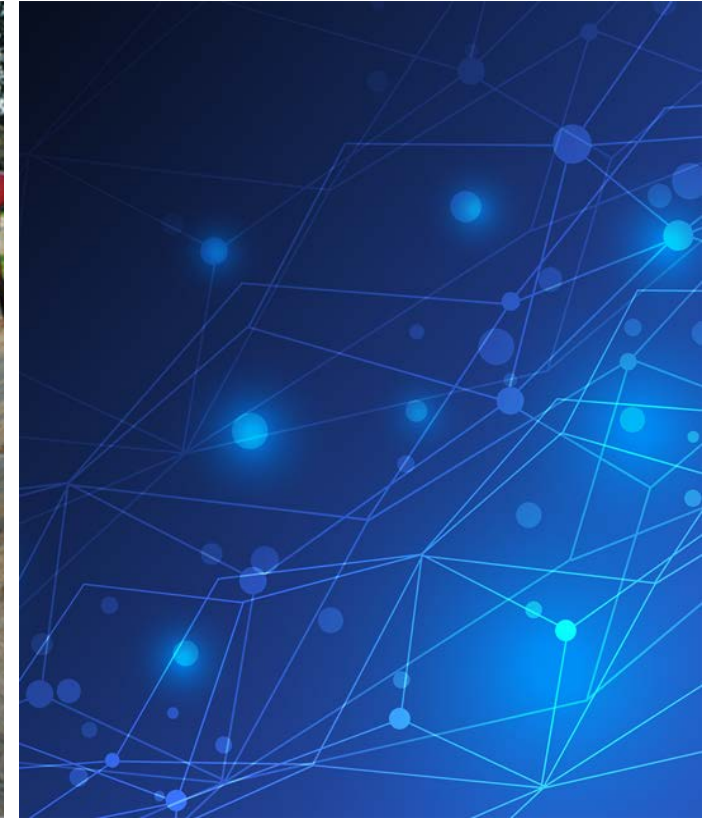




SEED Framework

Building a Digital Ecosystem for Societal Empowerment



7th IEEE Digital Ecosystems and Technologies Conference
July 24, 2013 Menlo Park, California

Sunset Room	July 24 2013 SEED Framework Workshop
11:15 – 12:00	Introduction and SEED Framework Overview Workshop chair: Jenny Huang, Strategic Standards, AT&T and Researcher, iFOSSF
12:00 – 13:00	Panel Session: Building a Digital Ecosystem for Societal Empowerment Moderator: Ken Homer, Founder, Collaborative Conversation Panelists: <ul style="list-style-type: none"> Hans Kielland Aanesen, CEO EPR-forum Jenny Huang, Strategic Standards, AT&T and Researcher, iFOSSF Achim Karduck, Professor, Furtwangen University Mireille Mather, Executive Director, Foundation for Sustainable Development Tom Rausch, Program Manager, Good World Solutions
01:00pm-01:45pm	Lunch Break Sunset Room Patio
13:45 – 14:15	Digital Ecosystems and SEED - Co-Innovation in Education Presenter: Achim Karduck, Professor, Furtwangen University
14:15 – 14:45	The Future Service Model for Home and Community Health Care Presenter: Hans Kielland Aanesen, CEO EPR-forum
14:45 – 15:15	Role-based Ontology Tool for Sustainable Development Knowledge Management Presenters: <ul style="list-style-type: none"> Kouji Kozaki, Associate Professor, Institute of Scientific and Industrial Research, Osaka University Osamu Saito, Academic Programme Officer Institute for Sustainability & Peace, United Nations University
15:15pm - 15:30pm	Tea Break Sunset Room Patio
15:30 - 16:30	Sustainable Development Roadmap – hands-on session using Hozo tool
16:30 – 17:00	Map analysis and next steps

Vision 2050: The New Agenda for Business

In 2050, some 9 billion people live well, and within the limits of the planet.

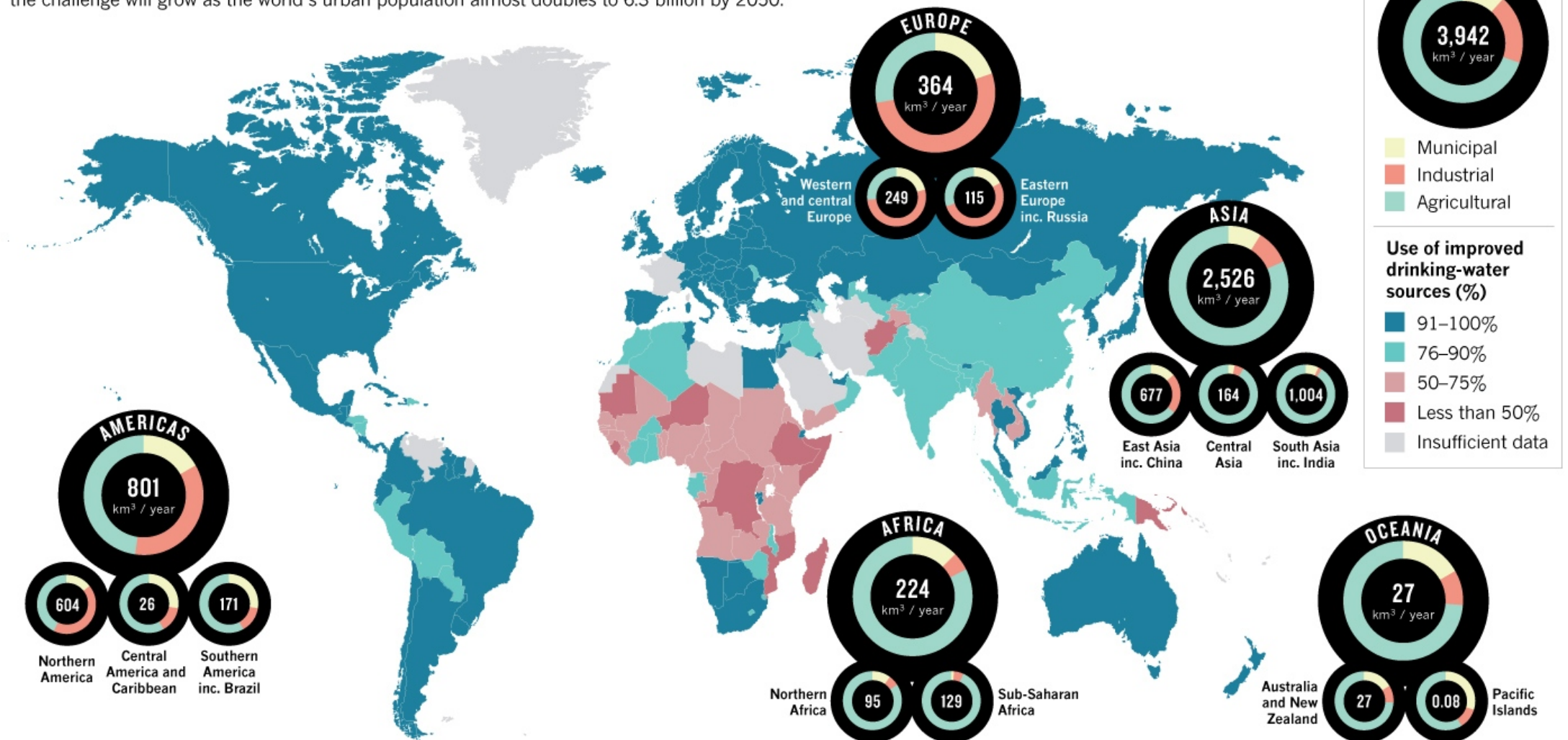
Between now and **2050** the global population is expected to increase from 6.9 billion to more than **9 billion**, with **98%** of this growth happening in **cities** and in the **developing** and **emerging world**



Source: World Business Council for Sustainable Development <http://www.wbcsd.org/vision2050.aspx>

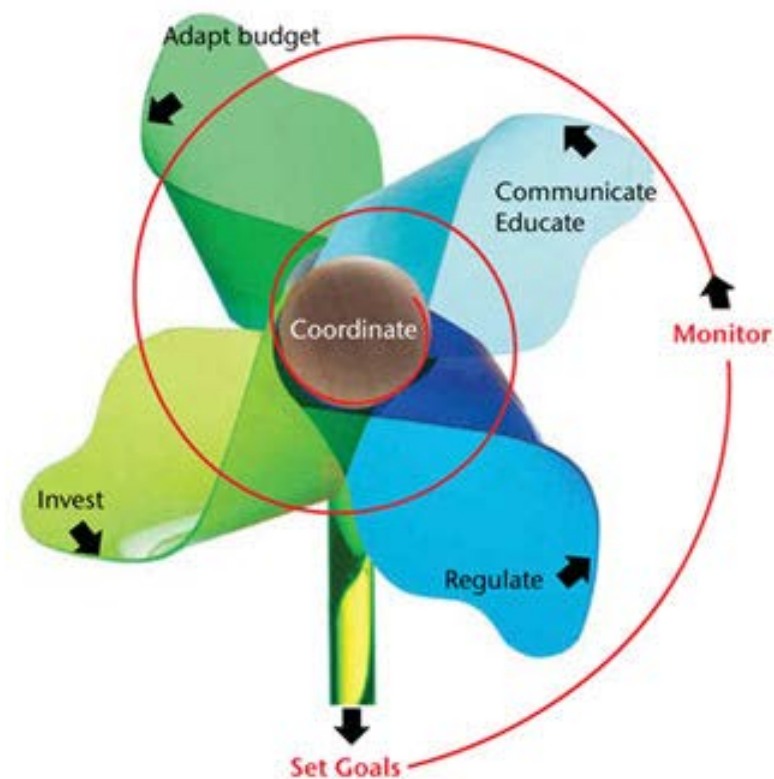
DYING FOR A DRINK

Nearly 1 billion people have no access to safe and improved water sources such as boreholes, protected wells, springs and rainwater collections. More than 80% of the world's waste water is not collected or treated, causing millions of deaths from waterborne diarrhoeal diseases every year in the developing world. Urban settlements are the main source of pollution, and the challenge will grow as the world's urban population almost doubles to 6.3 billion by 2050.



