## OUTCOME MAPPING

A method from the evaluation field that explores the way in which interventions contribute to a result and in particular the way in which changes in behavior of certain stakeholders contribute to a result.

It addresses the following questions :
- How does our intervention contribute to an ultimate goal?
- Whose behavior can we influence in terms of that contribution?
- What is a realistic strategy to achieve that behavior change?
- How do these behavior changes affect our role and which changes do we have to make to be an effective partner?

Outcome Mapping is an approach for planning, monitoring, and evaluating social change initiatives. It consists of a set of tools and guidelines that allow the various partners to identify their desired change and to work collaboratively for bringing it about. The originality lies in the shift away from assessing the impact of a program toward changes in the behaviors, relationships or actions of people, groups or organizations with whom a program is working directly and seeking to influence—and the influence these interactions have on the program.

Outcome Mapping differs from logic models in several ways: Foremost, it recognizes the importance of perspectives, i.e. that actors operate within different logic and responsibility systems. It is not based on a linear cause-and-effect framework but assumes that multiple (often nonlinear) causes lead to change. And it departs from the notion of attributing that change to specific interventions but assumes that only contributions are made—and tracks these contributions by looking at the logical links between interventions and behavioral change.

Instead the method allows identifying the probable impacts on "boundary partners" – stakeholders whose behaviors are both directly influenced by an intervention and consistent with promoting the chain of events. By closely monitoring these impacts and subsequent impacts on their partners, the contribution of the intervention to the overall goal can be assessed.

### When to use Outcome Mapping

Outcome Mapping is useful in situations where the direct impact of a particular intervention is clear but the longer term consequences are unclear or uncertain. For instance complex change processes with a number of interconnected issues and where progress relies on the interactions of many different actors. It is particularly appropriate for interventions where capacity building is (or should be) an important aspect. By presenting the overarching objective as a series of progressive behavior changes of the actors involved, program staff can track progress toward the goal and learn as they work.

Outcome Mapping is best used at the beginning of an intervention, when it helps sort out who is likely to be affected, in what ways, and through which activities. It then permits a program to design a monitoring and evaluation system to help document and manage outcomes. And it helps to clarify the roles of different stakeholders —beneficiaries, partners or implementers.

## PROCESS MONITORING OF IMPACTS

A mapping process that distinguishes between results and actions that contribute to a result. It usually follows the convention action -> result -> action -> result up an hierarchical chain of increasing and broadening impact. Very good for clarifying the boundary of an intervention, and the inter-relationship between action, result, assumptions and context.

It addresses the following questions:
- How can the behavior of diverse actors be steered in a desired direction?
- What are the key processes for achieving the intended results of an intervention?
- What are the consequences for achieving effects if those processes do not take place as foreseen?
- What should be done if such gaps between plan and reality occur?

Process Monitoring of Impacts is a method for "steering" interventions (projects or programmes) by first identifying processes that are considered relevant for the achievement of results or impacts - and then monitoring whether these processes are valid and actually take place. It builds on the hypothesis that inputs as well as outputs have to be used by someone to achieve desired effects. Thus focus is placed on those uses (by project owners, target groups, implementing partners, etc.) considered decisive for the achievement of effects.

A set of assumptions are identified for those uses and incorporated in logic models as statements for "intended use". These assumptions are then monitored during implementation - whether they remain valid, actually take place – or should be amended (e.g. to capture new developments or unintended effects). Thus programme models are not regarded as 'blue-prints' but as hypotheses for intended routes, which are to be modified in view of what actually takes place both within an intervention and its context.

The focus of monitoring is not on a few isolated indicators, but on entire processes - and with deliberate attention for capturing unintended effects. Defining core assumptions helps to clarify the intervention logic and provides orientation for a series of implementation issues (e.g. assessing and selecting project proposals, identifying information needs). Quantifiable indicators can be used to provide factual evidence, but within this approach indicators are considered as the product - or final measure - of preceding processes.

### When to use Process Monitoring of Impacts

Particularly suited for interventions with long-term impact chains, where results are produced at the end of the implementation period (or even later). By moving monitoring up on the impact chain, early information can be provided for programme operators on the likeliness of achieving results/impacts. And for interventions that are implemented through a large number of projects and independent actors, here the process assumptions function as joint rules for maintaining course towards intended effects. Because it is based on the observation of processes, it is also appropriate for monitoring "soft" and "open-ended" interventions (e.g. promoting innovation, improving co-operation), which are difficult to pre-determine and to capture through quantified indicators.

## CAUSAL LOOP DIAGRAMS

A method drawn from system dynamics, that map how components of a situation relate to each other.  Used to determine what aspects of a situation might have non-linear inter-relationships.

It addresses the following questions :
- What are the key variables in the situation that interests us?
- How do they link to each other?
- How do they affect each other - does each variable have a reinforcing or dampening effect on the variables to which it is linked?

Causal loop diagrams are based on the notion of feedback loops; circular chains of "cause" and "effect" (although the distinction between these two notions are by definition rather unnecessary).   The relationship between adjacent variables can be either positive (ie if A decreases, then B decreases), or negative (ie if A increases then B decreases).   Loops with an odd number of negative relationships are known as balancing loops and with an even number of negative relationships a reinforcing loops.

