

Insider's Guide to Using Information in Government



Strategy



Policy



Data



Cost



Skills



Technology

Topic

Strategy sets the stage

Look outward, inward, and forward

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Strategy sets the stage

Look outward, inward, and forward

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The word *strategy* comes from Greek roots meaning to lead an army. Today we use the term more broadly to convey the idea of a "battle" plan designed to achieve a major objective. Whether in business or in government, strategic thinking is concerned with mission-critical objectives; it looks outward with an emphasis on customers and stakeholders. Strategies place a high value on human, organizational, and technological resources and seek maximum return on those investments, rather than minimized costs.

Successful strategic use of information in government entails five factors:

- understanding the business or program need
- negotiating the environment
- accounting for existing infrastructure, practices, history, and culture
- looking ahead to future conditions
- devising an unambiguous approach

Key Points

In developing a strategy...

- understand your business or program need
- know how to negotiate your environment
- take into account existing infrastructure, practices, history, and culture
- look ahead to future conditions
- devise an unambiguous approach

Understanding the need: why are we doing this?

Everyone has a number one reason why IT initiatives fail. Ours is this: failure to understand the underlying problem or need that the system must address.

The first element of strategy then is a clear and agreed upon picture of the business, policy, or program need that is the reason for the effort. Easy as it is to say, this is very difficult to achieve. One reason for the difficulty is that different people see different symptoms and not the problem as a whole. The underlying problem is usually

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embedded in at least one business process and what you see depends on where you are connected to that process. The necessary analysis to uncover and define the problem cannot be a solitary effort, but one that must include all relevant perspectives.

It takes a lot of careful analysis to really understand the business need and your reasons for attacking it. We often use a simple starting exercise in which strategists and planners complete this sentence:

"Our service (or business) objective is to _____ for _____ so that _____."

The first two blanks are filled in with what you will do and for whom (more about that later). So far so good, but too many efforts seem to stop here. The all important third blank is filled in with the *result* of your action, the need that will be met, the change that will take place, the impact that you seek. This is just the beginning of the thinking process, but it is where all strategies must begin.

For tools to help you define your business problem and explore ways to attack it, see our handbook [Making Smart IT Choices](#). To see these tools in the context of a major policy initiative, look at [And Justice for All: Designing Your Business Case for Integrated Justice Information](#).

Negotiating the environment: who cares and why?

Stakeholders are everywhere. No governmental program or proposal can escape them. We know that the users or customers of services are stakeholders. Most efforts to use information on their behalf take them into account. But stakeholder considerations don't stop there. Ask yourself:

- who is directly involved in the process of designing, delivering, and paying for those services?
- who is indirectly affected, either by the outcome of your program or because resources were allocated to your effort rather than to someone else's?

Even when you are sure all the relevant stakeholders are identified, avoid the tendency to assess only the positive impacts. It is equally important to know who can be hurt and how.

For example, many states are streamlining and centralizing license or permitting processes on the Web. As a result, you can get a dog license or a fishing license 24 hours a day from home. This costs less and works faster than a visit to the town clerk. But it also deprives the clerk, an elected official, of the opportunity to be of direct service to the voters and may also divert fees from local to state coffers. These may not be

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reasons to kill the project, but they are definitely reasons for involving local officials in the planning process and design decisions.

Making Smart IT Choices and the business case guide to integrated justice information contain helpful tools for this kind of assessment including positioning charts, stakeholder analysis, and partisan analysis.

On Europe's forum on International Cooperation (EUFORIC) Web site you can find a comprehensive explanation of stakeholder analysis along with concrete examples and a very useful matrix and checklists.

Canada's International Development Research Centre has a conceptual paper on "Stakeholder Analysis and Conflict Management."

The "Guide to Managing for Quality," a joint effort of Management Sciences for Health and the United Nations Children's Fund also offers advice about stakeholder analysis.

