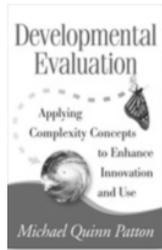


Developmental Evaluation:

Applying Complexity Concepts
to Enhance Innovation and Use



Michael Quinn Patton
AEA Summer Institute
Atlanta, 2011

Session 25: Wed AM

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 high-performance more than data quality and accuracy.

Original Primary Options

Formative

and

Summative

Evaluation

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

Blandin Community Leadership Program



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Beyond Formative and Summative to

Developmental Evaluation

as an option in the repertoire of approaches

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Challenge:

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

Contingency-based Evaluation

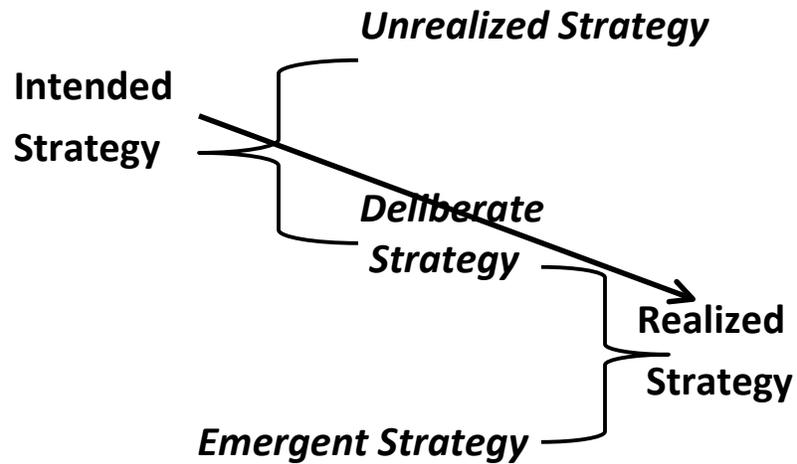
Conditions that challenge traditional model-testing evaluation

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



Adaptive Management

Mintzberg on Strategy



5 types of DE

1. Ongoing Development

Development

vs.

Improvement

First DE Type

Ongoing development in adapting a project, program, strategy, policy, or other innovative initiative to new conditions in complex dynamic systems.

5 Types of DE

2. *Pre-formative development of a potentially scalable innovation* to the point where it is ready for traditional formative and summative evaluation; pre-formative developmental evaluation works with emerging ideas and visionary hopes in a period of exploration to shape them into a potential model that is a more fully conceptualized, potentially scalable intervention.

As models emerge out of exploratory and innovative initiatives, some may move into more traditional formative and summative evaluation to determine scalability and generalizability, while others remain in developmental mode, either undergoing further development or continuous experimentation in the search for new models.

5 Types of DE

3. *Adapting effective general principles to a new context* as ideas and innovations are taken from elsewhere and developed within a new setting, the work of developmental evaluation in the dynamic middle between top-down and bottom-up forces of change.

Fundamental Issue: How the World Is Changed



Models vs. Principles

Identifying proven principles for adaptive
management

(bottoms-up approach)

