

Institutionalizing a Systems Practice

Dynamical Systems Innovation Lab

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Briefing Paper

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INTRODUCTION

In order to make sustainable change in complex social systems, it is necessary for people to work together as teams, organizations, and networks of organizations. However, many of the traditional ways organizations (especially in the West) are structured and run are founded on more linear approaches that make it very difficult for these organizations to support non-linear, complex, and systemic efforts. This creates a dual challenge to a systems practitioner – both how to grapple with the complexity “out there” (in the social contexts in which they work) and to grapple with the complexity “in here” (in the complex organizations they work within). This thematic strand looks at good practice in the area of building organizations that can respond to this dual challenge in non-linear and systemic ways. We explore the needed attitudinal, structural, and transactional/ behavioral qualities of a “systems-enabled” organization and consider how organizations can transition their more linear practices into ones that support thinking and acting in non-linear/systemic ways.

For the purpose of our mutual endeavor, we propose the following definitions:

- *Systems practice*: a way of thinking, feeling, organizing, and acting, both individually and corporately (e.g. organizations, networks, teams), that constructively engages with complex, dynamic environments in ways that support learning and adaptation aimed at the production of sustainable systems change.^{1 2}
- *Institutionalizing a systems practice*: the supporting structures (policies, systems, etc.), culture, and behaviors that create an enabling environment for members of the organization to apply systems practice and create sustainable, systemic impacts.³

The thematic paper is organized as follows:

- **OVERVIEW:** In this section we provide a brief overview of the landscape of the thematic area and highlight some key concepts to initiate the conversation as well as some of the challenges organizations face when seeking to institute systems practice;

¹ *Systems-based Peacebuilding* is the art and science of structuring peacebuilding efforts to better anticipate and account for complex interaction effects. Recognizing the inherent chaos and unpredictability of all conflict processes, systems-based approaches also emphasize the importance of monitoring system changes and adapting accordingly.

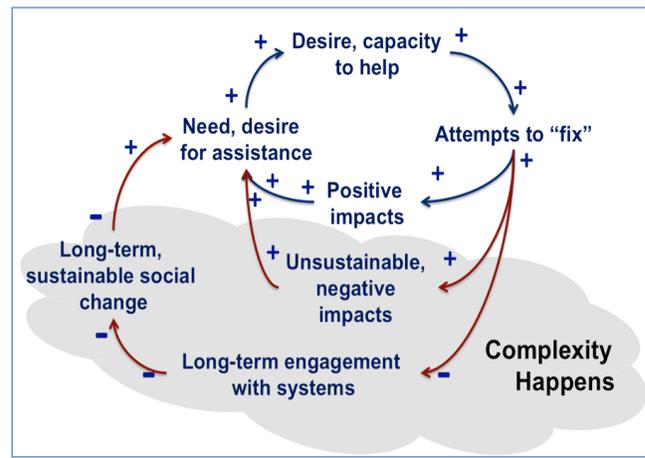
² By understanding these complex problems as the emergent result of a multitude of interrelated factors, systems practice helps to generate, communicate and implement effective solutions which themselves are the emergent result of many coordinated actions converging in a coherent way – therefore ensuring the efficiency of this final, targeted coherent action against the greater complexity of the initial problem.

³ *Institutionalization* is the process of developing ways of structuring peacebuilding-related organizations that better encourage and support systems thinking. Successful institutionalization also requires attention to the process of transitioning from current structures.

- **KEY ISSUES** for building a systems practice: a collection of ideas and input from members of the institutionalization thematic group on the process of how organizations can build a systems practice.
- **CASE STUDIES:** The case studies presented illustrate the efforts of organizations to institutionalize systems practice in their work. It highlights the approaches taken, the challenges faced, and the successes realized. **This material is necessary background for the Institutionalization Experiential Session at the 2014 DST Innovation Lab.**

OVERVIEW

Most organizations working in conflict resolution and peacebuilding are interested in fostering sustainable social change in the areas within which they work. They bring their skills, passions, experiences, and commitments and resources to bear on their interventions. However, many organizations, despite their best efforts, do not see the results of their work fundamentally alter the underlying characteristics and dynamics of a conflict system in ways that produce a sustainable peace. While peacebuilders might effectively support a “fix” in the short term, the long view reveals what can only be deemed a failure. For example, a peace agreement that leads to a short term ceasefire, but leads to even more violence over the mid to long term, or a food aid program that eases hunger in the short term only to lead to even greater famine in the long term.



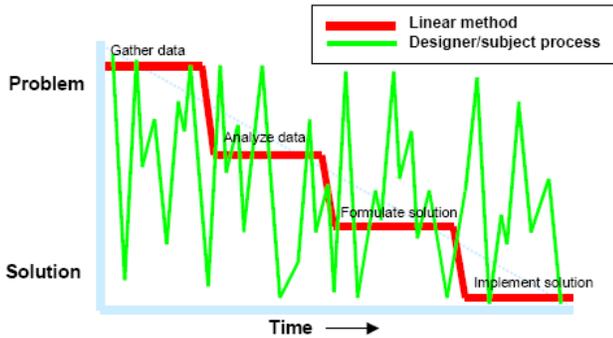
These “fixes that fail,” are all too common in our field. However, this lack on long term success has not lead to a major shift in how peacebuilding or development organizations approach their work. The image to the right illustrates a “vicious, virtuous cycle” that helps explain why. The diagram starts with the basic “desire/need for assistance” (in many places in the world), which drives a “desire to help” among those that are in a position to do so. In turn, this leads to well-intentioned “attempts to fix” these problems. In some cases, these “fixes” create “positive impacts” (e.g. digging a well in a village produces sustainable access to clean water) and this positive experience leads to a desire for even more assistance (the virtuous cycle).

However, in more complex, dynamic environments, these attempts to “fix” the problem are either unsustainable (e.g. the well breaks down in a year) or have negative impacts (e.g. the well causes conflict between rival clans that battle for control of it). This “failure” only increases the need for even more assistance in the future (a vicious cycle). Even worse, the pre-occupation with finding “fixes” to complex problems takes away resources from longer-term, more systemic attempts to engage dynamic systems (e.g. parliaments and donors want annual development results to justify their expenditures).

