



How Networks Create
Systems Change

Peter Plastrik
Madeleine Taylor
John Cleveland



Copyrighted Material

Peter Plastrik

Author

Connect > Innovate > Scale Up

Content

Q: Given the complex, wicked challenges of transforming energy and other systems... What are the keys to success? What should we change about business as usual?

A: Effective, diverse, adaptive collaborations that evolve strategically as the system shifts.

- Case Study: Changing Horses in Midstream – US Water Alliance
- Changing Conditions for Social Impact
- Building Effective Collaborations
- Wither JISEA?
- Discussion/Questions

Survey

1) How important is cross-disciplinary collaboration for producing impactful research?

- Extremely important
- Somewhat important
- Not important

2) How clear are you on how to effectively collaborate for cross-disciplinary research?

- Very clear, I'm an expert
- Somewhat clear, still learning
- Not very clear, just beginning

3) What would most support you in collaborating effectively for cross-disciplinary research?

- More opportunities for developing partnerships and relationships with potential collaborators
- More education/training/learning about how to collaborate effectively
- More funding opportunities--proposal writing, idea generation, etc.--that depend on collaboration
- More actual funded projects that increase my experience with collaboration

Case Study: U.S. Water Alliance

Changing Horses in Midstream

- Small # of leaders in the water sector would meet to share/discuss mostly technical challenges, opportunities, and developments in the sector. It was a *club*.
- As the sector's challenges mounted, some leaders recognized that creating technical knowledge was necessary but insufficient for taking the radical steps needed to secure the sector's well-being.
- Their “One Water” agenda called for rethinking the institutional structure, management, community relations, economic role, and culture of water utilities.
- They also recognized that a new sort of entity—a vast and diverse network, not a small club—was needed to catalyze changes in a sector long dominated by engineering, finance, and white privilege.

What if your mission were to..

- Ensure that *everyone* in US has access to affordable clean water and sanitation
- Get more government investment in upgrading/improving water system infrastructure
- Get water utility managers to adopt an integrative management or “One Water” approach
- Leverage the “anchor assets” of water utilities to support local community and economic development
- Do something about the many very small water districts that are not economically viable

What would you do?

How would you do it?

What a Social-Impact Network Is

A set of people—individuals and/or organizations--who voluntarily organize themselves for collective action to solve a large, complex social problem.

Decision-making is distributed throughout the membership.

The members set the agenda and the priorities.

There are minimal formal rules and structure, and the structure may change rapidly.

Members are deliberate about building, strengthening, and maintaining ties with each other; they forge a renewable collaborative capacity that generates numerous activities.

They create value for each other by exchanging information and knowledge, and making available their skills, resources, and connections with others.

A **Social-Impact** Network...

Uses its resources to tackle practically any social problem in new ways.

Changes as it goes along, issuing a flow of experiments and organizing ways to scale up what proves to work.

More and More Networks Seeking Social Impact

WHY?

Network Advantages

- **Unique Capacity.** Can assemble novel and flexible combinations of human talent that would be difficult to pull together in a single organization
- **Extended Reach.** Efficient access to information and other resources
- **Rapid Growth.** Members have interest in having more members with whom to connect and transact, to build a “critical mass”
- **Collective Intelligence.** Moves information quickly and widely through members’ links, instead of going through a central hub

Drivers of Collaboration

Focus on systems change. *The ambition to instigate change of entire systems leads to the recognition that it takes many people and organizations, aligned in purpose and methods, to leverage change at that scale.*

Emergence of digital power. *The rise of digital technologies enables long-distance, distributed, instant connectivity among people and provides them with new tools for collaborating to address social problems.*

Resistance to business as usual. *A widespread distrust of top-down, centralized institutions and organizations inspires the exploration of alternative models for taking action.*

Types of Networks

ARCHETYPES	
Connectivity networks	<ul style="list-style-type: none">• Links people to exchange information easily and often• Prevents social isolation• Share leadership information
Alignment networks	<ul style="list-style-type: none">• Links people to help them create and share a set of ideas, goals, and strategies• A collective impact approach for local systems
Production networks	<ul style="list-style-type: none">• Links people to produce innovative practices, policies, and other social-impact outputs

Network Purposes/Functions

- Learning
- Mutual support
- Shared services
- Marketing
- Leadership development
- System mapping

A social **innovation** network...

