

In their provocative essay, “Wicked Problems, Knowledge Challenges, and Collaborative Capacity Builders in Network Settings,” Edward Weber and Anne Khademian discuss the value of networks for dealing with unstructured, crosscutting, relentless problems (Weber 2008). These problems are unstructured in that little consensus exists about how to define them, cause and effect are unclear, and attempts to solve them often cause them to morph into different problems. “Wicked problems” are associated with multiple diverse stakeholders, high levels of interdependence, competing values, and social and political complexity. To top it off, while they can sometimes be ameliorated, they are never fully resolved. Among other challenges, such problems present enormous ongoing demands for information and knowledge.

Those demands are not easily met in a typical hierarchical bureaucracy. The division of labor and compartmentalization of expertise in these structures inhibits easy knowledge sharing. Professional identities and organizational cultures may be barriers to trust and risk taking in forming new relationships. These structures separate and often isolate practice domains, knowledge resources, and routines. The lines of authority, formal reporting relationships, and policy frameworks usually do not encourage and may even prohibit many forms of information and knowledge sharing and cross-boundary collaboration (Dawes, Pardo, and Cresswell 2008).

Government interoperability is the mix of policy, management, and technology capabilities needed by a network of organizations to deliver coordinated government programs and services.

What often emerges to meet these new demands is a **network form of organization**. In this form of organization, the hierarchical pyramids don’t disappear, but they are penetrated by both formal and informal information sharing and work relationships that cut across jurisdictions and program structures. Decisions and control are matters of exercising formal authority **and** negotiating and collaborating. New groupings of persons and forms of organization (i.e., networks) must learn to work together and share information, exchange knowledge, and respond to demands in new ways that transcend traditional constraints or operate with newer, more appropriate controls. These may be ad hoc networks that emerge in unexpected, temporary situations or more permanent networks that can meet the knowledge demands of a new program or long-term project. Regardless, organizations operating within these networks need to be connected and interoperable in new ways so that knowledge and resources can be shared among network members and, when necessary, can be shared across networks as well. With regard to delivering coordinated government programs and services, governments are important partners in such network forms of organization along with private corporations, non-profit groups, and research institutions (Goldsmith and Eggers 2004). Moreover, the ability of government to more effectively share resources and knowledge—both within government and with their non government network partners—has become a top priority for many countries.

Historically, governments around the world, while differing in their specific political structures and even degrees of civil society and rule of law, tend to share at least one similarity: they struggle in their efforts to effectively share authority, resources, and information across the organizational boundaries within those governments, i.e., to become interoperable. While the degree of complexity of the conditions varies, the struggle of working together across the boundaries of organizations, whether simply two agencies or a multi-level, multi-sector network of organizations, remains intense.

Government leaders must first understand the types of capabilities required to improve government interoperability.

This paper is presented as a guide for government managers as they begin to move beyond the vision of a more effective government to the reality. For those governments that believe network forms of government can help achieve more effective government, they must understand the types of capabilities required to improve government interoperability. Then, they must determine if those capabilities exist and where new capabilities must be created. A discussion of the challenges of working across the boundaries of government agencies is presented first to set the stage. Next, the discussion focuses on understanding government interoperability as a concept and current research on interoperability development. Several current interoperability and capability maturity models are presented and discussed as background. Drawing on these previous models and new discussions, we present a framework for understanding interoperability in the context of new network forms of government. This framework focuses first on understanding the capabilities needed to develop and manage (i.e., plan, select, control, and evaluate) initiatives to improve interoperability among government agencies and their network partners, and second on determining the right mix of capabilities needed to share information across a network of organizations. Finally, the complete framework is presented for use by government managers with some suggestions for next steps.