Key Challenges

Why are our interventions not sustainable? Conventional wisdom teaches us that when faced with a problem we follow distinct steps in seeking a solution. First, we collect data and conduct our analysis or assessment. Then, having framed a solvable problem—one that necessarily falls within the domain strength of our organization—we identify the ‘correct’ solution. This solution is typically based on

our theories and beliefs about how conflict and conflict resolution works, and may take the form of a capacity building program or direct intervention, which we then implement in a culturally and contextually relevant way. This method, represented by the red line in the image below, is the recipe for linear problem solving found in most textbooks, as well as peacebuilding or conflict resolution toolkits. This works fine where the problems are merely complicated or “tame” (see the table below for a recap of the tame/wicked dichotomy per Rittel and Weber, 1973), and where best practices have been honed through process improvement approaches. But when people are observed grappling with complex problems, they proceed by working through their understanding of the



problem *at the same time* as they are formulating possible solutions. The actual process used is much more dynamic and might look more like the green line in the image (Conklin, 2005). Observe that problem understanding does not level off; rather it will continue to be updated and iterated through engagement with it. This is because wicked problems are not amenable to a generalized systems approach. Rittel and Webber (1973) suggest a “second generation” systems approach which proceeds “as an argumentative process in the course of which an image of the problem and of the solution emerges gradually among the participants, as a product of incessant judgment, subjected to critical argument.”

TAME PROBLEMS	WICKED PROBLEMS
The problem statement is well defined and stable	Problems are ill-structured; emerge as an evolving set of interlocking issues and constraints
There is a definite stopping point—when the solution is reached	With no definitive solutions, problem solving ends when resources run out (money, time)
The solution can be objectively evaluated as right or wrong	Solutions are not right or wrong; assessed in social context; stakeholders judge
The problem can be identified as belonging to a class of similar problems which are all solved the same way	Every wicked problem is essentially unique and novel; embedded in dynamic social context
Solutions can be easily tried and abandoned as necessary	Learning about the problem occurs in the solution; solutions tested often spawn new problems
There exists a limited set of alternative solutions	Potential solutions are a matter of creativity; what is valid, pursued or implemented is a matter of judgment

Abstracted from Rittel and Webber (1973) and Conklin (2005)

Linear problem solving ignores two types of complexity. Unfortunately, in the face of problems of the wicked kind, many operations approaches will apply the first generation systems process (the virtuous cycle identified above). The first and most important decision made will be one to prioritize, select, name, and otherwise bound the problem-solution space. While this will result in a clean problem definition, a clear solution space, the system of constraints and ultimately the performance measures, it will necessarily eliminate from focus many other context specific issues. We take this approach with the best of intentions, hoping that everything will fall in to place. And, this is an understandable

response: **the clearer the task (fix a problem) and the method to perform the task (linear problem solving) the easier it will be to orchestrate collective action** (e.g. a parliament funds a development agency that allocates grants to implementing agencies to perform specific tasks designed to meet pre-set objectives).

The naiveté here is that when we are too quick to tame the wicked problem so that we can create a manageable and knowable entity to act upon, the problem tends to reappear (at best) and at worst worsen the original problem (Conklin 2005). In the end, this only takes us further from the generally agreed upon ethic to “first, do no harm” (Anderson 1999).

The diagram above shows how one person works through a wicked problem. Now, imagine adding another person (or a dozen organizations funded by two dozen donors) working in the very same problem-solution space, with their individual strengths, capacities, preferences. This is a picture of social complexity and the complexity of the “in here” that we suggest. Conklin (2005) defines social complexity as being “a function of the number and diversity of players who are involved in a project. The more parties involved in collaboration, the more socially complex it is. The more different those parties are, the more socially complex.” Therefore, we are describing two forces at play; the wicked problem and the social-organizational complexity involved with engaging it. Conklin (2005) tells us “The concepts are distinct; while wickedness is a property of the problem/solution space and the cognitive dynamics of exploring that space, social complexity is a property of the social network that is engaging with the wicked problem.”

Acknowledging the complexity “in here”. When we do not understand our problems as wicked and our organizational contexts as socially complex, we are not effectively prepared for the dynamics in the system that results from our activities. We may see our efforts as futile and the frustration we experience as inevitable. These are the “natural forces that challenge collective intelligence, forces that doom projects and make collaboration difficult or impossible.”

Fragmentation is the outcome of the varied and unaligned perspectives, understandings, and intentions of the stakeholders. Fragmentation is the antithesis of cooperation and exists deep within the “culture and practices of project work” (Conklin 2005). The project, then, of making sense of and framing situation and determining how best to engage with it is fundamentally “knowledge work” which, according to Addleson, Brumburgh and Chawla (2004), “depends on people-to-people ‘connections’; dynamic, fluid networks supported by interpersonal relationships.” Such coordinated action involves more than simple sharing information; **it is a call for organizations to completely reconceptualize their operating strategies.**

Learning to organize and organizing to learn. Conklin (2005) says, “Social complexity requires new understandings, processes and tools that are attuned to the fundamentally social and conversational nature of work.” Called ‘aligning’ by some scholars, dealing with social-organizational complexity is not done primarily through formal structures, hierarchies or divisions—all potential contributors to fragmentation—rather “aligning has to do with the culture of the organization [or network]: peoples values, beliefs and practices, which are reflected in how they interact. ...Aligning is revealed in the energy, passion, motivation, and commitment that people have for their [joint] work” (Addleson, Brumburgh et al. 2004). People committed to aligning have put aside competition and are building effective bridges for collaboration and creativity. Whether it is thought of as coherence, aligning, engagement, or sense-making (Daft and Weick 1984; Addleson, Brumburgh et al. 2004; Houghton and Ledington 2004; Conklin 2005) the issue is not *really* one of process; rather, each of these conceptions

speak to the quality, depth and commitment created in the ‘white space’ of organizational life—anything that goes on between people outside of formal channels: between the ‘lines’ on the org chart, around the water cooler, after the meeting, etc. The work in the white space (coherence, aligning, engagement, sense-making) is relational, discursive and emergent.