Changing Pace with Civic Engagement in a Connected World

From *Coordination* to **Collaboration**



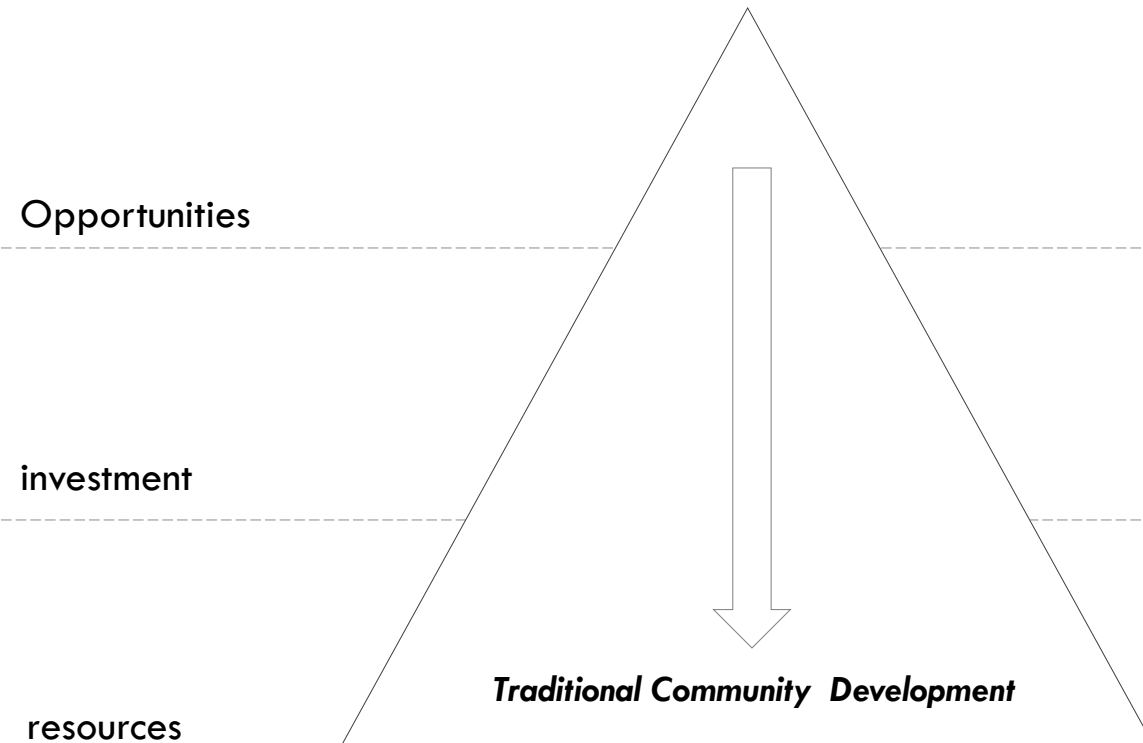
The SEED (Social, Economic, Environmental Development) Framework