Is a type of social-impact network that focuses on systems change through social innovation development and scaling.

Structures for Collaboration

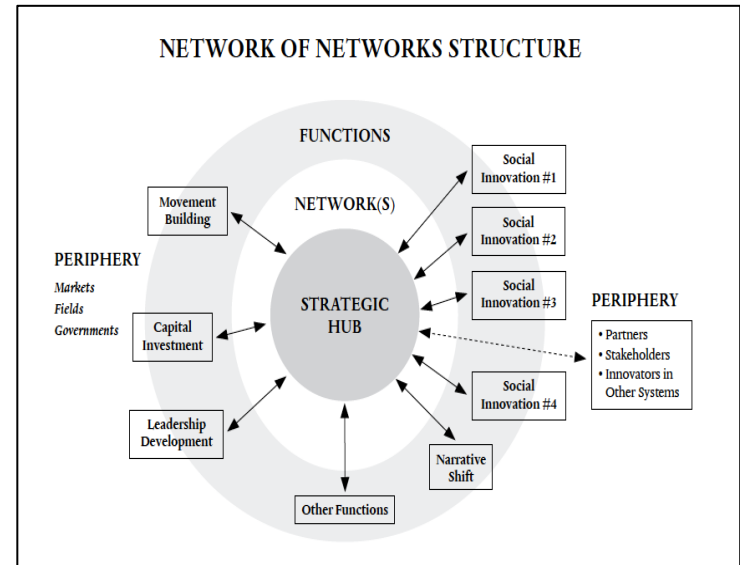
Networks	A set of people who voluntarily organize themselves for collective action to solve a large, complex social problem; decisions are member-based; members (not staff) do most of the work
Alliances/Coalitions	Temporary alignments of organizations formed to achieve a specific objective (e.g., policies)
Associations	Member-based, organized mainly to pool resources and provide members with various services; enduring relationships and collaborations are not necessary; association staff does most of the work.
Movements	Large numbers of people become organized around a cause, demanding solutions, their passion ignited by a personal desire to right a wrong; big, sprawling affairs that are less coherent and focused than networks
Social Media	Many online users who don't share a desire for specific social impact; they connect with some members, enter and exit as they please; the service providers make the rules; it's a tool, not a network
Communities of Practice	A small cohort of people dedicated to implementing/adapting an innovative practice or policy through shared learning, experimentation, and implementation

Networks may initiate alliances, movements, and communities of practice. They may morph into associations. Alliances, movements, communities of practice may morph into networks.

Networks may take on organizational legal forms (nonprofit corporation, program within an organization, community foundation, etc.) but its structure and operations remain network-y

The U.S. Water Alliance Today

- 2015: Alliance hires new CEO who envisions it as an inclusive national network of water system changemakers—community organizations, environmental & EJ groups, agricultural interests, labor unions, researchers, artists, utilities, government agencies.
- 2016: Alliance opens up annual Summit to diverse stakeholders – “It was unlike any conference I have ever attended.”—Utility leader
- 2022: Dues paying membership increased 50% to 131 members – 70 of them utilities that touch nearly 15% of US population; \$9m budget
- More than 1,000 people attend annual Summit



Changing Conditions for Social Impact

Change is Coming...

- It's about SYSTEMS
- We're in a POLYCRISIS!
- Develop HOLISTIC, VALUES-CENTERED, SCALABLE SOLUTIONS
- Maintain your SOCIAL LICENSE TO OPERATE
- Who's in CONTROL?

Key to Systems Change

System = a set of things that work together to create behaviors and results that the individual parts cannot produce by themselves.

Social systems = systems created by human beings to arrange how people live and work together. They are complex and have a life of their own; inherently unpredictable.

Changing Systems:

- Systems thinking model: understand and improve the dynamic interconnections among the parts, look for ways to leverage them.

Most powerful lever for systems change is the mindset or paradigm out of which the system has been designed and operated.

