Realizing Public Safety Project Success: Benefits of Using a Consultant

IJIS Institute
White Paper

Principal Contributors
Steve Hoggard, Spillman Technologies
Becky Ward, Tiburon
Michael Weins, RCC Consultants, Inc.
Kathy Wendt, SRA International

November 2010
Acknowledgements

The IJS Institute would like to thank the following principal contributors and their sponsoring companies for authoring this document:

- Steve Hoggard    Spillman Technologies
- Becky Ward       Tiburon Inc.
- Michael Weins    RCC Consultants, Inc.
- Kathy Wendt      SRA International

The following individuals also contributed input and advice regarding the content of this Paper: Bob Kaelin, MTG Management Consultants; Wendy Gilbert, VisionAIR; Ernie Pages, e-Gov; and Eric Kutner, Emergency Response Design Group.
Introduction

This paper is intended to provide relevant and important information to improve federal, state, local, and tribal public safety critical information sharing efforts. The material contained herein is expected to be a valuable resource for public safety practitioners who may require assistance in the strategic planning for, procurement of, or implementation of any public safety system or component. Anyone who may require additional resources or expertise specific to a project will benefit from understanding how and when the use of a consultant may be valuable.

Practitioners may not know what specific areas a consultant can assist them with or may not know how to go about selecting a consultant that best suits their needs. Situations when external consultant expertise can prove invaluable include the selection of solutions such as Computer Aided Dispatch (CAD), Records Management (including law enforcement, fire service, and jails), mobile data, and wireless communications systems (voice and data), as well as specialized projects like consolidation or interoperability. Consultants can provide specialized assistance in areas such as requirements definition, change management, consolidation evaluation, or contract negotiations, and they can also supplement the existing staff who would normally address these tasks. Consultants can provide a significant return on investment, saving far more than the cost of their services.

Why Consider a Consultant?

Consultants are typically brought in to supplement team expertise or to fulfill staffing requirements, especially in unique situations that are outside of, and in addition to, the normal day-to-day activities.

Thinking About Consolidation or Regionalization?

With the trend toward consolidation or regionalization, today’s public safety projects are increasingly complex and often costly. Agency practitioners are busy with full-time jobs and may lack the time, expertise, or familiarity with new technologies required to successfully complete a large-scope project. In addition, consultants are seen as “outside experts” that are not biased by internal or local politics or vendor preferences, and can provide objective recommendations. Because of this objectivity, consultant recommendations may be more convincing to decision makers. Top industry consultants know the technological, operational, and financial reasons for and against consolidation and regionalization, and can help their client agencies select the best course of action for their unique environments.

Thinking About Replacing a Key Application?

There are many phases and components involved in a system replacement including:

- staffing the project;
- grant applications;
- requirements and workflow analysis;
- system architecture and design;
- Request for Proposal (RFP) development;
- service provider due diligence and selection;
- Statement of Work (SOW) development;
- contract negotiations;
- project management;
- acceptance testing;
- training; and
- go-live support.
Errors or misunderstandings in any of these phases can delay the project, change the scope, or increase costs significantly. Top industry consultants are experienced with issues like the ones mentioned above and are well-suited to assist an agency with some or all of these tasks. From identifying the need for a new system, to implementation, testing and go-live, procuring major applications can consume years. Rarely is an agency able to devote sufficient skilled staff to these lengthy projects.

Perplexed by New Initiatives and Standards?

There are also new technologies and federal initiatives that require more than a passing familiarity in order to properly implement and fully realize the benefits. Examples include:

- The National Information Exchange Model (NIEM)
- The Justice Reference Architecture
- The Law Enforcement National Data Exchange (N-DEx)
- The National Suspicious Activity Reporting Initiative (NSI)
- Next Generation 9-1-1 (NG9-1-1)

Well-informed and experienced consultants know what standards exist and which are applicable to a given project, and, therefore, often take a leading role in developing or enabling these technologies.

Need to Justify the Effort?

There are many cases where an idea, project, or improvement needs to be clearly defined and justified. Consultants often take a key role in bringing examples and other experience to round out concepts, provide key success stories or funding examples, and evaluate and/or estimate efforts for budget or funding purposes.

Pressured by Impending Deadlines?

Consultants may be helpful when facing timeframe pressures such as grant funds that must be expended, expiration of maintenance contracts, hardware obsolescence, end-of-life announcement for one of your applications, or new requirements forcing a change. Delays in any phase of a project addressing these events ultimately increases costs for the agency, either in direct costs from the service provider or internal staff costs. Frequently, internal staff just does not have the availability to start a new project, and a consultant can provide the additional resources to get the project started.

Concerned About Contracts?