Accounting for infrastructure, practices, history, and culture: working in the real world

Every new information system goes into some pre-existing situation. That situation probably includes

- other, older information systems,
- business processes that channel work and information flow,
- standard operating practices that have grown up over time to accommodate past problems and changing needs.

The situation also reflects a way of working that can be summed up in the term "organizational culture." Some cultures value analysis; others value stability; still others studiously avoid risk or definitely embrace new ideas. Organizational culture always reflects past experience. Sometimes cultures conflict, even within the same agency.

Understanding and accounting for these factors means that planners and designers need to be creative in their thinking. But they must also be very, very realistic about the willingness and ability of staff, as well as the resources and technical infrastructure that are needed to change the status quo. Projects that depend on sharing information across state and local governments, for example, have to take into account the fact that local governments vary tremendously in size, technical sophistication, political philosophy, and operating practices. Even in a single organization, you must prepare for significant changes in the way work is done.

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CTG's guide to building effective state-local information systems, [*Tying a Sensible Knot*](#), offers both advice and examples of how agencies are designing systems that take these existing factors into account. Another guide, [*Developing and Delivering Government Services on the World Wide Web*](#), outlines the operational and cultural differences between Web-based services and traditional ones, and suggests ways to manage the transition from one to the other.

New York University offers an "Information Technology Interaction Model" that illustrates how the consequences of information systems follow largely from the interaction of the technology with the organization and its environment.

Looking ahead: keeping one eye on the future

A strategy should have a reasonably long half-life. Technology is the one component of information-based strategies that is likely to change soon. It isn't always easy to make the technology choice that meets your needs today but won't limit the choices you can make tomorrow. Adopting a standard of "only open system solutions," for example, may not give you the flexibility you expect. Open systems, we've come to find, are in the eye of the vendor. To protect your future options, look for technologies that have a track record of successful integration into existing infrastructures and that don't lock you into unexpected dependencies.

You must also anticipate the future in terms of upcoming legislative cycles or budget processes whose decisions will provide the authority or resources to proceed. The stakeholder and organizational analyses should give you insight into related initiatives that may affect or be affected by yours. Look for opportunities to influence them or to adjust your course so that conflicts are avoided and synergies are made possible.

In New York, "Managing New York State's Technology: The Strategy for the Future" sets forth a forward-looking strategy for using technology to improve the business of government

Devising a clear approach: sharing the battle plan

When you are clear about your purpose, your stakeholders, and the implementation environment, it's time to devise an overall approach to guide your work. The best approaches can be communicated briefly and in plain language. This is not a detailed project workplan. It's a high level statement that tells people what kind of project to expect. It answers key questions:

- Will the approach rely on incremental change or something more radical?
- Will it unfold over several years or be condensed into a few weeks?

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- Will it rely on contractors or be carried out entirely by staff?
- Where does leadership reside?
- What role do users and other stakeholders play?
- Who pays for what?
- What kind of technology will it employ?
- What are the major phases or milestones?

We are talking sentences here, not pages. Here's an example:

The XYZ system will be a web-based application that distributes state aid to school districts. The system, which will calculate, distribute, and reconcile state aid to local schools, will also provide districts with estimation and planning tools. It will be built by education department employees over an 18-month period. The 4-phase project includes business analysis, design and prototyping, full development, and implementation. Local school business officers will participate fully in all phases. The direct costs of the system, including local costs, will be borne by the department.

Effective strategies for your particular initiative may have already been developed and used elsewhere. [Best and current practice research](#) is an excellent, low cost way to learn what and where they are.

One commonly used tool for formulating a strategy is called SWOT, for analysis of strengths, weaknesses, opportunities and threats. This tool helps you choose your course based on the reality of your situation. The "Guide to Managing for Quality" of the Management Sciences for Health and the United Nations Children's Fund provides a good example of how to conduct a SWOT analysis.