These loops can often be quite extended with multiple variables and multiple possible "chains" of events.  To avoid constructing a meaningless wiring diagram, one of the important aspects of causal loop diagrams is focusing the model on the problem rather than trying to model an entire situation.

The illustration below depicts a CLD developed to explore why a particular economic development fund had low uptake.
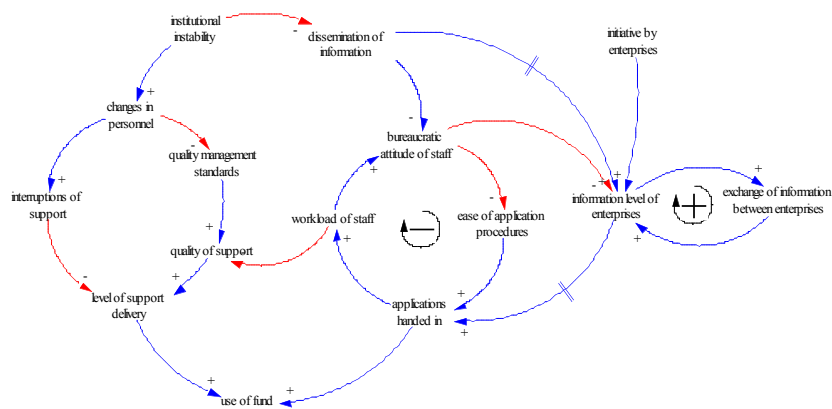


## When to use CLD

CLDs are useful when trying to get to the essence of a problem, when you suspect that the solution lies within the situation as defined and is largely about the way in which key components of that problem interact.

*Abstracted from Systems Concepts in Action : A Practitioner's Toolkit, Williams & Hummelbrunner.*
*Stanford University Press.    Not to be reproduced without permission*

## SOCIAL NETWORK ANALYSIS

A field of endeavor that maps the nature of the relationships between key actors. Extensively used to understand the consequences (especially for information flow) of different strengths and depths of inter-relationships

It addresses the following questions :
- What are the structural characteristics of a network?
- Who are the key actors in a network, why, and for what purpose?
- How can the network structure or information flows be changed?
- How do these changes affect the network's performance?

Social Network Analysis seeks to map, and thus understand, the nature and impact of networks. There are many variations but a classic network diagram will look something like this:
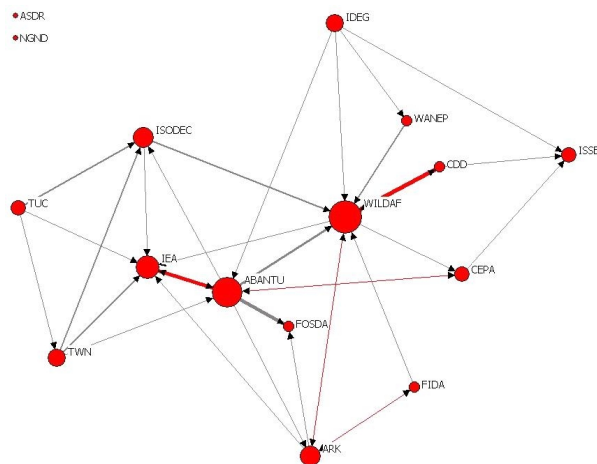


Careful analysis of these patterns reveals a lot about the success and stability of networks and how information or any other resource flows from one part of the network to another.
The analysis generally includes:

How many links a particular node has to other nodes
The direction of the flow between the nodes
The quantity of flow between the nodes

By placing this pattern alongside, say, resource allocation decisions you can judge whether the right resources are going to the best places within a network.

## When to use SNA

SNA is useful when you suspect that there are some issues with the way in which key agents or stakeholders are inter-acting with each other. It is especially valuable when you suspect that information isn't getting to those who you want it to, or if you are exploring the consequences, say, of a stakeholder being removed from the picture.

## STRATEGIC ASSUMPTIONS SURFACING AND TESTING (SAST)

Surfacing deep but key assumptions is more difficult than it seems.  This well established method hones in on them using a mixture of multiple stakeholder perspectives, strategic questioning and dialectic.

It addresses the following questions :
*   Who are the stakeholders who can affect the adoption or implementation of a strategy?"
*   What assumptions is each stakeholder making about other stakeholders in believing that the preferred strategy will succeed.
*   Which assumptions of the other stakeholders does each stakeholder find the most troubling?
*   How can these differences be resolved in the service of the strategy?

There are three critical features of a SAST inquiry.

First identifying assumptions about stakeholder beliefs and behaviors that are both important (ie have great impact) and are most uncertain (ie unsure or unable to determine whether the assumption is right or wrong).

Most certain

*Certain Planning Region*

Least important        Most important

*Problematic Planning Region*

Least certain

Second a debate about these assessments from two opposing viewpoints

A synthesis that leads to a more stable and more widely accepted strategy.

### When to use SAST

SAST is used particularly in situations where there are two opposing views on strategic options; let's say Option A and Option B; each option having support from two different factions; let's say Faction X and Faction Y.  Each faction will consider their option to be superior to the other by using different assumptions about key stakeholder beliefs and behaviors.   SAST deliberately creates a dialectic, where the two options are closely investigated by both parties in order to seek out whether there is an alternative option that transcends these different assumptions.

