

Sociotechnical Systems Design

for

Adaptive Enterprises

For:

2012 Organizational Development Forum
Atlanta, Georgia
April 2012

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Overview of STS

In the tapestry of social design, if you pull the strings attached to the Arab Spring, Occupy Movements, and general sense of [movement](#) that exists today, you'll end up in the mines and textile mills of late 1950s Britain. The same sense of isolation, lack of control, increasing economic disparity and dissatisfaction with rationalistic trickle-down economic philosophies (the fate of [Trist and Bamforth's](#) miners and textile workers) are being experienced across all demographics today -- times four! This "new normal", in all its interconnected, [Volatile, Uncertain, Complex and Ambiguous](#) (iVUCA) glory requires us now, more than ever, to use the benefit of our history to unlock the potential of our future.

Our quest is simple: buff and polish the magic lamp of [Sociotechnical Systems](#) (STS) theory and practice. Why? So today's social, economic, political and organizational revolutionaries can use the lessons learned in the coal mines of [England](#), the docks and factories of Norway as well as many other enterprises from [Mondragon](#) to Melbourne. We want those lessons to bring forth a world where humanity and sustainability live peacefully with profit and progress. The driving principle of STS is to jointly optimize an enterprise's social and technical systems in order to generate such effectiveness. Trist, Emery, Thorsrud, Cherns & Davis agree it is counterproductive to choose between economic success and social progress. We recognize the failure of command and control management practices to meet the demands of the New Normal (iVUCA) environment. In so doing, this article will explore and describe enterprises succeeding through connection, conversation, collaboration and co-creation and with these participative and appreciative methods enable optimization and innovation.

By the end of the 20th century, practitioners noted a significant decline in STS's application in many of the countries where it had been so successfully applied. In retrospect, STS followed the principles of life-cycle "S" curves as all technologies and living systems do, and its practitioners now faced a choice—to abandon much of their traditional practice or to attempt [discontinuous change in STS](#).

In 2005, members of the [STS Roundtable \(STS-RT\)](#) (an association of academics and STS practitioners) chose to launch an STS "Discovery" initiative -- an action research process through which the STS community is creating innovation, continuing to preserve core values and principles of STS, and finding new ways to apply both to the challenges of 21st century organizations. Our hope, through this whitepaper, is to –

- begin a dialogue with you,
- forge the new partnerships necessary to increase understanding of the new context in which we find our practice, and
- thereby bridge from practice to theory.

Renewal of STS

Fundamental changes have occurred in our society. As the co-evolution of political, social, technological, economic and ecological change accelerates, a new way of organizing is emerging identified by the authors as *Adaptive Enterprise Systems*. We believe open socio-technical systems theory and practice is also evolving and becoming a foundation for these Adaptive Enterprise Systems.

Emerging Characteristics of Adaptive Enterprise Systems

1. *Self-organizing*

- Shapes system evolution
- through an emergence and feedback process
- with limited (or no) hierarchy of command and control
- and limited (or no) planning and managing

Most futurists would agree we cannot predict the future. However we can, with conscious awareness and study, understand the past and the present in order to increase our certainty of emerging next steps. Cycles exist within all organisms and organic systems — the seasons, birth to death, product innovation, organizational growth and development, etc. Through observing and understanding these self-organizing patterns, we learn as humans to adapt to the emerging opportunities and challenges presented within each phase of the cycle.

2. *Transformational*

- Includes single-loop learning (incremental) – Behavior change
- Includes double-loop learning (reframing assumptions) – Belief change
- Includes triple-loop learning (innovation and integration) – Being change

This transformational shift in humanity takes us beyond learning the simple mechanics of behavior change that most organizations in today's business world abide by. We know from decades of research to create permanent release from behavioral patterns/addictions (dieting and smoking cessation), we need to address the source of the behavior (our underlying beliefs and assumptions) not just the symptoms (overeating and smoking). Once we understand these often unconscious and disabling assumptions, we can consciously choose to reframe them into enabling beliefs. Similarly, for an organization that believes "doing what it has always done will bring continued success." Shifting an organization's belief systems ultimately shifts its culture and identity, which when aligned with supporting structures and practices integrates this new identity into daily activities.

