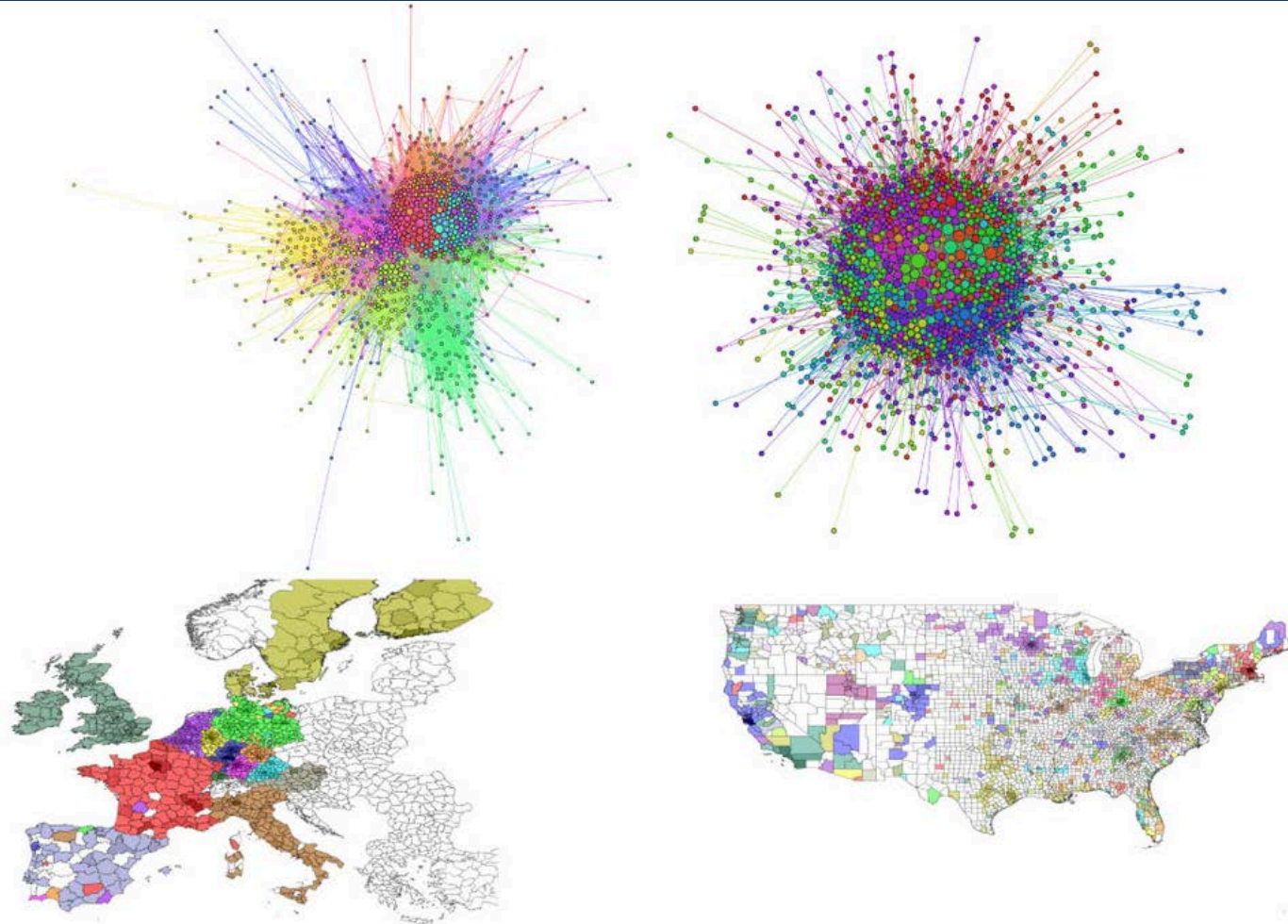


© <http://worldbusinessincubation.wordpress.com>, Vasily Ryzhnikov, 2013

