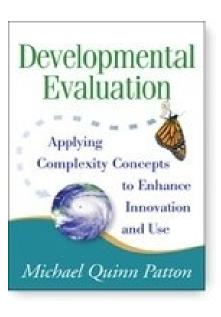
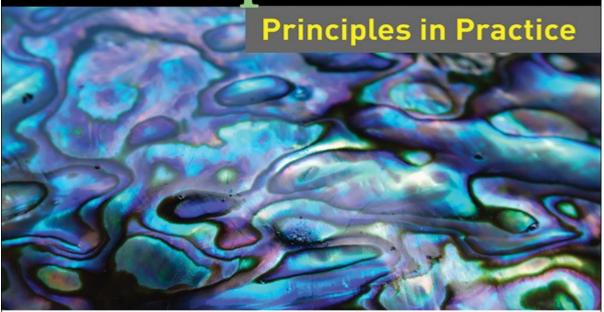
# **Developmental Evaluation**



Michael Quinn Patton

Kolding, Denmark September 8, 2016

# Developmental Evaluation Exemplars



edited by Michael Quinn Patton, Kate McKegg, and Nan Wehipeihana



# Research on Social Innovators' Perceptions of Evaluation



### Ubuntu

The spirit of interpersonal interaction that pervades sub-Saharan Africa, *ubuntu* emphasizes the idea that:

"A person is a person because of other people."

### Ubuntu

The introduction to *The Fifth Discipline* Fieldbook, companion volume to Peter Senge's classic book on learning organization, The Fifth Discipline, begins with an explanation of the expression Sawu bona, meaning "I see you", used by the tribes of northern Natal in South Africa to greet one another. The response is usually Sikhona, meaning "I am here." The authors go on to explain, "The order of the exchange is important: until you see me, I do not exist. It's as if, when you see me, you bring me into existence."

### Ubuntu

Opening:
Sawu bona,
meaning
"I see you."

Response:
Sikhona,
meaning
"I am here."

### Opening Exercise

- Introduce yourselves to each other at the table from oldest to youngest:
   respecting elders and valuing youth.
- 2. The eldest begins each subsequent intro by saying, "Sawu bona" (I see you.)
- 3. Respond: "Sikhona" (I am here.) Share some expertise or perspective you bring to the group.
- 4. Come up with a name for your group that integrates your shared expertise & perspective.

# **Interpretive Frameworks**

 May 2003 Harvard Business Review "The High Cost of Accuracy." Kathleen Sutcliffe and Klaus Weber.

They concluded that "the way senior executives interpret their business environment is more important for performance than how accurately they know their environment."

They further concluded that it is a waste of resources to spend a lot of money increasing the marginal accuracy of data available to senior executives compared to the value of enhancing their capacity to interpret whatever data they have. **Executives were more limited by a lack of** capacity to make sense of data than by inadequate or inaccurate data. In essence, they found that interpretive capacity, or "mind-sets," distinguish highperformance more than data quality and accuracy. 10

# Evaluation's Traditional Interpretive Framework

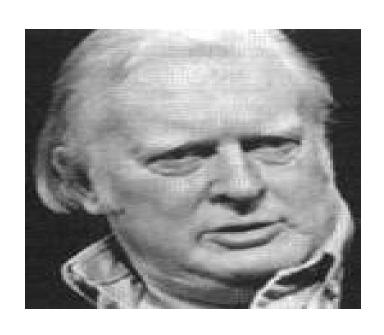
# **Original Primary Options**

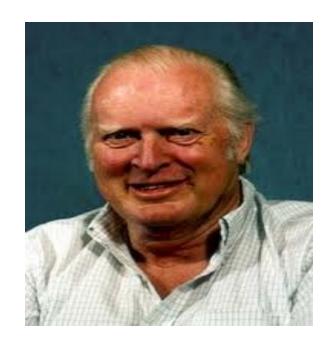
Formative and Summative Evaluation

(Mid-term and End-of-Project Reviews)

# Michael Scriven(1967). "The methodology of evaluation."

Pp. 39-83 in Ralph W. Tyler et al. (eds.) *Perspectives of Curriculum Evaluation*. AERA Monograph Series on Curriculum Evaluation, 1. Chicago: Rand McNally

