

While no project manager can fully reduce the complexity created by the larger environment, the challenges to innovative efforts stemming from that complexity can be mitigated. Throughout the projects each team employed a variety of strategies and techniques to manage these challenges and through these efforts identified a number of factors as critical to their success. Eight factors were identified by the project teams overall as most critical to their success. The importance of each varied depending on the stage of the project as well as the make-up of the project team. In general, the grantees recognized four distinct project stages – the proposal stage, the kick-off stage, the execution stage and the completion stage. In the proposal stage, for instance, many of the grantees talked about the importance of creating a shared vision as well as leveraging existing partnerships and resources. In the execution stage, most stated that strong management techniques and knowledge about technology were key to their success.

### **Eight recommendations for future efforts**

1. Employ a skilled manager using strong project management practices.
2. Create a shared vision of your project.
3. Align purpose with identified needs and capabilities of your stakeholders.
4. Define success in terms of the goal of the project.
5. Leverage existing partnerships and resources.
6. Understand and be comfortable with the technology.
7. Expect change and be flexible.
8. Create a sustainable model.

Each factor is discussed below in the form of a recommendation to future project teams. Brief vignettes from the projects are provided as illustration of how each factor was critical to the efforts of the project teams. Each factor section includes a brief excerpt from a relevant section of CTG's Making Smart IT Choices, a toolkit used throughout the conference calls as a resource to help support the teams' work. A set of tips for putting each recommendation into practice is also provided.

### **Analysis is a group process**

Consensus-finding and –building tools are often needed to help a group resolve different views and conflicting objectives or interests. Groups also frequently need to be introduced to models for collaboration, especially if they've never worked together before. Effective teamwork may also involve difficult trade-offs and other choices, so some decision making tools and techniques can be useful. Group processes take skill and time to work effectively but they result in well-documented and well-understood decisions that can then guide the work group to a successful outcome.

Source: Making Smart IT Choices

## **Employ a skilled manager using strong project management practices**

Strong management practices were identified by each of the project teams as key to the success of their projects. One of the most important skills identified by the project teams was the ability of the project lead to foster frequent and effective communication within the team as well as with stakeholders. A variety of communication mechanisms were used to establish and retain contact and to build effective communication mechanisms. The mechanisms used within the project teams varied based on the nature of the team and the stage of the project. Each project includes some face-to-face meetings, as well as teleconferences and Internet tools such as Web-sharing software to communicate. Communication with stakeholders was designed to maintain their support and involvement and included regular project updates and occasional contact to verify continued interest and to explore changes in needs and priorities. The capability of the project lead to identify and manage issues related to varying levels of access to and experience with the use of alternative communication technologies to overcome distance issues was critical.

Another management skill mentioned frequently was the ability to establish a clear assignment of roles and responsibilities within each project team. It was considered especially critical by those teams where roles changed depending on the phase of the project and individual specialties. These fluctuations did not affect the project as long as each change was clearly communicated to the entire team. Issues arose when there were overall unclear goals, roles and responsibilities; especially at critical transitions in the project when technology choices had to be made.

### **Employ project management techniques proven to work with multi-partner projects**

Based on previous experiences with managing multi-partner projects, the project lead knew the value of project management techniques such as project proposals, regularly scheduled meetings, meeting agendas, or monthly status reports to stakeholders. Her relentless efforts to keep all stakeholders engaged and informed of project progress were key in retaining project sponsorship when executive leadership changed and new competing priorities emerged. Detailed project proposal and status reports helped with recruitment of new teachers and forest service personnel after unexpected departures of project partners. Flexibility in adjusting to stakeholder expectations and needs were key to ensuring their participation.

### **Forest Resources**

The ability to maintain focus and energy among team members who are geographically dispersed was also noted as an important attribute of many of the project leads. Although commitment and level of excitement for a project is frequently based on a personal interest, even the most committed team members faced challenges staying engaged with local competing priorities demanding their attention. Practices considered routine, such as detailed documentation, scheduling, planning, and agenda setting, were found to be especially important in keeping team members from multiple organizations engaged. One team leader noted the importance of the team leader but also of the team members: *"You need to be patient, passionate, persistent, and committed not only as a project lead, but also as a team member."*

### **Group Facilitation**

Government IT projects typically involve dozens of people making hundreds of decisions. People with vastly different work styles, backgrounds, and talents are often brought together, asked to form cohesive groups and charged with solving problems. But people's differences and group dynamics can make it difficult for the group to fulfill its mission. That is why a skilled facilitator can be helpful in leading a group through the necessary steps to make effective decisions.