3. *Simplicity*

- Includes only those critical processes that integrate creating/innovating with conserving/sustaining (minimal critical specifications)
- Measured as good enough (excellence is built in with additional iterations)
- Minimally complex and not complicated (Assess, Act, Adapt)

In the design and development of an Adaptive Enterprise, simplicity of processes and structures is key for ensuring its rapid response ability. Boundaries are temporary and fluid to encourage continual morphing based on emerging needs, and excellence is measured as 'good enough' to meet immediate needs because those needs could and likely will change next month or next year.

4. Nested Systems

- Simultaneous intervention in all systems (individual, core work system, organization, ecosystem)
- Inclusion from across the nested systems builds resilience and innovation through diversity, requisite variety and interdependence

As we globally adapt to the beliefs "we are all connected" and "what we do to others, we do to ourselves," what evolves is a greater responsibility to act holistically. From a whole system perspective, this includes considering, for any intervention, the individual, work system, organization and ecosystem repercussions. Engaging participation from across all effected systems encourages win-win results.

5. Rapid Prototyping

- Embraces uncertainty and unpredictability
- Integrates familiar STS principles and methodologies such as variance control, incompleteness, boundary location, multi-functionality and minimal critical specifications

In traditional organizational design and development, the belief held is "once the experts perfect it, we can implement." Because perfection takes too long and is unrealistic and because the world around us is changing at an increasing speed, a new belief of 'good enough' is required. The practice of creating ever-improving iterations (think Apple products) through rapid prototyping of a product/service-offering by a diverse collaborative team marries innovation and optimization, which allows organizations to simultaneously exploit and explore opportunities.

6. Simultaneous exploration and exploitation

- Aligns optimization and innovation processes
- Integrates infinite feedback loops
- Coordinates along three co-occurring horizons
 - 1st horizon (operational optimization of core businesses)
 - 2nd horizon (development of new products or businesses with resources attached but not yet matured/optimized)
 - 3rd horizon (researching seeds of ideas for new businesses)

The increasing speed of change and the complexity of world markets and life in general require 21st century enterprises to strategize on two fronts — surviving and thriving. Survival in the business world implies the removal of rework and errors in all core business systems and processes. The resulting efficiency and effectiveness creates a stable foundation from which the enterprise optimizes its benefits and profit margin.

These accrued resources feed and seed developing and new markets enabling the organization's longevity and thrive-ability.

Emergent Themes

The remainder of this whitepaper is organized around the following five themes emerging out of STS Discovery work:

1. the evolution of the New Normal environment
2. the new STS design context of emergence and multiple systems level engagement--firm, network, eco-system
3. STS ideals, principles and values relevant to new forms of organizing
4. innovative STS design processes, tools and methods for working with enterprises at each level--firm, network, eco-system
5. collaborative leadership and governance systems emerging to address the complexity of organizing across all three systems.

1. The New Normal: a Hyper-Turbulent, Global Environment

When [Tavistock](#) action researchers developed their view that the system characteristics of work were socio-technical (Trist & Bamforth, 1951; Emery, 1959), they used von Bertalanffy's (1950) General Systems Theory (GST). While GST described open systems in a constant two-way exchange with the environment, the environment was simply presented as random deviations to which adaptation could easily occur. Envisioning a world where increasing complexity would make adaptation more challenging, Emery & Trist (1965) set out to develop a more complete Open Systems Theory. While socio-technical systems analysis and design helped optimize existing production systems, organizations needed better ways to understand and cope with change.

Emery and Trist defined the environment as a social field consisting of human systems with changing values, expectations and ideals (Emery, 1977). They described organizational environments as causally textured identifying four different types:

- Type 1, "placid random", described a limiting theoretical case that probably never existed with placid referring to stable value systems.
- Type II, "clustered, placid", as the longest-lasting and most adaptive environment (lasting from our early beginnings to about 1790) was characterized by cooperation in and between groups as the dominant way of working together.
- Type III, "disturbed reactive", ushered in by the industrial revolution was characterized by competition between large, virtually identical organizations. Also known as Taylorism (Kanigel, 1997; 2005), it became the dominant form of organizing resulting in widespread mal-adaptations, which continue to undermine our organizations today.
- Type IV, "turbulent environment", in which most people alive today were born and raised. In parallel, another term was coined to describe this turbulent environment – VUCA – which stands for the following:

- Volatility -- the nature and dynamics of change and the nature and speed of change forces and change catalysts
- Uncertainty -- the lack of predictability, the prospects for surprise and the sense of awareness and understanding of issues and events
- Complexity -- the multiplex of forces, the confounding of issues and the chaos and confusion that surround an organization
- Ambiguity -- the haziness of reality, the potential for misreads and the mixed meanings of conditions; cause and effect confusion

The STS–RT Discovery Team’s view of this dynamic global environment, in which not only the amount of change but the rate of change continue to increase, is the *New Normal*. We adopted this term to define a range of diverse environmental conditions. The New Normal was initially coined by a thought leadership team at the [Pacific Investment Management Company](#), in reaction to the American economic recession. Since then it has taken on a much broader set of characteristics than its originators intended including –

- “a restructuring of the economic order” from its current fog of uncertainty [McKinsey Quarterly](#) (2009)
- a “society without digital limits” (Peter Hinssen, *The New Normal*, 2010)
- a race neutral society
- climate extremes

and within the context of enterprise design –

- flexible work systems with continuous and rapid adaptation
- “member” alienation, isolation and lack of engagement
- coordination complexities within and across enterprises
- intentional socio-technical networks to achieve shared value creation
- contingent workforce; “free agency” and contract/flexible work
- multiple generations and cultures in the workplace
- greater connectivity and opportunity for direct participation, dialogue & deliberation on the big issues
- manufacturing shift to developing countries
- mistrust of traditional leadership and institutions
- fulfillment of individual potential--passion and purpose as meaningful aims

These changes in the design context require us to think about design very differently:

1. Design is no longer about creating effective processes, structures and systems, but about *leading effective designing*.
2. Design is *emergent*, no longer planned, occurring in a rapid adaptive cycle (growth to optimize to release to reorganize).
3. Design is *ambidextrous* requiring constant managing of the tension between innovation (growth and reorganize) and optimization (optimize and release).
4. Design occurs *simultaneously across three system levels*.

Emergent Design

For organization designers, the most important change in assumption arising from this hyper-turbulent, global environment is “emergent order, in which the patterns that form are not controlled by a directing intelligence; they are self-organizing.” (Kurtz and Snowden, 2003. This awareness of emergent order and its impact on mainstream management theory and practice is still in its infancy.

A design may exhibit both directed and emergent order at the same time with the intertwine and interaction between each creating the New Normal environment. Kostof (1991) described this well as regards cities – “two primary versions of urban arrangement, the planned and the ‘organic’ often exist side by side...Most historic towns, and virtually all those of metropolitan size, are puzzles of premeditated and spontaneous segments, variously interlocked or juxtaposed.” According to Bolman and Deal (1997), the same thing occurs in organizations where a formal command structure lives side by side with informal trust networks, while simultaneously competing with each other.

This new *context of design* with its dynamic and constantly changing environment requires a new mindset for design. In the ordered design context to realize an effective organization, we achieved renewal of the system by jointly optimizing the social and technical parts through analysis and structured design processes.

For emergent order, the whole is multi-level and can never be the sum of the parts because any act at any system level changes the nature of the whole system. Thus in a turbulent environment, we engage in constant designing of *patterns of emergent order* to stabilize desirable patterns and seed their emergence as well as destabilize undesirable patterns. Designing in this environment is essentially prototyping to make the pattern or potential patterns more visible before action is taken.

2. STS Design at Multiple Levels of System Complexity

A ‘society without digital limits’ and with a recent explosion of social media has empowered the awareness of large-scale societal issues. People know and can respond immediately to global events half a world away. This interconnectedness brings multiple levels of enterprise – firm, network and ecosystem – into view simultaneously, and requires analysis and understanding for all stakeholders beyond the traditional focus on the level of system within which they live. “Moving between the three levels is as important as thinking about the context we are ‘in’ because a move across boundaries requires shifting to a different model of understanding and interpretation including leadership style “(Kurtz and Snowden, 2003).

Articulating and understanding the three levels of systems enables designers to sort out the complex dynamics in the turbulent environment at each level and make effective design decisions.