Practical Examples

Establish a reasonable scope

The Office of the State Comptroller, Division of Municipal Affairs, wanted to move forward with their Municipal Affairs Contact Repository Operating System (MACROS) project. To do this they needed to start with identifying a specific business process. They chose the technical assistance process as a starting point.

Attacking the right problem

New York City has a bigger government than many countries, with all the same problems of coordination and seemingly missing information. The NYC Department of Information Technology and Telecommunications (DOITT) wanted to create a shared information resource for IT professionals. DOITT recognized that the separate agencies already had most of the information needed. What was missing was a culture and a mechanism for sharing it.

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Engaging strategic partners

When the Office of the State Comptroller (OSC) set out to improve the statewide central accounting system, the project team knew that an initiative that touches every state agency and local government would be scrutinized by powerful players outside OSC. The team leader engaged these key actors from the beginning by creating a group of "strategic partners" who were consulted and informed every step of the way.

Worthy opponents become supporters

The Bureau of Shelter Services faced an uphill battle in its efforts to initiate the Homeless Information Management System (HIMS). A serious obstacle was the unhappy history of past efforts to get the disparate community of service providers to adopt a government-provided system. That experience had been so difficult that the providers formed an ad-hoc committee to prevent it from happening again. The HIMS project leader acknowledged all the past issues, brought the ad-hoc committee into the project team, and created a collaborative environment in which their needs and capabilities were considered equal to the state's concerns.

"It's easy to say, okay everybody, we are going to be partners."

**Robert Dawes, Director
Bureau of Shelter Services
NYS Office of Temporary &
Disability Assistance**

Reaching out to stakeholders

When the New York State Council on Children and Families worked with CTG to develop the clearinghouse of child health and well-being indicator data, they asked several groups of users and data providers to share their needs and uses of indicator data. They also provided valuable insight into how they would like to use the data to support decision making. This prompted the project team to consider additional features for the site.

Prototypes test the waters

Both the [Homeless Information Management System](#) spearheaded by the NYS Bureau of Shelter Services, and the NYS Council on Children and Families's [Kids Well-being Indicators Clearinghouse](#) used prototypes to engage future users in the design process. The prototypes gave users the opportunity both to see how well their needs had been understood and to further influence the design before final development.

Build in the future

The NYC Department of Information Technology and Telecommunications' effort to create an information resource for IT professionals throughout City government was at first slowed, but later boosted, by a parallel effort to install a citywide intranet. By linking

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these efforts, the project leaders are able to build their information resources on a long-lasting platform that will be supported and enhanced far into the future.

Maximize related future investments

While the Homeless Information Management System (HIMS) project was unfolding, shelter provider agencies were struggling to find case management systems that would help them with day-to-day operations. The NYS Bureau of Shelter Services staff understood that the chosen case management systems could help or hinder HIMS. They therefore joined this search, seeing it as an opportunity to help providers identify and evaluate alternatives that would both meet operating needs and generate the data that would go into HIMS.

Major change can be incremental

The NYS Department of Transportation completely revamped its IT investment process by instituting four successive changes in policy and practice, each of which brought its own improvements along the way.

Phased approach minimizes risks

The Office of the State Comptroller's phased approach to redesigning the central accounting system was chosen to minimize the risk associated with this enormously complex undertaking. By focusing from the outset on the role of stakeholders and the needs of users, OSC created not only a solid factual foundation for eventual redesign, but a positive atmosphere in which to proceed.

Asking the locals

The NYS Office of Real Property Services knew that it was important to ask the local county assessors and directors what resources they would need to implement the annual reassessment program. The project team gathered information from the locals in six workshops across NYS.

A new philosophy at work

The Office of the State Comptroller's Division of Municipal Affairs is shifting from a regulatory relationship with local governments to one that relies much more on assistance. By changing the state agency's role from catching errors to promoting best practice, this project is working to improve local capabilities and performance in municipal finance.