## SYSTEM DYNAMICS

System Dynamics is a method that seeks to explore the consequences of non-linear relationships and delay. It is usually, although not always, used in conjunction with computer simulation.

It addresses the following questions :
- How does the structure of feedback affect the behavior of a situation?
- How does "delay" in that feedback impact on the performance of the situation that are rich in interconnections?
- What controls the way in which resources flow through the situation? How does this affect performance?

System dynamics is based on tracking the relationship between "stocks" and "flows" over time. In systems dynamics language a "stock" is something that has at any one time a value, that can change due to inflows and outflows. Popularity is a stock. Money in the bank is a stock. A flow is the rate at which things flow in and out of stocks.

In order to understand what might be contributing to a problem, or how best to change a situation, you need to understand how the stocks are related to each other via flows. These relationships are often complicated by delays – since stocks often store things creating delays. Thus system dynamics is almost always associated with simulation.

Constructing the dynamics of an issue is usually done backwards. A pattern of behavior is observed and then a model is created to see if that behavior can be replicated in simulation. If it can then various simulation experiments are run to see if that behavior, if undesirable, can be improved.

For instance, the demands on a particular micro-credit scheme varied wildly. A system dynamics simulation discovered that this variation was due to the popularity being affected by the interplay of the availability of money, the stringency of the loan conditions, delays in the loan approval and the "availability" message getting out into the wider community. By playing around with the simulation, options were discovered that created a more predictable and stable pattern of supply and demand.

## When to use System Dynamics

System dynamic is best used to resolve issues that are intrinsic – the "solution" is already buried somewhere within the existing system. It is also useful when you have patterns of behavior that are created by the interplay of delays between variables – as in the above example .

## STRATEGIC AREA ASSESSMENT

Strategic Area Assessment is a means of applying innovative solutions to specific situations and contexts, primarily used in local/regional development.

It addresses the following questions:

- What are the main innovation potentials of an area?
- By which combination of potentials can local and regional stakeholders achieve a maximum leverage effect in changing the development patterns of their area?
- How can local and regional stakeholders ensure that the chosen development strategy will be conducive to the sustainable development of the whole territory?
- Which strategic priorities may unleash these potentials, and who is taking charge to pursue these common goals?

This method treats areas (territories) as Complex Adaptive Systems, whose development is the subject of public concern and often multiple support programs. It assumes that it is possible to draw appropriate strategic conclusions for an area´s development on the basis of prior diagnosis with an 'innovation compass', a diagnostic tool for generating a holistic picture of the area´s development potentials.

The innovation compass is made up of nine components, clustered under three categories:



- *Capital si*gnifies the natural, economic, and socio-cultural endowment of an area (e.g. finance, environment, government);
- *Flows* refer to physical and immaterial resources and potential (e.g. capacities, markets, society);
- *Levers* are catalysts influencing the flow components and hence, indirectly, the capital components (e.g.activities, identity, images).

The categories and their related components are represented as an enneagram (three interlinked triangles) with a specific sequence to be followed during the assessment. The tool provides a set of questions for assessing each of the components. The assessment is usually embedded in a participatory strategy building process involving a range of stakeholders and culminating in an interactive large group event, the 'SAA Conference'. The results of an SAA are usually visualized as a cobweb diagram allowing to identify relevant leverage points for innovation.

### When to use Strategic Area Assessment

It is a powerful, time-saving method drawing on "collective intuition," nurtured by a dynamic mixture between (individual) intuitive knowledge and joint reflection in smaller groups or plenaries. The innovation compass as its central tool is 'light' and can be used without much theoretical background. It produces robust results within a rather short time frame and can be handled flexible by adapting the pre-defined questions to the respective situation. The innovation compass is accessible as open resource and its functional principles may also be transferred to other social systems (e.g. organizations).

## THE CDE MODEL

A complex adaptive systems (CAS) method drawn from Human Systems Dynamics.   It explores the way in which framing systems properties as containers (C), differences (D) and exchanges (E) can enable us to understand and influence how complex systems work.

It addresses the following questions :
 * What are the conditions that shape a self-organizing process?
 * What interventions might influence the path and outcomes of a self-organizing process?

We often complain about constraint. Yet, high levels of agreement and certainty within a situation result from constraints that reduce the situation's degrees of freedom. We all can, and do, establish constraints by using procedures, rules, and other expectations to attempt to control behavior and interactions. There's nothing inherently wrong with those rules and procedures.

Sometimes, however, we need the situation to be less constrained so that it can adapt to an unpredictable environment. When we want a situation to self-organize in that manner, we cannot by definition control every inter- action, nor can we predict the result, either at the individual or at the broader level.  That does not mean that we have no role in shaping those responses, guiding them toward a desired result.

In the CDE model, the relative balance of containers, differences, and exchanges determines where a situation lies on the continuum from organized through self-organizing to disorganized. Skillfully used, the model provides insights that enable you to use those elements to influence system change.

A container provides the space within which a situation operates.  Containers typically are ideas, physical spaces or groups of people,  Small – and the agents are constrained and do not self-organize.  Large and the agents just rattle around the space at random.  In between they have the opportunity to self organize.