The three levels of systems and the corresponding patterns we see emerging are:

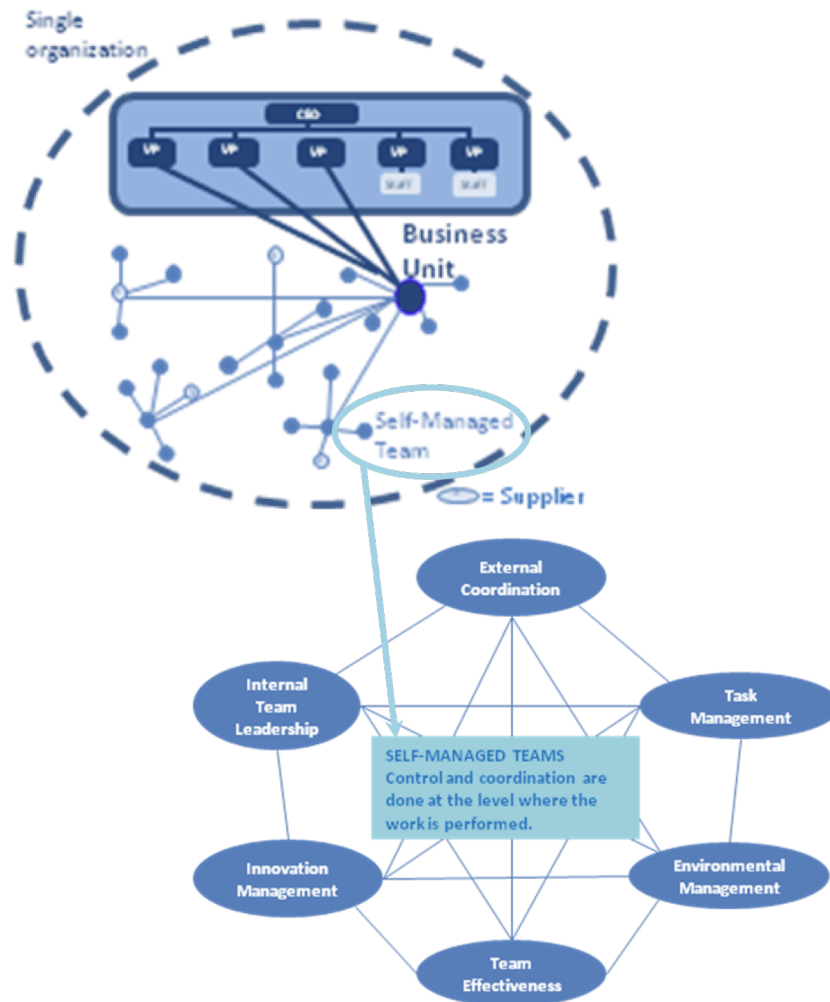
- the *firm* level of analysis and design is manifested by what we call a *Vertically-Integrated Decentralized Organization (VIDO)*.
- the *network* level of analysis and design is manifested by what we call a *Value Realization Network (VRN)*.
- the *societal* level of analysis and design is manifested by what we call the *Issue-based Eco-System (IBES)*.

These three patterns of organizing are not proposed as a developmental progression where evolving from one to the other is desirable. Rather, the IBES may contain VRN's and VRN's may contain VIDO's. Further, a firm or enterprise may manifest all three patterns. For example, a business unit of General Electric may be considered a VIDO. However, when we include its supply chain and other business partners, that system could be considered a VRN. And when we consider the business unit is involved with developing mini-nuclear reactors designed to address the energy needs of remote communities in developing countries, we see it as an IBES.

Nor are we prescribing these three patterns as ideal organization forms. They are the new contexts within which people currently work and have the opportunity to design. In other words our three patterns of organizing (firm, network and society) may combine into multiple possibilities of "adaptive enterprise" rapidly responding to changing demands of the environment, that is, the tension between adaptation (surviving) and optimization (thriving). These patterns represent the three levels of system analysis within which we as designers and practitioners find ourselves working.