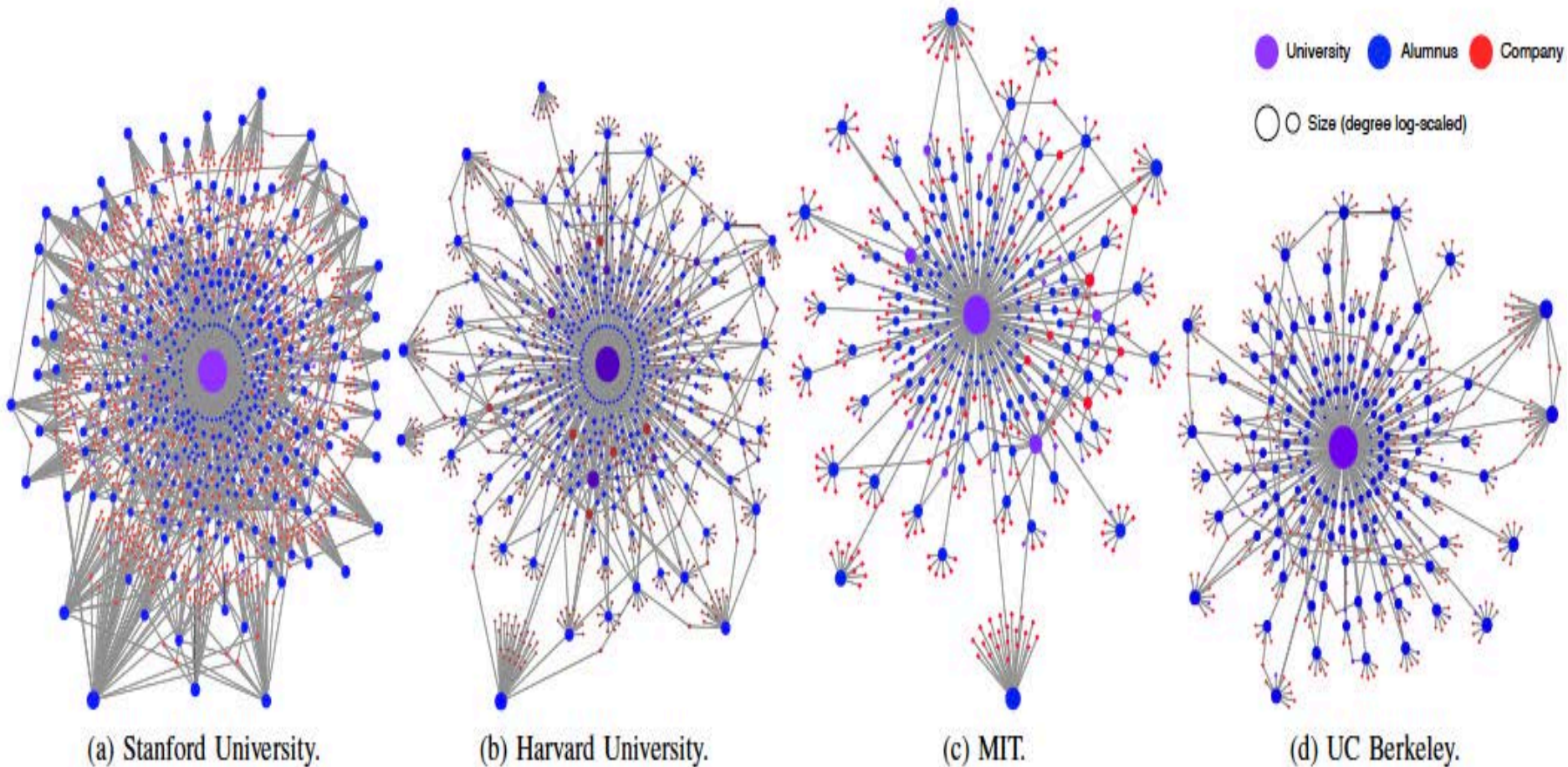
Stakeholders: Connectivity – Inclusion - Integration