Differences provide the energy necessary to self-organize.  They can be ideological, ethnic, organizational hierarchies, histories, role differentiation and so on.  To small a difference and there is no energy, too big and the situation blows itself apart.

Exchanges provide the information or material necessary for the agents to connect with each other.  Without that connection, there is no means of expressing difference.

## When to use the CDE Model

The model is best used when dealing with a complex situation that needs to be guided towards a goal of some kind.  The key word is guided … this is about setting conditions for the self-organization to be directed towards a particular end even though the particular process may not be able to be managed in the traditional sense.  Conferences are classic examples.

## ASSUMPTION BASED PLANNING

A method developed by the RAND Corporation that focuses attention on the importance of assumptions made about the nature of inter-relationships.  In many cases a more robust and reliable alternative to business planning or strategic planning.

It addresses the following questions :
- What are the key assumptions underpinning the achievement of a plan?
- What can be done to assure that these assumptions are sustained?
- What can be done to make the plan more robust to assumption failure?

Assumption-based planning lies somewhere between planning and strategy and in some ways addresses Henry Mintzberg's comment that most strategic planning processes result in bad plans and poor strategy. It is based on the idea that plans fail because inadequate attention is paid to monitoring a plan's underlying assumptions. All plans contain assumptions—but many of those assumptions are unstable. Some assumptions are correct, some assumptions are incorrect, and some assumptions become correct or incorrect during the period of a plan. Like many assumption-oriented methods ABP identifies key assumptions and closely monitors them over time. What makes ABP unique is the way it actively protects the plan from assumption failures.

The first task is to establish a goal and a time-frame.  Next the key assumptions that underpin the achievement of that goal within that time-frame are identified.  A key assumption is judged along two dimensions, certainty of the assumption being justified and influence of the assumption on the plan.

Once this has been established, the conditions likely to cause the assumption to be invalid are established and "signposts" are developed to assess if these events are happening.
Shaping and Hedging actions are then developed. A shaping action is an action designed to take control of the uncertainty. These actions, if successful, guarantee that the plan remains unmodified. Shaping actions steer events either toward the maintenance of the assumption or to prevent an assumption-threatening situation to occur (see Taking Shaping and Hedging Actions below). Most often these shaping actions are externally focused, seeking to influence the environment rather than the organization.  A hedging action is more internally focused, helping prepare an organization to cope with an assumption failure.  It often implies replanning.

## When to use ABP

Assumption-based planning is best used when a plan has already been decided.  It is a planning tool, not a strategy development tool.  It is especially suited for conditions that are uncertain but knowable within the planning timeframe.
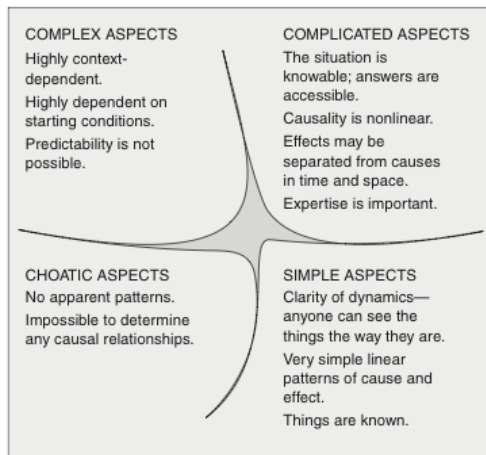
**CYNEFIN**

A framework drawn from the network analysis, knowledge management and the complex systems fields.  It distinguishes between "simple", "complicated", "complex" and "chaotic" aspects of a situation and how each aspect can be successfully managed.   A powerful analytical tool for matching situation with response

It addresses the following questions :
*   How are we framing the situation; as simple, complicated, complex or chaotic?
*   What are the implications of this framing for how we manage a situation?
*   What are appropriate ways of managing a situation on the basis of this framing?

Management theory and practice in the past few decades have often factionalized into two distinct camps. There are those who seek to treat all situations as if they were simple irrespective of the actual nature of the situation (e.g., results-based management, management by objectives). Then there are those who regard everything as complex, notably those influenced by complexity theory.  More recently, a third way has evolved: those who argue that managing everything as if it were simple is ineffective, and managing everything as if it were complex is inefficient. Cynefin is an example of this more recent trend.  Developed by David Snowden and Cynthia Kurtz when they were at the IBM's Institute of Knowledge Management, Cynefin identifies four behaviors a situation can display: simple, complicated, complex, and chaotic.



Most situations display two or three of these behaviors. Such rich situations require a range of management approaches and styles.  You manage (and evaluate) different aspects of these situations in different ways.
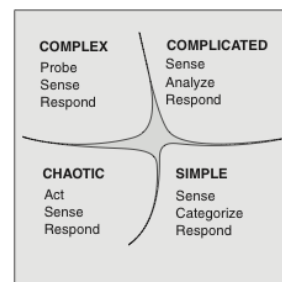


**When to use Cynefin**

Cynefin is especially helpful in teasing out and thus evaluating the various ways in which a situation is managed and proposing ways in which it could be managed.  It is especially helpful when there are disagreements about management approaches – if someone "sees" one aspect of a situation through a "simple" lens, then they will propose different solutions to someone who "sees" that aspect through a "complicated" lens.