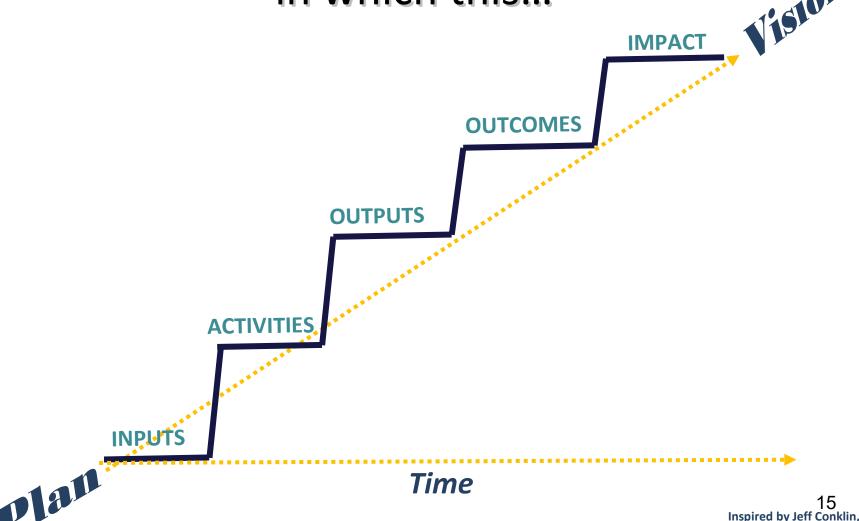




# Blandin Community Leadership Program

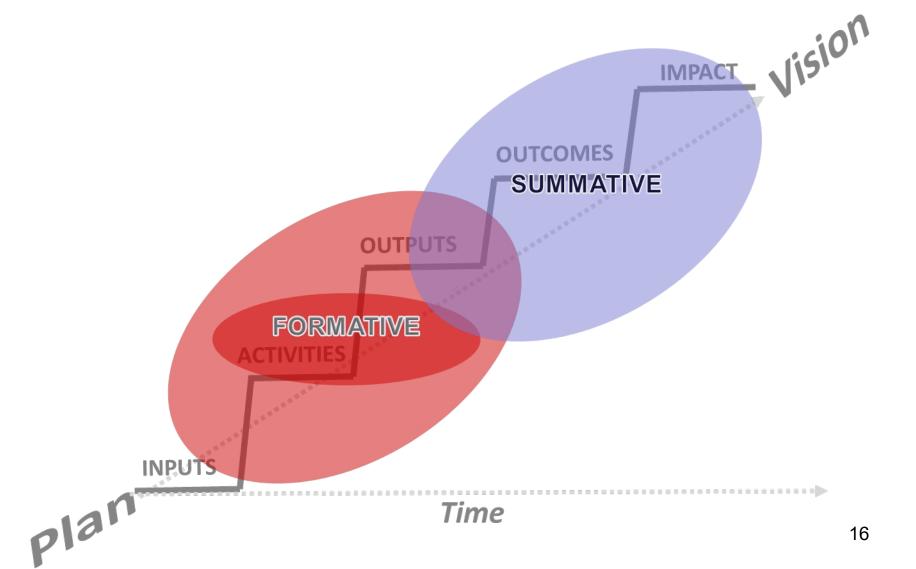


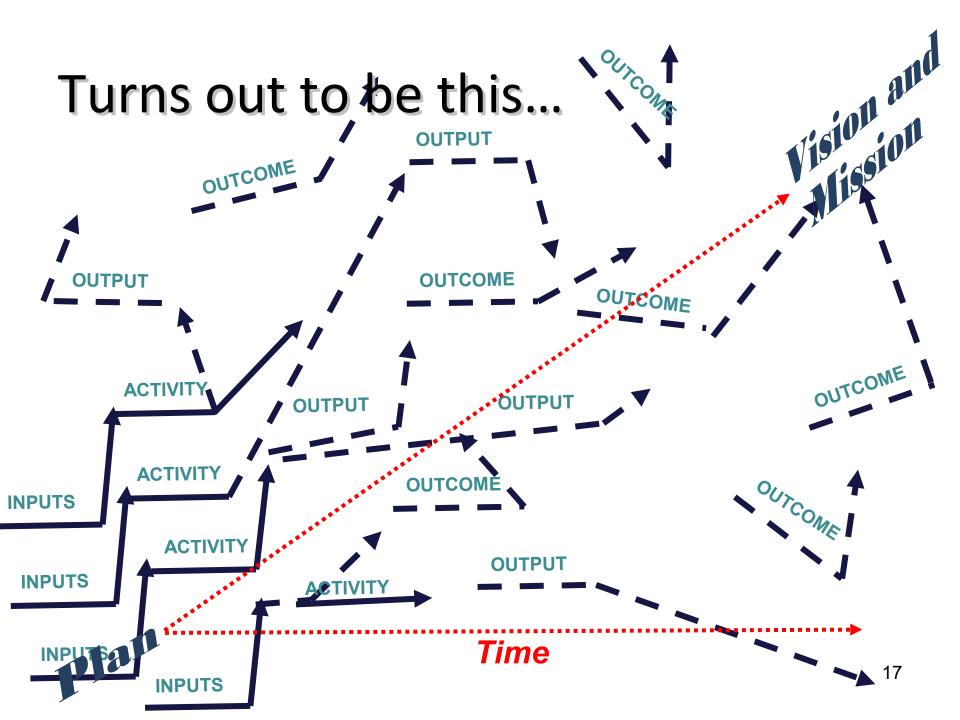
Complex development situations are ones in which this...

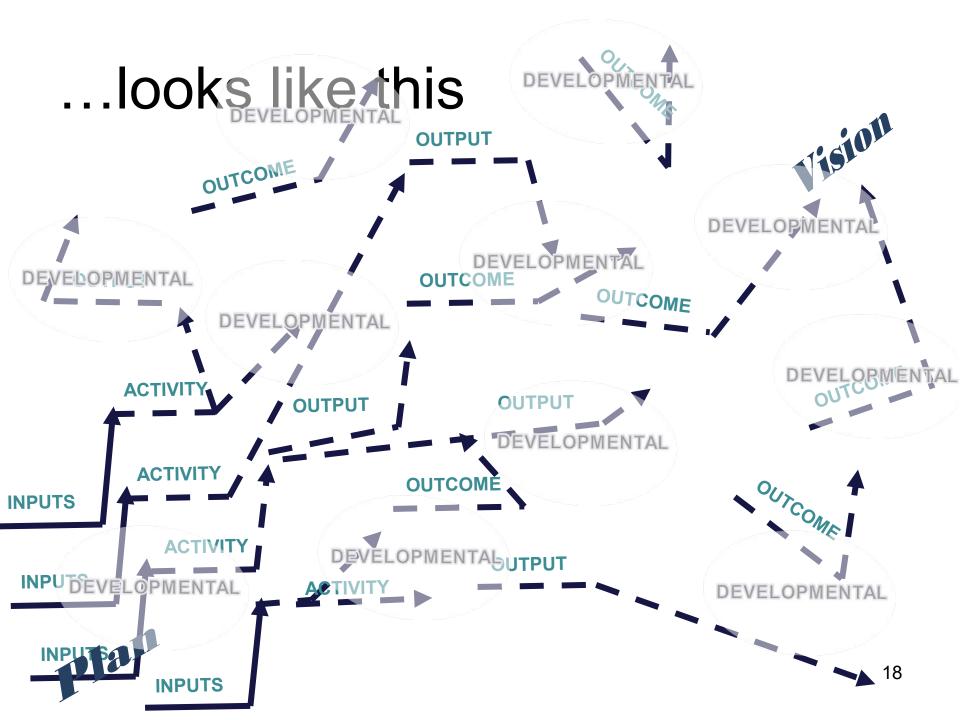


cognexus.org

# And this...







# Uncertainty and Emergence

"No battle plan ever survives contact with the enemy." Field Marshall Helmuth Carl Bernard von Moltke

"Everyone has a plan...until he gets hit."

Former World Heavyweight boxing champion, Mike Tyson

Tom Peters (1996) Liberation Management: "READY, FIRE, AIM."

# Improvement versus Development

# Check-in Question #1

A leadership program increases the break times from 15 minutes to 30 minutes to allow more time for informal participant interaction. Is this...

- 1.An improvement
- 2.A development

# Check-in Question # 2

An employment program designed for and offered to secondary school drop-outs opens up to immigrants from other countries. Is this...

- 1.An improvement
- 2.A development

# Improvements versus developments

Program Improvements	Program Developments
1. Add a new topic to a training	Change the entire scope, sequence and
curriculum.	delivery of the curriculum for a new target
	group.
2. Provide staff training to enhance the skills of	2. Change job descriptions and re-
current staff.	conceptualize the priorities, qualifications and
	needed competencies of staff.
3. Expand the recruitment effort to a wider	3. Fundamentally change the recruitment
target area.	strategy, for example, instead of direct
	advertising working through referral agencies.

# Improvements versus developments

4. Expanding the staff to serve increasing	Adding staff to significantly change the
numbers under the same basic model.	staff-participant ratio in order to provide more
	individualized and intensive attention to
	participants.
5. Fine-tune the program delivery based on	5. Replacing face-to-face workshop training
participant feedback, for example, providing	with exclusively on-line training and support.
longer breaks and more small group exercises	
to supplement lectures during training	
workshops.	
6. Add healthier food to children's pre-school	Make lunch an educational experience
program lunches.	engaging with children about food and
	nutrition, involving them in food preparation,
	and giving them homework assignments
	related to home nutrition.

# Small group exercise

Distinguishing improvement from development

In an area of your expertise, distinguish what would constitute a program improvement from a program development.