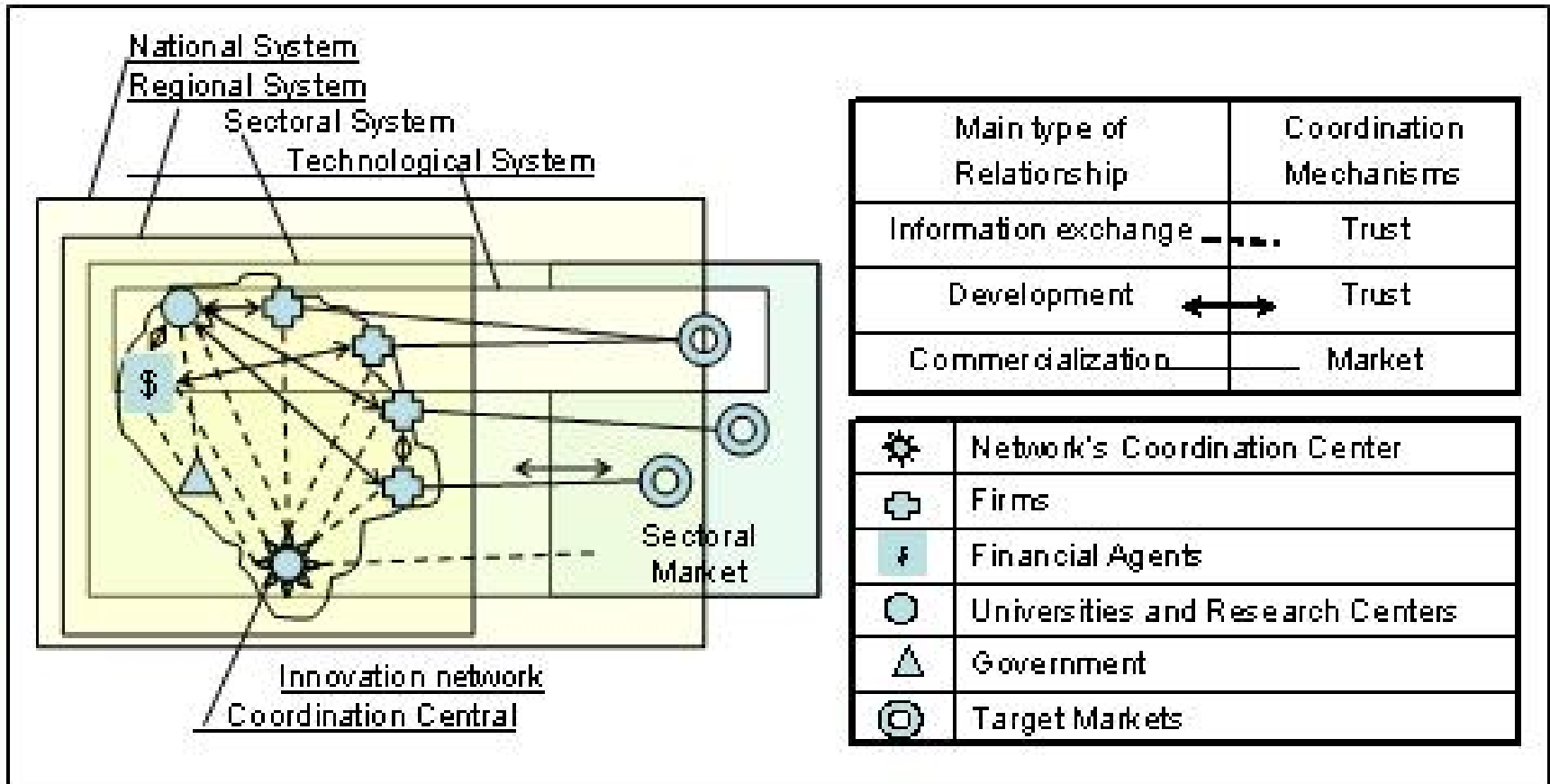
Example of Developed Country Clusters: US & EU



Well Developed and Profitable University Clusters



Induced, Intentional, and Directed High Return on Investment Innovation Ecosystem Construction



A Strong Ecosystem Requires A Strong Foundation

IPR, Markets, Incentives, and the Rule of Law

The ONLY basis for a just, sustainable, and integrated global knowledge based global innovation economy

Peace and Social Stability

Market Based Economy

Respect for the Rule of Law

Government: Policies, Laws, Regulations, and Institutions

Stakeholder Participation:

- Business and Industry
- Financial Ecosystem
- Education (STEM, youth, universities)

A Holistic, Integrated, Multistakeholder Whole of Government Solution

Develop and Implement Sustainable Science, Technology, Innovation (STI) and Intellectual Property Rights (IPR) Strategies

Select Attributes – 6Cs:

- Connectivity
- Clusters
- Capacity (Absorptive and Adaptive)
law, institutions, markets, education, training, technology transfer, reduce barriers to investment and trade, knowledge diplomacy, etc.
- Customers – innovation diplomacy
- Culture – barrier and opportunity
- Capital – financial, human, organizational, and other types of capital

Build on Assets above Ground (non-extractive)

- traditional knowledge (TK)
- genetic resources (GRs)
- traditional cultural expressions (TCEs)
- Indigenous peoples

Building Capacity To Address Global Aysmmetry

Capacity is Developed Over Time:

The US and European economies developed over centuries along with Trade, STI, & IPR.

Leapfrogging is Possible.

Asian countries developed more quickly: Japan, Republic of Korea, China.

Development is a Continuum.

There is no finish line.

Capacity Can be Intentionally Developed.