## SOLUTION FOCUS

This technique was originally developed in family therapy. Problems are "ignored" by directly exploring solutions which have occurred in the past, presence and future, which helps to overcome states which have previously been considered problematic.

It addresses the following questions :
- What would it be like, if the problem suddenly disappeared?
- Who should be doing (or stop doing) what to reach that ideal situation?
- How can these actions be supported and by whom?
- Which elements of the solution take place already?

Solution Focus is an approach to positive change within people, teams, or organizations. It is based on two fundamental assumptions: there is not necessarily a logical connection between problem and solution, and the route to the solution depends on the solution, not the problem. Therefore attention is placed on identifying a different "ideal" situation that will "dissolve" the problem. And on the changes required to arrive at this new situation, which are usually differences in behavior and interaction of the people involved.

Solution Focus is an approach to change that provides a set of principles, tools and corresponding questions. The focus on solutions (instead of problems), the future (instead of the past), and what is going well (rather than what went wrong) leads to a pragmatic—and often very rapid—way of making progress. It is not just positive thinking but about taking action to achieve a desired state. And it is more than best practice, because the intention is not to copy others but to find an appropriate solution for the situation at hand. Seeing the solution as rooted in the reality of particular circumstance avoids imagining things that are not there—or introducing change proposals that are not shared by those expected to carry them out.

Solution Focus has a minimalist approach, advocating changing as little as possible, which has benefits in terms of time, cost, and effort and takes the path of least resistance. But it requires skilled facilitators or consultants who are capable of engaging in—and maintaining—a solution-focused conversation.

## When to use Solution Focus

Solution Focus is a powerful and proven approach to bring about change, which takes an explicit systemic view by recognizing and making use of interaction patterns and identifying solutions by changing perspectives. Its use is particularly recommended for situations marked by negative experiences from the past or situations where an emotional burden weighs on the relationship between the involved parties.

Solution Focus can also be useful for evaluations but departs from prevalent problem-solving attitudes. It can be rather helpful with formative evaluations that do not only seek to inform change but already initiate change during or through the evaluation work. Or in cases where more detailed analysis of problem causes is either inappropriate or too cumbersome.

## VIABLE SYSTEM MODEL (VSM)

A long established method drawn from the cybernetics tradition. It describes the information requirements and necessary inter-relationships between five generic, interconnected systems present in every purposeful organization. Powerful for identifying necessary information flows between the systems and the consequences of getting these flows out of balance.

It addresses the following questions :

- What are the operational, co-ordination, management, strategy and governance needs of the situation in order to deliver on its purpose?
- What information is needed at each level of the situation's to achieve the purpose?
- How does information flow through the situation?
- Is the right information available at the most appropriate level of a situation's hierarchy of tasks?

How can you ensure the long term viability of an organization? What are the basic minimum requirements that enable that organization or institution to survive long term. That were the questions Stafford Beer sought to address when he developed his Viable System Model. Based on the working of a biological cell, Beer suggested that viability depended on the successful integration of five "systems"
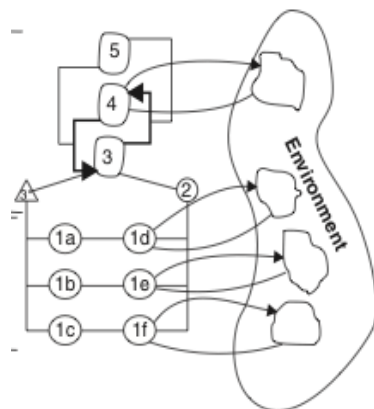


*System 1* : Comprises the operational units

*System 2* : provides information, communication, and processes for issues common to all Systems 1. It coordinates System 1

*System 3* : Ensures that the "policy" functions of Systems 3 and 4 are integrated into the "practice" of Systems 1 and 2. We often call this "management"

*System 4* : Acts as an intelligence function that monitors the environment and helps the enterprise adapt and plan for the future.

*System 5* : establishes policy in light of competing demands between the present and future and between internal and external perspectives

There are two other key notions in VSM. *Recursiveness* is the idea that the entire model is reflected in each level. Thus even System 1 has its own Systems 1 through 5. *Requisite Variety* says that a system is viable only if the five systems are in balance with each other. Variety is the number of states a system can possess. If System 5 has lots of variety but System 1 can only cope with limited variety (or vice versa), then the system will be unviable and collapse.

### When to use VSM

VSM has been used extensively to understand two problems familiar to evaluators. Information flow (too much, too little, wrong place), and performance measurement (System 4 may assess System 1 in ways that reflect system 4's interests not System 1's well being).

## ACTIVITY SYSTEMS

Activity Systems (or to give it it's full name "Cultural-Historical Activity Theory") is also one of the few systems approaches that is based on learning theory as well as systems theory. This approach specifically seeks to understand how the ability to address contradictions within systems can be directed towards innovation.

It addresses the following questions:
- What fundamentally are the motivations underpinning the achievement of a goal?
- What tools, rules and roles are necessary for that motivation to be translated into goal directed activities?
- How does the system handle contradictions in tools, rules, roles and motivations so that the goal is achieved?

CHAT was developed by cognitive psychologists, who considered that if the point of systems thinking is to gain new insights and meanings, then we should develop systems models that reflect how we actually develop insights and meanings.