Pioneers of institutionalizing systems practice. Peter Senge and colleagues in the *Fifth Discipline Fieldbook* offered a practical set of principles and approaches for organizations seeking to transform into learning organizations. However needed and useful it is to build a learning organization and systems practices, such efforts often confront resistance. Examples from the peacebuilding field are captured in Reychler and Paffenholz’s (2001) edited volume, *Peacebuilding: A field guide*. In that volume Kapungu (“Peacekeeping, peacebuilding and the lessons-learned process”) says, “Learning is a process, and institutions and leaders tend to resist the process of learning the lessons that do not fit into their framework. In this context, a state of mind willing to learn is necessary to attain effective results.” He clearly points to process and the role of ‘defensive routines’ in blocking learning (Argyris 1974) and the power of mental models in shaping work, regardless of context.

Arno Truger (“Training peacebuilders and peacekeepers”) recognizes the need for individuals to function in increasingly complex scenarios of multidisciplinary peacekeeping operations where communication among the various actors and across functional areas increases. Truger shows how training field workers must use a mixed and interactive method, including “lectures, working groups, exercises, and readings” in order to enhance “interaction, reflection and integration.” In the final chapter, Paffenholz (“Peacebuilding: A comprehensive learning process,” p. 535) suggests peacebuilding as a comprehensive learning process. She calls for the peacebuilder on the ground to look beyond their daily tasks to see themselves as part of a conflict context with opportunities to support peacebuilding. Specifically she suggests adopting a shared vision of peace, committing to full participation, and flexible but sound processes. That this plea comprises the final chapter of a comprehensive volume points to need for theory that speaks to learning and acting in complex environments.

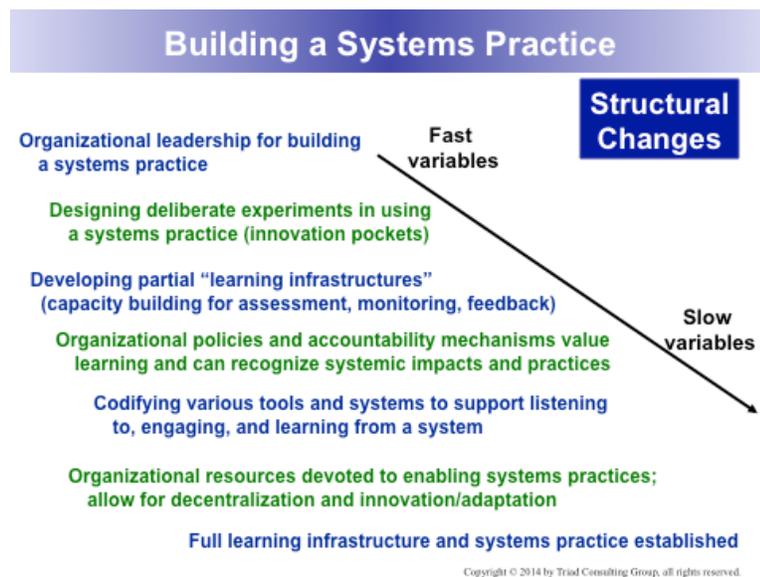
The nature of the relational space that supports learning. If what is needed in situations of social complexity, where the problems are wicked, is a building of shared understanding about the problem and a shared commitment around possible solutions, we need also to explore theories of how relationships work and what goes on in the relational space with regard to meaning making and knowledge creation. Nonaka and Konno (1998) suggest the concept of “ba”, which translated into English means “place”, as a useful platform for emerging relationships. Ba is the shared space, the context, in which knowledge is created as a social act. Knowledge exists in ba (context) and when knowledge is removed from context (e.g. through reification as in the generation of “best practices”) it becomes information. Von Krogh, Ichijo and Nonaka (2000) suggest that in order for individuals to want to share tacit knowledge, the critical component of creativity and innovation, they must experience “care” in the space. They describe five dimensions of care which support a knowledge enabling context: mutual trust, active empathy, access to help, lenience in judgment, and courage (Krogh, Ichijo et al. 2000). Where there is care, there is access to help and expertise without judgment, sincere interest in the projects and progress of others, and the freedom to experiment and create without fear. Competitive environments do not enable knowledge creation. “The right context”, say the authors, “[is] one that fosters emerging relationships within microcommunities, across group boundaries, throughout an organization, whatever it takes to unleash tacit knowledge” in order to drive creativity and innovation (Krogh, Ichijo et al. 2000).

KEY ISSUES FOR BUILDING A SYSTEMS PRACTICE

The following questions and response from the Institutionalization working group are meant to give a window on how organizations can best enhance their ability to grapple with complex social systems.

1. What are the key attributes of an organization that has institutionalized a systems practice (structural, attitudinal, transactional/behavioral) that are different from a traditional organization? In response to this question there was a focus on being proactive perhaps through cross-functional teams and being open to learning and noticing signs of change throughout the system. Most comments can be grouped into structural, attitudinal and transactional characteristics that will evolve over time:

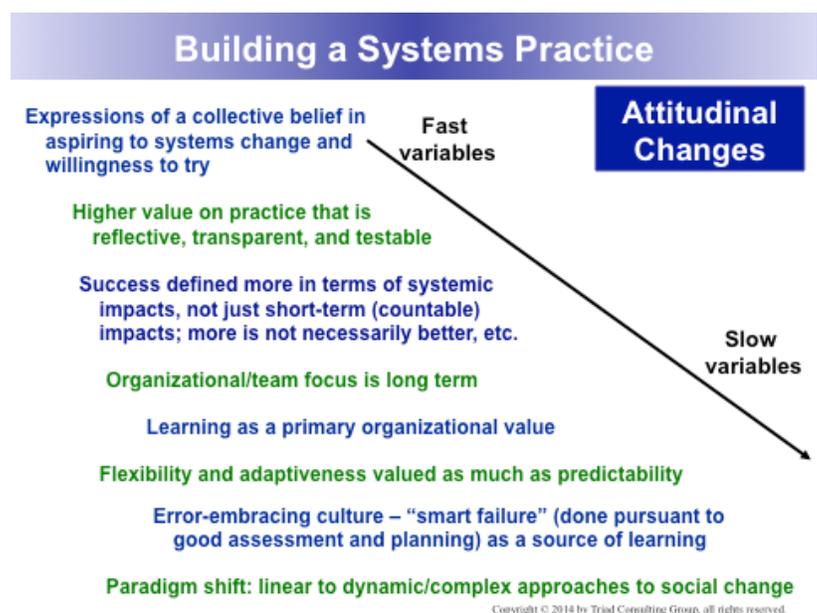
Structural Attributes:

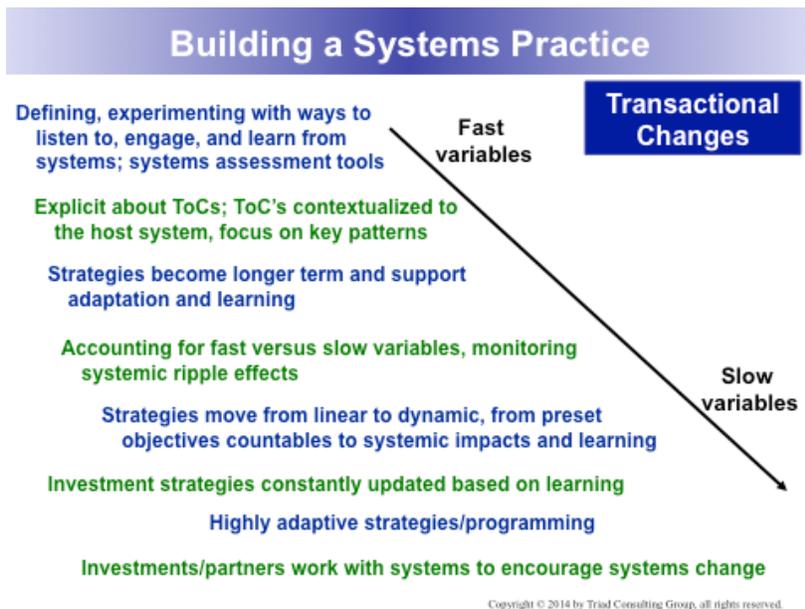


- De-siloization and interdisciplinary collaboration are useful for implementing a systems practice
- Support- funding and protection of structures that provide “balance” and “systemic feedback”
- Hierarchical structures go against non-linearity; How to horizontalize?
- When any change is thought of or initiated, an exploration of how this change will affect other aspects of the organization will be considered. For example, a change in direction impacts recruitment and hiring, learning & development, all HR schemes, mentoring, career development, talent development, R&D, and more.

Attitudinal Attributes

- Embracing complexity; When there is time sensitivity, how to keep open possibilities and not rush to closure, decisions, actions
- The use of the word culture is key, since this kind of thinking is a cultural transition.
- A learning culture must be well-integrated into the organization, and there should be some ease in thinking across traditional silos (even if programming is not yet integrative).



Transactional Attributes

- Proactiveness- constantly looking for feedback, data, etc to inform everyone about the state of the system
- Looking forward to the next step, innovation
- Transactional/Behavioral: Need ethos of collaboration; Need level of accountability - where are the levers?; Evaluation is important; Practice inclusion; Need lots of feedback loops
- I have been using the term “Complementary serendipitous collaboration.”

- One example is the regular use of cross-functional teams, for example, to have an inclusive practice from the beginning. The different functions bring their perspective so there is knowledge from the start about how new initiatives or any changes will affect the entire systems. Then each of these functions has an opportunity to provide input to shape the change, rather than being thought of after or not at all.

2. What are some good practices that practitioners can employ to help organizations institutionalize a systems practice?

In general, the practice of building an organization that is able to effectively engage complex, dynamic systems is, itself, an exercise in systems change. These organizations are themselves complex systems and many of the same tools and practices we would use to engage a complex system like Sudan or Detroit, we would apply to organizations trying to build a systems practice. For example, one comment noted:

- It makes sense to analyze the process of institutionalization systemically. This means, for example, that we ought to systematically try to anticipate and account for feedback loops that might support or undermine our efforts. We also ought to build into our institutionalization efforts the adaptive flexibility needed to respond to inevitable chaos and unexpected events. This suggests that we avoid getting locked into a particular institutionalization formula. Those seeking to implement systems-based approaches need the flexibility to be able to successfully work around the many unexpected obstacles that are likely to present themselves.\

Practices that support institutionalization of systems approach include mapping and visualization of the system including engaging stakeholders from multiple levels within the system. There is an educational and learning component to incorporate changes as they occur and this could naturally lead to innovation. All of these practices need to have elements of quality control to make the best use of feedback loops and to maintain a sense of balance in the system.

- The ultimate goal of our institutionalization efforts is to show quite a large number of people how the application of the cluster of ideas associated with systems thinking can help better advance their “peacebuilding-writ-large” goals. Given that, I think that we should assume that much of our target audience will not, in any rigorous sense, be “systems thinking” experts. This then suggests that, as a general principle, we should try to write things in as jargon free and accessible manner as possible. It would probably be good to find a few folks who are typical of this audience and who would be willing to review any documents that we produce (for broad, not internal, distribution) to make sure that there are easily understandable.
- One of the most forward thinking organizations is Valve (a prominent game developer) who has broken down all silos and encourages spontaneous collaboration. It expects its employees to self organize in a way that is most efficient according to each task/project. This has been proven extremely successful for them because they are more contained (meaning that they do not have thousands of employees) and have embraced a culture of effective conflict resolution amongst its members (meaning that they are intrinsically cognizant of their positive interdependence, they appreciate and expect the intellectual opposition as a duty of their members towards improving their collective efficiency and promoting innovation.) Their desks do not have a specific space but they move them around on wheels.
- In the area of conflict management: the creation of conflict management system in some organizations follows a similar pattern: Originally, many processes are not systemic, connected only with HR/ management. The first independent structures tend to be rights based, followed by interest based structures. The last stage is the creation of an integrated system. The WBG is an example of this evolution
- The Mayo Clinic is an extraordinary example of an organization re-engineered to operate using a systems practice. All patient care now happens with all specialists cooperating together, treating the patient holistically rather than as a series of disconnected complaints or health issues. I can speak more about this (from the perspective of the parent of a patient, and more objectively).
- Educational Practices to keep the issues in front of leaders and members alike, including training, outreach, communication plans, etc
- Innovation- approaching systemic issues related to organizational culture from different angles, inviting scholars, etc
- Quality control- design and maintain units that provide balance and systemic feedback using best practices
- It is very helpful (critical?) to: (1) be engaged with multiple levels in the organization – the Board/donors, leadership, program managers, staff and try to build alignment; (2) build “pull” not just “push” for these ideas.
- Exploring this topic through mapping and other visuals to document the layers and the complexity in the system from the organization’s perspective; asking provocative questions that stimulate systemic thinking; identifying and filling gaps in capacity.
- Structure – even physical space can be designed to support the sort of organizational dynamics and outcomes that one hopes to achieve. Space can encourage or inhibit interaction and communication among people in the organization who have to collaborate. Attitudes have to reinforce the message that is communicated by the space. A cooperative/collaborative attitude is essential to enable people to focus on collective goals rather than just individual accomplishment. Of course reward criteria and procedures need to be in synch with the behaviors and attitudes that are desired.