### **Source: Making Smart IT Choices**

### **Create and regularly revisit a shared vision statement**

Creating a shared vision among members of the project team contributed to the success of the Native Plants project. The process of creating a shared vision started with the initial project design plans and continued as the team wrestled with narrowing down specific objectives. Although the design stage took longer than previously expected, the vision creation process is recognized as helping the team expedite the planning process. Further, the shared vision was considered instrumental in facilitating the successful transition to a new project lead, which occurred mid-project when the original lead departed due to a promotion.

### **Native Plants**

#### **Tips**

- Be diligent in planning meetings in a virtual environment. Explore alternatives for integrating traditional tools and techniques into a virtual meeting environment as necessary. For example, typical visual cues that often communicate points of agreement or disagreement, and sometimes that a topic has run its course, don't work in a virtual environment.
- Select a communication tool appropriate to the task, the length of time required to complete the task, and the people participating.
- Be aware of the limitations of the communications tools selected by the team and the abilities of team members to communicate effectively using those tools.
- Use traditional tools and techniques of project management, such as monthly status reports, timelines, task plans, meeting agendas, and others - as long as they don't become a barrier to communication or to the work.
- Share detailed agendas with meeting members ahead of time to specify topics to be discussed and the decisions that must be made.
- Recognize that frequency of contact may vary depending on the phase of the project – at critical points meetings may need to be more frequent and inclusive, while at less critical points frequent and all-inclusive meetings may be counterproductive.

### Create a shared statement of purpose

The eight teams were successful because they went beyond shared interest in issues to creating an explicit shared vision for a specific outcome. The investments they made in creating a shared vision turned out in most cases to generate new relationships and attitudes about working together and opened communication among potential partners. According to the grantees, projects with an explicit and clear project purpose and a focused set of goals were easier to manage. In particular, participants noted that a shared vision effectively communicated to all members of the team and reinforced throughout the project helped them maintain the interest and focus of the project team. **Native Plants** found the group process of shared vision formation allowed for the creation of trust in the lead collaborators; through this process they demonstrated openness to the ideas of all partners.

Creating a shared vision within a geographically dispersed, multi-organizational team posed several challenges to the eight project teams. For example, **Promise of Place** noted the challenge of getting people who are not physically located in the same building to take the time to go through the process of creating a common vision, while **Economic Development** noted the challenge of finding common ground among the many partners with varied interests involved in the project. In general the grantees found that, while the team leader played a critical role in the vision creation process, - those projects where the leader saw his or her role as a facilitating the development of a shared vision rather than as the one responsible for developing the project vision by themselves were more effective. The participants noted that autocratic leadership, when exhibited, whether by the project lead or others, was a barrier to the vision creation process, as well as in other activities throughout the projects.

### Visioning

Visioning is a tool you use to establish an image of what you want your organization or project to look like in the future. The time frame associated with the vision depends on the needs of the group and may range from months to years.

**Source: Making Smart IT Choices**

#### Tips

- Build consensus among your project team on the project vision – do not assume everyone is thinking the same thing. Use exercises or facilitated sessions to explore perspectives and to work toward a shared vision. A variety of tools and techniques can be employed in this task.
- Building a shared vision takes time. Visions evolve as participants become more familiar with the general ideas and issues under discussion and more comfortable with each other. Allow enough time for this evolution to take place and encourage it.
- Select communication strategies that support the collaborative development of a vision statement. Often face-to-face contact is necessary in early vision creation meetings, with more virtual meetings possible as the group becomes more comfortable with the task and each other.
- Maintain open communication ensuring all participants are able to share their perspectives and ideas freely.

### Align purpose with identified needs and capabilities of your stakeholders

The grantees regularly emphasized the importance of making sure the purpose and goals of their projects were closely aligned with the needs of their stakeholders. They appreciated the statement of one of their colleagues, *“if you build it...well, they might not come after all”* and regularly invested in understanding their stakeholders. They saw this as a two step process – first, the teams worked to reach consensus concerning project purpose and goals, and second, they worked to ensure the product would in fact meet the needs of their target audience. In addition to identifying the specific needs of their target community, the project teams also had to pay attention to the technological limitations they were likely to encounter in those communities.