versus

Identifying and disseminating

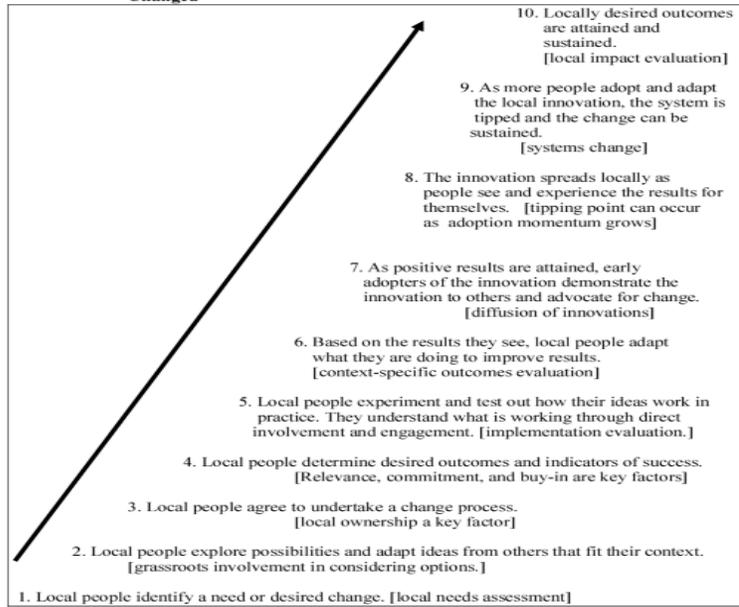
proven models

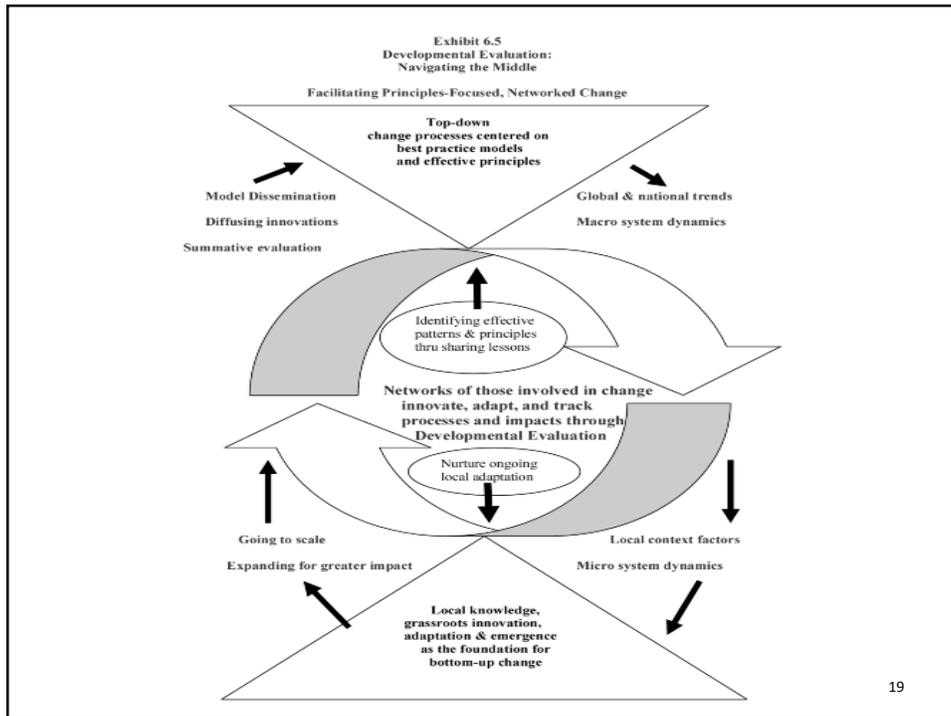
(top down approach)

Exhibit 6.1. Top-Down, Going-to-Scale Theory of How the World Is Changed



Exhibit 6.4. Bottom-Up, Local Innovation & Adaption Theory of How the World Is Changed





5 Types of DE

4. *Major systems change and cross-scale developmental evaluation*, providing feedback about how major systems change is unfolding, evidence of emergent tipping points, and/or how an innovation is or may need to be changed and adapted as it is taken to scale, that is, as its principles are shared and disseminated in an effort to have broader impact.

Horizontal scaling across systems or vertical scaling to broader systems may involve more than adaptation; these dissemination and scaling processes can evolve an essentially new development, the emergence of which can be documented and analyzed as part of a developmental evaluation.

Systems

- **Parts are interdependent such a change in one part changes all parts**
- **The whole is greater than the sum of the parts**
- **Focus on interconnected relationships**
- **Systems are made up of sub-systems and function within larger systems**

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)

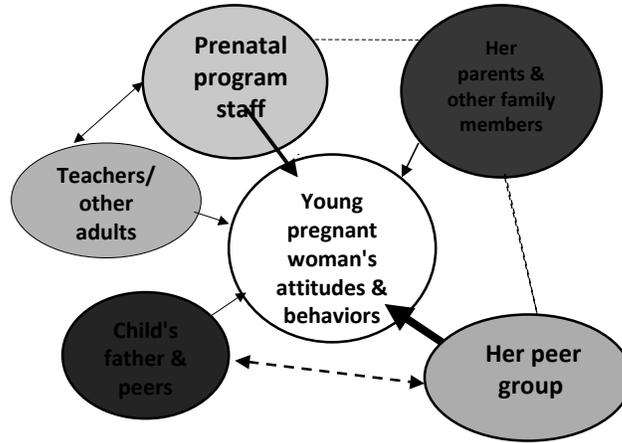
3. Teens learn prenatal nutrition and self-care (increased knowledge)