The basic CHAT model seeks to explore the relationship between the following components of an activity :

Where:
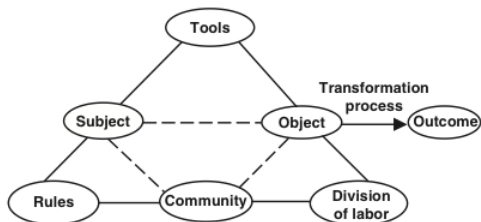


**Object**: the purpose and motives that define the activity
**Subjects**: the person or people who carry out the activity
**Outcome**: both intended and unintended results of carrying out the activity
**Tools**: both physical and non-physical instruments that are used in the conduct of the activity
**Community**: the community in which the subjects carry out that activity
Rules: the formal and informal rules that the community imposes on the subject
**Division of labor:** relationships in the community that determine the roles that subjects have in carrying out the activity.

However, the main purpose of the model is to help us understand how well we respond to and learn from contradictions within and between components. Hence "history" … new tool imposed on old rule, new tool on old division of labour (think what happened to typing pools), rules that contradict each other (very common in health and safety issues – finish on time vs don't injure yourself)

### When to use Activity Systems

Activity systems are useful any time you are seeking to understand the often unintended consequences of change (ie the introduction of something "new" on something "old") and how innovation happens (ie innovation is often the successful resolution of conflicting dynamics).

**SOFT SYSTEMS METHODOLOGY**

Soft Systems Methodology brings together alternative ways of viewing situations that can be used to address "problem situations"

It addresses the following questions :
- What are the different ways in which a situation can be viewed?
- How does each of these ways, on its own, provide a means of comprehending how a situation behaves?
- What are the implications for any changes to the situation?

Soft Systems Methodology (SSM) was developed by Peter Checkland in the late 1960s and turned the systems field on it's head. Checkland's key insight was, at the time, revolutionary. Existing systems methods assumed that a given set of interrelationships would be understood by everyone in roughly the same way. His experience as a manager, however, told him that this was not so; different people within a situation are working to different objectives, based on different perspectives. These differences influence their behavior and thus the dynamics of a situation. Thus, addressing a situation regarded as problematic required an understanding of the multiple perspectives that people brought to that situation. So rock concert could be understood by framing it in the following ways :

- Entertainment
- Drug dealing
- Publicity (e.g world poverty)

- Employment for musicians
- Merchandising (T-shirts, DVDs)
- Underaged drinking

- Tribal identity (e.g., save the world)
- Marketing (e.g., Pepsi)
- Security personnel machismo

Let's say a riot broke out and someone was killed. How do you design a "safe" rock concert. In SSM rather than developing a single systems model of a problem situation, you developed models for each of the ways you can frame the problem situation. By comparing and contrasting the different models and those models with how the situation is actually behaving you can develop more feasible, more sustainable solutions.

However the most profound impact of soft systems was the use of systems ideas themselves. Prior to soft systems, systems methods considered systems as real life entities. In contrast Checkland talked about "situations" that we thought about using systems concepts.

**When to use soft systems**

In evaluation we constantly struggle with "unintended" consequences. A soft systems framework essentially says that there is no such thing as unintended consequences; somebody, somewhere intended it based on their framing of the situation. Thus any situation where there are multiple ways of framing is a candidate for soft systems.

## DIALECTICAL METHODS OF INQUIRY

This chapter describes three methods of inquiry that deliberately seek out differences rather than similarities in order to deepen understanding of a situation.

Dialectical methods addresses the following questions :
- What are the different ways in which people see or can see a situation
- What are the exceptions or contradictions to the way in which people see or can see a situation?
- How can exploring and making sense of these differences enhance our understanding of a situation?

Dialectics is the establishment of higher truths by bringing together opposing arguments.  It is the basis of many systems methods (eg SAST, Activity Systems, Soft Systems, Critical Systems) and implicit in many others.  Out of these have emerged some quite simple yet powerful techniques that enable successful dialectics to take place.  For instance :

### Option One and a Half
Rather than argue the merits or otherwise of two opposing viewpoints, Option One and a Half combines the merits of both options and requires the production of a new option based on those merits.
**Use :** When there seems to be unbridgeable differences between judgements of worth

### Contradiction analysis
Contradiction analysis takes this one step further.  For every generalisation that can be made from a data set (eg kids liked Shrek 4) an exception is identified *and what this means explained.*  Similarly the data is deliberately investigated for contradictions (eg one the one hand girls liked Shrek 4, on the other boys hated it) *whose meanings are also explained.*  Finally the data is investigated for occurrences (or absences) that were unexpected.  This too is explained.  The emphasis here is to explain not to explain away – the search is for meanings.  The last step is to identify those things that are puzzles – where meanings are unclear … and what that might mean is explored.
**Use :** Pretty much any data analysis situation where you wish to gain deeper meanings and analysis by stakeholders rather than researchers

### Convergent Interviewing
Convergent Interviewing transposes contradiction analysis into an interview setting.  In traditional social science interviews, each interview is independent of one another.  Interviewees are asked the same or similar questions, usually decided by the researcher.  In convergent interviewing, each interview is connected to previous interviews by requiring interviewees to make sense of contradictions between what they are saying and what the previous interviewee is saying.  Where interviewees agree, then the second interviewee is asked to identify and reflect on exceptions.   Thus the content of interviews is determined by interviewees rather than researcher.
**Use :** Pretty much any data analysis situation where you wish to gain deeper meanings and analysis by stakeholders rather than researchers

## SCENARIO TECHNIQUE

A perspective driven technique that seeks to avoid "problem" solving by working backwards from potential "solutions"

It addresses the following questions:

- What are the key influence factors that determine the future development of the system in question (e.g., enterprise, community)?
- How can the system in question thrive under various possible future conditions, using emerging opportunities but avoiding possible risks at the same time?
- What are the core elements of a robust strategy for the system in question?
- Which are the early signals indicating that certain contingencies will eventuate?
- How can the stakeholders foster the system's resilience by obviating even unexpected disturbances?