# AES Best Evaluation Policy and Systems Award

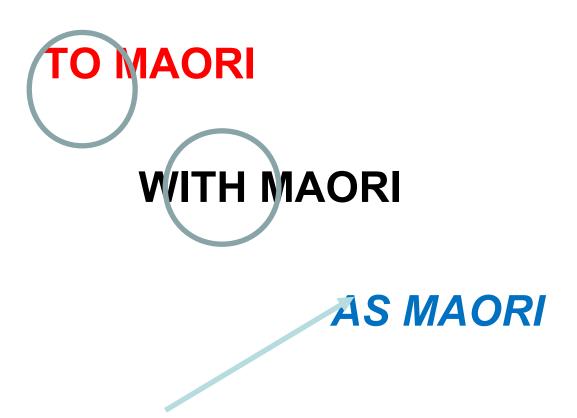
Recognizes work developing the best evaluation policy, integrated evaluation system, evaluation program, framework and/ or implementation of evaluation policies, systems, programs or frameworks. Also recognizes work undertaken in partnership with clients or users who have championed the evaluation and can attest to increased arising from the evaluation process or specific evaluation findings.

#### 2013 Award Winners: Nan

, Kate McKegg and Kataraina Pipi of Research Evaluation Consultancy Limited (a member of the Kinnect Group), and Veronica Thompson from Sport New Zealand) for Developmental Evaluation – He Oranga Poutama: what have we learned?



# The Journey





HOP initiative set out to develop a practical, grounded understanding of what as Māori looks like in diverse activities.

Core principles were developed and adapted in various local settings along with a system of national coordination and support to facilitate local effort.



### Te Whetu Rehua

A guide to deciding appropriate activities for He Oranga Poutama

# What was developed

WHIM Delivered

mainstream

WHIM\*

Managed and/or

Delivered

Supporting

WITH

Te Reo me ona
Tikanga - elements
central to identity and
survival of unique Māori
identity. Considered a
'normal' and/or expected
part of the activity
or event.

Te reo me ōna tikanga not likely to occur

#### BY

Māori - governed, managed and/or delivered by Māori. Bi-lingual Bi-cultural

Total Immersion: Te Reo Me ona Tikanga

ion:

Me
Whanau (i.e Kohunga
Taiohi Pakeke
Whānau whakapapa
Kaumatua)

Mainstream audiences

#### FOR

For Māori - groups of whānau, hapu, iwi, Māori. Emphasis on whanaungatanga of whakapapa whanau or Kaupapa Māori whānau.

### AS MĀORI

Nga Taonga Tākaro (active)

(Governed Managed

Marae Whenua Awa Maunga

whanau kaupapa

Nga Mahi a te Rehia

WHIM\* GMD

Wahi kaupapa Maori e.g. Kohanga, Kura Kaupapa

Contemporary sports, games and activities e.g. rugby, hip hop, basketball, softball contemporary sport, recreation and/or community facilities e.g. council rec centre, school hall

#### THROUGH

Activity types. HOP focus is on traditional sports and games. Broader SPARC focus is contemporary sport and recreation activities.

#### IN/ON

Places, venues and facilities. Ranges from venues of whakapapa significance through to contemporary facilities in the wider community.



# Our learning about DE

- DE is responsive to culture and cultural context
- As an evaluation approach it is a cultural chameleon in that it takes on and is sensitive to local context
- It is not method prescriptive, so it is able to sit comfortably within an Indigenous values base
- It allows evaluation to affirm and privilege indigenous language (te reo Māori), cultural practices (tikanga Māori), concepts and knowledge (whakaaro).

### **Developmental Evaluation Defined**

Purpose: Developmental evaluation (DE) informs and supports innovative and adaptive *development* in complex dynamic environments.

DE brings to innovation and adaptation the processes of asking evaluative questions, applying evaluation logic, and gathering and reporting evaluative data to support project, program, product, and/or organizational <u>development</u> with timely feedback.

# Key DE Characteristics

- Focus on development (versus improvement, accountability or summative judgment)
- Takes place in complex dynamic environments
- Feedback is rapid (as real time as possible).
- The evaluator works collaboratively with social innovators to conceptualize, design and test new approaches in a long-term, on-going process of adaptation, intentional change, and development.

# Key DE Characteristics

- The DE evaluator can be part of the intervention team.
- The evaluator's primary functions are to elucidate the innovation and adaptation processes, track their implications and results, and facilitate ongoing, real-time, data-based decision-making in the developmental process.
- DE becomes part of the intervention.

# **High Degree of Process Use**

Process use refers to and is indicated by individual changes in thinking and behavior, and program or organizational changes in procedures and culture, that occur among those involved in evaluation as a result of the learning that occurs during the evaluation process. Evidence of process use is represented by the following kind of statement after an evaluation: "The impact on our program came not just from the findings but from going through the thinking process that the evaluation required."

# Conditions that challenge traditional model-testing evaluation

- High innovation
- Development
- High uncertainty
- Dynamic
- Emergent
- Systems Change

Adaptive
Management
and
Developmental
Evaluation

# Purposes

**Implications** Challenge Purpose **Ongoing** Implemented in No intention of development complex & dynamic becoming fixed; environment identifies effective principles Adapting Innovative initiatives: Knowledge disseminated; effective sensitivity to context, Develop 'their own' principles to capabilities & priorities version new contexts

#### **Evidence-based Practice**

Evaluation grew up in the "projects" testing models under a theory of change that pilot testing would lead to proven models that could be disseminated and taken to scale:

The search for best practices and evidenced-based practices

## Fundamental Issue: How the World Is Changed

Top-down scaling of

"proven models" with

Fidelity Evaluation ← →

versus

Bottoms-up adaptive management and

**Developmental Evaluation** 

#### Models vs. Principles

Identifying proven principles for adaptive management (bottoms-up approach) versus Identifying and disseminating proven models (top down approach)

### 5 Purposes

Challenge **Implications** Purpose Pre-formative Dynamic situations New models move into development of require innovative evaluation & others model solutions; Model does remain developmental not exist Major cross-scale Disrupt existing Adaptive cross-scale developmental innovations assume system; scale & evaluation systems change add complex dynamics:

levels of complexity

agility, responsiveness



## Harvard Center for the Developing Child

#### **FOI** consists of three primary components:

- **1.**Science that provides a continuous pipeline of discoveries and hypotheses (from the biological, behavioral, and social disciplines) that are communicated effectively for application in policy and practice.
- **2.Intervention Strategies** that are designed, tested, and refined through the Translational Science Model, often within the context of an "innovation cluster." They include small-scale pilots as well as strategies for increasing the population impacts of large-scale, evidence-based interventions.
- 3.A **Learning Community** that includes people and organizations united by a common vision, engaged in shared learning to accelerate innovation, promoting early adoption of promising strategies, and testing pathways to impact at scale.

#### 5 Purposes

Purpose

Challenge

**Implications** 

Developing a rapid response in turbulent environment:

Existing responses no longer effective as conditions change:

Planning, execution & evaluation occur simultaneously.

natural disasters, civil unrest, political turmoil, famine.../

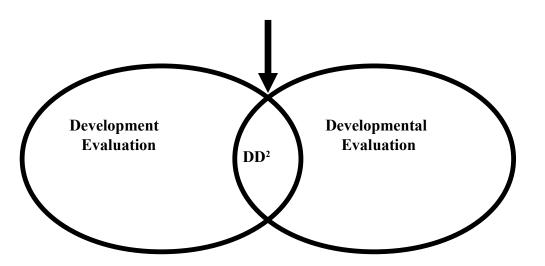
turbulence,
instability,
dynamic,
high uncertainty.../

Rapid feedback, adaptation, & agile responses.