Origin of the Technology Bank

Istanbul Program of Action

- Enunciates a clear objective for half of LDCs to graduate by 2020.
- Pathway - technology driven economic growth – (STI & IP & FDI)
- best practices to leap-frog over structural and capacity gaps
- 9-13 May 2011 A /CONF.219/3 (pages 14-15)

Secretary General Report:

- “Technology bank and science, technology and innovation supporting mechanism dedicated to the least developed countries.”
- 29 July 2013 A /68/217

High Level Panel

- Formation (Fall 2014)
- Initial Meeting of HLP – February 2015 (Gebze, Turkey)
- Final Meeting of HLP – September 2015 (Istanbul, Turkey)
- HLP Report available at: <http://unohrlls.org/technologybank/>

Origin of the Technology Bank

General Assembly requests the Secretary General to take steps to operationalize the Technology Bank by 2017 - December 2015 A/RES/70/216

Turkey to be the Host Country

LDC Mid-Term Review - 27 May 2016 - 29 May 2016. Antalya, Turkey

TO DO (operationalization): Trust Fund, Charter, Host Country Agreement, Governing Council

Opportunities for public and private participation

The UN Technology Bank for LDCs

A Catalyst for Developing the Capacity for STI and IPR Capacity
Overcoming Structural Barriers
Integrate LDCs into the Global Knowledge Economy
Consistent with IPoA Graduation Objectives



Technology Bank for LDCs

Integrated structure - interrelated functions

Two sides of the same coin

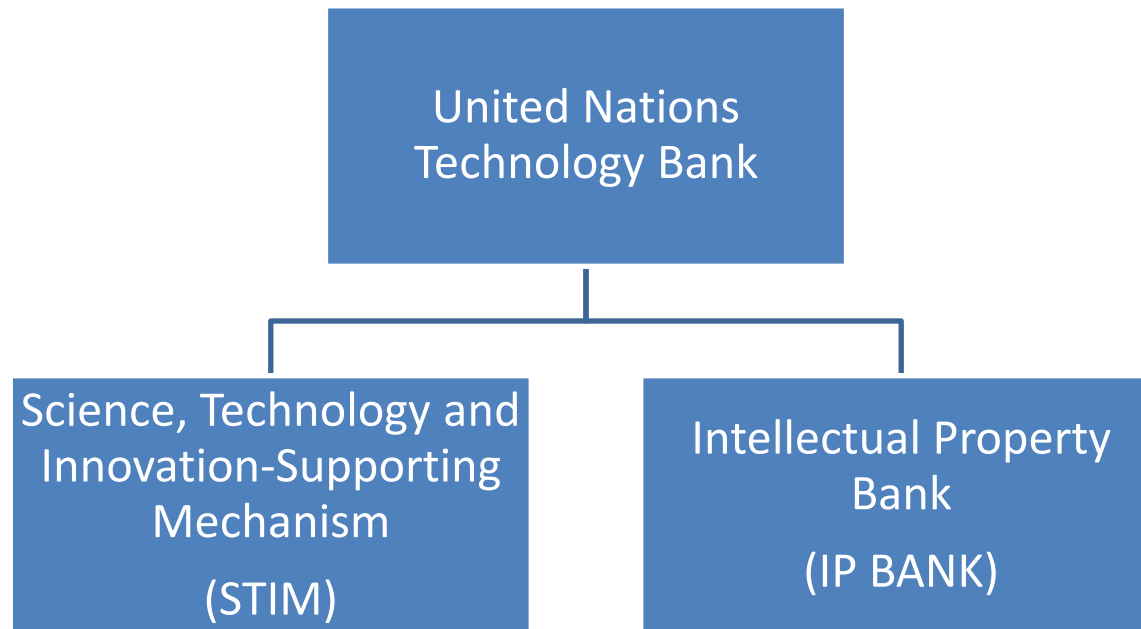


Chart 3 Organizational structure of the Technology Bank, Page 42, Feasibility Study

Technology Bank for LDCs

STIM Activity: Information Access to Support Research, Development, and Demonstration

Research for Life and Online Content of STI Information – FREE for LDCs

To foster activities that lead to knowledge spillovers, and,

To lead to patent and know-how licensing, business to business connectivity, and projects for development bank and other funding –

Access to existing free patent information

Technology scouting/ownership identification Linkages to post-invention entities to nurture technology projects (incubators, etc.)

Linkage to existing knowledge sharing platforms (multi-stakeholder connectivity FfD Technology Facilitation Mechanism)

Linkage to existing partnering mechanisms (USAID online program about to launch)

Coordinate with STIM on education and training

Technology Bank for LDCs

Traditional IP Technical Assistance & Training

(helps with absorption of external technology and adaptation in LDCs)

NOT INTENDED TO BE DUPLICATIVE – coordination of scarce resources – high ROI

STI & IP Policy,

STI & IP Laws,

Institutional Capacity

- Securing rights (IP administration)
- Enforcing rights (enforcement)

Promotion of innovation, creativity, and technology transfer – multi-stakeholder education and training on IP and technology transfer (Business, Industry, Government, University, civil society)

Topics for technical assistance: patents, trademarks, copyright, trade secret, licensing/technology transfer, litigation, enforcement, counterfeiting, and piracy.