The scenario technique (or scenario planning) is a strategic management tool. Thinking out various "alternative futures" should prepare companies to take appropriate measures for the most probable development without getting wrong-footed by unexpected shocks. Thinking ahead in this manner helps to minimize risks and to configure resources in an optimal manner.

There are two basic types of scenarios:

- *Policy- or objective-related scenarios,* where already existing strategic options are selected and compared in respect to different possible futures.
- *Development scenarios*, where possible alternative futures are devised and consequently strategic options are configured in response to prior analysis of their potentials and risks.

The scenario technique can be used in a variety of settings from a small circle of key decision makers to broader participative processes.  The involved parties identify, select, and assess all the endogenous and exogenous forces that exert an influence on the situation or topic in question.

### When to use Scenario technique

The method is well suited for assessing the scope for possible developments on the basis of best- and worst-case scenarios, allowing concerned stakeholders to get a feeling for more realistic scenarios and the likelihood of their occurrence. Scenarios have been used in planning, devising strategies or organizational change projects.

The scenario technique is best applied in situations where the availability of information is low (which means high uncertainty) and the complexity of issues is high. In systems terms, the method is strongly oriented on using multiple perspectives and identifying boundaries. However, scenarios are a reflective tool and should not be confused with forward planning as a predictive tool. Scenario technique deals with likelihood and not with certainty. And even the best strategies developed on the basis of scenario planning become obsolete if not accompanied by appropriate monitoring processes, which are capable of detecting changes in basic assumptions already at early stages.
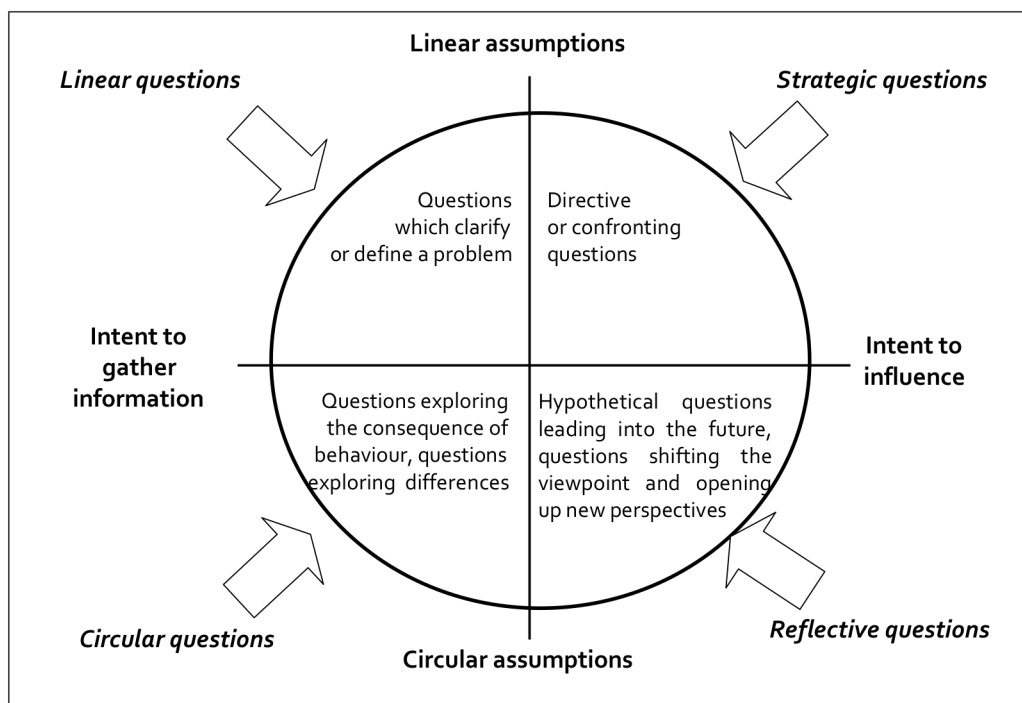
## SYSTEMIC QUESTIONING

This approach for exploring the investigative qualities of language patterns has originally been developed in family therapy. Beyond obtaining information questions can also be used to trigger change in perception or generate new information and knowledge.

It addresses the following questions:
- How to obtain a multidimensional picture of a situation?
- How to identify leverage points in a quest for solution-oriented interventions?
- How is it possible to address delicate but relevant content without offending the privacy of those in the dialogue?

