Creating an Agile Policy Function in Government

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Overview

Agile Policy-Making was created to answer three important questions (Room, 2011, p. 5):

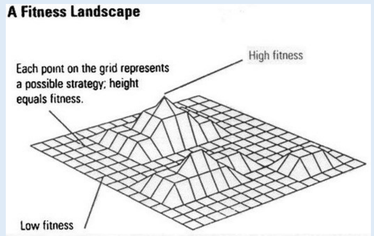
1) "How can public policy-makers make good decisions?"
2) "What counts as a good decision?"
3) "And having made it, how can they check just how good it turned out to be?"

Policymakers today have unprecedented access to huge amounts of complex data (much of which is real-time or near-real-time) and greatly sophisticated analysis tools and techniques. They also face a policy environment which is more dynamic and complex in relationships and issues. As discussed in "Issues With Current Policy Making," traditional methods for making policy do not work as well in today's policy environments. That is why Dr. Room formulated his "Agile Policy Toolkit" which incorporates complexity theory into policymaking.

In my work and research, I have blended Dr. Room's Agile Policy Toolkit with current advances in Big Data and Data Science to produce "Agile Predictive Policy Analysis" (APPA). The advantage of this model is that it not only provides a deeper understanding of the current policy area but also methods to better predict the impacts of proposed policies. APPA uses both traditional statistical methods and cutting-edge "New Analytical Tools" to create a more complete picture of the policy landscape and the organizations in that landscape.

Related to APPA are "Organizational Health," "Network Health," and "Adaptive Case Management." Organizational health became an important component of APPA because the success of policymaking and implementation depends on how well an agency can align its people, processes, and technology to meet strategic goals and carry out policies. Network health is like organizational health in that it examines the effectiveness of cross-organizational policy networks as agencies and other organizations interact on the fitness landscape.

Finally, because processes are how the agency's work is done (with support from people and technology), it was important to find a business process approach that also incorporates complexity theory and modern social networking techniques to fit into the dynamic policy landscape. That is why adaptive case management was chosen as a complementary research area.



Agile Predictive Policy Analysis

1) Model the Participants—complete profile of all stakeholders involved in the policy area.

2) Model the Relationships – map the connections and power balances among the stakeholders.

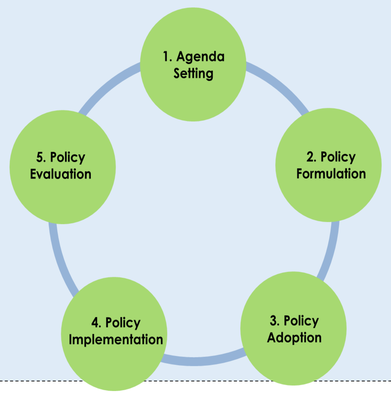
3) Model the Environmental Factors— list and describe the influence that the policy environment has on the stakeholders and their relationships.

4) Build the Simulation— create the simulation using the information from the first three steps and using a wide variety of data feeds.

5) Retrodiction analysis for model refinement— test the simulation by how well it models past events and closely its output resembles the actual historical outcome.

6) Predictive function— run the simulation using hypothetical data that to predict the effects of proposed policies.

7) Scenarios— create narrative reports based on the simulation runs from the step above.



Issues With Current Policy-Making

The diagram to the left is a generalized model of how policy is currently made. We start with "Agenda Setting" where events cause a sudden focus on an issue which then compels calls for a solution. In the "Policy Formulation" stage, different policy setting groups (Congress, President, Agencies, etc.) study the issue to develop a policy to solve/manage the current issue. The final policy solution is created in the "Policy Adoption" stage where it is then released for implementation ("Policy Implementation" stage). Once the policy is implemented, it's effects on solving the issue are evaluated ("Policy Evaluation" stage) and the policy may go through the cycle again if it is not considered successful enough in solving the original issue. There are five major issues with this model:

1 — The entire model is focused on events as they are happening or just happened. Essentially, policy makers are rushing from one crisis to another which leads to waste and often partially-effective solutions made in haste and/or overwhelming public pressure.

2 — There are efforts to involve some stakeholders in policy formulation but this is often after the initial problem statement is created and most of the solutions have been decided upon by the same set of experts in that field and/or well-organized interests that tend to dominate the conversation. This can lead to a narrow focus on the issue and the inability to think of disruptive, innovative solutions.

3 — In the policy adoption stage there is often confusion over how to implement the policy and how it will interact with other policies. Similar problems that effect the policy formulation stage can affect the regulatory process as agencies implement the policy solution.

4 — Once the policy has been implemented, metrics are collected to evaluate the effectiveness of the policy. Again, problems from the policy formulation and policy adoption stages can lead to flawed metrics. The agencies may also resist reporting metrics because of fears that they will be unjustly judged in their effectiveness in implementing the policy.

5 — If measures are not being collected correctly or interpreted correctly, then policy makers cannot really tell how successful the policy is or when it needs to be revised. This delay can cause greater problems than the original issue that the policy was designed to create. It may also take longer to determine when to revise a policy and thus the harmful effects from the ineffective policy are prolonged.