A key component of this process for the eight projects was defining their stakeholders and constituents. The eight projects were originally proposed with broad objectives. As the project teams began working they realized they needed to narrow their perspectives and establish alignment between the purpose of the project and the needs and technological capabilities of a specific set of stakeholders. As one grantee stated, *“You need a reason to create whatever it is you are creating – in order to do that, you have to know your stakeholders and what their needs are.”*

### Identify key stakeholders – and listen to what they say

The original vision of the White-tail Deer team was to create a Web-based database of information on controlling the population of white-tail deer in various regions of the country in the interest of improving overall forest quality. However, through discussions with potential users prior to the design of the Web site, they realized their original vision would not fulfill the needs of all their stakeholders. Namely, they did not account for the various interests of conservationist, hunters, farmers and others whose lives and livelihoods were touched by this issue. After analyzing the feedback received from their information-gathering sessions, they changed the focus of the Web site to providing information to all interested parties on how to ensure healthy deer herds with emphasis on a symbiotic relationship between the forest and the deer.

### *Sustaining White-Tail Deer & Forest*

For instance, the project manager for the **Forest Resource and Technology** project personally knew the teachers and schools with whom she was working. She knew their technological capabilities and limitations and made sure their concerns were addressed with training prior to the beginning of the projects. The **Cooperative Weed** team on the other hand had less direct knowledge of the capabilities of their stakeholders and relatively little experience in using the specific technologies. Therefore, they had little ability to even assess the limitations of the potential participants against some standard or experienced-based understanding of the technology – they had to learn “as they went.” By conducting several preliminary training sessions using their Web-based tools they found that some of the participants faced unexpected technological limitations. Identifying these limitations resulted in the development of an alternative training strategy for future participants facing similar conditions. In both of these cases the grantees aligned their purpose with a select set of needs that were not being met while paying attention to the technological capabilities of their audience.

### Stakeholder Analysis

Stakeholders are individuals and groups who are affected by or have influence over your initiative. Every project needs a careful assessment of stakeholders in order to understand who cares about it, how they can affect it, and how they will be impacted by it. Stakeholder analyses are structured examinations of the relationships between a proposed project and key players in the environment.

### *Source: Making Smart IT Choices*

#### Tips

- Identify primary stakeholders and their needs.
- Conduct a careful and detailed stakeholder analysis prior to and during the project development phase. Be sure to communicate often to key stakeholders to keep them engaged in the process.
- Continue to review the project goals and to ensure they continue to fulfill the identified, but typically dynamic needs of the stakeholders.

### Define success in terms of the goal

A common mistake made by novice and experienced project teams is to define success in terms of the creation of a new resource such as a Web site or a new database. They focus on the process of building the “thing” and fall often into trap that once available – the resource will certainly deliver the expected benefit. Research on information technology innovations shows this is often not the case. Solely focusing on the specific resource as the objective is particularly problematic when issues arise in the creation of that specific thing. If the focus is on an overall outcome – then the strategy for achieving that outcome can change depending on unexpected conditions.

### Focus on the goal, not the technology

The goal of the Augusta Springs project was to help students of all ages learn about the role that forests play, particularly the National Forests, in protecting clean water. With the number of visitors to Augusta Springs increasing each year and the resources of the forest service being stretched thin, the Augusta Springs project team wanted to design a Web site that would help train student volunteers and free up time of the Forest’s environmental educator to concentrate on developing new educational opportunities. Despite difficulties with shifting personnel and priorities, and by resisting the temptation to get carried away with technology this project always kept its sights on its initial goal. In the end, they produced an informative Web site that is easily accessed

and updated by its users and promises to serve that audience for years to come. The Web site itself never became the focus; it was always the Web site as a tool to meet the primary goal - preparing student volunteers.

### **Augusta Spring**

Several of the **Electronic Commons Program** proposals contained project purpose statements presented in terms of the resource being produced – the system, the Web site, the training materials-rather than on the impact the new resource would have on its intended audience or user. Through guidance provided in the teleconference calls with CTG and the use of CTG's toolkit, Marking Smart IT Choices, many of the grantees began to understand the need to shift their perspective from the “thing” to “what the thing would do and for whom.” In particular they used the service objective statement to separate out the thing they would be building from the action that users would be able to take as a result and the outcomes they expected would be realized. Once they did this it became easier for the grantees to define measures they could use to determine whether their project was creating the expected benefit.

Using the service objective statement the teams were able to emphasize the importance of first defining what role this new product would play in the user community and only then choosing a suitable technological solution. Gaining knowledge of the end-user and how the final product would be used by them became a pivotal point for many of the grantees. This allowed the discussion to turn from the technology to the purpose of the project such as dissemination of information or building a community of practice. Once this occurred creating a meaningful evaluation plan that allowed the teams to track their progress became easier.