- Schedule regular times for critical reflection on individual and group functioning. Look for systemic factors that contribute to problems, failures, mistakes. Organizational M and M rounds

3. What are the key challenges you confront when helping organizations institutionalize a systems practice?

- Resistance from HR/ Legal to a “checks and balance” approach to conflict management systems
- Concerns with costs- difficulty proving value ahead of time
- How do we educate for adaptability? To be comfortable with uncertainty? For self-reflexivity what is my role and positioning within the system and how does it affect the system? We need to think about this on an ongoing basis.
- How do we educate to be a risk taker, calculated risks? And not a “siloeed” risk, but a team risk?
- Not something that will happen overnight and we need to educate for persistence
- From different experiences:
 1. Leading with a tool – e.g. systems mapping and planning – did not work as well as hoped. The tool was too alien to the culture and established way of doing things to get much traction and ended up confusing systems mapping with systems thinking (so if the tool seemed to difficult to do on their own, it meant that systems thinking did not have anything to offer them).
 2. There is the generic problem of organizational change where people are trying to build the bike while riding the bike (or better turn the bicycle into a motorcycle while riding it).
 3. Swimming up stream – even if the organization makes the transition, they are working with many organizations that have not.
 4. The tension between doing and improving (many program people can feel a tension between adopting a different way of thinking and acting that is unproven in their realm and which is taking them away from doing what they used to do – and which was getting pretty good results by traditional measures. Similarly, it is hard to motivate practitioners/organizations to change when you basically say: “what you are doing is understandable and is leading to some positive impacts, but it is really not sufficient/enough to make real, sustainable change.” This is especially true when they can look at others and say “I am not doing any worse than them...”
 5. The tension between finding fixes to important problems and grappling with complexity and systems (see the vicious, virtuous cycle described above)
- Like Quality assurance, systems practice is a culture-based concept that requires strong leadership commitment for its implementation. The organizations that can benefit from such practice need to embrace it in a profound way in order to institutionalize it. Some of the challenges may have to do with
- Incomplete understanding of some of the basic premises. Some people might have a superficial understanding so it is important to clarify and support the importance of such approaches in a quantifiable manner.
- Siloization (geographical, disciplinary, structurally and culturally) as well as top – middle – bottom management/workforce disconnect.
- Established organizations may need ways that allow for systems thinking to inform their decision making processes in a controlled fashion without interfering with certain balances,

structures. Perhaps they can benefit from a combination of parallel, safe structures, spaces and a series of cultural training in order to progressively balance the structural with the attitudinal and the transactional. As in the SAT model, I believe there need to be coordinated approaches during such an implementation.

- There is still the impulse to measure impact along linear lines, rather than using a systems lens; there is resistance to the kinds of programming changes that might follow a strong systems approach (e.g. staff go along with things like systems mapping, but do not want to change long-held programming practices even when new approaches may be more successful in the long term).
- Often people want either a quick fix or do not give the necessary amount of attention and time to building a systems practice. Sometimes it is difficult to engage the “right” people to champion it because it is not a priority.

4. What have been some successes? What do you see as future opportunities/ideas or growing edges for advancing the theory or practice institutionalizing a systems practice?

- Since systems thinking is a learned skill, successful institutionalization efforts will require a strong education and training component. While generally preferred, face-to-face education and training opportunities tend to be limited in duration and frequency. There is, therefore, a need to figure out how to make web-based, larger-scale training programs really work. Here the key is to develop a series of easy-to-understand web-based materials capable of explaining key concepts to wide audiences. Still, I think that the critical challenge is figuring out how to use the interactive capabilities of today’s Web to provide the interaction opportunities which are so benefit to face-to-face instruction.
- The need to present our ideas to lay audiences also suggests that there is a role for something that we might call “conflict mapping LITE” – mapping techniques that can quickly and easily guide users to the “punchline” that tells them how they might better deal with specific situations. This would supplement existing, conflict mapping “HEAVY” techniques that would still have to be the backbone of the comprehensive analyses used by core leadership
- Google – 10% of time is on own pursuits; encourages thinking differently
- Use of software to assess/ measure systemic features
- Most organizations that create a systemic way to manage conflicts tend to keep it
- I am working with a consumer goods company who is beginning to understand and get on board about changing their negotiation culture. It is not completely there yet, but they acknowledge and accept that what they want involves more than a training session and needs to be more fully integrated into their organizational culture. Still far from being fully systemic, but it is a work in progress.
- It is easier to envision something new than to transition to something new from an existing situation
- Education and pedagogy – content and form (i.e., for peace and of peace); need to walk the talk; therefore, systemic thinking needs to be done with a systemic approach
- We have content and now we need an ongoing practice
- There is definitely a lot of resonance in the system – among donors, practitioners, and NGOs – with (a) the “complexity diagnosis” – that many of the tough problems faced in the peacebuilding/development world are rooted in the realities of complex systems; and with our inability to deal with them – e.g. vicious, virtuous cycle; and (b) the need to use different tools and practices to better understand and engage systems.

- Greater accessibility; framed in a way that the client sees what it is, how it might impact them and the amount of time it would take, sooner than it now takes. It may need to be broken down into steps that are easier to grasp.