Targeting Systems

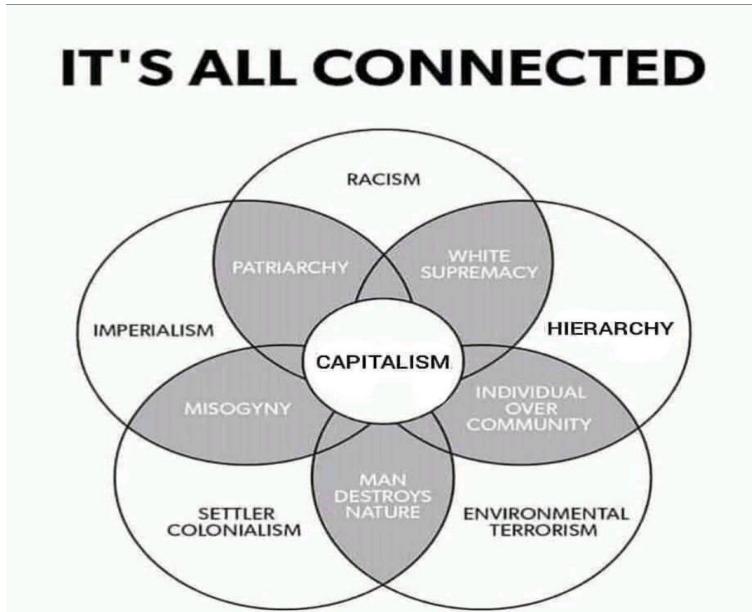
Approaches for Changing a System

Associate	Engage with the system to inform, promote, and support change.
Adversary	Seek to change the system against its will. Often occurs when system changing is done through public policy shifts.
Alternative	Create a new system designed to solve the problem and/or to lure the existing system into changing itself to address the problem.
Authority	Change a system's performance by aligning and coordinating the efforts of leaders with power over various parts of the system.

Ways to Understand a System

Intuition	Change agents have an instinctive feeling, rather than rational analysis, about how the system works and its leverage points.
Analysis	Change agents gather data and expertise, using various tools, such as system mapping, feedback loops, and recognition of typical leverage points, to understand how the system works and where its leverage points may be.
Lived Experience	Change agents tap into the experiences and voices of people within or affected by the system, which provides unique information about the system.

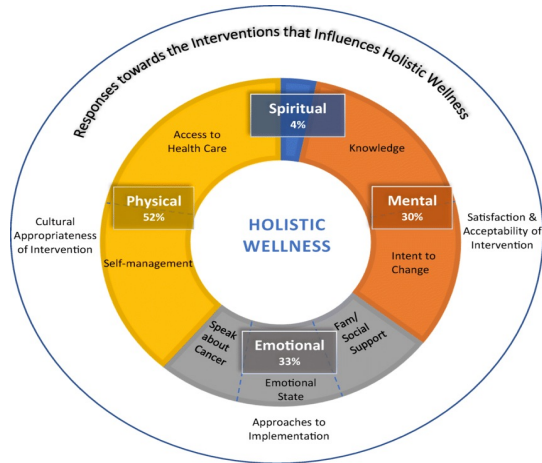
The Polycrisis We're In



Concurrent shocks, deeply interconnected risks and eroding resilience are giving rise to the risk of polycrises – where disparate crises interact such that the overall impact far exceeds the sum of each part.

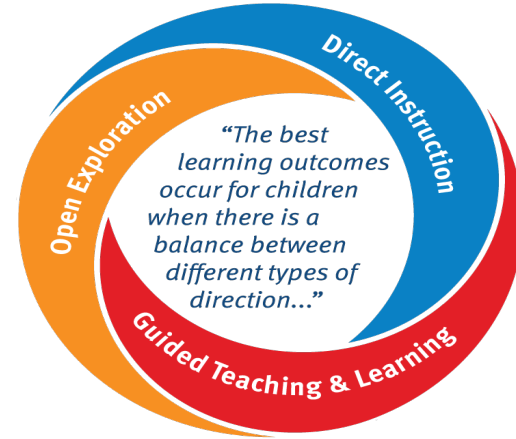
A wicked problem is a social or cultural problem that is difficult or impossible to solve for as many as four reasons: incomplete or contradictory knowledge, the number of people and opinions involved, the large economic burden, and the interconnected nature of these problems with other problems.