It has been said, “good contracts make good friends,” but do you know what makes a good contract involving a complex technology system? Service providers propose, negotiate, and implement many technology projects each year whereas agency practitioners seldom engage in these activities. While your agency’s legal representative ultimately has responsibility for contracts, consultants can be very helpful within the framework of the agency’s legal process. Consultants provide not only the knowledge of technology but also the key issues that make contracts fair and balanced for all parties. In the unfortunate circumstance where everything does not go as planned, the time to have a good contract is before the ink is dry on the agreement, and not after. Contracts are complex documents that should clearly detail what is being purchased, when it will be delivered, how much it will cost, and a variety of other details. Top-tier consultants are highly-skilled advocates that help ensure that you get what you want as well as what you need, and incorporate appropriate contract language to protect the agency.

Inexperienced with Change Management?

Change Management is the “people” side of technology projects. You can select the best products from the best service provider, and if your agency is not prepared for change, your project may fail. The best consultants are skilled in assessing change readiness and assisting the agency in dealing with the human and IT governance factors impacting the successful implementation of projects and systems.
Puzzled by Emerging Technologies?

The capabilities of public safety systems are evolving each day. Just as consultants must stay current with technologies and federal initiatives, they must also stay abreast of emerging functional capabilities and integration possibilities. An experienced consultant can help you determine what is possible, what is feasible, what is practical, and what is most valuable based on current levels of performance by systems in place across the nation today.

Does Your Agency Need a Consultant?

You may find value in using a consultant if your agency faces issues with any of the areas below:

- Independence and Objectivity - Practitioner staff close to a situation tend to favor a predetermined solution. A consultant brings an independent focus to the problem and can offer a different and valuable perspective.

- Subject Matter Expertise – Practitioner staff already have full-time responsibilities that may preclude staying current with the newest technologies and solutions available (such as NIEM). Consultants are retained for their subject matter expertise and must maintain their currency on new and emerging technologies in order to be competitive.

- Implementing the Desired System – A consultant may have successfully implemented dozens of solutions similar to the one the practitioner envisions. The practitioner staff may have never implemented a similar project or only done it once or twice. In this case, a consultant can bring his/her repeatable solution experience and methodology which has historically ensured success.

- Mentoring Staff – Increasingly, RFPs for consultant work require the consultants to share their expertise with practitioner staff. This promotes project success and creates a more informed staff to support the solution in the future.

- Short-Term or Long-Term Staffing Requirements – Practitioners may need to augment staff for a short period or may be unable to hire staff on a permanent basis. A skilled consultant often requires no training and can be immediately productive. In addition, a consultant does not require the overhead of a permanent hire.

- Change Management Best Practices – Change is inevitable and almost everyone is uncomfortable with change. Typically, public safety organizations seek to return to the “status quo” as quickly as possible so change is even harder. Since Change Management is relatively new to the public safety environment, skilled consultants can ensure that you have the assessments and training you need to make sure your change is successful, accepted, and institutionalized.

- Managing Project Risk – Public safety projects are complex, lengthy, and incorporate multiple technologies that need to interoperate. All these elements introduce deployment risks. A consultant can assist the agency in reducing this risk through proven IT governance best practices. Other risk categories where consultants may be helpful include technical, project cost and schedule, legal, operational, and financial.

General Types of Consultants

Some consulting firms offer specialized skills in specific service areas. Selecting the right type of expertise is an important success factor. The following are generic categories of consultant expertise:

- Staffing Consultants – These firms have specialized staff to augment agency personnel with specific services such as project managers, programmers, trainers, or clerical staff.

- Domain Consultants – These firms provide specialized business expertise such as public safety voice or data communications, project development, data sharing, or disaster recovery.
• Management Consultants – These firms focus on advisory services such as assessments, strategic planning, acquisition, governance, and program management.

While some firms specialize, many firms span some or all of these service areas.

**Consultant Value-Added Services**

Consultants bring many value-added services to their engagements – services that may not be available from existing staff or may not be needed on a continuous basis, thus precluding the retention of a permanent resource. The following list describes areas where the use of a consultant can add significant value to a project:

• Strategic Planning – Identification and justification of future agency needs including staffing, funding, operations, governance, and project facilitation.

• Requirements Gathering and Analysis – Agency vision is often limited to existing knowledge and capabilities. Consultants can document existing requirements as well as introduce new capabilities that are prevalent in modern systems for enhanced operations and improved workflow.

• System Architecture and Design – The underlying technology can impact how well a system integrates with your current environment, how well it operates, and the overall ease of maintenance.