#### Other names

- Real time evaluation
- Emergent evaluation
- Action evaluation
- Adaptive evaluation

DD<sup>2</sup> = Developmental evaluation used for development evaluation

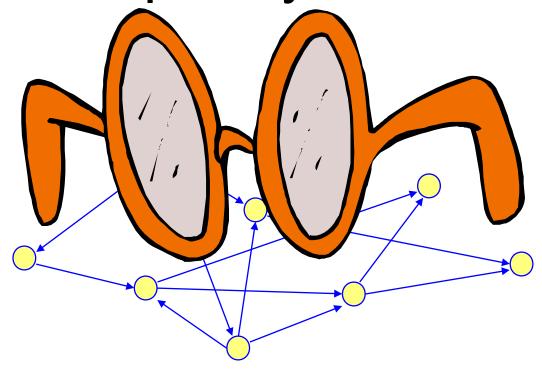


#### **Challenges**:

Situation Recognition and **Appropriate Evaluation Designs** 

# The nature of **EXPERTISE**

## Seeing Through A Complexity Lens



"You don't see something until you have the right metaphor to let you perceive it". Thomas Kuhn 47

# Getting to Maybe: How the World Is Changed?

Frances Westley,
Brenda Zimmerman,
Michael Q. Patton
Random House
Canada,2006



THIS BOOK IS FOR THOSE WHO ARE NOT HAPPY WITH THE WAY THINGS ARE AND WOULD LIKE TO MAKE A DIFFERENCE. THIS BOOK IS FOR ORDINARY PEOPLE WHO WANT TO MAKE CONNECTIONS THAT WILL CREATE EXTRAORDINARY OUTCOMES. THIS IS A BOOK ABOUT MAKING THE IMPOSSIBLE HAPPEN. GETTING TO MAYBE: HOW TO CHANGE THE WORLD.

"A Leader's Framework for Decision Making" by David J. Snowden and Mary E. Boone, *Harvard Business Review*,

November, 2007:

Wise executives tailor their approach to fit the complexity of the circumstances they face.

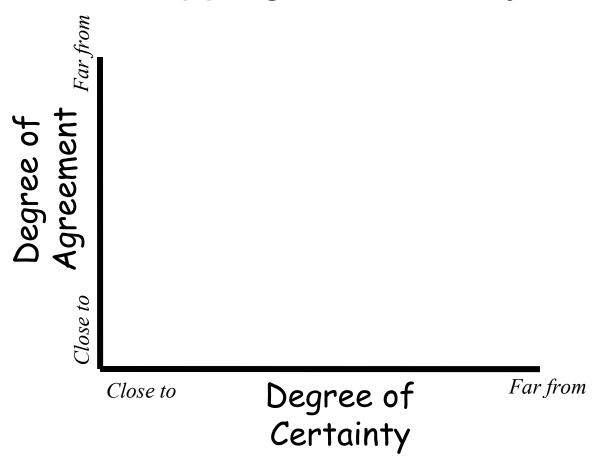
#### **Conceptual Options**

Simple

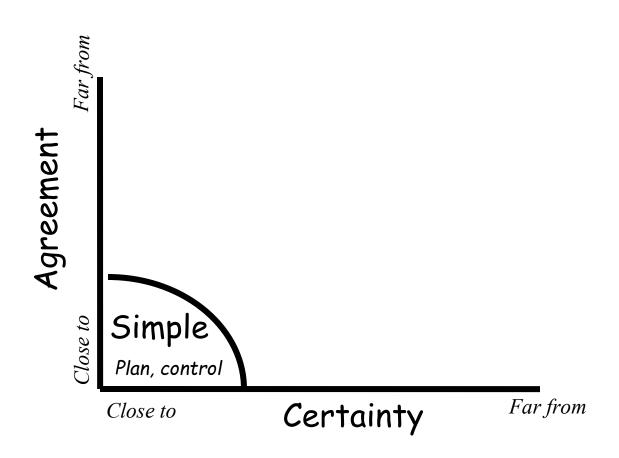
Complicated

Complex

# Situation Analysis Matrix: Mapping the Territory



#### Simple Space



#### Simple

#### Complicated Complex

Following a Recipe A Rocket to the Moon Raising a Child

#### The recipe is essential

Recipes are tested to assure replicability of later efforts

■No particular expertise; knowing how to cook increases success

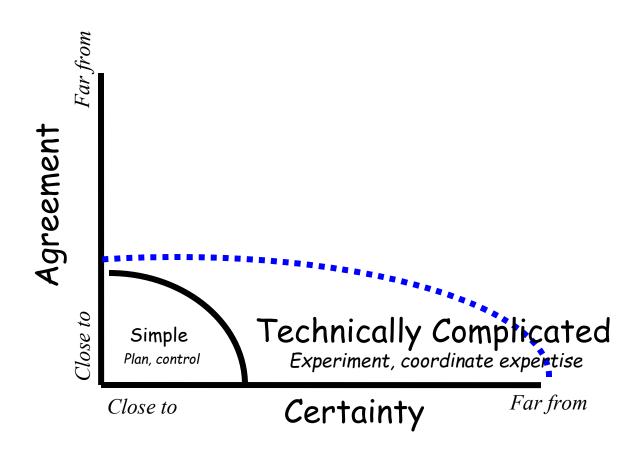
Recipes produce standard products

**Certainty of same** results every time





#### **Technically Complicated**



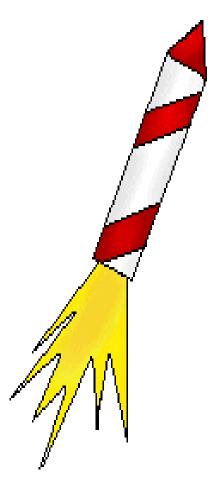
### **Simple**Following a Recipe

- The recipe is essential
- Recipes are tested to assure replicability of later efforts
- No particular expertise; knowing how to cook increases success
- Recipes produce standard products
- **Certainty of same** results every time

### Complicated Complex A Rocket to the Moon Raising a

- Formulae are critical and necessary
- Sending one rocket increases assurance that next will be ok
- High level of expertise in many specialized fields + coordination
- Rockets similar in critical ways
- High degree of certainty of outcome