Seeking Holistic Outcomes



Green Infrastructure Benefits

- Flood control
- Increased green space
- Available local jobs
- Tree canopy for resilience
- Reduced GHG emissions & lifetime costs
- Increased property value



Maintaining Social License to Operate

- **Moral dimensions of action**
- **Diversity, inclusion, equity**
- **Social vulnerability**
- **Engagement - planning**

One of the powers of Western science that has brought us so much understanding and benefit is this separation of the observer and the observed; to say that we could be rational and objective and empirically know the truth of the world. Absolutely, but there are lots of truths. I like to say that there are multiple ways of knowing, and we could benefit by engaging more of them... But sometimes what we call conventional Western science is in fact scientism. Scientism being this notion that Western science is the only way to truth. It's a powerful way to truth, but there are other ways, too. Traditional ecological knowledge, Indigenous science, is a more holistic way of knowing. **In Western science, for often very good reasons, we separate our values and our knowledge. In Indigenous science, knowledge and values are always coupled.** It's an ethically driven science.

—Robin Kimmerer

The “postmodern” purpose of planning is to make “the future visible in a socially acceptable way.”

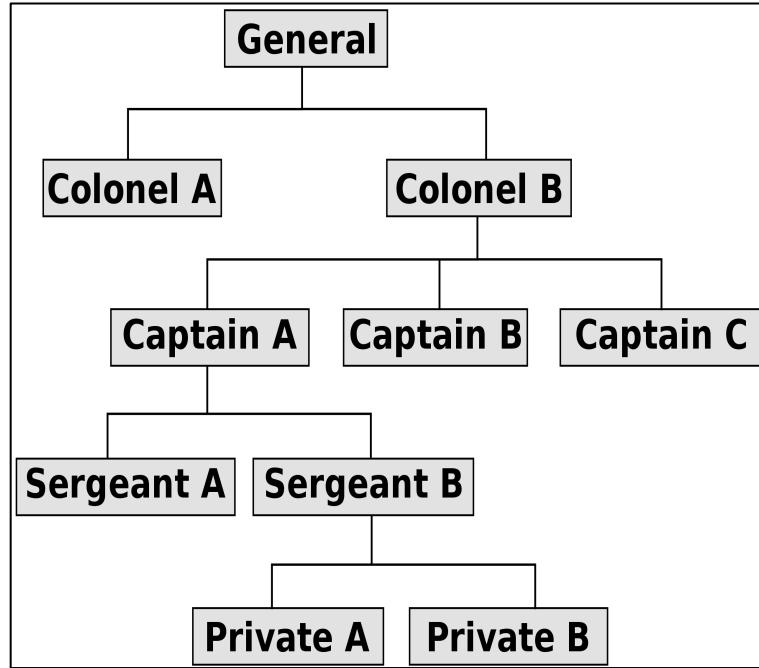
—Professor David Connell,
environmental planning

True intelligence is also capable of **moral thinking**. This means constraining the otherwise limitless creativity of our minds with a set of ethical principles that determines what ought and ought not to be (and of course subjecting those principles themselves to creative criticism).

— Noam Chomsky, Ian Roberts, Jeffrey Watumull

Distributed Control over Decisions

WHO IS IN CHARGE?



