

Book Chapters (8)



Assessing the Value of Investments in Government Interoperability

In Pallab Saha (Ed.) *Enterprise Architecture for Connected E-Government: Practices and Innovations*. IGI Global.

Government investments in enhancing the interoperability of ICT systems have the potential to improve services and help governments respond to the diverse and often incompatible needs and interests of individual citizens, organizations, and society at large. These diverse needs and interests encompass a broad range of value propositions and demands that can seldom be met by single programs or assessed by simple metrics. The diversity of stakeholder needs and the complexity inherent in interoperable systems for connected government require an architecture that is up to the task. Such an architecture must include the reference models and components that can accommodate and integrate large portfolios of applications and support multiple kinds of performance assessments. The value propositions that underlie the architecture's performance assessment or reference model are fundamental. The propositions must be broad enough to span the full scope of the government program's goals, a substantial challenge. In recognition of that challenge, this chapter puts forward two perspectives for assessing the value of interoperable ICT investments, incorporating outcomes beyond financial metrics. The first is the network value approach to assessment of investments in interoperable ICT systems for government. The second is the public value framework developed by the Center for Technology in Government, which expands on the network value approach to include a broader range of public value outcomes. These approaches are illustrated in two case studies: the I-Choose project designed to produce interoperable government and private sector data about a specific agricultural market and the government of Colombia's interoperability efforts with expanded metrics based on the expansion of interoperability networks.

Information Sharing and Public Health: A Case-based Look at the ICT Expectations-Reality Gap

In Albert Meijer, Kees Boersma, Pieter Wagenaar (Eds.) *ICTs, Citizens & Governance: After the Hype!*. pp.180-197. Amsterdam: IOS Press.

Sharing information across organizational boundaries is central to efforts to improve government operations and services. However, creating the capability necessary to enable information sharing across the boundaries of organizations is among the most difficult types of information technology projects. New knowledge about information sharing is required; in particular, new understanding about how government, non-governmental and private sector organizations come together to share information is necessary. This chapter draws on the experiences of key actors in three states in the United States as they organized to create new capability to share information as part of their responses to the West Nile virus outbreaks. The cases highlight the gap between expectations and reality, providing opportunity to more fully understand the gaps between expectations (the hype) about ICTs and the reality facing government practitioners who seek to use ICTs to share information. Examining the cases in terms of four contexts of information integration and sharing provides a more specific understanding about the gaps between these expectations and the reality (after the hype). The lessons learned in the context of public health include the central role of information sharing and the implications of resource constraints on data capture and use capability in the context of an outbreak management and surveillance effort. Insight into the interdependence of system design and process support and improvement in the context of public health surveillance was also found to be critical to future planning of public health surveillance systems. This chapter serves to reemphasize to both researchers and practitioners the need to close the gap between expectations and reality; the point is made again through the cases that closing the gap depends on strategies that draw on technology, process, interorganizational, and political perspectives and resources.

Sustainable cross-boundary information sharing

In H. Chen, L. Brandt, V. Gregg, R. Traunmüller, S. Dawes, E. Hovy, A. Macintosh, & C. A. Larson (Eds.) *Digital government: Advanced research and case studies, and Implementation*. pp.421-438. New York: Springer.

Information is one of the most valuable resources in government. Government managers are finding however, that information needed to plan, make decisions, and act is often held outside their own organizations, maintained in disparate formats, and used for widely different purposes. Efforts to bring this data together across boundaries have provided new understanding into just how difficult cross-boundary information sharing is. Finding ways to bring together information and integrate it for use in solving pressing public problems is fast becoming a focus of attention for digital government practitioners and researchers alike. This chapter reports on one such study¹ of cross-boundary information integration that revealed three important lessons for creating and sustaining cross-boundary information sharing: 1) interoperability is key, 2) a shift in agency culture is necessary, and 3) the role of policymakers is central to this type of project. Four recommendations for action derived from the case studies are presented as well. Government executives and policy-makers need to ensure the creation of enterprise-wide mechanisms and capabilities such as (1) governance structures, (2) resource allocation models, (3) scalable strategies, and (4) non-crisis capacity.

Building Collaborative Digital Government Systems: Systemic Constraints and Effective Practices

in W. McIver and A.K. Elmagarmid (Eds.) *Advances in Digital Government: Technology, Human Factors, and Policy*. New York: Kluwer.

MACROS: A Case Study of Knowledge Sharing System Development within New York State Government Agencies

In M. Khosrow-Pour (Ed.) *Annals of Cases on Information Technology, Vol 7*. Hershey PA: Idea Publishing Group.

Participants' Expectations and the Success of Knowledge Networking in the Public Sector

In W. Huang & K. Siau & K. K. Wei (Eds.) *Electronic Government Strategies and Implementations*. Hershey PA: Idea Publishing Group.

Pool the Risks, Share the Benefits: Partnerships in IT Innovation

In Keyes, J., (ed.) *Technology Trendlines*. New York: VanNostrand Reinhold.

The Challenge of Integrating Data for E-Government

Global ICT Agenda 2002, #1. 40-41. London: Quasar International Communications.