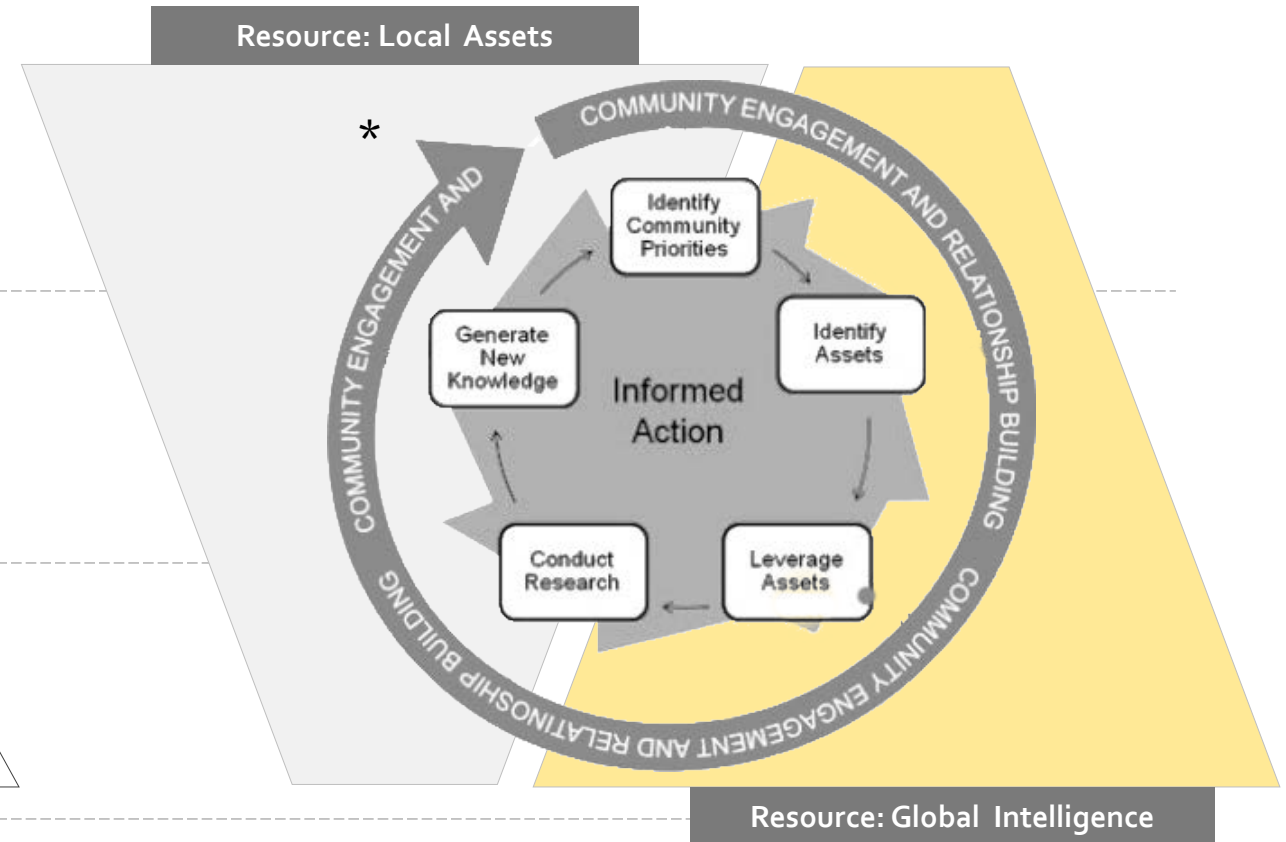
Emerging Development Strategy

Asset-based Community Development

Top-Down Development



Asset-based Community Development

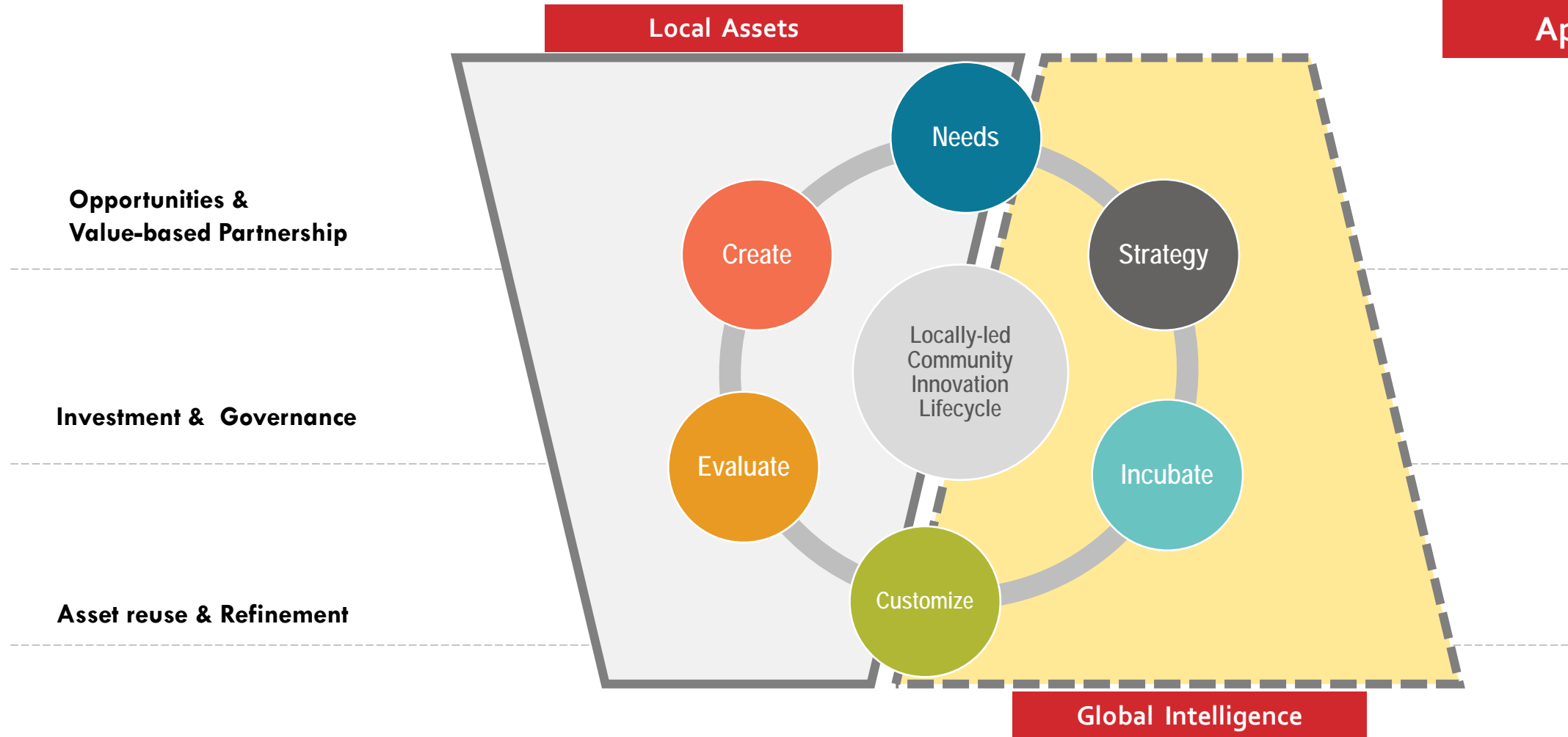


* Graphic source: "Building community-engaged health research and discovery infrastructure on the South Side of Chicago: science in service to community priorities.," Preventive Medicine, vol. 52, no. 3-4, pp. 200-207, 2011.