Building Effective Collaborations

Network Building is a Practice with Multiple Interacting Elements

- Purpose
- Members
- Value Propositions
- Coordination, Facilitation, Communication
- Resources
- Governance
- Assessment
- Operating Principles (Culture)
- Structures of Relationships & Power

Relationships & Reciprocity

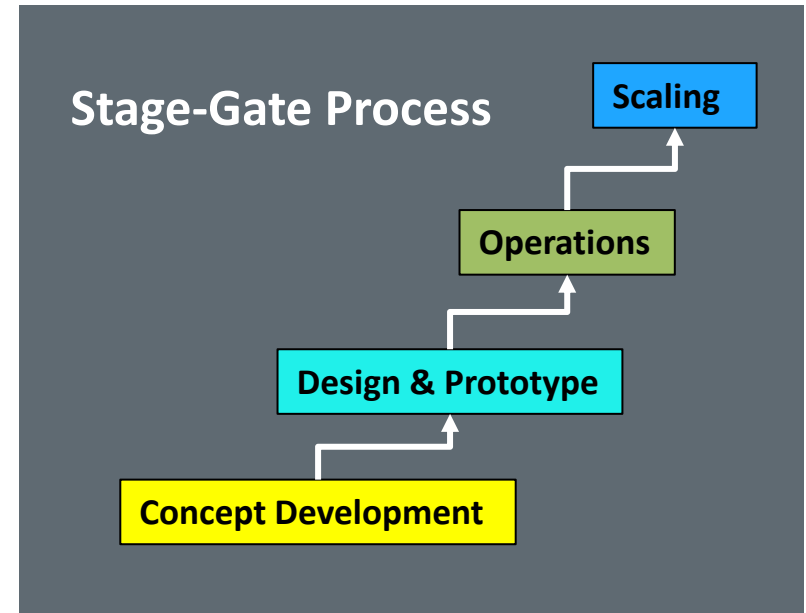
- Connectivity is the foundation of a successful social-impact network.
- In a network, two social forces are set into motion: the generosity with which members treat each other and the shared sense of identity they develop.
- A network's members give to each other. "The net rewards generosity," says former Wired executive editor Kevin Kelly; a network, he says, is "a gift economy." Members give away their knowledge, skills, and resources. They give in the expectation that giving to others will be rewarded by getting from others. When this happens, the network's structural advantages magnify the value of the gifts, efficiently spreading the benefits to other members.

Evolution of Relationships in a Network



Developing Social Innovations

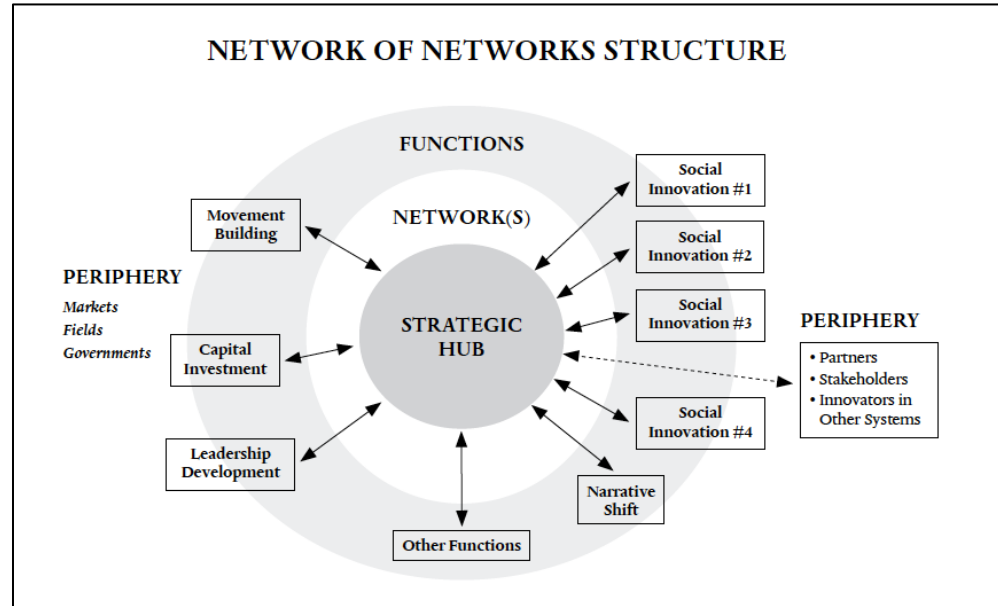
<i>Types of Social Innovations</i>	
Practices	Knowledge about promising or proven new practices and tools and how to apply them.
Policies	New or revised public policies (laws, regulations, investments, programs, services, administrative rules) and government power relationships.
Products	New goods or services or business models—solutions—which users can obtain and use.