## Child

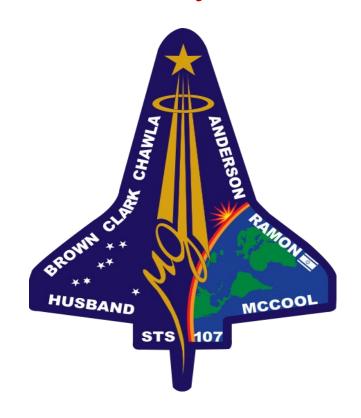


#### Space Shuttle Disasters

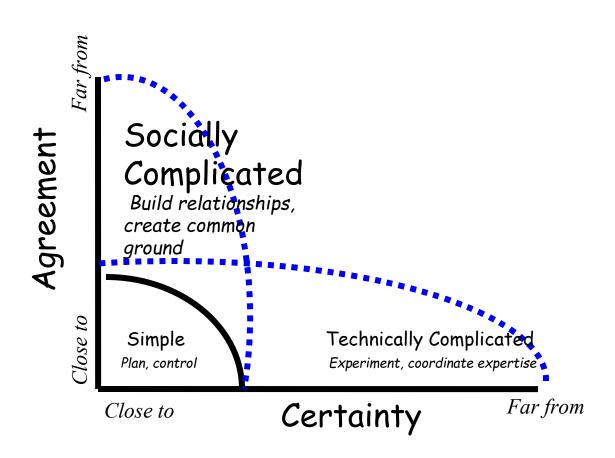
 Challenger disaster January 28, 1986



 Columbia disaster February 1, 2003



#### **Socially Complicated**



#### Socially complicated

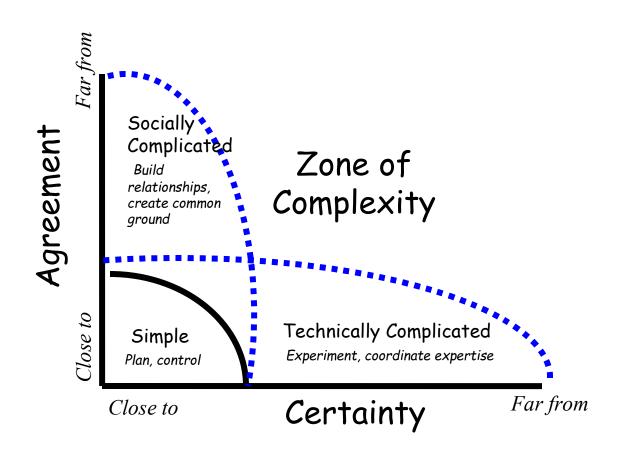
Implementing human rights agreements, like gender equity or outlawing child labor

#### **Environmental Initiatives**

- Many different and competing stakeholders
- Diverse vested interests
- High stakes

Socially complicated situations pose the challenge of coordinating and integrating many players

## Know When Your Challenges Are In the Zone of Complexity

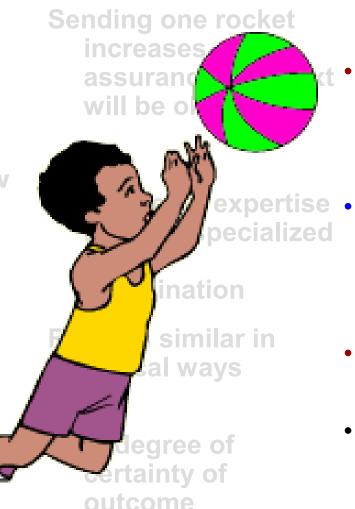


### **Simple**Following a Recipe

#### Complicated A Rocket to the Moon

## Complex Raising a Child

- The recipe is essential
- Recipes are tested to assure replicability of later efforts
- No particular expertise; knowing how to cook increases success
- Recipes produce standard products
- **Certainty of same** results every time



- Formulae have only a limited application
- Raising one child gives no assurance of success with the next
- Expertise can help but is not sufficient; relationships are key
- Every child is unique
- Uncertainty of outcome remains

#### Simple

#### Complicated Complex

Following a Recipe

A Rocket to the Moon

Raising a Child

- The recipe is essential
- Recipes are tested to assure replicability of later efforts
- **■No particular** expertise; knowing how to cook increases **success**
- Recipe notes the quantity and nature of "parts" needed
- Recipes produce standard products 200
- **Certainty of same** results every time

- Formulae are critical and necessary
- **Sending one rocket** increases assurance that next will be ok
- High level of expertise in many specialized fields + coordination
- **Separate into parts** and then coordinate
- Rockets similar in critical ways
- High degree of certainty of outcom

- Formulae have only a limited application
- Raising one child gives no assurance of success with the next
- **Expertise can help** but is not sufficient; relationships are kev
- Can't separate parts from the whole
- **Every child is unique** 
  - **Uncertainty of** outcome remains

"A Leader's Framework for Decision Making" by David J. Snowden and Mary E. Boone, *Harvard Business Review*,

November, 2007:

Wise executives tailor their approach to fit the complexity of the circumstances they face.

# Wise evaluators tailor their approach to fit the complexity of the circumstances they face

## Contingency-based Evaluation

- Situational analysis & responsiveness
- Context sensitivity
- Clarify and focus on intended users: stakeholder analysis
- Clarify and focus on intended uses
- Methodological appropriateness
- Criteria for evaluating the evaluation: credibility, meaningfulness

#### Example

The McGill-McConnell Leadership
Program Example
Simple elements
Complicated elements
Complex elements

#### Simple outcomes

 Increase knowledge and skills of participants

**Evaluation:** Pre-post data and documentation of learning

#### Complicated Impacts

Change participants' organizations

Evaluation:
Case studies
of
organizational change

#### Complex Vision

- Infuse energy into the moribund notfor-profit (voluntary) sector
- Make the sector more dynamic
- Create network of leaders who actively engage in change

#### **Evaluating the Complex**

- Real time follow-up of network connections and actions
- Follow-up is an intervention
- Rapid feedback of findings permits infusion of resources in support of emergent outcomes

#### Table practice exercise

Identify an intervention (program, policy, initiative) in your arena of expertise:

What aspects are...

simple?

complicated?

complex?

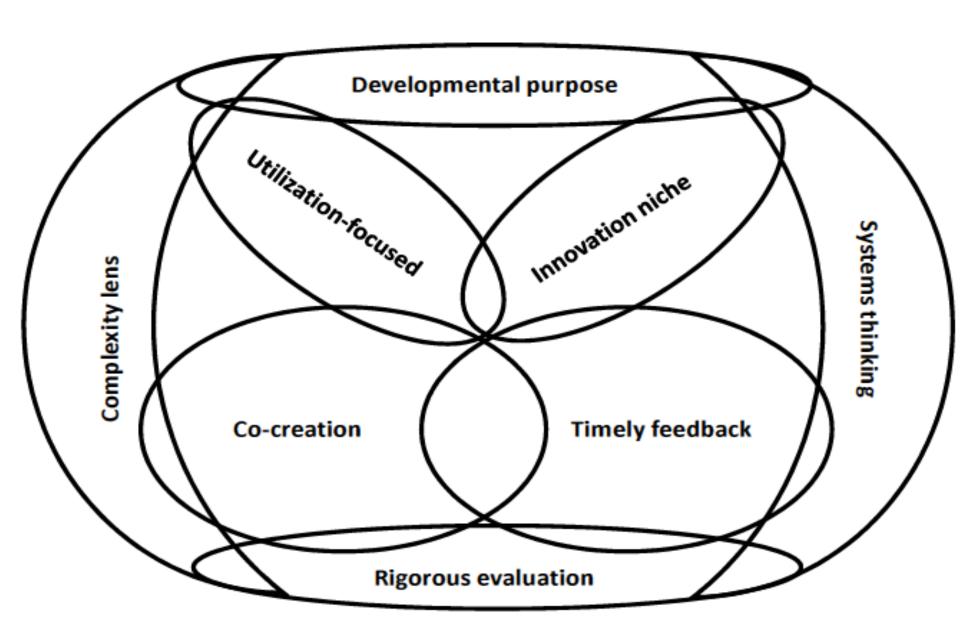
### **DE Situations**

- Peace and conflict mitigation
- Community-based collaborations
- Volatile issues: Immigration
- Advocacy campaigns
- New disease outbreaks: Ebola, Zika
- Spread of new technologies
- Collaborations of all kinds
- Systems changes