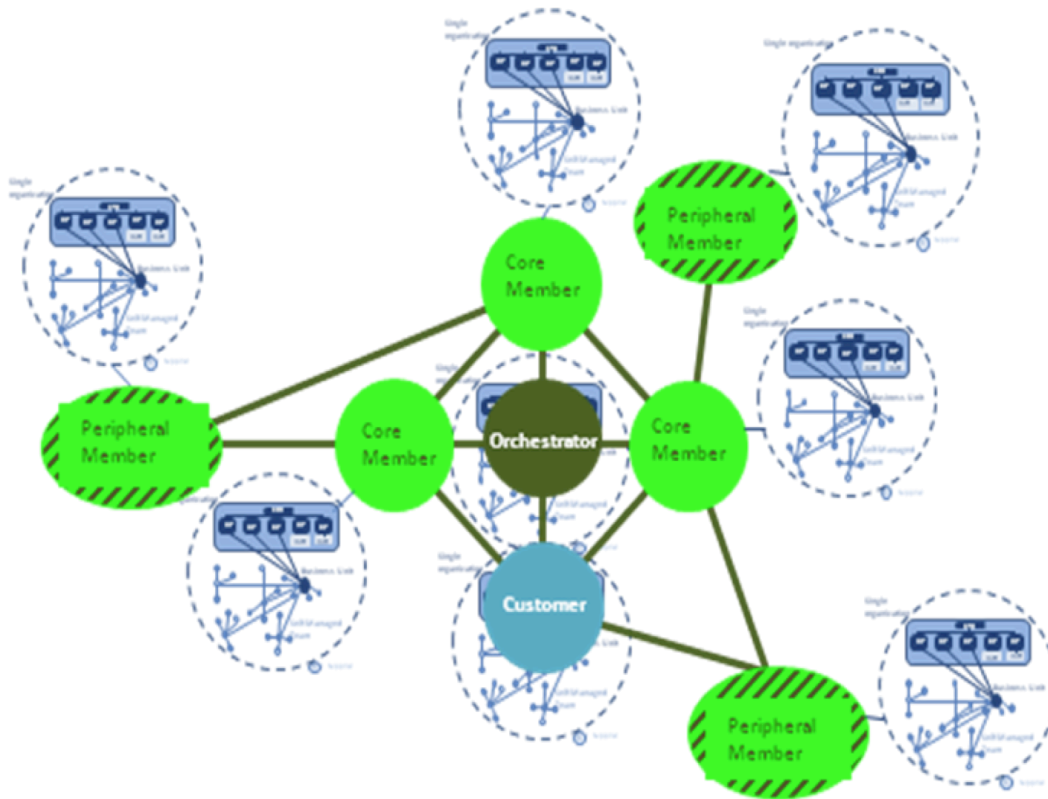
Firm Level of Analysis and Design

At the firm level (see image below), designers typically are presented with a singular enterprise having clearly defined organizational boundaries represented by a Vertically-Integrated Decentralized Organization (VIDO). VIDOs can be viewed as a singular enterprise bounded by its core capability with several functions performed by other suppliers. In a VIDO, outsourcing is for cutting costs and taking advantage of some network capabilities. While some form of team is typically the basic unit of organization, the control and coordination given to these teams varies from little to a high degree of self-management. In more effective VIDOs, there may be pockets of collaborative communities using social media to connect internal and external resources.