### **Service Objective**

A service objective is a structured way to express the goals of your project. The process of creating a commonly understood and agreed upon service objective often reveals differences in thinking, different assumptions, and conflicting perspectives that all must be discussed and resolved before the service objective statement is complete.

*To provide (who) with (what) that allows them to (action) so that (outcomes).*

**Source: Making Smart IT Choices**

### **Tips**

- As a team, develop a clear description of the intended value of the end product; be explicit about who it will serve, how it will help or support those users and what the outcomes will be from its use.
- Set realistic expectations from the start.
- Conduct current and best practices reviews of projects with related goals to learn from the experience of others.
- Consider including prototyping or benchmarking as a part of the project plan to help evaluate the impact on users and other stakeholders.
- Create an evaluation plan as an integral part of the overall design and project scope.

## **Leverage existing partnerships and resources**

As described in the previous chapter, scarce resources and the geographical distance separating project team members presented challenges to the eight teams. However, the grantees found leveraging existing partnerships and existing resources helped them overcome many of the obstacles created by these conditions. Participants talked about how they drew on their past partnerships to identify and acquire resources, to share experiences and to connect with new partners. Working with known partners allowed the trust already established in previous projects to be leveraged for these new knowledge sharing efforts.

One of the first tasks of all the team members in each project was reaching out to current collaborators. The second was to use these networks to both explore potential interest in the new effort and to use these existing networks of contacts to connect with other unknown potential collaborators. Many of the teams crossed organizational and professional boundaries reaching beyond the natural-resource field to Web-design and marketing professionals, system developers, as well as academics to help bring in subject matter expertise to fill gaps in their existing teams. Others used existing partnerships for disseminating information about their projects to the wider community of natural-resource organizations and school districts. Many found that new partners

could be brought in to provide a specific knowledge or skill that would be relevant during a particular stage of the project or to complete a specific task. Understanding that not all partners need to be connected to the project and involved in the same way allowed the project lead and core participants to bring in those less interested in or available for the overall project but interested in and capable of participating in a specific, and often critical activity. For example, a number of the teams drew on technical skills available in local universities. These individuals did not need to hire a full participant to provide a valuable resource to the projects in terms of very specific tasks such as data base design and Web site development.

### **Engage past partners and seek new ones**

Engaging existing partners in the development of their Web site was very important for the team from Shelburne Farms. The field of place-based education is relatively new and in order to ensure comprehensiveness of their material, the team needed to engage various partners from the governmental, non-profit and private sector. These partnerships provided the opportunity to gain important feedback on the design of the Web site, to engage others in populating the Web site's content, and to find new partners. Leveraging existing partnerships meant not only reaching out to past collaborators to work on new projects, but also to leverage new contacts to achieve project goals.

### ***Promise of Place***

Another benefit of leveraging existing relationships according to the grantees, was the opportunity provided to leverage the small amount of resources available by bringing in more partners willing to invest in the effort – some with money, but most with time and energy to work on some aspect of the project. In other cases existing connections provided opportunity for taking advantage of purchased software licenses in partner organizations. Several of the teams were able to take advantage of existing software already purchased by their partners or their home institution, enabling them to use this technology at no cost. Others found that existing course work or curricula used in other parts of the country could be adapted to reduce the costs of new curriculum development. Leveraging existing resources was found by the grantees to be especially important in those cases where there was a time lag between the desired start of the project and arrival of grant funds. Leveraging existing resources helped the teams conserve scarce resources and allowed them to concentrate on areas that were novel or needed extra attention. Some of the teams were in the unique position of having available resources that could be used in the short term to start working on their projects prior to when the grant monies were available.

### **Don't reinvent the wheel**

The Cooperative Weed Management Areas (CWMA) team started their project by drawing on a workshop model and cookbook used successfully in the western CWMAs as a blueprint, thus considerably decreasing the cost of developing completely new curriculum. The team customized the western format and text to better address the issues faced in the eastern states. They then piloted the workshop and cookbook in four trial training sessions. The feedback they received from this 'in-person' training was then used to fine tune the material before broadcasting the training in a distance environment. The team found this iterative process to be very successful not only to work out the mechanics of the course but also as a way to introduce the material to new instructors who may not be familiar with the distance training environment.