# The 8 Essential Principles of Developmental Evaluation

### **DE Principles**

- 1. Developmental purpose
- 2. Evaluation rigor
- 3. Utilization focus
- 4. Innovation niche
- 5. Complexity perspective
- 6. Systems thinking
- 7. Co-creation
- 8. Timely feedback

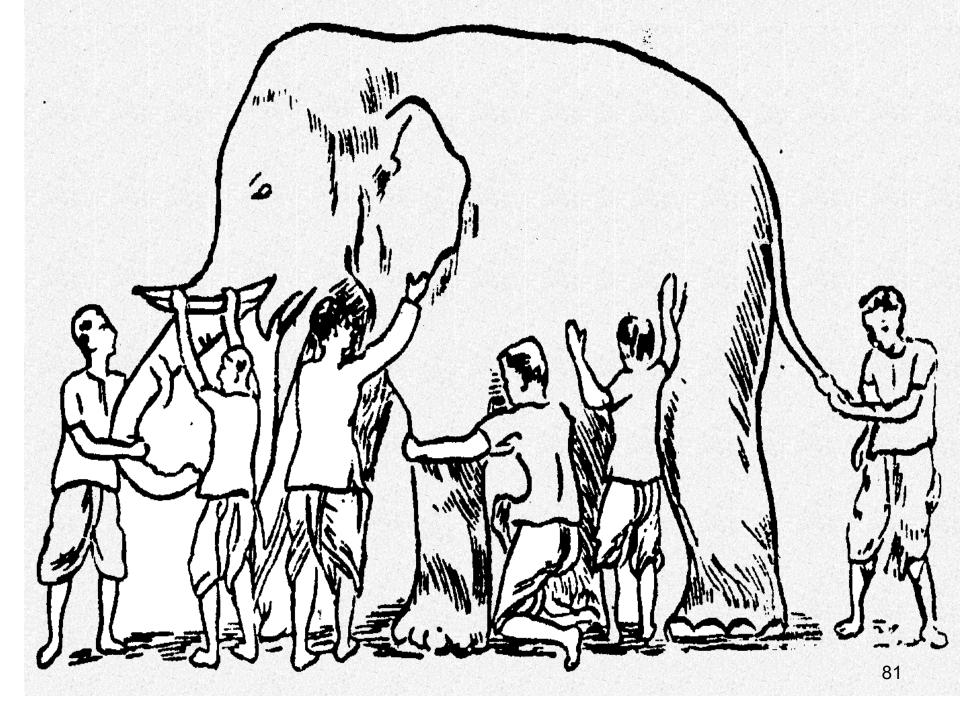


# Systems Change



# Understanding the Elephant from a Systems Perspective

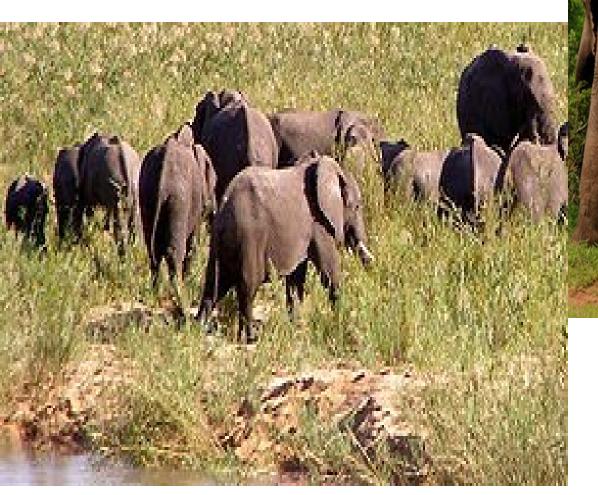






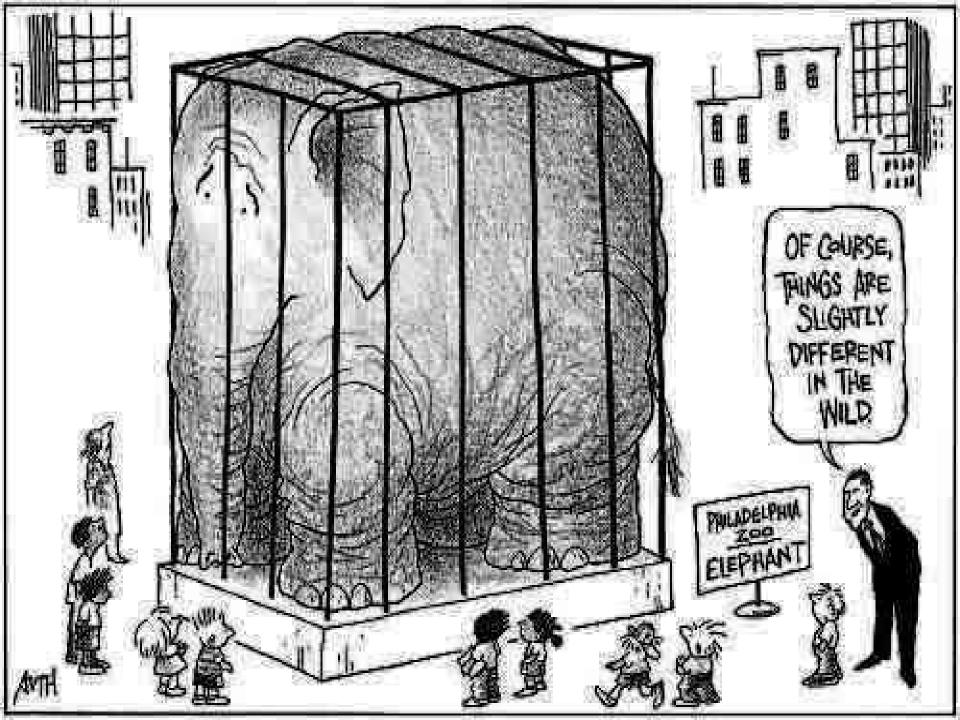












# The relationship between what goes in and what comes out



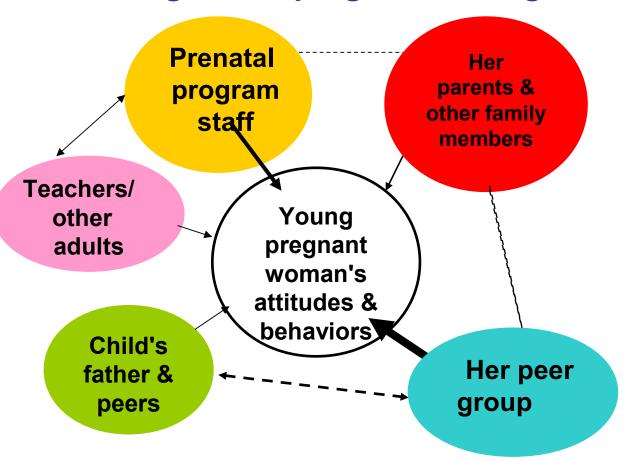
What conceptual framework informs front-end evaluation work?

