Peer to Peer Session
Consulting in Complex Adaptive Systems
December 6, 2016
Session Objectives

As the environment becomes more complex, the concept and process for org design and consulting is changing. In our peer-to-peer session, we will explore some ways consultants can be more adaptive to address client real time needs.

We plan to:

• Share a Consulting Framework to set context for current competence
• Explore how consulting approaches are evolving to adapt to complex systems challenges in a dramatically changing world

• Welcome
• Consulting Framework
• Complex Adaptive Systems (CAS)
• Evolution of Complex Adaptive Systems
• Consulting in Adaptive Systems
• Take Aways
What are your core consulting skills, knowledge, expertise?
A Macro Map for Consulting

Defining Your Practice
- Visioning
- Strategic Planning
- Building Capability

Finding Clients
- Creating a Presence
- Marketing
- Sales Contact

Securing the Work
- Preparing Proposals
- Contracting
- Project Planning

Managing the Engagement
- Client Entry
- Service Delivery
- Close Down

Supporting the Effort
- IT & Production Support
- Project/Portfolio Management
- Billing

Basic Tools
- Reflect
- Modeling
- Run Meetings
- Interview
- Survey
- Write Reports
- Present
- Facilitate
- Train
- Conduct Workshops

Boxes:
- Balancing: Intention, Capability, Market Acceptance
- Represent the richness and uniqueness of your offering, Do it efficiently, Remaining authentic
- Securing an initial contract with both clarity and elasticity, Translating broad outcomes into a WBS
- Delivering perceived value within the promised contract, Give voice to collective (and often unpopular) wisdom
- Ensuring service delivery does not stumble, Keeping the evolving contract visible and consensual
Service Delivery

Service Delivery represents the wide range of knowledge, skills, expertise organization consultants apply to their client engagements.

- OD
- Org Design
- Strategy Development
- Change Management
- Communication
- Training
- Project Management

- Team Development
- Coaching
- Social Technical Systems
- Agile
- Adaptive Systems
- Other?
What are the implications for consultants working in Complex Adaptive Systems?
Adaptability:
It is not the strongest of the species that survives, nor the most intelligent; it is the one that is most adaptable to change. (Charles Darwin)
Complex Systems

**Defined**
Complexity is an interdisciplinary theory that grew out of systems thinking and cybernetics in the 1960s. It draws from research in the natural and physical sciences that examine **uncertainty** and **non-linearity**. Complexity theory emphasizes **interactions** and the accompanying **feedback loops** that constantly change systems. While it proposes that **systems are unpredictable**, they are also constrained by **order-generating rules**.

**Refined**
*Complexity* is a concept that helps current and future leaders make sense of the organizational, political and regional challenges they are facing due to the rapid changes in technology, globalization, markets, culture. “In short, the science of complexity can help all of us address the challenges and opportunities we face in a new epoch of human history.

*David Snowden 2007*
Complex Systems – Other Thoughts

- Xxxxxxx
- Xxxxxxxxxxxxxxxx
- Xxxxxxxxxxxxxx
## Leadership Decisions in Multiple Contexts

<table>
<thead>
<tr>
<th>Context</th>
<th>Leader’s Role</th>
<th>Danger Signals</th>
<th>Responses</th>
<th>Consultant Role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Simple</strong></td>
<td>Consistent events</td>
<td>Categorize, respond</td>
<td>Complacency</td>
<td>Updated communication</td>
</tr>
<tr>
<td></td>
<td>Clear cause/effect</td>
<td>Follow procedures</td>
<td>Simplify issues</td>
<td>Stay connected</td>
</tr>
<tr>
<td></td>
<td>Fact-based decisions</td>
<td>Communicate clearly</td>
<td>Reliance on BP</td>
<td>Assume complexity</td>
</tr>
<tr>
<td><strong>Complicated</strong></td>
<td>Requires expert input</td>
<td>Analyze, respond</td>
<td>Experts over confident</td>
<td>Involve ext/int input</td>
</tr>
<tr>
<td></td>
<td>Emergent cause/effect</td>
<td>Create panels of experts</td>
<td>Analysis paralysis</td>
<td>Invite creative thinking</td>
</tr>
<tr>
<td></td>
<td>Fact-based decisions</td>
<td>Listen to differing advice</td>
<td>Non experts viewpoints</td>
<td>Think outside box</td>
</tr>
<tr>
<td><strong>Complex</strong></td>
<td>Flux, unpredictability</td>
<td>Probe, sense, respond</td>
<td>Fall back on command</td>
<td>Be patient</td>
</tr>
<tr>
<td></td>
<td>Many competing ideas</td>
<td>Support innovative ideas</td>
<td>Focus on fact vs pattern</td>
<td>Encourage reflection</td>
</tr>
<tr>
<td></td>
<td>innovative approaches</td>
<td>Increase interaction</td>
<td>Speed up solution</td>
<td>Encourage interaction</td>
</tr>
<tr>
<td><strong>Chaos</strong></td>
<td>High turbulence, tension</td>
<td>Act, sense, respond</td>
<td>Command/control</td>
<td>Setup parallel teams</td>
</tr>
<tr>
<td></td>
<td>No clear cause/effect</td>
<td>Look for what works</td>
<td>“cult” of leader</td>
<td>Urge open dialogue</td>
</tr>
<tr>
<td></td>
<td>Too many decisions</td>
<td>Take action for order</td>
<td>Chaos unabated</td>
<td>Shift chaos to complex</td>
</tr>
</tbody>
</table>