### ***Cooperative Weed Management Areas***

### **Strategic Framework**

A strategic framework is a structured way to understand a project proposal by helping you clearly define each key service objective and its customers. The framework then helps you identify the resources, partners, and innovations that might contribute to success. To be most effective, the strategic framework should refer to one project-specific objective at a time. Strategic frameworks can be devised by one person and then presented to and reviewed by others, or they can be created through a facilitated group decision conference.

### ***Source: Making Smart IT Choices***

#### **Tips**

- Use existing relationships with others as potential resources for the team.
- Create a "snowball effect" by asking your contacts to use their contacts and so on.

- Reach out to others in the not-for-profit world (universities, colleges, etc.) and across your communities of practice to explore creating cooperative agreements that will provide you access to technology or other resources at no or reduced cost.
- Reach out to partners who may have the funding flexibility to allow for preliminary work to begin prior to the availability of the grant funds.
- Consider your project from a holistic perspective by using such tools as the Making Smart IT Choices Strategic Framework. This tool helps you place your project into the larger context of customers, resources, and innovations.

### Understand and be comfortable with the technology

Many of the grantees had previous experience using the technology of interest in their projects. However, overall they had limited experience employing the tool to meet their own knowledge sharing program objectives. This new use presented a challenge for all of the teams. According to the participants, they found they had to think in new ways and plan differently. Because of limited funding and limited access to expertise, many of the project teams had to select the software/technology that was most readily available and affordable. In a majority of the projects, this turned out to be okay, as their needs were straightforward. However, in some cases, as the teams began to work with their new systems and discovered limitations with the tools, they had to look for other options.

### Understand the changes in process introduced by technology

Although the project lead and his partners had experience delivering seminars and lectures in person, when they decided to venture into the world of Webinars, they realized they would need to adjust their delivery techniques. The use of Webinars meant they would lose face-to-face contact. They would lose the ability to read audience reaction and not be able to feed off other people's energy. The project lead knew in order for the Webinars to deliver the intended value he would have to make sure his use of the technology was seamless. The presenters made sure they were not only familiar with the operation of the technology and were comfortable using it, but that they were also able to troubleshoot minor problems and provide rudimentary assistance to their students.

### *Historic Woods*

In one project the collaborators were experienced trainers in their individual areas. What was new to them was the concept of distance training via technology without face-to-face contact with their audience. To reduce the anxiety associated with this new approach and to become familiar with the technology, they held several live training workshops. These sessions allowed them to gain familiarity with the tools but also to gather feedback on their training materials enabling them to tailor it for "virtual" training. They then conducted their first remote training session with a select group of participants to ensure the "kinks" were worked out before moving on to a wider audience. The grantees also found they needed to spend a certain percentage of their time experimenting with the chosen technology prior to going live to ensure that they were comfortable with using the medium and that they were able to provide a certain degree of technical assistance to its users to prevent frustration on their user's part. They discovered they needed to be more than users, but implementers, trainers, and troubleshooters as well.

### Technology Awareness Reviews

Technology awareness activities help to identify what technologies make sense to use given a specific problem. These activities are used to educate people about the capabilities of the technology so they can begin to think creatively about transforming the way the agency operates. Becoming aware of the capabilities of specific technologies helps to inform analysis of alternative solutions and helps narrow investment choices to those that will work best for your organization

**Source:** *Making Smart IT Choices*

### Focus on the goal – be flexible with everything else

When originally planning, the Cooperative Weed Management Areas team assumed they would be able to use the interactive learning management system licensed to a University partner to deliver training sessions. However, after developing the project plan and reviewing the software available at the University, they realized that the software, while free, introduced limitations on the ability of the team to deliver training as originally planned. The original goal was to deliver training to people in or as close to their home facilities as possible. The

software available through the university required that participants would have to travel to specially equipped university extension facilities to participate in training sessions. This not only defeated the goal of eliminating travel but would also limit the geographic reach to a very small segment of their intended audience. Because the project team decided to evaluate the selected technology early on in the project and because they had a clear project purpose in mind, they were able to correct mid-course and select another Web-based technology that met their needs.

### ***Cooperative Weed Management Areas***

#### **Tips**

- Familiarize yourself with the various types of technology available to you. If there is no one on your team, then reach out to others to help.
- Conduct current practice research and technology awareness reviews to assess whether the technology you plan on using has been used in similar projects before.
- Expose yourself to the technology being used prior to the beginning of the project, whether as an observer or active participant.
- Have an experienced information technology person as part of your team. If your organization does not have an IT person, look toward your partners or local academic institutions for possible resources.
- Practice with the new system – technology and work practices - prior to going “live.” Consider prototypes, dry-runs and benchmarks as a way to test if the technology will work for your application. Assume you won’t get it right the first time and that you will need to design and redesign a few times before getting it “right.”