Organizational Health in Agile Policy-Making

Implementing policy is just as vital as creating the policy. Agencies need the ability to effectively execute and manage the policies which is why organizational health is an important related component to Agile Policy-Making. Organizational health is defined as "the ability of an organization to align, execute, and renew itself . . . so that it can sustain exceptional performance over time."* For government agencies, organizational health is how effectively the people, processes, and technologies are aligned to the agency's strategic goals. Many of the same data analysis techniques used in modeling policy landscape can also be used to measure and improve the organizational health of agencies and other organizations involved in the policy area.

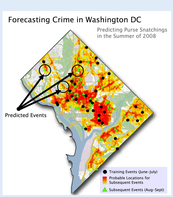
* **Keller, S., & Price, C. (2011).** ***Beyond Performance: How Great Organizations Build Ultimate Competitive Advantage*****.**

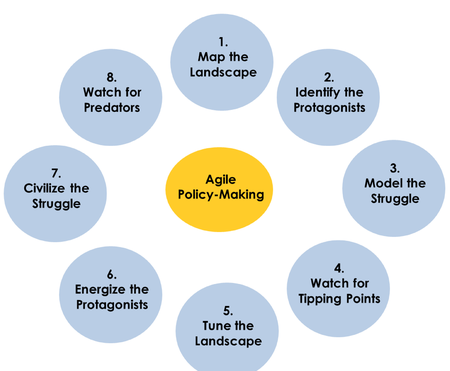
New Analytical Tools

Listed below are some of the new analytical tools used in Agile Policy Making and Agile Predictive Policy Analysis. Given the immense volume, variety, and speed which transactional data and other big data sources are created, traditional statistical methods do not adequately provide the ability to analyze, synthesize, and visualize policy data to make effective evidence-based decisions.

New visualization and simulation tools provide interactive displays so that decision makers can run "what-if" scenarios. This is the next step in the evolution of CompStat-like dashboards in which data displays become more real-time and can aggregate data from a wide variety of data sources.

- Big Data (technologies to receive, store, and prepare for analysis and reporting
- Predictive Analytics
- Bayesian Networks
- Social Physics
- Social Network Analysis
- Serious Gaming
- Dashboards and Visualization Tools
- Geographic Information Systems
- Topological Data Analysis
- Simulation Modeling
- Scenario Analysis





The Agile Policy-Making Toolkit*

1) Map the Landscape – understanding the policy arena's issues and current challenges.

2) Identify the Protagonists –who are the players and stakeholders in the policy arena and what their relationships to each other are.

3) Model the Struggle – create multiple scenarios to understand how the policy landscape may evolve.

4) Watch for Tipping Points – identify the triggers that could dramatically shift the structure into a new form.

5) Tune the Landscape – using analytical tools and discussions to move the policy arena into more productive directions.

6) Energize the Protagonists – the policy maker helps some of the protagonists build capacity and take other actions to encourage cooperative behavior toward win-win situations.

7) Civilize the Struggle - this is where the policy maker helps to create win-win situations and limit destructive behaviors by the protagonists.

8) Watch for Predators – the policy maker is continually on guard to keep one or more protagonists from unfairly tipping the balance of power and creating a destructive struggle in the landscape.

* **Room, G. (2011).** ***Complexity, institutions, and public policy: Agile decision-making in a turbulent world.***

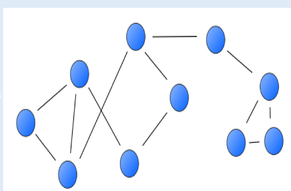
Network Health in Agile Policy-Making

"Networks are a cornerstone of contemporary public sector institutional architecture."*

Agencies and other protagonists in agile policy-making and agile predictive policy analysis have at least one relationship with other protagonists in the policy landscape. The web of relationships form one or more networks which is how protagonists coordinate their actions, share resources, and advance their interests. Like organizational health, network health measures how effectively the network members interact with each, grow the network, and sustain the network's influence over policy issues.

Network Health uses governance network theory's perspective on how policy networks solve complex problems and create policy combined with organizational health concepts to develop measures on:

1 — The network's coordination of resources
2 — Shared management effectiveness
3 — The network's influence over policy
4 — The network's ability to develop and synchronize shared processes
5 — The network's ability to grow and maintain its influence.



Adaptive Case Management

Closely allied to Agile Policy-Making is the emerging concept of Adaptive Case Management (ACM). ACM was developed to deal with the major problem of traditional business processes—inability to deal with exceptions.

Under ACM, employees start with a minimal process that has a small number of policies and rules. All employees are linked together using an online social networking platform (SNP). The SNP contains a repository of templates, best practices, and work processes for specific situations.

As cases come in, employees learn from each case to refine the templates, best practices, and work processes in the repository or create new products for the repository.

For particularly difficult cases, employees can use the SNP to call in "work swarms" of other employees to lend their expertise to resolving the case.

The advantage of ACM is that it is agile and evolves the case management process as cases and the work environment changes.