Consulting in Complex Adaptive Systems*

20th Century Organizations

- Linear Change
- Planned Staged change
- Change targets
- Primary design
- Environment scan
- Bureaucratic rules
- Dynamic equilibrium

Complex Adaptive Systems

- Nonlinear Change
- Iterative Agile Theory
- Self organizing
- Primary-who ever lives in the system
- Co-evolution in response to context
- Flexible rules
- Edge of chaos

*Dave Roitman, STS Presentation, Sept 2016
Your Perspective and Input

- Comments or reactions to Snowden’s framework on organization contexts?
- What are the implications for your consulting practice?
- What actions might you take to work in Complex Systems if any?
A complex system has the following characteristics:

- It involves a large number of **interacting elements**
- The interactions are **nonlinear**
- The system is dynamic, the **whole is greater than** the sum of its **parts**
- **Solutions** cannot be imposed; they **emerge** from the circumstances
- The system has a **history**, which is integrated with the present
- **Hindsight does not always lead to foresight** because circumstances and systems constantly change

Evolution of Complex Adaptive Systems

From hierarchy to networks!
Complex Adaptive Systems
Evolution of Organization Design

Vertical Integrated Systems
“A basic proposition is that the greater the uncertainty of the task, the greater the amount of information that has to be processed between decision makers during the execution of the task”

Complex Adaptive Systems
Organizations as Networks

Third Organizational shift is where networks are more effective processors of information
Complex Adaptive Systems
Verticals, Horizontals, four to six dimensions, heavy matrixes

- Scale
- Aggregation
- Anonymity
- Efficiency
Complex Adaptive Systems

Rapidly increasing and run away complexity
Adaptive Work System
Organization Design View

The Agility and Speed Star Model

- Agility, flexibility, speed, and re-configurability

- Stakeholders
  - Communities
  - Network Leader
  - New design skills
  - Collaborative culture

- Customized compensation
  - Bonus
  - Career – market value
  - Recognition
  - Metrics

- Network (foreground)
- Structure (background)
- Ambidextrous
- Adaptive Work Teams

- Decision/Design Accelerator
- Technology enablers/system
- Rapid prototyping
- Strategic Horizons Process
- Plan-of Record / market dynamics
- Performance management
- Dashboards for learning

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Complex Adaptive Systems
Consulting at the vertical/lateral interface

Managing the interface between vertical and lateral stakeholders is the sweet spot for org consultants.
Consulting in Complex Systems

Approaches and Methods Used to Consult in Complex Adaptive Systems

- XXXX
- XXXXXXXXXXXXXXXXXX
- XXXXXXXXXXX
- XXXXX

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### Take Aways

**What skills, knowledge, expertise do I need to work effectively in Complex Adaptive Systems?**

<table>
<thead>
<tr>
<th>Skills</th>
<th>Knowledge/Theory</th>
<th>Expertise</th>
<th>Methodology/Tools</th>
<th>Consultant Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitation Skills</td>
<td>Org Design</td>
<td>Org design</td>
<td>SCRUM</td>
<td>Pair of Hands?</td>
</tr>
<tr>
<td>Assessing readiness</td>
<td>STS</td>
<td>Large Group Design</td>
<td>Agile</td>
<td>Collaborative?</td>
</tr>
<tr>
<td>Diagnostic skills</td>
<td>Cybernetics</td>
<td>Change Management</td>
<td>Ethnography</td>
<td>Expert?</td>
</tr>
<tr>
<td></td>
<td>Network Theory</td>
<td>CAS</td>
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<tr>
<td></td>
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Thank You!
Complex Adaptive Systems

Verticals, Horizontals, Networks, Adaptive Work Groups

The Decision/Design Accelerator is a powerful management tool/intervention which improves both execution performance and innovation capability. We define the DA as a creative, knowledge rich, technology-enabled, highly collaborative environment where clients participate in work sessions to create solutions to complex business problems.

The DA is an organizational capability whose characteristics and benefits generally do not exist in traditional organizations and thus provides a source of advantage – reduced time to value (speed), maximizes productivity of resources (costs), accelerates stakeholder commitment (empowerment), significantly increases social capital (integration), and solves complex business problems with concrete solutions.