Technology Bank for LDCs

Supporting IP Rights and Technology Transfer

Supporting domestic and external IP rights is the foundation for building an innovation ecosystem – supportive of Technology Bank STI programs

IP Bank activities - “**on mutually agreed terms and conditions.**”

The Istanbul Program of Action, Feasibility Study p.101-2 (STI under priority area B, D and E)

The UN General Assembly also provide for technology transfer on the same conditions. Feasibility Study, P. 106, para vii, (a) (i) (UNGA Resolution, A/RES/68/224, Operative Paragraph 25).

Terms of Reference to HLP: Feasibility Study, P. 110, para (i)

Feasibility Study. **The IP Bank should pursue its work on both technology transfer and technical assistance on the same basis.** The term is used 9 times in various sections of the Feasibility Study.

IP Bank internal expertise and external **pro-bono program** for assistance in obtaining IP rights for LDC participants and for licensing external technology and know how

Technology Bank for LDCs

Integration with Global IPR System:

Technology Needs Assessment (a) and TRIPs priority needs (b)

Feasibility Study page 75

“The “**on request**” provision means that countries that need help must ask. If an LDC must submit a request or assistance, how is it to know, in the absence of the level of sophistication in this regard, exactly what its needs are and what requests to submit?”

The IP Bank will fill this role by providing necessary expertise to work with LDCs to assist them in matching their needs assessment with TRIPs requests.

TRIPs priority needs “**on mutually agreed terms and conditions.**”

Technology Bank for LDCs

High Growth Country Dialogue (Private Sector Engagement)

Goal: foster connectivity between IP owners and LDCs for mutual benefit

“High Growth Potential Countries Dialogue”

Model: US-EU Trans-Atlantic Business Dialogue

- Forum for private sector to private sector engagement (North-South)

- Organized by industry

- Eventually to be self funded from business contributions

- Agenda driven by LDC priority needs and developed country company interests, staff provided by IP Bank (secretariat function)

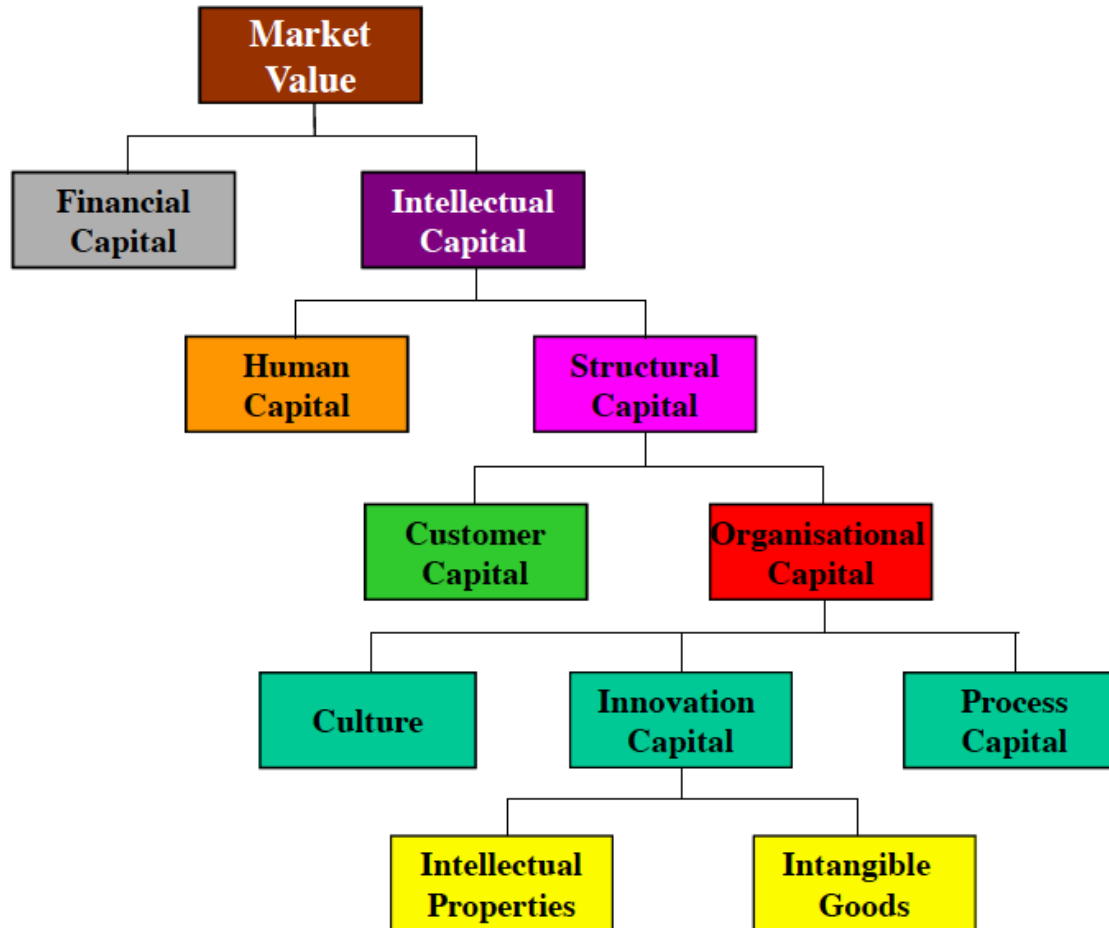
- Annual conference C-level and senior government officials