4. Teens develop commitment to take care of themselves and their babies (attitude change)

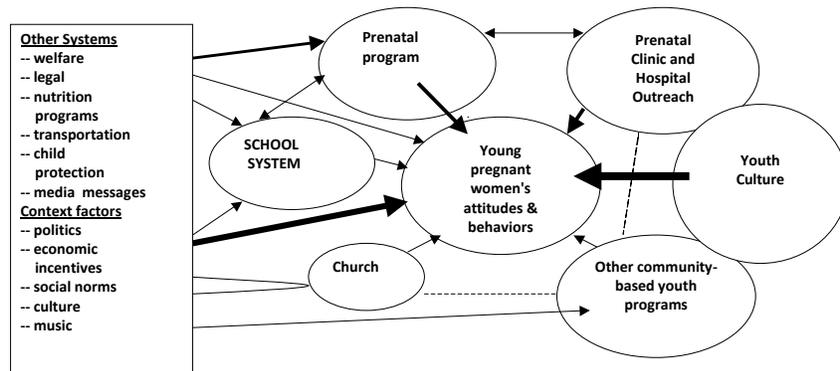
5. Teens adopt healthy behaviors: no smoking, no drinking, attend prenatal clinic, eat properly (behavior change)

6. Teens have healthy babies (desired outcome)

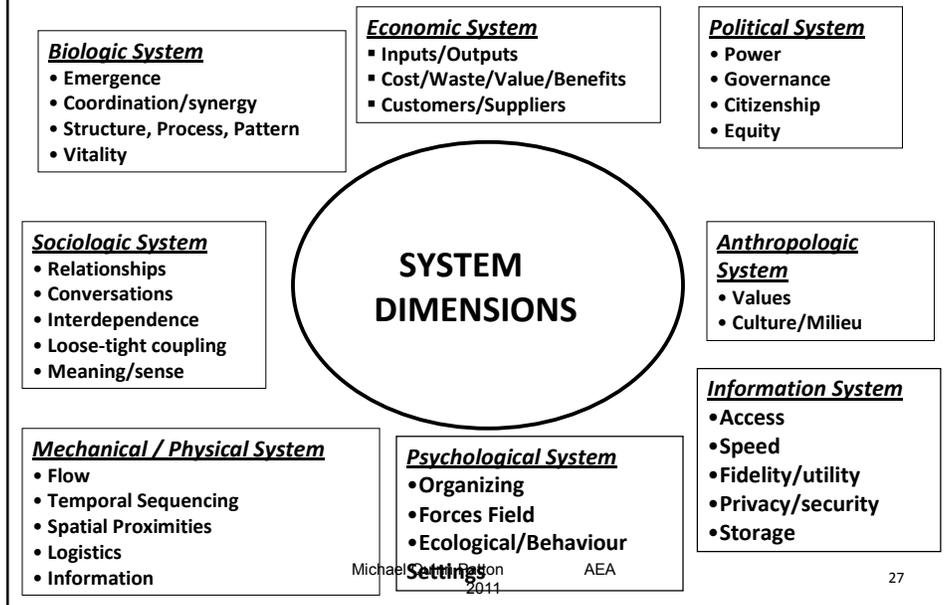
Systems web showing possible influence linkages to a pregnant teenager



Program systems web showing possible institutional influences affecting pregnant teenagers:



Using Different System Lenses to Understand a “particular” System



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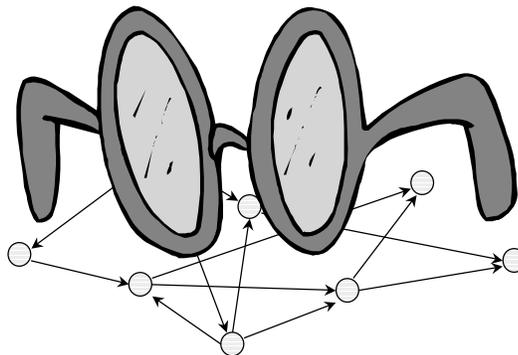
5 Types of DE

5. *Developing a rapid response* in the face of a sudden major change or a crisis, like a natural disaster or financial melt-down, exploring real time solutions and generating innovative and helpful interventions for those in need.
 - Dealing with high uncertainty, turbulence, turmoil, high stakes, and often conflict.