5. What idea, project, or practice would you most like to try in this area?

- There is an unhealthy preoccupation in the peacebuilding world with finding “tools” – which they equate with “fixes” that can be mass produced... However, we may be able to use this as a leverage point if we can meaningfully create systems and complexity tools which require organizations to retool their basic organizational structures and practices.
- I am presenting in a DevOps (developers and operations) conference end of May about the institutionalization of such practices in technology companies. My current concept includes a potential software component and a culture training/consulting component. I would love to talk more about it if anyone is interested. I am also very interested in the implications of this thinking in governance, I am currently preparing a paper for John Jay’s international conference on inclusive governance title “dynamical governance”, where I am using SAT and DST principles – also would be interested in talking more about it.
- <http://prezi.com/j3pzk7epf3zf/embracing-complexity/>
- I am particularly interested in the emerging new field of “Infrastructures for Peace” respectively “Peace Support Structures” and their organizational design as entities with a time-frame related to the needs of peace or conflict transformation processes. The “Insider Peacebuilders Platform” (IPP) for the Deep South of Thailand was established in 2011 as a network of joint learning of persons with a broad spectrum of proximity to the conflicting parties (inspired by Rob’s “Network of Effective Action”). The network structure enabled the initiative to keep a high level of systemic creativity. But last year – in light of an official Track-1 Facilitation-Process (managed by the Malaysian Government) – we decided to establish a joint and multi-partial support structure in the form of a “Peace Resource Center” (PRC). The PRC will comprise three components: a shared knowledge management center on peace processes, a “Common Space” of representatives and proxies of all parties to engage in incremental problem solving and a (positive) peace monitoring and polling entity to complement the existing conflict monitoring capacities.

CASE STUDIES: Institutionalizing a Systems Practice

In order to help the Innovation Lab participants develop useful and innovative thinking on how organizations can best apply a systems approach, we have identified three short case studies to flesh out important challenges, opportunities, and good practices. We hope these cases serve as catalysts for the Lab developing new, innovative ideas for how best to institutionalize a systems practice and identify good questions for future work and research.

The three case studies represent diverse experiences in trying to apply systems thinking both as a core mental model for change and a set of tools that enrich an organization's effectiveness. In the Lab session devoted to Institutionalizing a Systems Approach, we will have short presentations from each of the organizations in these case studies. In order to start the process of considering these cases, we have provided some background on each organization and framed our consideration of their experience with applying a systems approach as an organization.

The three cases are:

- **The Ulupono Initiative (UI).** UI is a Hawaii-based organization. It represents a case where systems thinking was used as a foundational concept in constructing UI from the start. It provides an example of how an organization might apply systems thinking as a core practice and fundamental value.
- **US Agency for International Development (USAID).** USAID is a large development organization that has been running development programs around the world for the US government for decades. Units and individuals within USAID have been trying various ways of applying systems thinking to their work for years. It provides an example of how individuals within a large bureaucracy can try to apply systems thinking in an organization that is not set up use systems thinking and can, in many ways, work against efforts to apply systems thinking successfully.
- **Humanity United (HU).** HU is a foundation that makes grants, engages in policy advocacy, builds networks, and takes direct action. It was not originally set up to implement a systems approach, but has invested heavily in building systems thinking tools and practices into its work. It provides an example of an organization that is trying to make the transition from a "traditional" practice to a systems practice.

Ulupono Initiative (<http://www.ulupono.com>)

Who they are and what they do. Ulupono strives to "improve the quality of life for the people of Hawaii by investing in Hawaii-focused businesses and organizations." Their vision statement goes on to so say that they use a "systems approach to understand how partners and projects work together to create the most impact." They describe their approach to making sustainable change as follows:

...in nature, ecosystems comprise many elements that all work together to survive or perish. Using this approach, we are continually working to understand how things influence one another within Ulupono's three key sectors of food, energy and waste in Hawaii. We're identifying key partners, leverage points and linkages to determine where the most impact can occur. It is our belief that you cannot change one aspect of a system without affecting many others. Our goal is to infuse investment capital, or grants, along with collaboration and guidance to help our partner organizations find success in achieving impact.

Typically, Ulupono makes for-profit investments between \$2 million and \$10 million and and not-for-profit investments between \$250,000 and \$1 million across three broad sectors, locally produced food (37%) ; clean, renewable energy (61%); and waste reduction (3%) (although they are also working more explicitly on issues of water). Ulupono is the leading investor in local food in Hawaii and plays a critical role of sponsor equity for renewable energy project development. Their total investment budget since their founding in 2009 through mid-2013 was almost \$30 million, 21% of which was given out as grants and 79% in investments and trials.

How they do what they do. Ulupono three key elements to their strategy:

(1) Systems thinking + value-chain thinking + social network theory. UI deliberately overlays economic value-chain thinking and social network theory with systems dynamics in order to identify potential leverage points in a system. They exploit that leverage point by using their investment acumen to make strategic infusions of capital (as investments or grants). Simultaneous investments are made across the system to create synergies within the value chain from byproduct and coproduct utilization, known as industrial symbiosis. In turn, these investments then serve as a catalyst for market forces to self-replicate and amplify the impact of initial investment in was that further their core goals of improving local food production, increasing the supply of clean energy, and/or reducing waste. In order to target their investments, UI does systems mapping of particular industries, e.g. cattle ranching on the Big Island, to identify leverage points and potential investment opportunities and strategies. Ulupono uses social network theory to determine who to invest with, based on their ability to lead the sector social network.

(2) Focus on Leaders. UI also sees leaders, working through their networks, as important sources of leverage in a system. More than their investments themselves, these leaders can become a powerful force for self-replication of a project impact. UI works in partnership with key leaders to develop business plans and an investment strategy. As Kyle Datta, Ulupono's General Partner, says, "the ideas have to belong to the leaders, not Ulupono."

(3) Trust! UI sees investing in leaders to make catalytic change as a "very human process," not just a transaction. The core of what Ulupono does looks very much like a private equity operation, but it takes place within a systems thinking understanding of how sustainable change happens. So, Ulupono is deeply involved with their partners – they invest in building social capital a relationship that is strong enough so they and their partners (investees) can learn and adapt together over the course of the investment. It is this trust-based relationship that leads to real transformation in the system.

Implications for using systems thinking as an organization. In order to create an organization built on a systems approach, Ulupono has built several qualities or operating practices into their organization that are different from traditional organizational structures, culture, and business practices:

- *Embracing ambiguity, contradictions, and even conflict.* UI has built an organizational culture contains practices and mental models that seem contradictory. For example, Ulupono combines both linear and non-linear tools: on the non-linear side, they use systems mapping and the concept of leverage points to target their engagements/investments in a market sector; while on the linear side, they use traditional investment analysis and valuation techniques to implement specific investments. UI uses both qualitative and quantitative modeling. And, UI measures success both in traditional investment terms, but also in terms of how well they create non-linear, self-replicating change in a sector.