- Quarterly industry/sector meetings

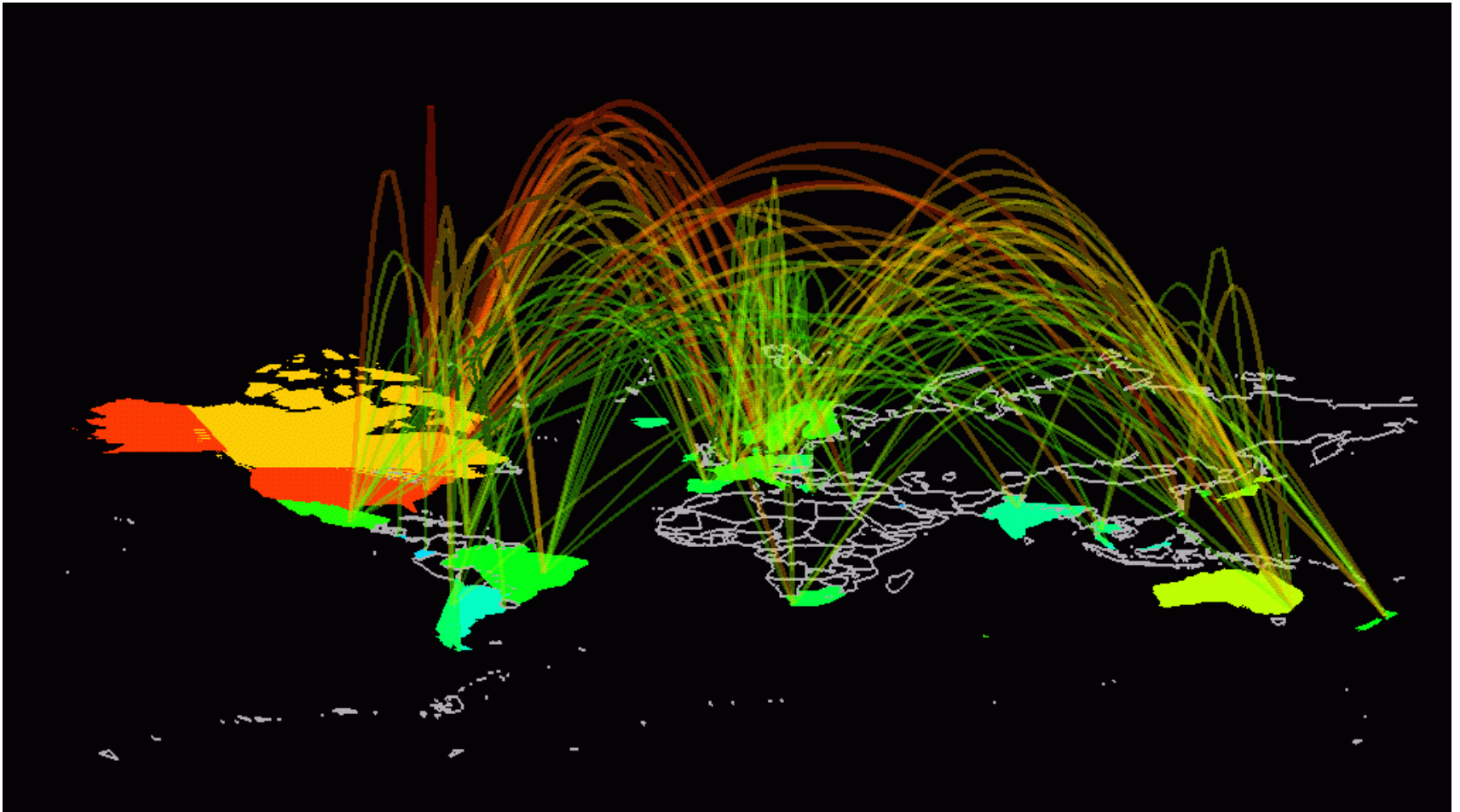
Developed country companies own IP and ability to structure financing of projects
- must be mutual, win-win. Again: “on mutually agreed terms and conditions.”