Taking Emergence Seriously

- Beyond “unanticipated consequences” to genuine openness

Seeing Through A Complexity Lens



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

Complex Nonlinear Dynamics

- **Nonlinear**: Small actions can have large reactions. *“The Butterfly Wings Metaphor”*
- **Emergent**: Self-organizing, Attractors
- **Dynamic**: Interactions within, between, and among subsystems and parts within systems can volatile, changing
- **Getting to Maybe**: Uncertainty, unpredictable, uncontrollable

Getting to Maybe: How the World Is Changed

- Frances Westley,
- Brenda Zimmerman
- Michal Quinn Patton

- Random House Canada, 2006

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

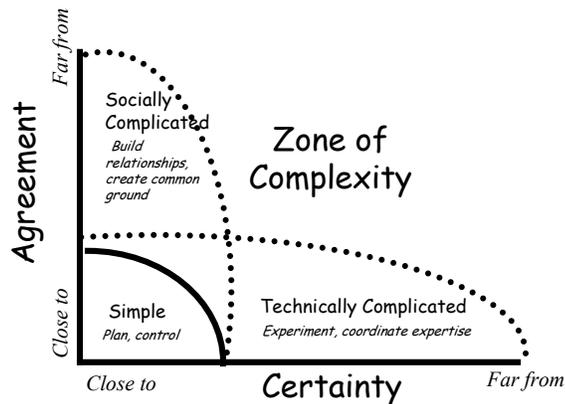
November, 2007:

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

Conceptual Options

- **Simple**
- **Complicated**
- **Complex**

Know When Your Challenges Are In the Zone of Complexity



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Simple Complicated Complex

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
- ⌘ Recipe notes the quantity and nature of "parts" needed
- ⌘ Recipes produce standard products
- ⌘ Certainty of same results every time



A Rocket to the Moon

- 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 outcome



Raising a Child

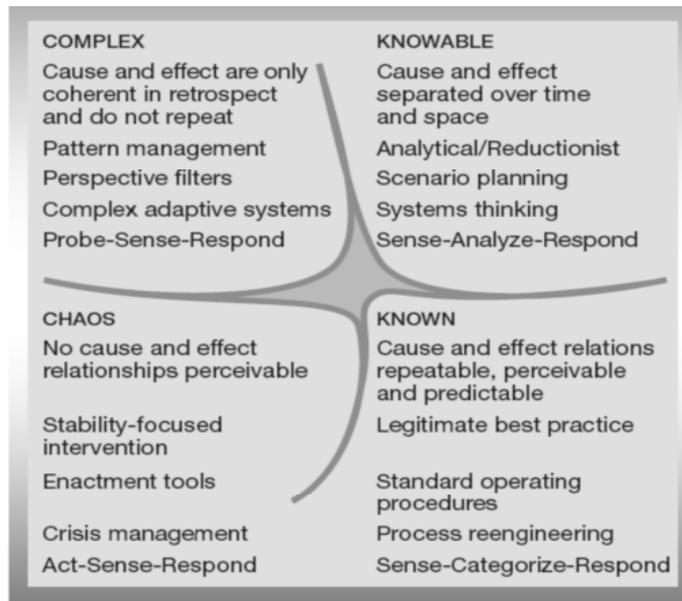
- Formulae have only a limited application
- Raising one child gives no assurance of success with the next
- Expertise can help but is not sufficient; relationships are key
- Can't separate parts from the whole
- Every child is unique
- Uncertainty of outcome remains



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**“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.

5 Types of DE

1. Ongoing development and adaptation
2. Preformative evaluation to support exploration and innovation
3. Supporting local adaptation of general principles to navigate top-down and bottom-up forces for change
4. Evaluating major systems change
5. Evaluating in turbulent, disaster situations

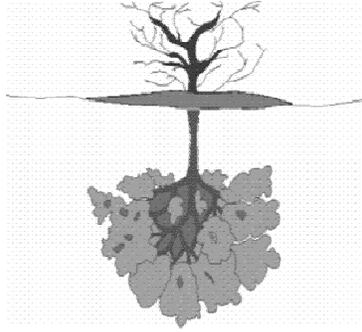
What role can evaluation play with complex dynamic innovations?

Challenge:

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

Contingency-based Evaluation

In the beginning...



References

Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use. Guilford Press, 2011.

Getting to Maybe: How the World Is Changed?
Frances Westley, Brenda Zimmerman, Michael Q. Patton, Random House Canada, 2006

Utilization-Focused Evaluation, 4th ed.,
Michael Quinn Patton, Sage, 2008.