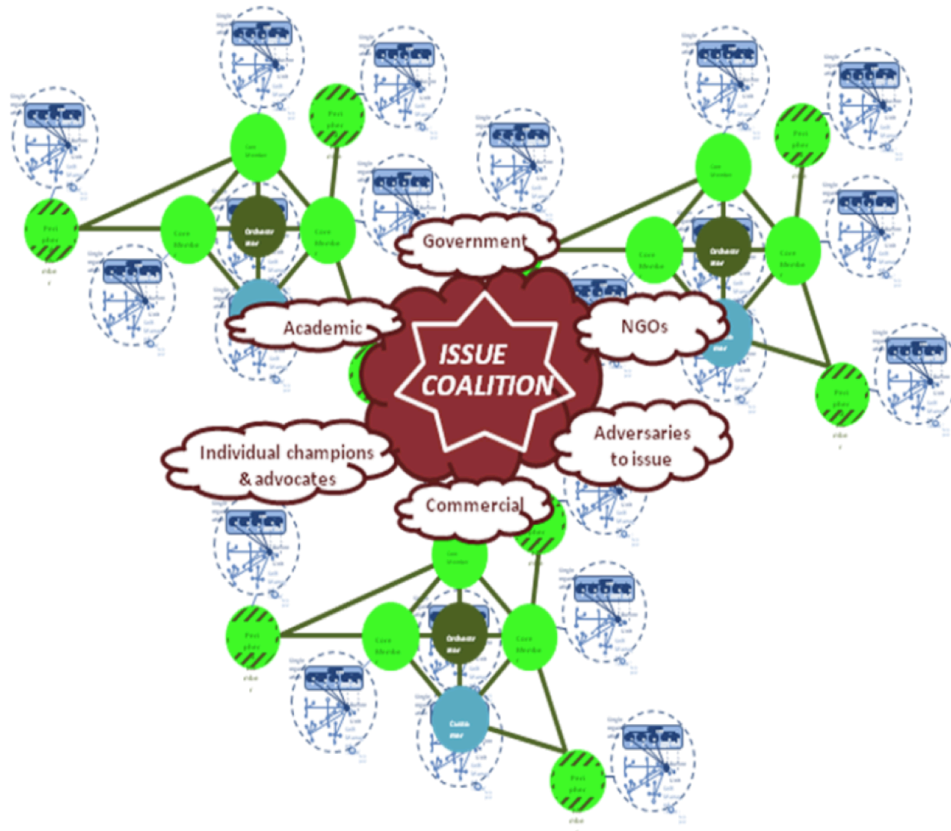
Network level of Analysis and Design

At the network level, designers typically work with multiple enterprises with a variety of connections, all providing mutual benefit. This set of relationships is represented by a Value Realization Network (VRN). VRNs range from *linear value chains* to *industry-based value creation constellations* (Ramirez, R. 1999). Multiple entities, both private and public, work together to create value as defined by the customer. VRNs are bound together by a shared value proposition. Members' initial interaction is *divergent* due to different values and points of view, but they rapidly *converge* around clarifying the value proposition. This convergence is guided by high-level processes, which we named connect, converse, collaborate, co-create, community. As the VRN matures, interactions become increasingly nonlinear and dynamic with simultaneous co-creation taking full advantage of network properties. While many entities operate together in this system of partnerships and alliances, an "orchestrator" takes on the primary coordination role. In more effective VRNs, control is vested in shared values and purpose not just in the role of the orchestrator. Value is created through the interaction of multi-functional roles and knowledge, which is complex to design and coordinate.



Society or Eco-system level of Analysis and Design

At this broader level of analysis, designers consider the larger eco-system (Emery & Trist 1972, Trist 1976). Large societal problems (e.g., elimination of AIDS, providing sustainable energy and food sources to all) are areas of concern for IBES. These “wicked problems” affect every organization and/or person but no one sector (government, corporate, civil society, etc.) working independently can resolve them. An IBES attracts passion, creativity and initiative into self-organizing groups. It forms with the *convergence of shared will* but needs to move to and stay with *divergence* (local autonomy and customization) to arrive at transformational and inspiring solutions. The IBES must ‘hold the space’ for its divergence to generate exceptional solutions satisfying multiple stakeholder needs. This requires more complex social and technical capabilities, thereby making the IBES the most complex form of adaptive enterprise to design and coordinate. Issue resolution at this societal scale requires a temporary coordinating structure (e.g., an issue coalition). The IBES addresses issues and ideals rather than profit, but at some point these ideals need to be monetized through VRNs, VIDO’s and/or individuals to become viable in the economic context.



When considering these levels of analysis, organization designers bring different aspects of value to each. At the firm level, designers help organizations optimize technology and work processes. High participation team-based structures are common design elements, which enable organizations to control the most predictable variances in their bounded system. At the network level, designers help organizations develop broader, more effective networks of partners/collaborators. Having this broad network creates greater ability to respond to more dramatic shifts in markets and technologies. Lastly, at the society level, designers help create broad coalitions which develop greater conversation competencies and create large communities with shared values and ideas. These broad-based communities have greater capacity to identify and mitigate large social and ecological issues.