Types of Capital – High ROI Investments

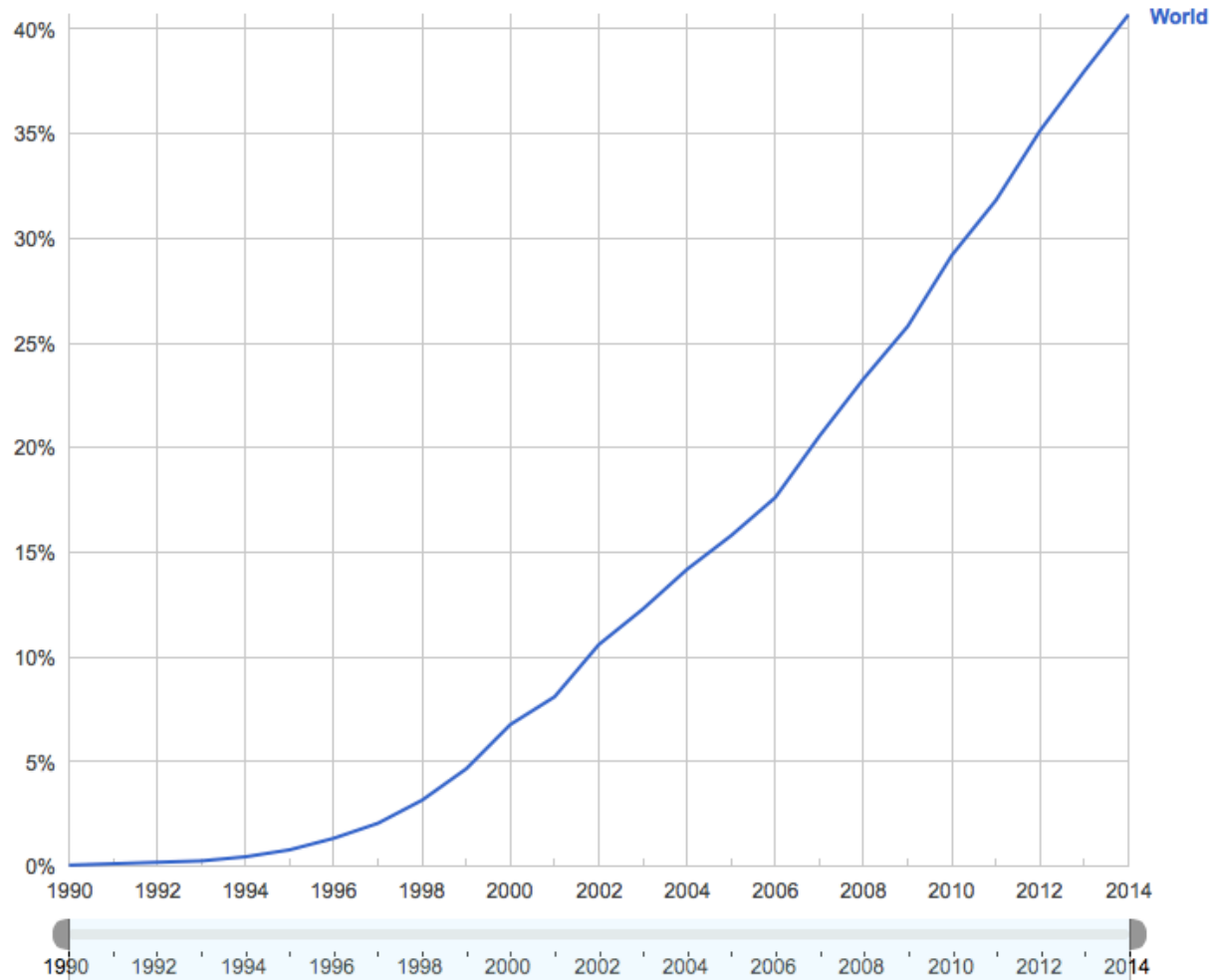
Integration Formula: STI + IPR + Finance = Value Creation
Bankable, Win-Win, Harmonious Tech Transfer Projects



