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Taming Wicked Problems

It's Time for a Completely New Way of Thinking

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Dealing with difficult problems affecting communities and organizations is the daily work of local government managers. Many problems get solved, but some defy managers' best attempts to find solutions, or when "solved," morph into some other difficult challenge.

Take, for example, traffic congestion. Increasing road capacity initially reduces congestion and typically increases nearby land values, thus spawning new development that generates new traffic resulting in the reappearance of traffic congestion.

Such problems as these have their own classification and are called "wicked problems." Because wicked problems are not actually considered evil but are unique and difficult to resolve, managers must be able to recognize them and craft appropriate responses.

Having been away from the daily work as a manager for a while, I have had time to reflect upon my efforts to resolve wicked problems and also learn how others have confronted this special type of problem. In this article, I share what I have learned from my readings of the literature, research on local government sustainability, and reflections on my present and past experiences.

Wicked Problem Characteristics

In their 1973 article in *Policy Studies*, authors Horst Rittel and Melvin Webber[1] identified wicked problems as the primary reason community planning is unable to solve many of society's problems.

They classified wicked problems as a unique class comprising societal challenges and policies for which there are no apparent solutions.

Some examples of wicked problems that managers regularly confront include poverty, sustainability, economic development, traffic congestion, and crime prevention. Here are the attributes that separate wicked problems from other problems:

- The problem is difficult to define.
- The problem consists of interrelated systems (e.g., transportation and land use).
- The problem lacks a clear-cut solution.
- Once implemented, the solution cannot be easily undone (e.g., construction of a highway).
- The implemented solution creates unanticipated effects.
- The solution is not readily transferable due to location, scale, setting (e.g., culture), and time.

As noted, economic development, which can be a common task of managers, is one of the problems. We can define it in all sorts of ways, including lack of jobs, inadequate workforce abilities, unreasonable tax policies, absence of desired industries, and need for livable wage rates. The multiple ways that the problem of economic development can be defined speaks to the various interrelated systems that are involved and require attention.

Why So Challenging?

Wicked problems are extremely challenging because they are rooted in the complex interrelationship of the social, economic, and environmental systems in which we live and work. Making a change in one system generally results in a change in another system generating unanticipated consequences.

Our efforts to build sustainable, disaster-resilient communities where we attempt to modify energy sources and use thru their residential building codes, while at the same time ensuring affordability and safety, is an example of working within this complex web of interrelated systems.

Another reason why these problems are so challenging is that managers, councilmembers, and residents typically have different definitions of the problem and its corresponding solution. Also, when managers implement solutions to wicked problems, the solution affects residents and community organizations differently thereby generating a wide variety of responses.

Often the diverse responses to the solutions cause our original problem to transform itself into something else, as when, for example, our efforts to enhance economic activity through land

development results in gentrification or the breakup of cohesive neighborhoods.

Different Approach Needed

Because of their complexity and difficulty, addressing wicked problems requires an approach much different from the standard problem-solving process where we define the problem, identify all potential solutions and related outcomes, consider the effects of each solution, and then select the most promising solution.

For wicked problems, which have no true solutions, a manager's aim can be to moderate their negative effects. Therefore, working on wicked problems requires a completely new way of thinking and acting at these personal, organizational, and community levels:

Personal changes. Changes at this level consist of developing a receptive mindset, building a comprehensive knowledge base, and maintaining a healthy, balanced lifestyle. A receptive mindset comes from building a keen sense of self-awareness and reflection that alerts ourselves to our biases and weakness so that we may take steps to counter these shortcomings.

Being open to other perspectives and actively seeking such views provides the opportunity to bring new approaches to bear on the problem at hand. Building a comprehensive knowledge base is necessary to identify links between systems so that we may connect the dots.

Enhancing our knowledge comes from a serious commitment to lifelong learning and regular collaboration with peers both within and outside the management profession.

Working on wicked problems is hard work. It requires stamina, concentration, and critical thinking; so, maintaining a balanced lifestyle is vital for maintaining mental and physical fitness. Devoting adequate time for family life, exercise, hobbies, and rest help us achieve this balance.

Organizational changes. Our organizations must also be recalibrated to address wicked problems. As taught at ICMA's Senior Executive Institute, managers should endeavor to transform their local governments into high-performance organizations (HPOs).

An HPO is characterized by information sharing across departments; empowerment and trust of employees; decision making pushed to those closest to service delivery; willingness to experiment; and regular analysis of what worked and what didn't.

These actions allow the organization to make optimal use of its human resources and enhance the communication of new ideas and approaches necessary for addressing wicked problems.

Community engagement changes. Organizations must also learn to effectively engage residents if managers are to make progress when working on wicked problems. Effective engagement requires providing community members with accurate information about the problem at hand, allowing them to participate in defining the problem, and generating ideas for its resolution.

As suggested by Martin Carcasson2 in his work on deliberate engagement, wicked problems are inherently about the values held by members of our communities. Therefore, it is critical to thoughtfully engage with community members in order to understand their thoughts on how the problem should be defined and ultimately resolved.

As advocated by Carcasson, wicked problems require a different form of public engagement, one that entails long-term commitment to working and communicating with residents to increase their knowledge base and regular participation in community problem solving. In other words, our use of such things as one-shot surveys and a single batch of public meetings must be transformed into an ongoing community communication effort.

When pursuing economic development, for instance, we should commit to a process that enhances residents' knowledge of where the community is today in terms of strengths and weaknesses, while also asking them to assist in defining the issue and offering recommendations. Indeed, an effective process requires the building of an informed public and a trustful relationship that can only be garnered through continual resident engagement.

A Comprehensive Approach

To sum up, many of the problems faced by communities are, in reality, wicked problems. Managers must recognize this fact and design appropriate methods for addressing them.

The management methods entail strengthening personal abilities, transforming local governments into high performance organizations, and engaging community residents so that they may participate meaningfully in defining and addressing the issues.

By taking a more deliberate and comprehensive approach for dealing with wicked problems, managers are more likely to make significant progress in building successful local government organizations as well as stronger, more livable, sustainable communities.

Endnotes and Resources

1 Rittle, Horst W. J., and Webber, Melvin M. (1973). "Dilemmas in a General Theory of Planning." *Policy Sciences*, 4(2), 155–169.

2 Carcasson, Martin. (2016). "Tackling Wicked Problems Through Deliberative Engagement." *National Civic Review*, 105(1), 44–47. doi:10.1002/ncr.21258.

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