3. STS Ideals, Values & Design Principles in the New Normal

In the period 1945–1953, a series of events undermined the two key assumptions that had governed the acceptance of hierarchical domination of the people by the state. The extraordinary levels of production achieved during World War II destroyed the assumption that government control was required to guarantee the equitable distribution of scarce resources. The dropping of the A bombs on Japan, followed by the development of thermonuclear weapons and the MAD (mutually assured destruction) strategy of the Cold War, was more than sufficient to convince the global population that the assumption that the state guaranteed their security was untrue. M. Emery 2000

Once people no longer accepted these assumptions about domination and security, they began to change their beliefs and values. The traditional cultural value systems that sprang from the acceptance of hierarchical domination were rejected and people sought self-actualization exploring various different belief and value systems. As noted by Thomas Berry (1978), we were then and are now “between stories.” Our contemporaries are still trying to work out a new set of values to be agreed upon, and it is this process that creates the ‘relevant uncertainty’ we now refer to as the New Normal.

In addition, Daniel Pink’s popular statement below suggests STS ideals and principles for work design are becoming mainstream:

Stop treating people like horses and start treating them like human beings. Instead of trying to bribe folks with sweeter carrots or threaten them with sharper sticks, how about giving them greater freedom at work, allowing them to get better at something they love, and infusing the workplace with a sense of purpose? If we tap that third drive more fully, we can rejuvenate or businesses and remake our world. Pink 2010

As [Porter and Kramer \(2011\)](#) noted, “The opportunity to create economic value through creating societal value will be one of the most powerful forces driving growth in the global economy.” STS practitioners have typically accomplished this through the collaborative process of action research.

Action research has been the foundation of Socio-technical Systems (STS) theory and practice since the 1950s work of Trist and Emery in British coalmines. As a co-learning or “learning-by-doing” process, those involved act to:

... contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously. . . . [This] dual commitment . . . to study a system and concurrently to collaborate with members of the system in changing it . . . requires the active collaboration of researcher and client, and thus it stresses the importance of co-learning as a primary aspect of the research process”. Gilmore, Krantz & Ramirez 1986

Inherent in the action research of STS analysis and design is the recognition that all members of the system have a stake in its goals and purposes. Thus effective ‘organizational’ design considers the quality of work life, enterprise objectives and environmental realities. To balance these multiple needs, STS analysis and design traditionally employed a common set of design principles and values, which improved quality of work life, productivity and sustainability.

However, as the VUCA world came to be the New Normal, changing realities within our global environment triggered a ripple effect of reflection and reinvention relative to design contexts, principles and values.

Subsequent reviews of the extensive literature resulted in what we believe to be the key

principles and values relevant to our current practice. We are in agreement with Emery (1976) that ideals are more enduring than values that are currently shifting. In our design work and action research interventions, the following set of ideals and design principles are common across settings and applicable at all three levels of system complexity (firm, network, society):

STS Ideals: (active modes) adapted from Emery (1976)

- Humanity (dignity/spirituality)
- Community (dialogue)
- Nurturance (meaning)
- Beauty (collective creativity/participative democracy)

STS Principles:

- Compatibility of designing, transitioning and end-state
- Joint-optimization of all systems—social, technical, environmental
- Timely information flowing first to the primary task/user
- Ongoing prototyping and redesign
- People who do the work design the enterprise
- Building on strengths
- Stakeholder-centered optimization
- Conscious choice among multiple options
- Collaborative decision making (no design is imposed)
- Shared understanding and purpose

4. STS Innovative Design Processes, Tools and Methods

The New Normal generated three new “design contexts” at the firm, network and societal levels. Each of these levels (or design contexts) presents its new challenges and opportunities. We further suggest that each level has different value propositions, high leverage design elements and design processes and methods including specific analysis and design tools. While grounded in open socio-technical systems theory, we also integrated design thinking, appreciative inquiry and other perspectives to develop new design processes, tools and methods.

VIDO Design Context

At the firm or VIDO level, ‘what gets designed’ include the core work processes, management and compliance systems, and information flows. Alongside traditional STS tools such as variance analysis and key variance control, one also finds business process mapping, statistical tools and rapid prototyping as the methodologies for analysis and design.

VRN Design Context

At the network level, designers work with multiple enterprises (private and public) to create value as defined by the customer. This binds the VRN together through the

commonly held value proposition. The focus of ‘what gets designed’ shifts toward defining shared value proposition, clarifying governance processes, developing network member capabilities, developing information capital, improving working relationships, and creating the right leadership paradigm. Our rich heritage of STS Design Principles and Deliberation Design methodology are complemented at this level by approaches such as Appreciative Inquiry (Watkins, Mohr, et. al. 2011), Two-stage Search Conference (Emery 1999), Human Centered Design (Brown 2009), and Value Network and Social Network Analysis (Allee 2008).