Internet Traffic 1993



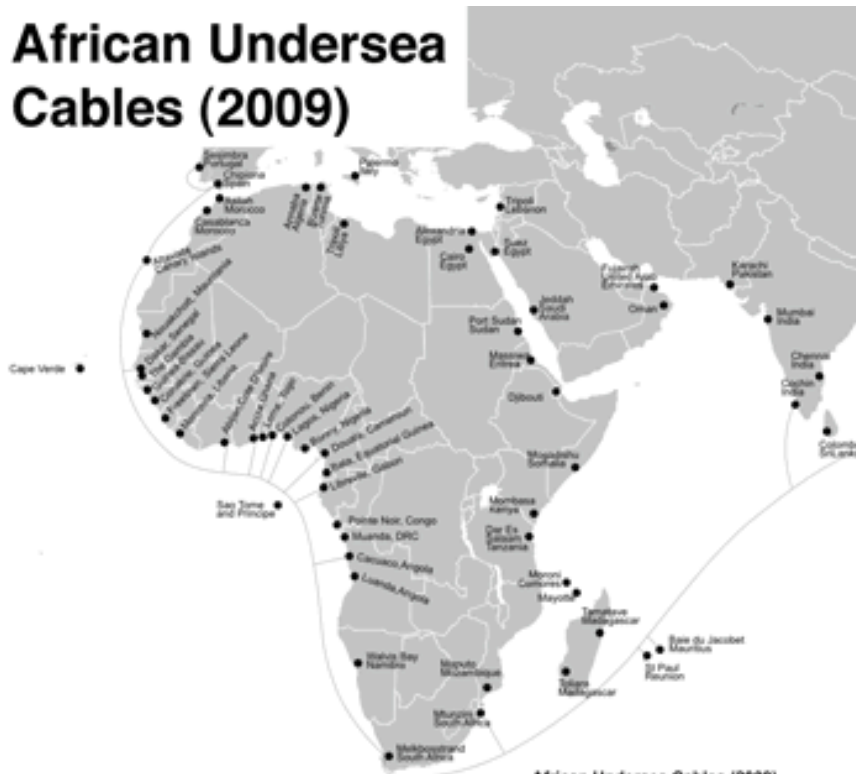
Internet Users as Percentage of Global Population – Over Time (from Google)



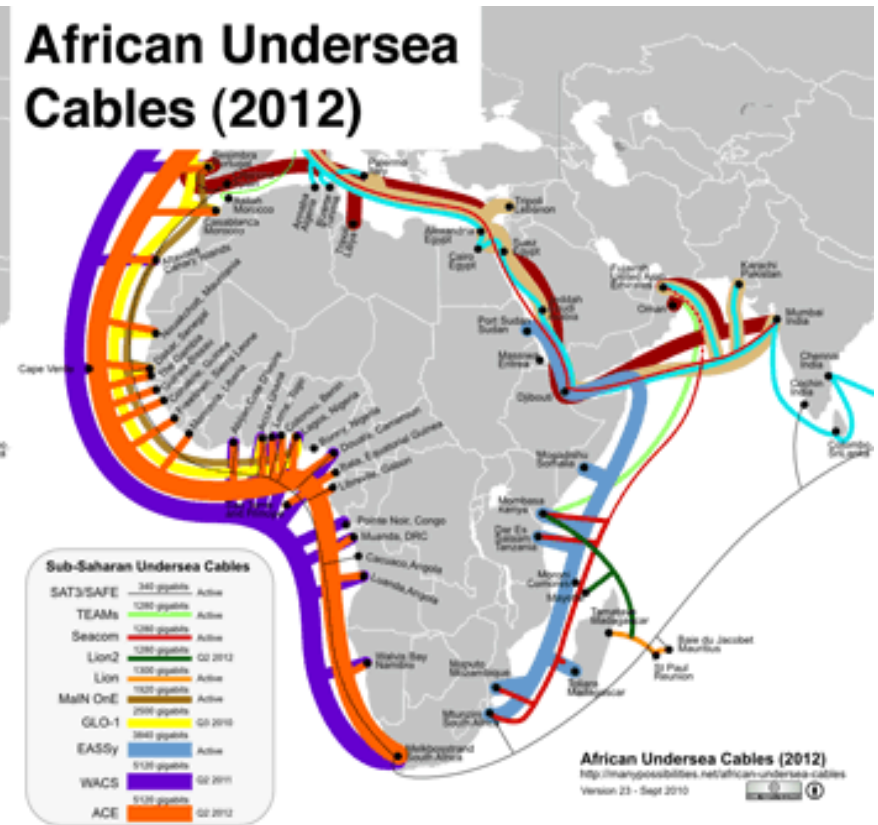
Data from [World Bank](#) Last updated: Mar 30, 2016

Internet Connectivity – IT and Cell Phones

African Undersea Cables (2009)



African Undersea Cables (2012)



Thank You

Andrew D. Hirsch
Director General
International Intellectual Property Institute
ahirsch@iipi.org
LinkedIn: Andrew D. Hirsch