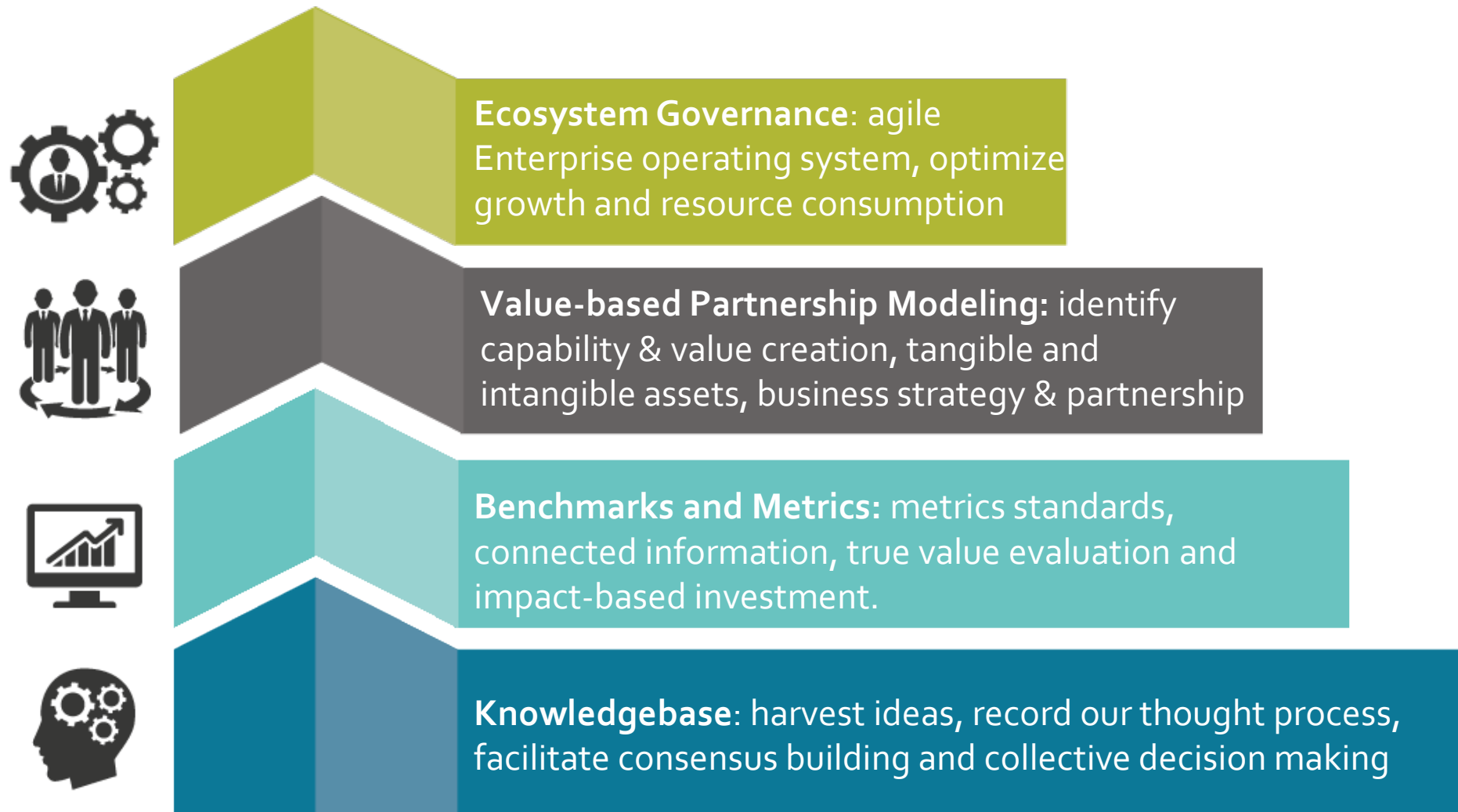
Community Focused Innovation Strategy

an ICT enabled digital-ecosystem to co-create

A knowledge-based Approach



Enabling Technologies, Standards & Practices

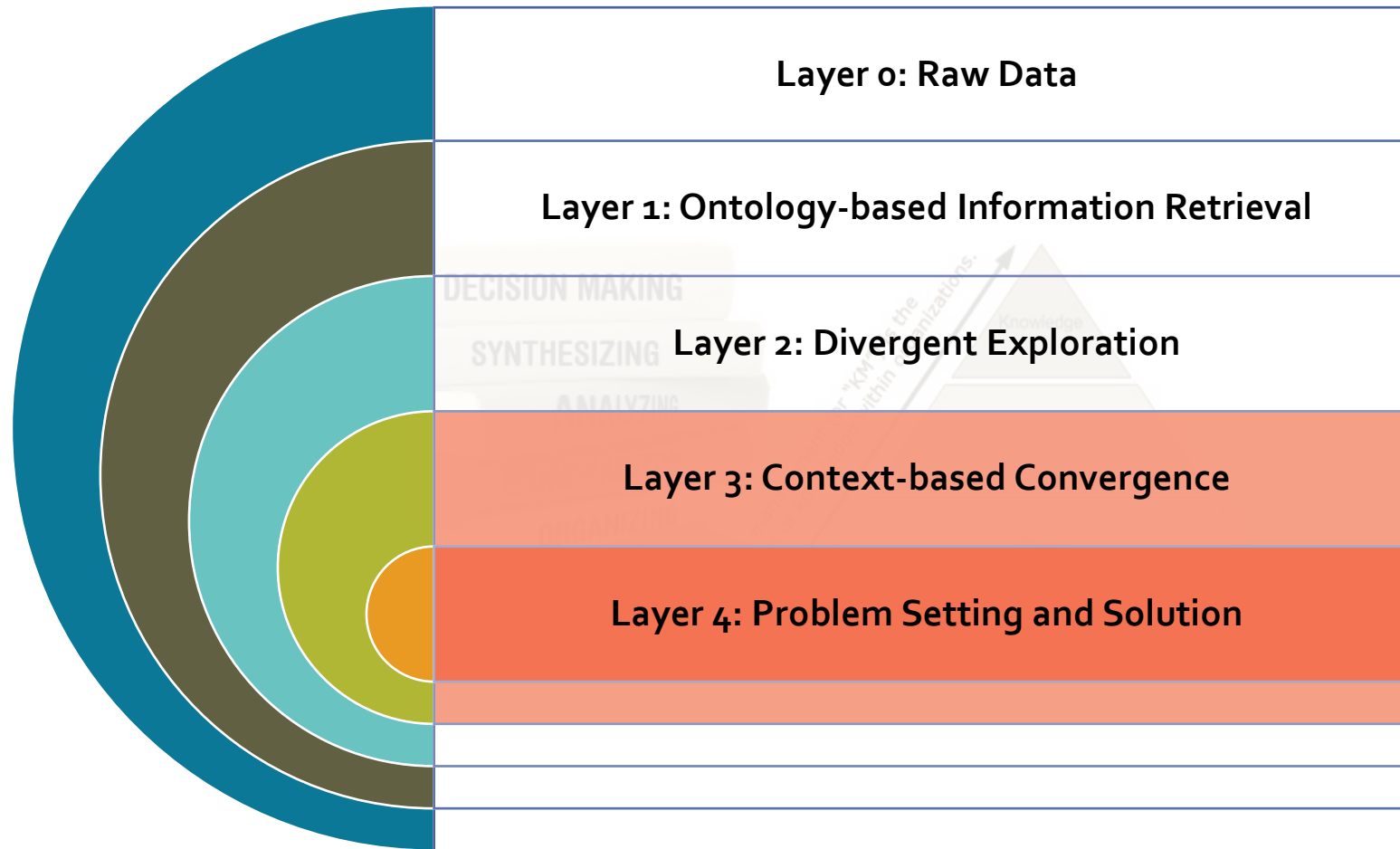


Technologies are abundant!
Following are examples of existing technologies,
they need to be
re-purposed, field tested and better integrated.

**Building a digital ecosystem for societal empowerment
IS within reach.**

Role-based Knowledge Management

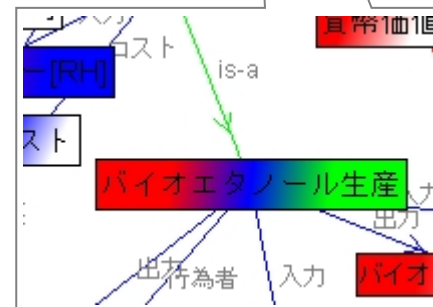
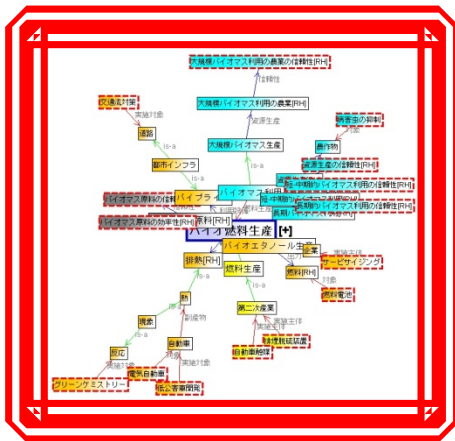
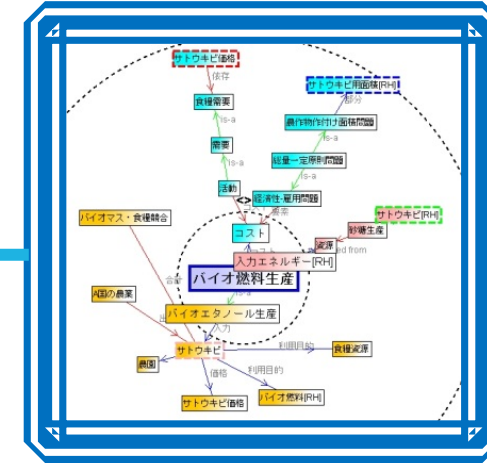
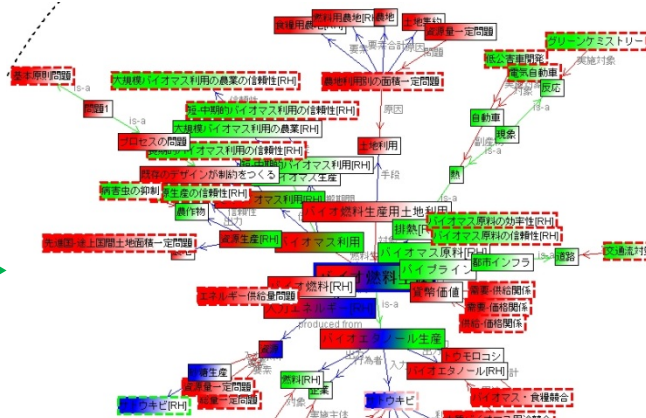
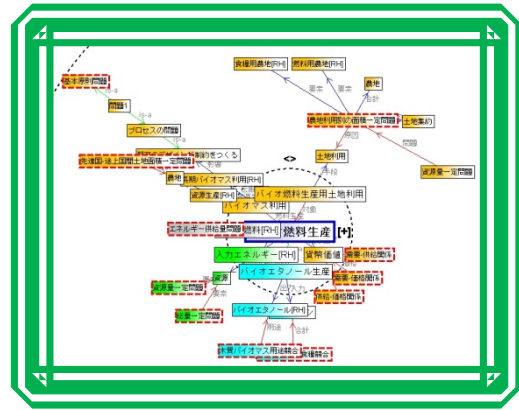
Respect different viewpoints, facilitate collective thinking



* T. Kumazawa, O. Saito, K. Kozaki, T. Matsui, and R. Mizoguchi, "Toward knowledge structuring of sustainability science based on ontology engineering," Sustainability Science, vol. 4, no. 1, pp. 99–116, Feb. 2009