IBES Design Context

At the broadest level of analysis, the IBES, large societal problems (e.g., global coordination of responses to pandemics, etc.) are the areas of concern. Because these “wicked problems” affect everyone, but no one sector working independently can resolve them, what gets designed focuses on processes for -- 1) creating productive dialogue across time and space and 2) building community. The broadly divergent stakeholder groups with widely differing values, competencies, and interests must each be given voice and productively engaged. The approaches utilized to bring this disparate set of constituencies together include Search Conferencing, Scenario Planning, Open Space Technology, Innovation Summits, Innovation Studios and Appreciative Inquiry (Holman, P., Devane, T., and Cady, S. 2007).

As a theory in the 1960s for understanding organization design, *open socio-technical systems* (Emery 2000) was ahead of its time. Trist (1979b) discussed early examples of emerging organizations and inter-organizational domains (networks/eco-systems) for the 21st Century. He foresaw democratized organizations with a high quality of working life and international controls. At the eco-system level, he envisioned the emerging appreciation of meta-societal issues, interdependent objectives and collaborating interests.

Following in Trist’s footsteps, Cal Pava (1983) developed an STS methodology (Deliberation Design) for the nonlinear work that was then emerging in the environment. Our more recent discovery echoes Pava’s work -- the key unit of analysis shared in common by all three system levels (firm, network, ecosystem) is *deliberation* (reflective and communicative behaviors concerning a particular topic).

5. The Missing Design Variable: Collaborative Leadership and Governance Systems

One of the most important challenges confronting adaptive enterprises is designing the coordination processes and roles for developing the leaders needed to operate effectively in the New Normal.

Historically, leadership received relatively little, if any, attention in the field of socio-technical systems design because it was typically linked with the bureaucratic-technocratic paradigm of “command and control” (Perlmutter and Trist, 1977; Austrom and Lad, 1989). This hierarchical and unilateral approach to coordination was anathema

to the STS principles and practices of self-management and self-organization.

Since we define the core purpose of leadership as *building the collective capacity to produce outcomes that matter – people, prosperity, and the planet* (adapted from Anderson, 2002) leadership does not need to be solely a function of hierarchical position, title, or formal organizational authority. Nor does leadership need to be the purview of the few. Arguably, the adaptive capacity of an enterprise would be enhanced if leadership was widely distributed. Contrary to the notion to promote and design leaderless organizations (Brafman and Beckstrom 2005), the authors believe the New Normal requires the design of leader-ful organizations embodying a culture of shared or distributed leadership (Ancona 2005, Gronn 2002, Senge 1996). By distributed leadership, we mean organizations comprised of many people throughout the enterprise who are willing and able to –

- build collective capacity by
- working collaboratively across functions internally and across boundaries externally (organizational, sectoral, geographic, and cultural) to
- continuously adapt within the New Normal environment.

The following design challenges need addressing:

- Designing the appropriate governance and coordination processes and roles – the leadership system for a self-managed, self-organized and self-designed enterprise.
- Discerning the leadership competencies individuals will need to be effective at all three levels of complexity – firm, network, and ecosystem.
- Developing and implementing a leadership strategy for building the deep talent pool necessitated by a distributed leadership model.

Our purpose is to outline an *emergent collaborative leadership and governance methodology* for addressing the above design challenges and building the adaptive capacity of an enterprise at all levels of system complexity.

Important to note here is the STS assumption that governance is (and should be) distributed throughout the organization and is already occurring on a daily basis at all levels, albeit based in some very traditional views.

Join Our STS-RT Community

Our hope is to ignite the dialogue, forge the new partnerships necessary to increase understanding of this New Normal in which we find our practice, and thereby bridge between practice and theory. By building on our long and proud history as open socio-technical systems designers we can create opportunities to evolve the practice of STS -- together.

In this way, we will coalesce into a community of practice co-creating the futures our forbearers in Tavistock, Oslo, Melbourne and Los Angeles knew were possible. These interesting and complex times are a blessing and the passions that unite us are exactly

where our cooperative collaborations need to focus. Join us in merging your capabilities and ours in this “discovery journey”!

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