# Teen Pregnancy Program Example

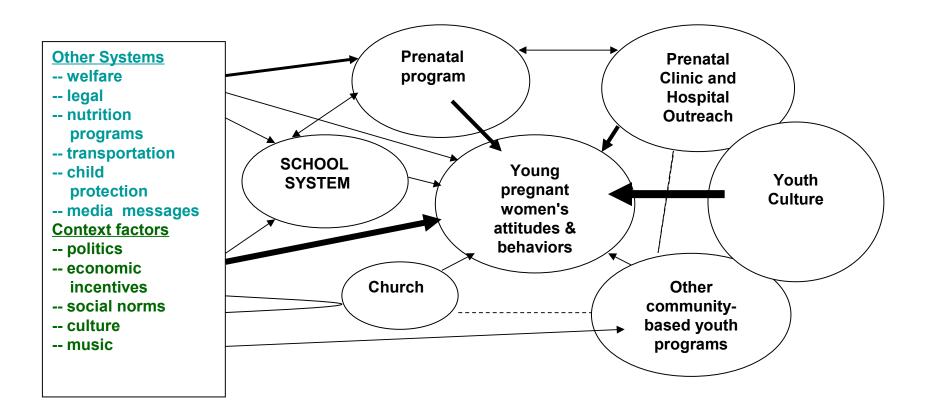
#### **Logic Model for Pregnant Teens Program**

- 1. Program reaches out to pregnant teens
- 2. Pregnant teens enter and attend the program (participation)
- 3. Teens learn prenatal nutrition and self-care (increased knowledge)
- 4. Teens develop commitment to take care of themselves and their babies (attitude change)
- 5. Teens adopt healthy behaviors: no smoking, no drinking, attend prenatal clinic, eat properly (behavior change)
- 6. Teens have healthy babies (desired outcome)

# Systems web showing possible influence linkages to a pregnant teenager



# Program systems web showing possible institutional influences affecting pregnant teenagers:



## Police and sleep apnea

Bangladesh examples

# Using Different System Lenses to Understand a "particular" System

#### **Biologic System**

- Emergence
- Coordination/synergy
- Structure, Process, Pattern
- Vitality

#### **Economic System**

- Inputs/Outputs
- Cost/Waste/Value/Benefits
- Customers/Suppliers

#### **Political System**

- Power
- Governance
- Citizenship
- Equity

#### Sociologic System

- Relationships
- Conversations
- Interdependence
- Loose-tight coupling
- Meaning/sense

# SYSTEM DIMENSIONS

#### **Anthropologic**

#### <u>System</u>

- Values
- Culture/Milieu

#### Mechanical / Physical System

- Flow
- Temporal Sequencing
- Spatial Proximities
- Logistics
- Information

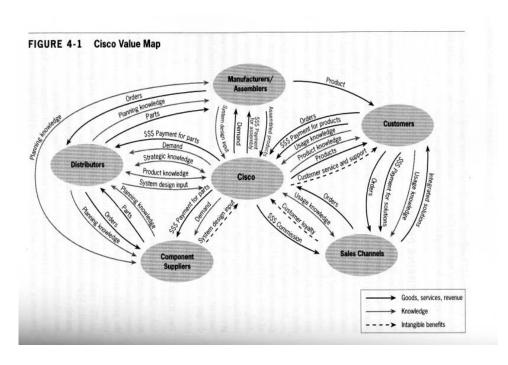
#### <u>Psychological System</u>

- Organizing
- Forces Field
- •Ecological/Behaviour Settings

#### **Information System**

- Access
- •Speed
- •Fidelity/utility
- •Privacy/security
- Storage

### Map Systems as Webs

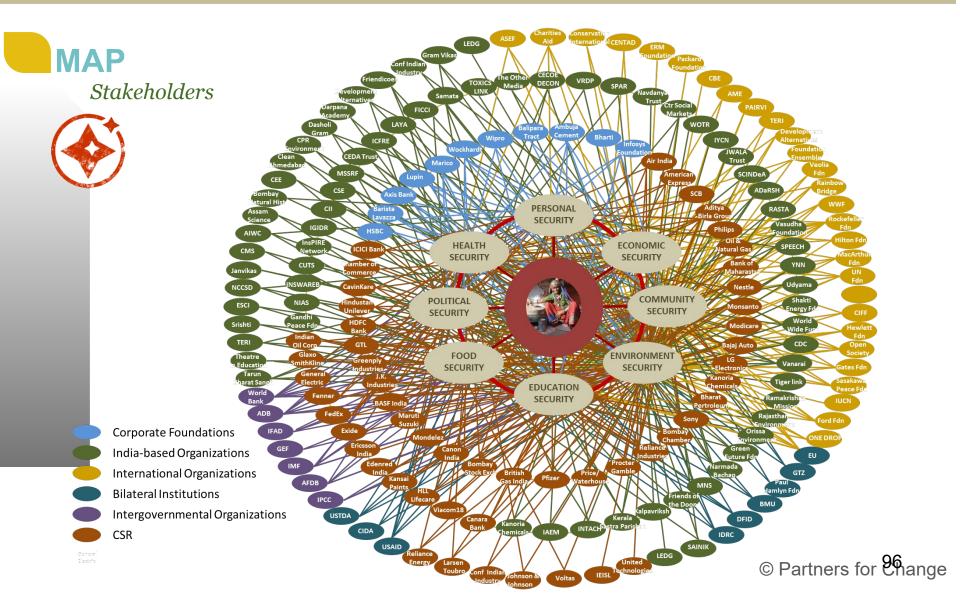


Source: Digital Capital: Harnessing the Power of Business Webs, By Don Tapscott, David Ticoll and Alex Lowy

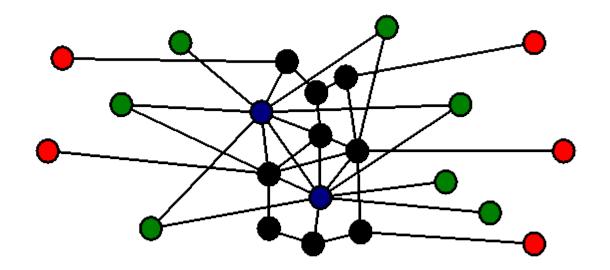
**GBN** Global Business Network

### **NETWORK VISUALIZATION**





# Complex Dynamic Systems Configuration



# **HIV/AIDS Example**

- Hits every system: health, family, social, religious, economic, political, community, international
- Requires multiple interventions on multiple fronts in all subsystems simultaneously
- Resulting reactions, interactions, consequences dynamic, unpredictable, emergent, and ever changing

## Global Economic Complexity

Alan Greenspan, Final speech to world's Central Bankers, Jackson Hole, Wyoming August 26, 2005

 "In the absence of a single variable, or at most a few, that can serve as a reliable guide, policymakers have been forced to fall back on an approach that entails the interpretation of the full range of economic and financial data."  "Despite extensive efforts to capture and quantify what we perceive as the key macroeconomic relationships, our knowledge about many critical linkages is far from complete and, in all likelihood, will remain so. Every model, no matter how detailed or how well conceived, designed, and implemented, is a vastly simplified representation of the world, with all of the intricacies we experience on a day-to-day basis."