Addressing infrastructure and cultural challenges

When the MACROS project at the Office of the State Comptroller, Division of Municipal Affairs approaches the prototype phase it may face several challenges including

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working within the existing technology infrastructure and addressing cultural change. The prototype will test the usability and effectiveness of the system and it will also test the business rules that require staff to share all contact information.

Strategy Links

[Making Smart IT Choices](#)

Generated by the Center for Technology in Government (CTG) at the University at Albany, "Making Smart IT Choices" (in PDF format), summarizes "the methods and models that CTG uses to help organizations apply technology to mission-critical problems. This report is formatted in a handbook style. It offers background information, worksheets, exercises, and practical approaches to information technology issues.

[And Justice for All: Designing Your Business Case for Integrating Justice Information](#)

This guidebook developed by the Center for Technology in Government (CTG) at the University at Albany, offers a series of lessons and tools justice officials can use to build business cases to win support and funding for integrated justice information systems. The business case blueprint leads readers through the analysis, design, and presentation of business cases tailored to specific projects and audiences. The guidebook also contains appendices of useful tools, references, examples, and resources. See Appendix A of the guidebook for generic tools that can be used for any project.

How To Do Stakeholder Analysis of Aid Projects and Programmes

This paper done by Europe's Forum on International Cooperation's (EUFORIC) Social Development Department provides a comprehensive explanation of the what, why, when, who, and how regarding stakeholder analysis along with concrete examples and very useful matrix and checklists.

Stakeholder Analysis and Conflict Management

This concept paper developed by The International Development Research Centre (IDRC), illustrates two common situations: one in which there is enough consensus among the stakeholders for collaboration and one where conflict hinders negotiation. The IDRC is a public agency created by the Canadian government to "help communities in the developing world find solutions to social, economic, and environmental problems through research."

The Guide to Managing for Quality—Stakeholder Analysis

The Guide to Managing for Quality is a joint effort of Management Sciences for Health

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and the United Nations Children's Fund. The Guide provides a stakeholder analysis tool for use in almost any organization.

[Tying a Sensible Knot: Best Practices in State-Local Information Systems](#)

The Center for Technology in Government (CTG) at the University at Albany, worked with over 65 state and local agencies to identify and document a set of practices that lead to effective state-local systems in intergovernmental projects. This report shares intergovernmental information system best practices and highlights many state-local projects in NYS.

[Developing & Delivering Government Services on the World Wide Web: Recommended Practices for New York State](#)

This report generated by the Center for Technology in Government (CTG) at the University at Albany, focuses "on one major aspect of the Internet: the World Wide Web (WWW or Web). The WWW has emerged as an interconnected network of information sources located all around the world. These guidelines present principles to help government agencies in NYS decide how best to design, manage, and market Web services."

The Information Technology Interaction Model

Developed by Mark Silver, Lynne Markus and Cynthia Beath. The model is based on the theory that the consequences of information systems in organizations follow largely from the interaction of the technology with the organization and its environment. The model addresses the interaction of a new information system with the organization's external environment, strategy, structure and culture, business processes, and IT infrastructure.

New York State Information Technology Strategic Plan 2005

Developed for New York State, the intent of the IT Strategic Plan is to identify goals, initiatives and action plans that, when implemented, will help the State improve the business of government.

[Four Realities of IT Innovation](#)

This paper, featured in *The Public Manager*, is based on The Center for Technology in Government's collaborations with over 100 state and local entities since 1993. The article discusses the four "realities" that shape government projects in pursuit of effective and innovative information systems.

[Conducting Best and Current Practices Research-A Starter Kit](#)

Developed by the Center for Technology in Government, this starter kit contains step-by-step instructions on how to conduct best and current practice research. The kit will

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show you how to research your specific topic and learn from other organizations to replicate successes and avoid mistakes.

The Guide to Managing for Quality—SWOT

The Guide to Managing for Quality is a joint effort of Management Sciences for Health and the United Nations Children's Fund. This tool provides a good foundation on how to conduct a SWOT analysis.