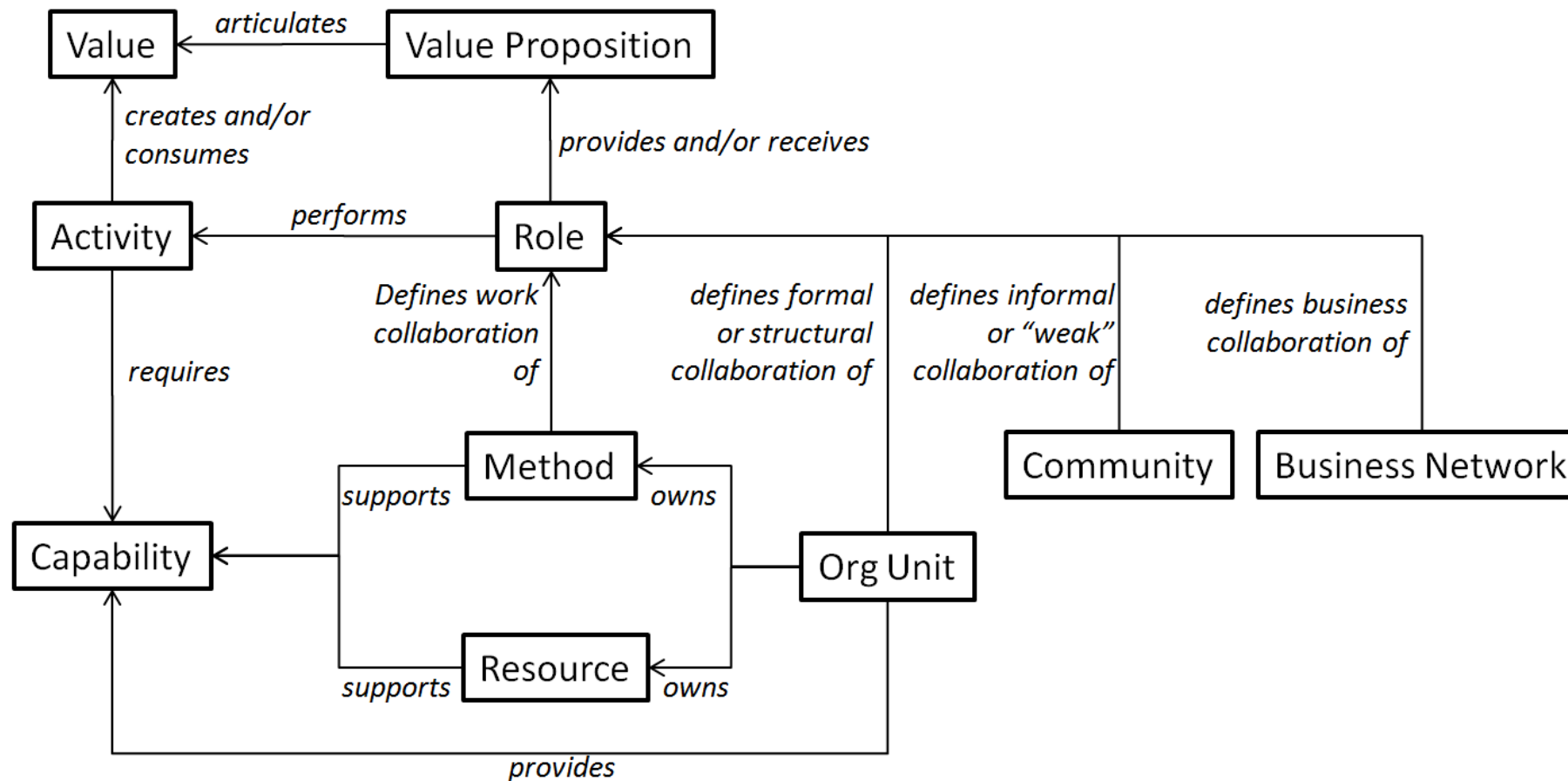


Consensus-building Based on Ontology Exploration





Value-based Business/Partnership Modeling

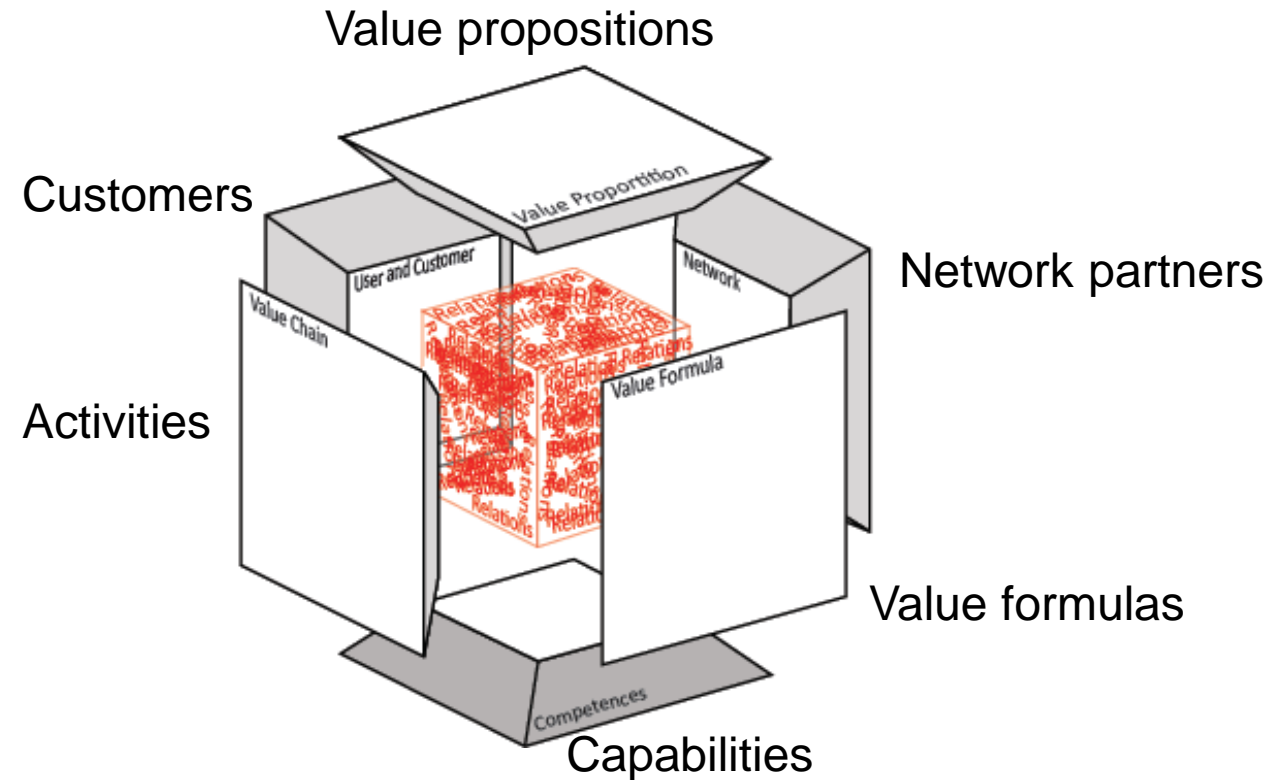


- Value Delivery Modeling Language (VDML) is a [work-in-progress](http://fredacummins.blogspot.com/2011/07/rethinking-business-for-changing-world.html) at the Object Management Group
 - <http://fredacummins.blogspot.com/2011/07/rethinking-business-for-changing-world.html>



Abstraction of Business Models and Processes

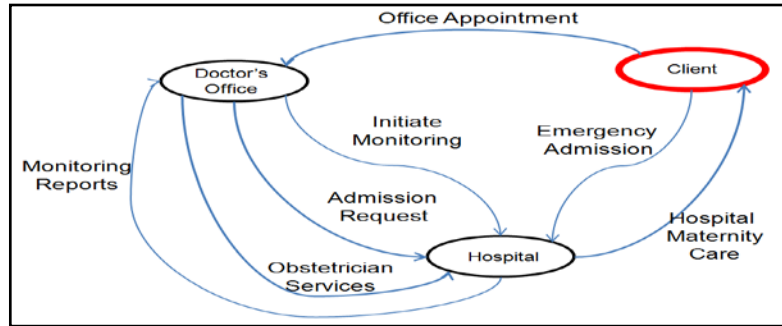
Focus on partnership and value creation



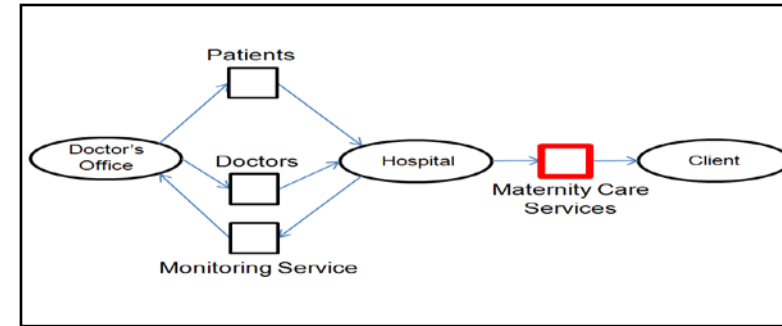
* See also FP7 [NEFFICS](#) project - Networked Enterprise transFormation and resource management in Future internet enabled Innovation CloudS



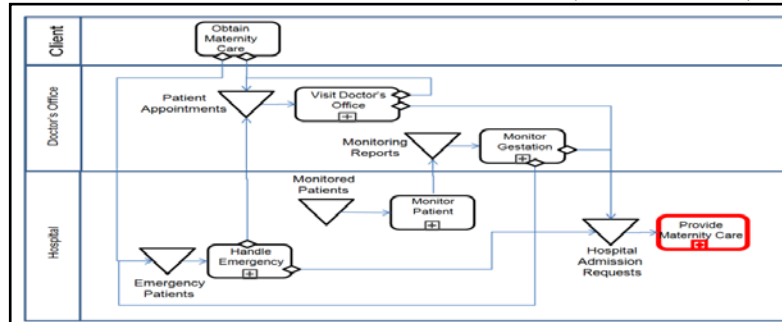
Modeling a Value Network – Community Healthcare Example



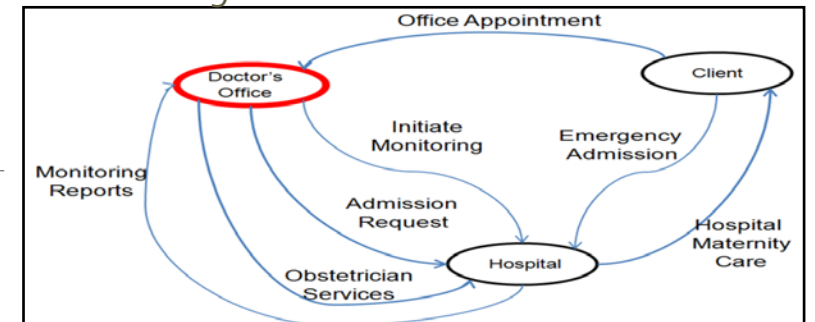
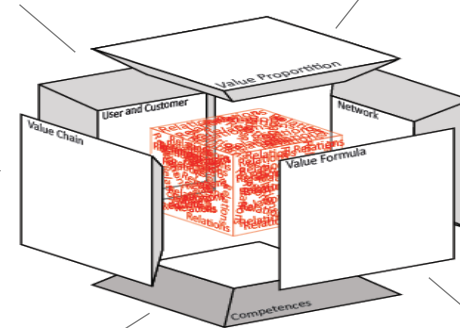
Role Collaboration (**Customers**)