Systemic questioning uses the linguistic and semantic richness and ambiguity our language offers to us. There are four basic types of systemic questions:



## When to use Systemic questioning

Systemic questioning is a technique rather than a methodology, it can be used for a large number of explorative purposes. It is applicable and useful in situations where the aim is to broaden the perspective, to mark differences, to bring forth rapid solutions for problems, or to identify hitherto untapped resources. They can be used in any context: in a one-on-one setting, in personal conversations, in larger groups, but also in standardized surveys.

Systemic questioning has spread far beyond the original therapeutic context, into organizational, business development as well as pedagogic or social work.

## CIRCULAR DIALOGUES

A method that forces participants to take a critical stance on topic by progressive shifting the focus of a discussion.  Primary use is to understand perspectives.

It addresses the following questions :
- How can a situation be seen from different angles or perspectives?
- How do other points of view challenge our way of seeing things?
- What can we learn from opposing viewpoints and how can they be overcome?
- How can different perspectives lead to a new understanding of the situation?

Circular dialogues are rooted in the tradition of role-play and are based on the method of systemic questioning. In circular dialogues, participants have the opportunity to perceive a given situation from at least three perspectives. Perspectives are assigned to the participants (individuals or small groups). At least three different perspectives (a triad) must be involved:
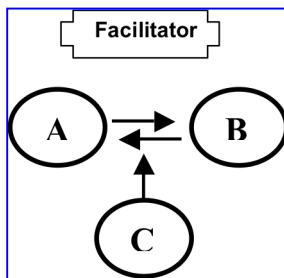


Communication takes place in a strict order and setting:
- Representatives of each perspective express their points of view consecutively (first A, then B, then C).
- While these representatives are talking, the others observe these expressions (verbal and nonverbal), reflect on them, and comment on them when it is their turn again to speak;
- one perspective can have the specific role of observing or synthesizing the communication of others (e.g. C).

The aim of the dialogue is to look at a situation from various angles and to use these perspectives for critical appreciation, for validating experience or for identifying solutions. In this way, a situation is being passed around several times and observed from various perspectives - that is why such a dialogue is called circular. The different perspectives or roles can be identified from the particular situation, represent the view of participants or be deliberately "constructed" or assigned because they are considered useful for dealing with the situation at hand.

### When to use Circular dialogues

Circular dialogues are a simple and fast method for dealing with different perspectives, by using participants´ resources in a focused, yet relaxed atmosphere. They are particularly helpful when participants perceive their differences as a potential threat. By assigning such threatening behavior as a role-task (e.g. the Skeptic, the Critic), it is rendered legitimate and the respective fears can be enacted in a constructive way without putting relationships under strain. In situations where participants know each other fairly well or have rather fixed opinions about each other, circular dialogues can have a "de-freezing" effect. In evaluations, circular dialogues can be used to gather evidence on an issue or evaluation question from different stakeholder groups or for the validation of findings. And they can be used to generate new insights and solutions by working constructively with differences in stakeholder views or perspectives.

## CRITICAL SYSTEMS HEURISTICS

A tool primarily designed to identify key systems boundaries and explore the consequences of those boundaries.  Helpful in understanding that "unanticipated" behaviors are often not unanticipated at all.   It addresses the following questions :

- What and who is being excluded, marginalized or made a victim by the way in which a situation is bounded (i.e. being viewed and/or is being operated)?
- How might different often conflicting boundary judgments on a situation be reconciled? What are the implications of not questioning and/or debating boundary judgments?

We can't do everything.  Every endeavor has to set boundaries; in a literal sense the idea of "holism" is nonsense.  But where do we set those boundaries?   C. West Churchman was an American sociologist and philosopher whose concerns centered on the decisions taken when constructing systems viewpoints. He argued that our choice of what lies inside a system is essentially an ethical decision. By choosing what lies inside a system, you implicitly or even explicitly marginalize what lies outside the system. Your choice of what lies inside a system's boundaries depends on your perspective or more deeply your values. If these choices are not reflected upon, they may well result in exacerbating the very problem you are seeking to address. Indeed, it may well cause you to frame the problem in unhelpful ways. Churchman developed methods of identifying these boundaries so that further viewpoints could be identified, addressed, and brought into the analysis. He called this process "sweeping in."  Werner Ulrich developed an heuristic that provided a more precise way of critiquing boundary decisions.

The heuristic identifies four main sites for boundary decisions :

**Motivation :** Who will benefit from an intervention and how we determine what "benefit" means.  Thus this is about *values*
**Control :** Who has decision-making authority over what?  Thus this is about *accountability* and *power* over *resources*
**Expertise :** Whose expertise is acknowledged and valued.  Thus this is about *knowledge*
**Legitimacy :** What makes this the right thing to do relative to all the other possible uses of resources and knowledge?  Thus this is about *worldviews*

In the heuristic, each of these four sets of decisions are subjected to various critiques.  The purpose of the critique is to see if a more "just" approach can be developed by deliberately bringing other viewpoints to bear on those decisions.

## When to use CSH

It is difficult to identify when *not* to use at least the principles that underpin CSH.  Evaluators constantly come across boundary decisions, in the interventions they evaluate and the design of the evaluation itself.  However, the Heuristic poses uncomfortable questions, challenging evaluators, clients and stakeholders alike.  Indeed one of the uses is, ironically, to explore the consequences of *not* using the heuristic!