- *Handling failure.* Ulupono follows what might be described as a “fail smart” approach. They know that certain investments and actions are more like true experiments – where the value in the action is what they learn as a result (e.g. about a certain market, organization, or possible leverage point). However, it has honed a methodology to choose these experiments very carefully. At the core of this practice however, is a general value that says failure, if done as part of a rigorous process, is not inherently bad and can be quite positive.
- *Combining accountability with a lack of control/high adaptability.* Many traditional organizations are fundamentally built around trying to maximize their ability to control their environment (e.g. to be better at picking high return investments, seize market share, etc.). UI has managed to build an organization around the assumption that they are not in control of the social and financial ecosystems in which they work. For a traditional organization, control is a necessary ingredient because it allows you to have accountability in the form of measuring whether employees or projects met pre-set objectives. UI takes the view that it is accountable for system wide outcomes, even though it is only one player within the system. In turn, this means that UI believes that it needs to be rigorous in planning its investment and influencing strategies, but also has to value “letting go” of the replication process once its business partners have adopted the change model.

US Agency for International Development (USAID)

Who they are and what they do. USAID’s mission is to “partner to end extreme poverty and to promote resilient, democratic societies while advancing our security and prosperity.” It is [organized](#) into six geographic bureaus, five functional bureaus, four “headquarters” bureaus, and many field missions around the world. USAID’s FY2015 budget request was \$20.1 billion for the 12 foreign assistance accounts that USAID implements. Of this overall budget request, “\$9.7 billion is in core USAID accounts: Development Assistance, Global Health Programs, International Disaster Assistance, Food for Peace Title II, Transition Initiatives, Complex Crises Fund, and USAID Operations.” USAID works across [10 sectors](#) including global health, education, economic development, water and sanitation, food security, human rights, and conflict and crises.

Without going into further organizational detail, suffice to say that USAID is a large, complex bureaucracy that is working in some of the most complex and dynamic societies around the world.

Challenges for Using a Systems Approach. From an organizational perspective, the challenge USAID faces is that they are trying to address many classically complex environments - for which a non-linear, systems approach is well suited - but is classically organized around more linear change models and its operating procedures often work against individuals, let alone the organization, taking a systems approach. For example, contracting and budgeting procedures rely heavily on establishing pre-set objectives and holding implementing partners accountable to meeting these objectives, which makes it difficult to implement flexible and adaptive programming. Also,

In addition, USAID is organized into functional bureaus, which have the advantage of developing expertise in specific areas, but which often results in a too narrow focus that does not engage the true complexity of most development challenges (e.g. if a community lacks access to clean water, build a water system).

A report from a project on integrating systems mapping into the USAID's Conflict Assessment Framework (CAF) noted that any attempt to build systems thinking into one tool (like the CAF) will be:

...less effective if the surrounding policies, procedures, and practices within USAID do not co-evolve to become more systemic. For example, the current "Program Life Cycle" at USAID is divided into four stages, assessment, planning, implementation, and evaluation. A common complaint from USAID staff is that there is often too big a disconnect between each phase, e.g., that the insights from an assessment are not sufficiently incorporated into the program planning phase and that evaluation results are not fed back into future assessments.

Over the years, however, there has been lots of good work by individuals and units within USAID to apply systems thinking. For example, the Office of Transition Initiatives was formed in 1994 to allow programs to be more agile and responsive to local conditions. As referred to above, the office of Conflict Management and Mitigation has applied systems thinking in developing and implementing both the CAF and the related Interagency Conflict Assessment Framework (ICAF).

Perhaps the most important development to date has been USAID's conceptual framework on strengthening local systems, which "places local systems at the center of all our efforts to promote sustainability." The [report](#) (April 2014) on this framework starts from the premise that a systems view is fundamental to USAID's success:

The focus on local systems is rooted in the reality that achieving and sustaining any development outcome depends on the contributions of multiple and interconnected actors. Building the capacity of a single actor or strengthening a single relationship insufficient. Rather, the focus must be on the system as a whole: the actors, their interrelationships, and the incentives that guide them.

Implications for Institutionalizing a systems practice. USAID has both significant challenges for implementing a systems approach and signs of progress and promise that it will develop the systems tools and practices needed to grapple effectively with the complex environments within which they work. As a case in how to institutionalize a systems practice, USAID poses several interesting questions, including:

- How to balance the potential/need for an organizational "enabling environment" for a systems approach with the difficulty of transforming a very large and geographically dispersed organization? And, to what degree is it necessary to make centralized, organizational shifts in policy, incentives, structure, and/or culture versus empowering individuals and smaller business units to use systems tools in spite of the organizational barriers to them doing so? Related to this
 - Is it enough to create pockets of innovation, where pilot programs can experiment with more robust systems practices?
 - Is it enough to focus on the more marginal programs that are amenable to trying a systems approach (e.g. evolution versus revolution...)
- How to counter the built in inertia of the current systems – that produces enough development "fixes" that work – to inhibit new systemic efforts and/or excuse the lack of efforts to grapple with complexity and produce better, long-term/sustainable development impacts? The current system does "well enough" to ensure its continued funding and operation, so where will the real driver of change come from (especially when significant change may take resources away from direct work in the field in favor of organizational change efforts)?

- How to fit a non-linear approach into a linear world? Even if USAID were to try using a systems approach, they live in an environment that does not use this approach (e.g. Congress, which has budgetary and regulatory authority demand more simplistic, short-term “successes”). It may be very difficult for USAID to embrace failure as part of a successful systems engagement, measuring longer-term and non-linear impacts, and valuing learning as a critical measure of success (e.g. satisfying the demand for accountability in ways that do not force falsely linear and reductionist approaches).