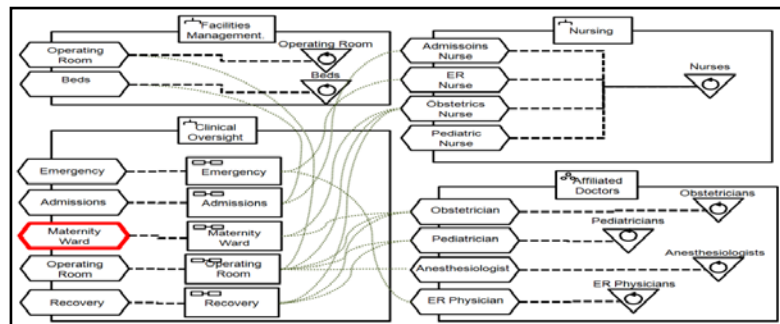
Value Proposition Exchange



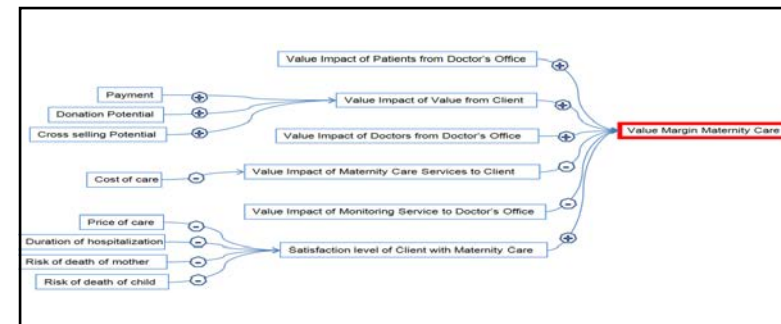
Activity Network (**Activities**)



Role Collaboration (**Network Partners**)



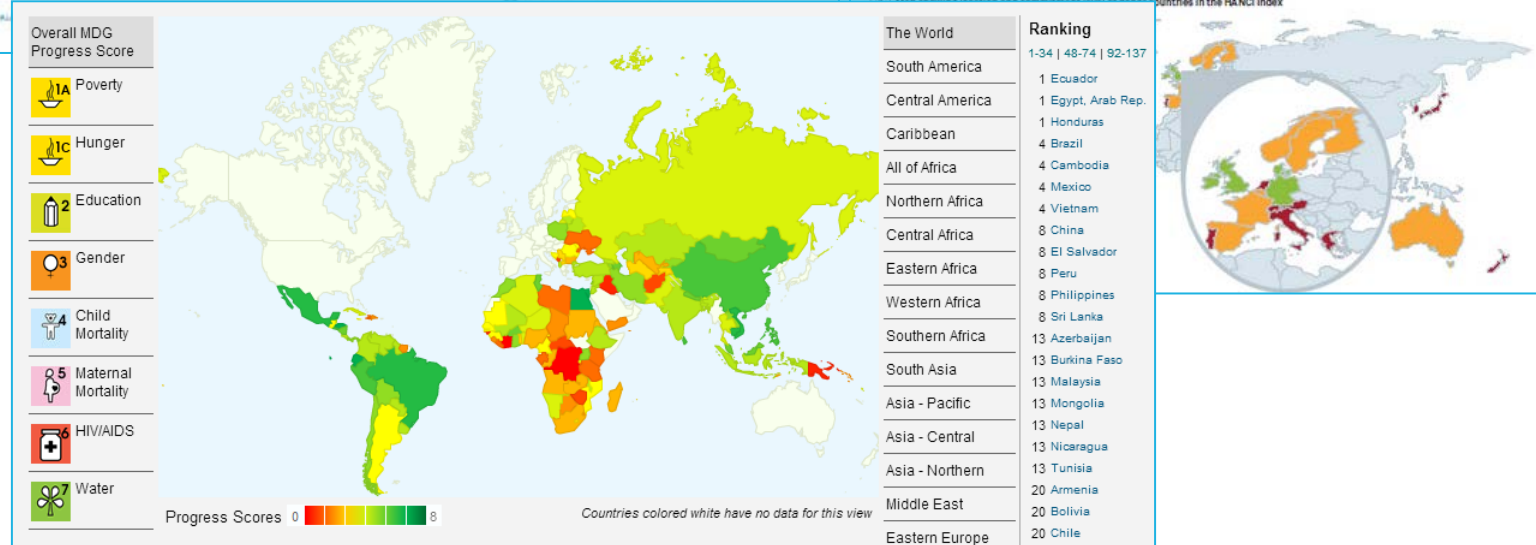
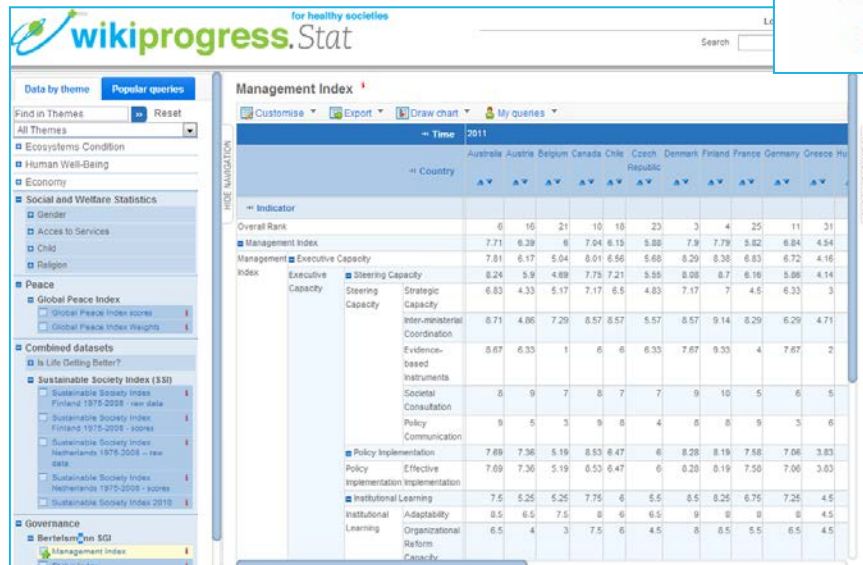
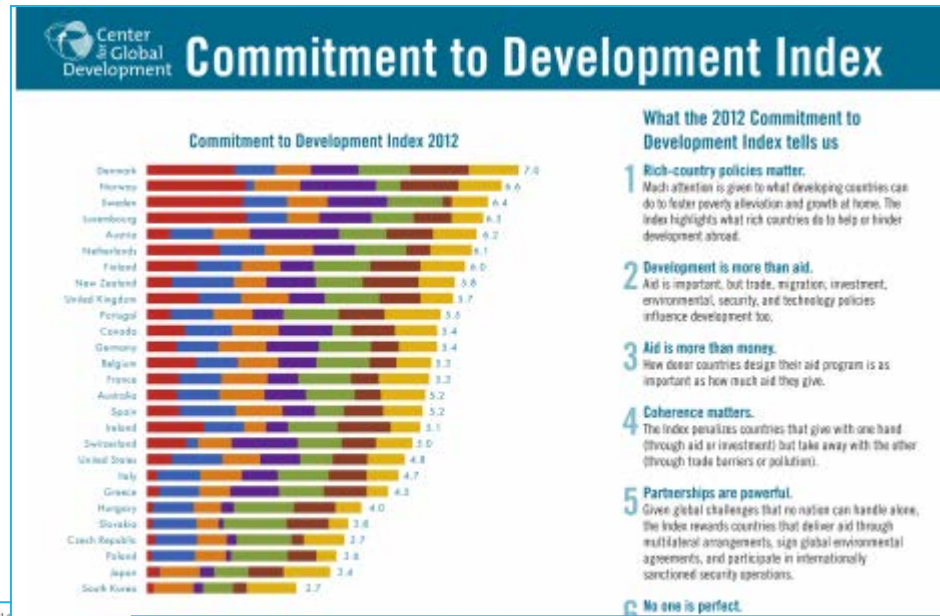
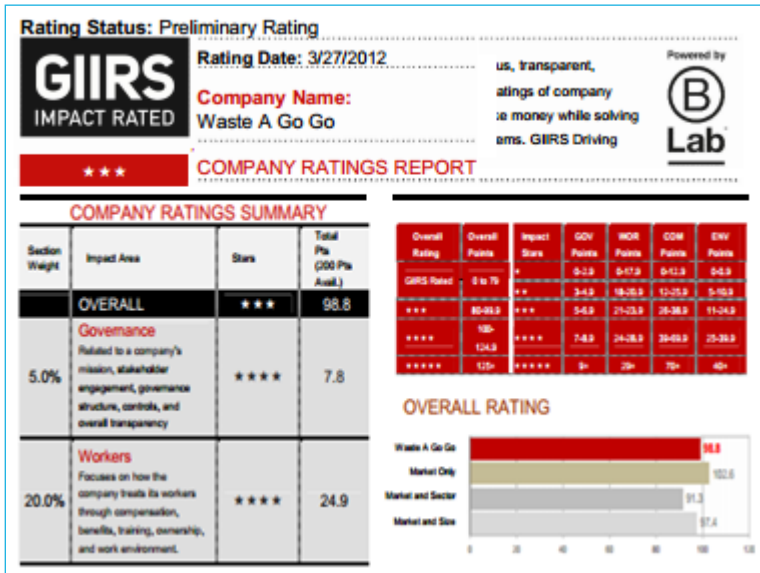
Capability Management (**Capabilities**)



Measurement Dependency (**Value Formula**)



Metrics, metrics, everywhere ...