 "We all temper the outputs of our models and test their results against the ongoing evaluations of a whole array of observations that we do not capture in either the data input or the structure of our models. We are particularly sensitive to observations that appear inconsistent with the causal relationships of our formal models."

### Oct 8, 2007 on The Daily Show

"I was telling my colleagues the other day...I'd been dealing with these big mathematical models for forecasting the economy, and I'm looking at what's going on the last few weeks and I say, "Y'know, if I could figure out a way to determine whether or not people are more fearful, or changing to euphoric... I don't need any of this other stuff. I could forecast the economy better than any way I know. The trouble is, we can't figure that out. I've been in the forecasting business for 50 years, and I'm no better than I ever was, and nobody else is either." Alan Greenspan.

# The Age of Turbulence: Adventures in a New World, 2007, by Alan Greenspan

# Dealing with the Unexpected and Unpredicted

# Creative Challenge

### Situational adaptability:

- Contingency-based evaluation
- Appropriateness
  - --Using standard forms of evaluation and
  - -- Going beyond standard forms when appropriate and useful

# Being Open: How hard is this to do?

My Colorado experience....

"The range of what we think and do is limited by what we fail to notice. And because we fail to notice that we fail to notice, there is little we can do to change, until we notice how failing to notice shapes our thoughts and deeds."

Scottish psychiatrist, R. Laing

#### Paradigms and Lenses

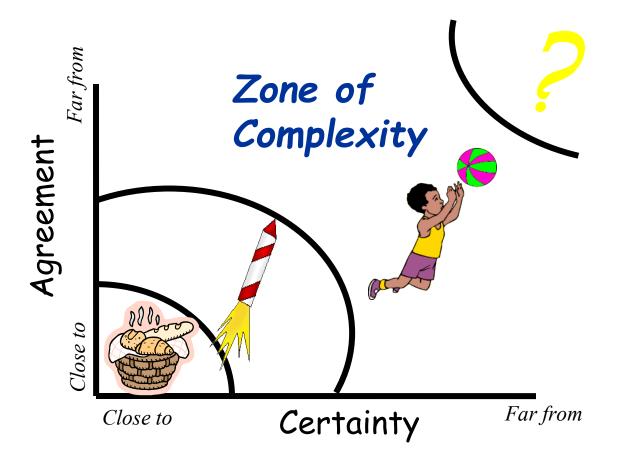
- The importance of interpretive frameworks
- Complexity as an interpretive framework

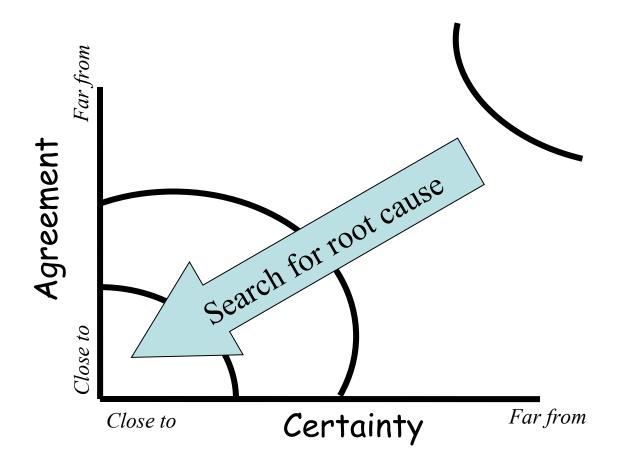
#### Getting to Maybe: How the World Is Changed? 2006

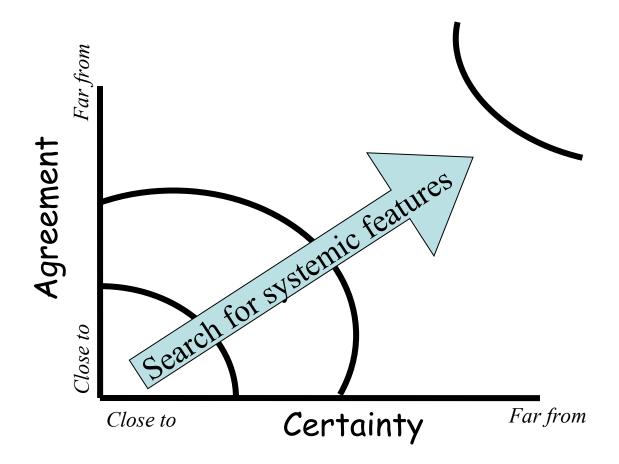
Frances Westley, Brenda Zimmerman, Michael Q. Patton Random House Canada,

#### **Complex Situations**

- Highly emergent (difficult to plan and predict)
- Highly dynamic, rapidly changing
- Relationships are interdependent and non-linear rather than simple and linear (cause-effect)







# Contingency-based Developmental Evaluation

# Improvement versus Development

Beyond just Summative and Formative

# Beyond Static Accountability Models

## Conditions that challenge traditional model-testing evaluation

- High innovation
- Development
- High uncertainty
- Dynamic
- Emergent
- Systems Change

Adaptive Management

#### CONTRASTS

## Traditional evaluations...

Testing models

Complexity-based,
Developmental
Evaluation...

Supporting innovation and adaptation

Render
 definitive
 judgments of
 success or
 failure

# Developmental **Evaluation...**

 Provide feedback, generate learnings, support direction or affirm changes in direction in real time

- Render definitive judgments of success or failure
- Measure success against predetermined goals

## Developmental Evaluation...

- Provide feedback, generate learnings, support direction or affirm changes in direction
- Develop new measures and monitoring mechanisms as goals emerge & evolve

 Evaluator external, independent, objective

## Developmental Evaluation...

 Evaluator part of a team, a facilitator and learning coach bringing evaluative thinking to the table, supportive of the organization's goals

 Evaluator determines the design based on the evaluator's perspective about what is important. The evaluator controls the evaluation.

#### Developmental Evaluation...

 Evaluator collaborates with those engaged in the change effort to design an evaluation process that matches philosophically and organizationally.

 Design the evaluation based on linear cause-effect logic models

#### Developmental Evaluation...

 Design the evaluation to capture system dynamics, interdependencies, and emergent interconnections

 Aim to produce generalizable findings across time & space

#### Developmental Evaluation...

 Aim to produce context-specific understandings that inform ongoing innovation

 Accountability focused on and directed to external authorities and funders.

## Developmental Evaluation...

 Accountability centered on the innovators' deep sense of fundamental values and commitments – and learning.

 Accountability to control and locate blame for failures

## Developmental Evaluation...

- Learning to respond to lack of control and stay in touch with what's unfolding
- And thereby respond
   strategically

 Evaluation often a compliance function delegated down in the organization

## Developmental Evaluation...

Evaluation a leadership function:

Reality-testing, results-focused, learning-oriented leadership

 Evaluation engenders fear of failure.

## Developmental Evaluation...

 Evaluation supports hunger for learning.

#### **Conditions**

- High innovation
- Development
- High uncertainty
- Dynamic
- Emergent

#### Challenge:

Matching the evaluation process and design to the nature of the situation:

Contingency-based Evaluation

#### References

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Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use. Guilford Press, 2010.