Designing Networks for Complexity

We've identified at least eight functions that systems-changing networks of networks may perform while also doing innovation development. These tasks support a network's growth and evolution, but that's not their primary purpose. Instead, they are part of a wide-ranging, emergent approach to systems change that contains multiple functions and networks. The functions, in alphabetical order, are:

- Capital investment
- Celebrations
- Consulting/technical assistance
- Leadership development
- Measurement development
- Movement building
- Narrative shifting
- Research



Designing Networks for Complexity

- Building and operating networks—distributed, evolving collaborations—is an intentional practice that can be learned, not just an instinct some of us have.
- Networks can be effective structures for tackling systemic transformation: many changes to initiate, leveraging mental model change; success takes years, decades
- Keep evolving a network's structure and methods – as competencies/capacities develop, strategic situations change, successes occur

In Summary

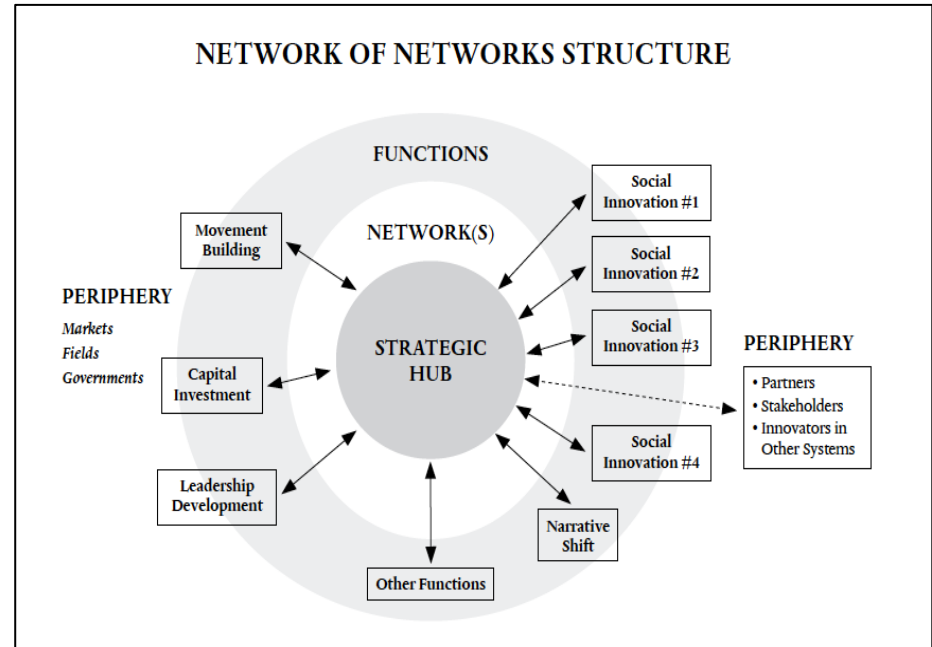
JISEA – A Network with System-Change Goals and Multiple Functions

- Provide leading edge, objective, high-impact **research and analysis** to guide global investment and policy decisions and to support education and human development.
- Focus on nexus of energy, finance, and society – guiding **transformation of the global energy economy**.
- Establishing a foundation of **knowledge, research capabilities, and solutions** in complex, emerging areas of clean energy transformation – convergence of environmental, societal, and technological factors
- **Convene experts** to share knowledge and collaborate
- **Catalyze seed research projects** to provide analysis on research questions
- **Coordinate prize and voucher programs** to enable solutions and promote **DEI in the clean energy sector**

How can we evolve?

Increasing complexity...

- Multiple Functions
- Growing Number of Partners & Stakeholders
- Strategic Alignment



Discussion

More at www.in4c.net

- Read Introduction & Chapter 1 of *Connect > Innovate > Scale Up*
- Also learn about *Connecting to Change the World: Harnessing the Power of Networks for Social Impact*
- Contact coauthor: peteplastrik@gmail.com



How Networks Create
Systems Change

Peter Plastrik
Madeleine Taylor
John Cleveland



Thank you!