### **Expect change and be flexible**

Each of the project teams acknowledged that change was inevitable. As one grantee stated, “*The one thing you can count on in a project is change.*” Whether because of technological problems, personnel issues, or changing needs of stakeholders, the ability of the project lead to assess these events and to make adjustments as necessary was found to be vital to the success of each project. A number of participants noted the importance of open communication among team members and with stakeholders to effectively assess project goals, timetables and stakeholders. They also noted the value of having the service objective statement as well as an understanding of stakeholder needs as a way to inform discussions about changes in the environment and in resources available to the project.

### **Environmental Scanning**

Organizations use environmental scanning to monitor important events in their surrounding environment. It is a way to answer the questions, “What’s happening in my environment that will affect my future?” Scanning involves identifying the issues and trends that have important implications for the future. Scanning includes analysis of the information about these issues and trends to assess their importance and determine their implications for planning and strategic decision making in your project.

#### ***Source: Making Smart IT Choices***

#### **Tips**

- “Plan the work and work the plan.” Recognize that change is inevitable. Be open to the likelihood that the conditions within which the project is being carried out will change and the project plan will have to change as well.
- Look for opportunities for positive change – sometimes unexpected changes create negative consequences, however, sometimes they are positive. Keep an eye out for those opportunities.
- Continuously assess the project environment and progress regularly and make adjustments as needed.

### **Create a sustainable model**

Creating a sustainable model had two aspects, according to the project teams. The first was to design a resource that was in and of itself sustainable, and the second was to create capability within the necessary organizations to ensure ongoing investment in and support of the new resource.



Creating a sustainable resource required that core project team members as well as partners in the project understood the goals of the project and the needs and capabilities of users. It was also critical to have an understanding of those with a stake in the success of the project. Making Smart IT Choices provided tools and techniques to build this understanding. In particular, building a model of the solutions allowed project teams to understand fully what would be necessary to sustain the new resources into the future.

### **Invest in sustainability from the beginning**

Planning for the future beyond the duration of this grant was very important to the Shelburne Farms team as they realized the potential value of the Web site being built. To ensure that this resource would remain accessible in the future, the organization decided to include it as a regular budget item; thus making sure that funding would be available for continuous maintenance. Consideration of the project's future also drove a decision to delay the design of the Web site until the hiring of an IT manager for Shelburne Farms. Although it slightly delayed the project plan, the project lead knew that having input from the person responsible for managing the Web site in the long run was invaluable and potentially crucial for the Web site's continued existence.

### ***Promise of Place***

Many of the grantees found that planning for the long term was the most important thing they did in their project. It was also one of the most significant challenges for many of the eight projects as securing funding for maintenance of an ongoing project is more difficult than finding seed money for new projects.

One suggestion from the **Augusta Springs** team was to keep the core team connected and involved, even after launch of the knowledge-sharing system. Seek their input on ongoing questions of resources for maintenance and more importantly for enhancement. If there is interest in continued expansion of the program, there will be a specific interest in sustainability of the infrastructure. Another suggestion was to learn how to reassess priorities among specific modules or programs. If one piece of the program does not seem to connect with users anymore, remove it, and use those assets to create new resources.

### **Models of Solutions**

When the stakes are high and uncertainties are great, it pays to build a model of your idea and test it in any and every way to you can. By modeling a process, a system, or a program before it is designed and implement, you can more clearly think through how it will impact overall organizational processes and performance. When the idea works in the modeling state you can be more confident that it will succeed in real operation. That is why building models and testing them thoroughly before getting to the final design and implementation phase is an effective way to hold down development costs and minimize risks.

### ***Source: Making Smart IT Choices***

#### **Tips**

- Assess the alignment of project goals and potential value of the project to involved organizations to determine whether continuous financing can be argued to be in the organizations' interest.
- Make the project future part of the initial planning stages.
- Develop detailed and concrete evaluation techniques to capture the overall value to the public and use this value data to argue for ongoing funding.
- Make information on the impact of your efforts on the wider community available to decision makers and partners as evidence of the value created through the project. This may support efforts to secure additional funding.
- Consider ways to create sustainability in the project plan by finding additional partners who may be better equipped and, in some cases, more appropriate to support the new resources in the long term once it has been developed.