Measure Success Requires Thoughtful Strategy and Planning



- Measure what Matters
- Define Metrics in Context
- Crowdsourcing & Metrics Repository
- Standardized Metrics Schema
- Linked Data
- Value-based Accounting



Putting the Pieces Together

Re-purpose industry standards and best practices

tmforum open digital program

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Why

Cloud

eHealth

Smart Grid

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News

Developers

TM Forum Home



We've seen the future. And it's digital. TM Forum's Open Digital Program focuses on overcoming the challenges of managing complex digital services and enabling an open, vibrant digital economy.

Download our new report
DIGITAL LIFE

<http://www.tmforum.org>



Operationalize the Digital Ecosystem

Taking an Enterprise Architecture Approach

'enterprise' Architecture

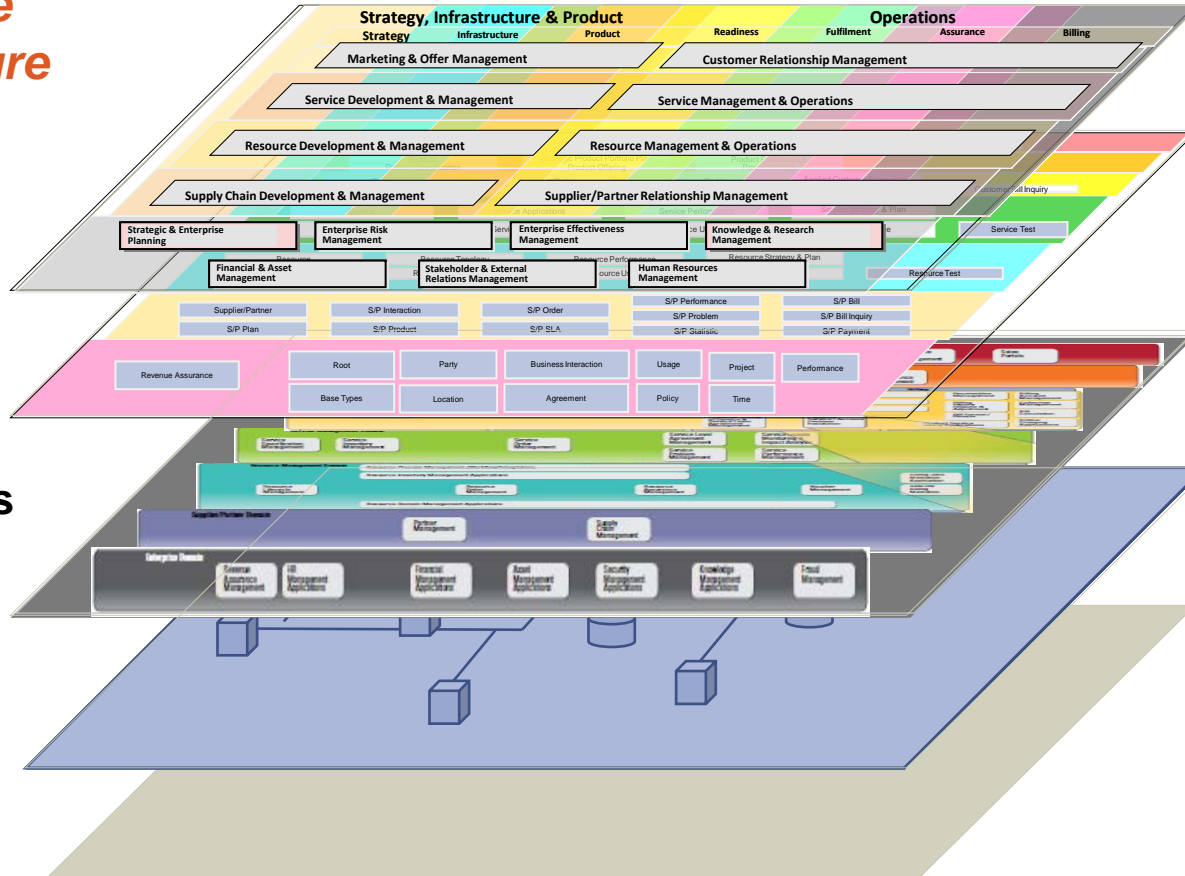
Business
models and
processes

Information

Applications

Technology

People



TM Forum Frameworkx

Business
Processes
Framework

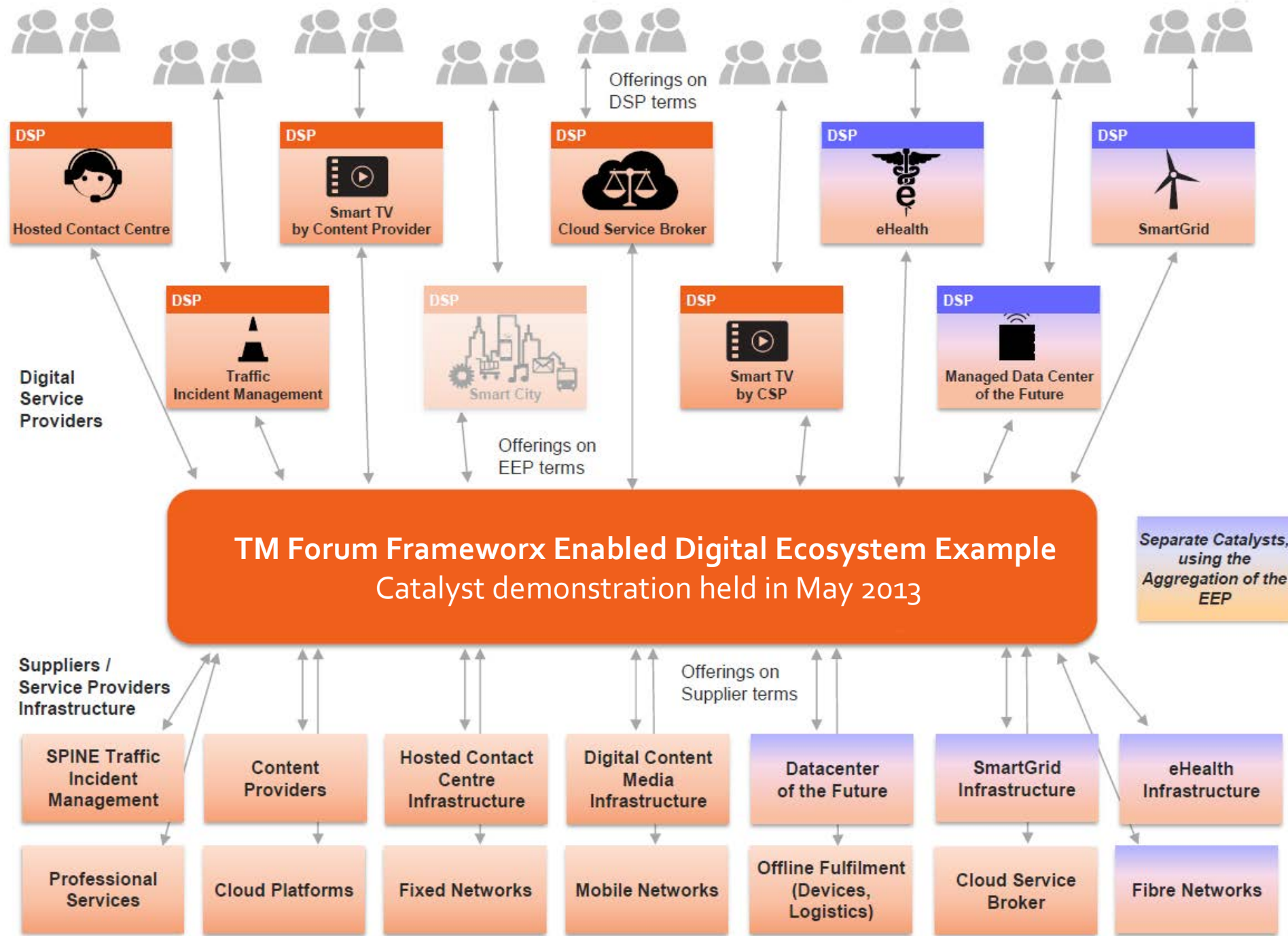
Information
Framework

Applications
Framework

Integration
Framework
(APIs)



- TM Forum frameworkx is an accumulation of 20+ years of worldwide service providers 'operational experiences
- <http://www.tmforum.org/TMForumFrameworkx/1911/Home.html>



Closing thoughts

- Fix **Systems** not **Symptoms**
- Think **Locally** act **Globally**
- Harvest **Knowledge** as **Resources**
- Establish **Value-based** partnership
- Use **Dataset** to change the **Mindset**

Call for Actions

- Technologists & Researchers: SEED Framework R&D
- Communities: Pilot Projects
- Policy Makers: Impact-based investment
- Corporate Citizens: Engagement