Humanity United

Who they are and what they do. Humanity United (HU) was founded in 2005 as a foundation dedicated to “building peace and advancing human freedom.” HU, like Ulupono, is part of The Omidyar Group. In 2013, the organization or about 36 people spent \$23.2 million in grants and direct impact activities (DIAs), for a total of 158 grants and DIAs (see the [full 2013 report](#)). HU is active in several geographic (Sudan/South Sudan, Nepal, Democratic Republic of Congo, West Africa) and thematic (Corporate Engagement, Global Solutions, International Justice, Human and Philanthropic Capital, US Leadership) initiatives. HU uses a variety of tools, especially investing in leaders, doing advocacy, making grants, convening, advising, and building networks (such as the Alliance to End Slavery and Trafficking – ATEST). Over the years, HU has evolved from HU 1.0 (2005: when it was launched as an independent project within the larger Omidyar Network that largely focused on ending human slavery), to HU 2.0 (2008: when HU began operating as an independent grant maker), to HU 3.0 (2014: when HU began its transition to a systems practice).

Experience at building a systems practice. In 2012, at the encouragement of The Omidyar Group, HU experimented with applying systems mapping to refining the strategy for their work in Democratic Republic of the Congo (DRC). The effort had mixed results, but the bottom line was that it produced little lasting change at HU. One of the key obstacles was that this initial systems work remained an isolated project and was not integrated with a more holistic organizational change effort. At about this time (January 2014), senior leadership of The Omidyar Group, Pierre and Pam Omidyar and Mike Mohr, issued a memo to all TOG organizations and initiatives that presented them with the 5-year challenge of improving their individual and collective contribution to making sustainable social change in the various arenas in which they work. Specifically, the memo stated:

...2013 was a year where we became more convinced that success with individual investments/grants are important achievements but may be insufficient to catalyze success at the larger scale of our ambitions.

Many leaders across TOG have asked for more specific guidance on what we think success at this larger scale will require, so here is an explicit framework we are suggesting to assess our efforts toward achieving our common goal of making durable social change at scale. We are trying to be clear and transparent while acknowledging that we expect to refine this framework with you over time...

...we believe another set of standards is necessary to assess impacts over the mid to long term within the sectors/systems we are trying to improve. These sectors exhibit complex interrelationships among a diverse set of societal forces and social dynamics. Catalyzing change in them will require patterns of behavior in each organization that reflect:

1. **Listening** to each system in which we are working

2. **Engaging** each system toward positive social change
3. **Learning** from each system in order to improve our efforts over time

In response, HU addressed this challenge, as well as the prospects of building a systems practice, during an all staff retreat in February 2014 and a “Generative Session” for senior leadership and their investment teams in March. As a result of the Generative Session, HU produced a four-part strategy for institutionalizing a systems practice at HU:

- *Enabling Environment*: developing a set of key organizational values, structures, and practices that would define a future HU that is able to be even more impactful.
- *Learning Organization*: Improving HU’s ability to constantly learn and improve based on its experience.
- *Systems Pilot*: HU selected one new program area that would fully implement a systems approach from the outset, regardless if it differed from traditional HU practices.
- *Strategy Development*: Other program areas would take a “systems lite” review of their strategies/theories of change, learning plans, and evaluation plans.

Ongoing Challenges for building a Systems Practice: While HU has made significant progress across these four systems initiatives, there are several challenges that HU is grappling with that compound the general difficulty of making any significant organizational change. These include:

- *The Basic Difficulty of Making Organizational Change and Grappling with Existing Internal Dynamics*. Organizational change in hard and every organization has its own troublesome internal dynamics. These issues would pose difficulties for any change process, whether or not the organization was specifically building a systems practice. And, because HU is itself a complex system, the transition to a systems practice creates a nested set of issues for both the staff of HU and those the “outsiders” trying to help them through this change: changing how they deal with external complexity in the areas in which they work, and dealing with the internal complexity of their own organization. A major issue is managing the relationship between existing internal dynamics and building a systems practice: in what ways does one enable or impede the other?
- *Sailing Uncharted Waters and the Cost-Benefit Analysis of Change*: There are not a lot of precedents for how organizations that work in the peacebuilding space (big, global social change) have successfully built an organization wide systems practice. This means there is no “recipes” to follow. Moreover, it also skews the cost-benefit analysis of making change tip toward preserving the status quo – e.g. certain cost making fundamental change that will be felt in the short term with uncertain benefits that will mostly be realized in the mid to long term.
- *Tension between thinking/planning and doing*. As HU works through some fundamental shifts in how it operates and even their underlying paradigm for how to make sustainable social change, it also has many pressures to keep doing business at the same pace it has in the past. Grantees expect action on their requests, events on the ground are changing, and opportunities are constantly arising. It is hard to get staff, especially investments staff (e.g. program officers) to spend even more time thinking about their strategies and tactics when that takes away from engaging in dynamic situations, especially ones where they face life and death situations (e.g. South Sudan and DRC).

- *Changing the nature/value of expertise.* The move to a systems practice introduces a new set of skills and expertise into an organization that already has many staff who are used to being valued for their subject matter expertise (e.g. the expert in Sudan now needs to also be expert in systems thinking...). Learning a new set of skills pursuant to an organization message that systems thinking skills are essential to the future effectiveness of the organization can have the unintended consequence of making people feel devalued and/or that their subject matter expertise is no longer important. The critical issue is how can an organization position systems thinking as complementary, even additive, to the value of subject matter expertise (e.g. helping someone become an expert in how to make systems change in Sudan)?
- *Transaction costs of building a community of practice.* Often, organizations that have diverse subject matter experts to manage distinct initiatives develop a more individualistic working culture, where experts work largely on their own. A systems practice tends to require building a community of practice and investing in participatory, collective sense making processes (e.g. to surface and test assumptions, etc.). The transition from one culture to the other has transaction costs (participatory processes take longer than a sole practitioner model). And, inviting others to participate in thinking through an issue, like developing a theory of change, can be confused with inviting them to share decision making and micro-management.
- *What is planned and what is emergent.* Knowing a certain path forward can make a change process less stressful. However, finding the best path to building a systems practice is often a process of trial, error, and adaptation (as it is when engaging any complex system). It is stressful for staff to know that any investment of precious time in one systems practice initiative, may be more of a “learning” opportunity for the organization than a concrete step forward. Also, building a systems practice is a slow variable, while the transaction costs of getting there are felt immediately. So, how can the emergent nature of the “gain” from building a systems practice, ease the short term “pain” of getting there?
 - *Balancing “Push” and “Pull.”* Because the full benefit of building a systems practice is a slow variable, a certain amount of “Push” from the organization may be necessary in the early stages. However, if there is only a “Push,” then the system is never going to own and advance the desired change. Getting the mix right between push and pull is critical.