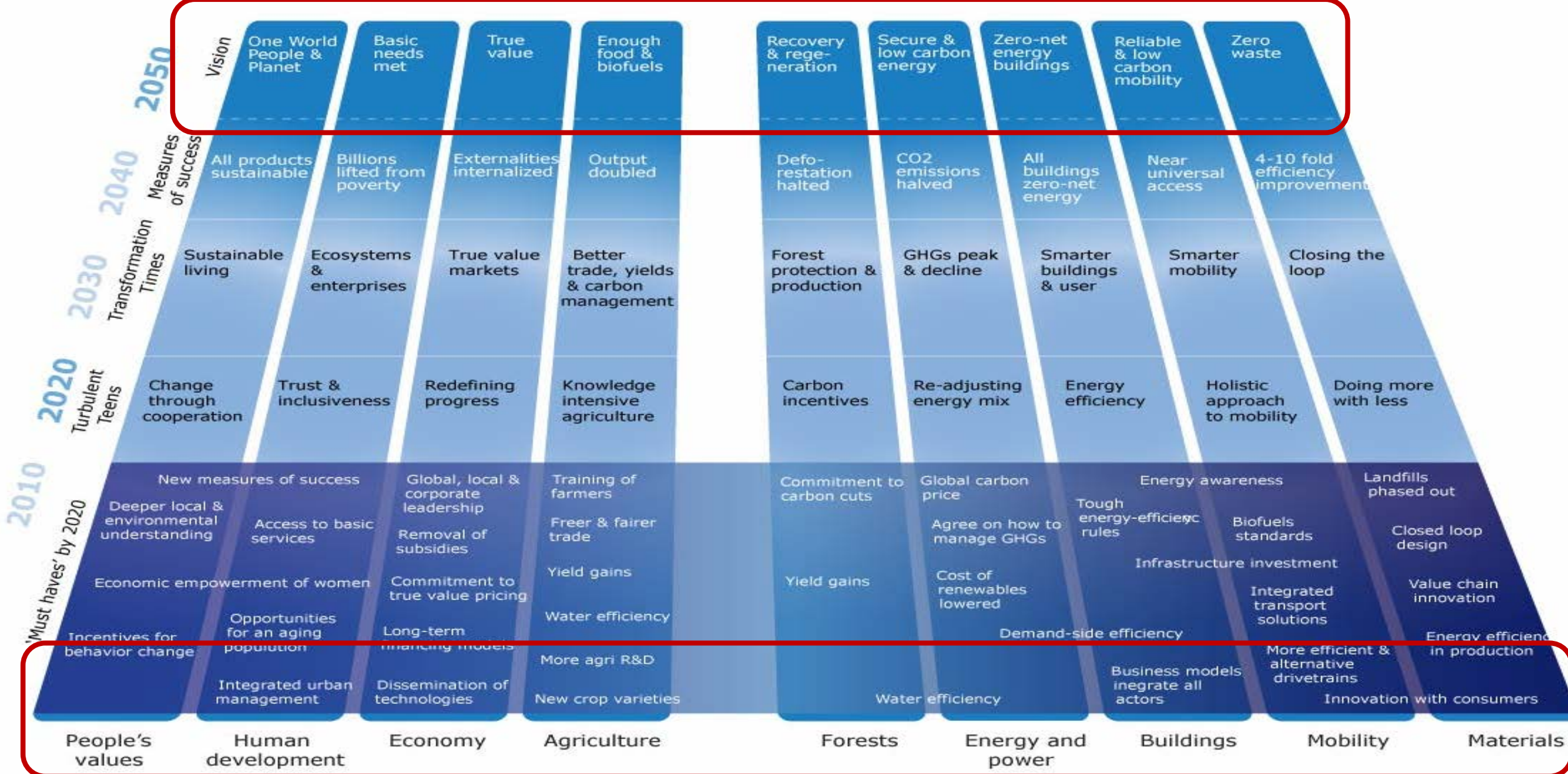
Background

About the speaker

- Jenny Huang works for AT&T in the Strategic Standards organization, having more than 20 years of experience in the field of business & operations strategy and technology development. She is a distinguished fellow of the TM Forum chairing the Service Providers Leadership Council and End-to-End Cloud SLA Management team; she also chairs the Telecom Interest Group at the Object Management Group.
- Working side-by-side with industry's top talents, she is interested in developing her knowledge and participation at the global grassroots level. Jenny firmly believes that the solutions to humanity's most pressing issues require global efforts, that harness good ideas from the grassroots level and effectively transform them into practical solutions.
- Jenny serves as a volunteer and director of the International Free and Open Source Solutions Foundation (iFOSSF) since 2006, providing advice on ICT for sustainable development projects.
- The SEED Framework was the result of her observations on how current SEED projects are conducted by corporate and grassroots communities; it is a recommendation of an ICT enabled digital-ecosystem that could collectively cross-pollinate resources and expertise among multi-sectors more effectively to achieve greater impact.
- Jenny can be reached at: jenny@ifossfoundation.org



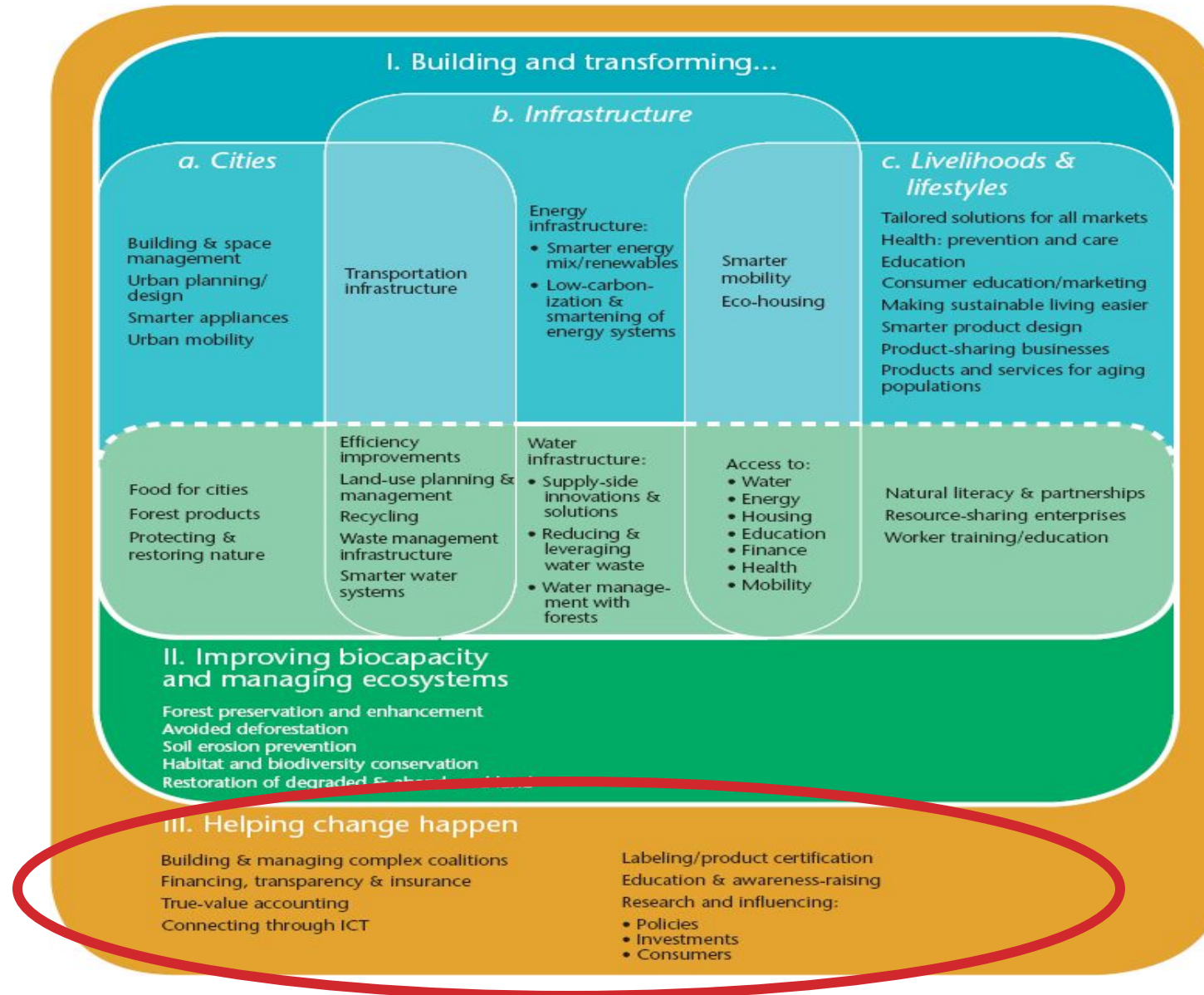
To a sustainable world in 2050



From business-as-usual

<http://www.wbcsd.org/vision2050.aspx>

Business domains for the next decade – Opportunities and Overlaps



Source: World Business Council for Sustainable Development
<http://wbcsd.org>