• Procurement Assistance – Consultants assist in the overall procurement process including: develop of an RFI/RFQ/RFP as appropriate, pre-bid meetings, response to questions, development of addendum, proposal evaluation, demonstrations, solution recommendation, and contract negotiations.

• Implementation and Project Management – Once the solution is chosen, a significant amount of work is often required to actually implement the solution. Successful implementation takes skill and experience, and often requires a dedicated and experienced resource for an extended period of time that can transfer knowledge to agency staff in the use of sound project governance best practices.

• Change Management – Since new solutions frequently require changes to operating procedures and methodologies, agencies may need assistance to effectively optimize the changes, as well as assist in implementing the changes.

• Supplement Staff Resources – Any new project requires resources, and as many agencies face reduced staffing and increased workloads, an external consultant is frequently the best way to provide the resources needed to accomplish the project, especially if the resource is skilled in the particular area of expertise.

• Schedule/Timeline Optimization – In many cases, a consultant can come in with a detailed understanding of the technology and perform with little or no learning curve, making the use of a consultant a more efficient way to complete a project.

• Independent Verification and Validation (IV&V) – For an independent review, it is imperative to use an independent agency that does not have any bias for or against the system. A consultant can provide this independent review and ensure that the system is performing as required.

• Subject Matter Expertise – A specialized consultant comes to the project with an advanced knowledge of the desired system or technology, and provides the ability to understand and articulate needs, provide options, and make recommendations. This knowledge can be obtained and even transferred very cost effectively and efficiently.
## Consultant Evaluation Criteria

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Considerations for Evaluating the Consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) Service Expertise (Planning, Acquisition, Implementation, Developing, etc.)</strong></td>
<td>Work previously completed in this area (both quantity and quality). Acknowledgement by industry peers as subject matter expert. Participation in industry working groups and/or committees. Referrals from agencies of similar size and having the same level of project complexity.</td>
</tr>
<tr>
<td><strong>2) Technology Expertise (CAD, RMS, Wireless, Radio, and more)</strong></td>
<td>Work previously completed in this area (both quantity and quality). Acknowledgement by industry peers as subject matter expert. Participation in industry working groups and/or committees. Referrals from agencies of similar size and having the same level of project complexity.</td>
</tr>
<tr>
<td><strong>3) Domain/Operational Experience (familiarity with environment or issues)</strong></td>
<td>Number of projects completed. Projects completed with similar size, scope, and domain. Prior practitioner/end user experience.</td>
</tr>
<tr>
<td><strong>4) Independent (not affiliated with manufacturer or service provider)</strong></td>
<td>Experience with multiple manufacturers and technologies. Recommended solutions customized for each client.</td>
</tr>
<tr>
<td><strong>5) Reputation and Experience, References, and Resumes</strong></td>
<td>Has a history of meeting deadlines. Has a history of keeping the budget under control. Performs correct and complete analysis. Historically provides successful recommendations and valid solutions. Maintains positive interaction with practitioner staff. Visible work is unique and relevant. Provides quality status reporting.</td>
</tr>
<tr>
<td><strong>6) Certifications</strong></td>
<td>Participation in industry organizations such as the IJIS Institute. Education and experience of staff. Currency of certification. Value reputation of certification. PE, PMP, ENP, CMC, and RCDD are a few examples of certifications that may be of value to your project.</td>
</tr>
<tr>
<td><strong>7) Public Safety Resources (depth, stability)</strong></td>
<td>Additional capabilities and areas of expertise available from the consultant’s company. Current projects underway and availability of backup staffing.</td>
</tr>
<tr>
<td><strong>8) Fiscally Sound</strong></td>
<td>Financial information (from Dunn and Bradstreet, Transperion, Lexus-Nexus, etc.) on the company to evaluate their stability. Background check on both company and participant staff.</td>
</tr>
</tbody>
</table>
After reviewing the consultant’s submission and after personal interviews, you should feel entirely comfortable that the consultant/company has demonstrated:

- The ability to diagnose problems and identify innovative, value-added solutions.
- A confirmed record of presenting workable solutions to practitioners (as evidenced by past performance references).
- The ability to successfully implement high-quality solutions on time and within schedule that will address your needs.
- The ability to obtain consensus from practitioner staff and commitment to the solution.
- The experience and references showing the consultant has delivered all of the above successfully.

**How to Work with a Consultant**

Agencies need to spend quality time in determining what they want a consultant to do in order to select the best consultant for their project. Consultants with expertise in radio projects may be abysmal at assisting with Computer Aided Dispatch projects. You must select your consultant very carefully as the firm or individual will become your partner in the project. However, it is your project and you must never abdicate responsibility for its success. You have to live with the results and ramifications of your decisions for what may very likely be a long time.

Just as it is necessary to define the success objectives for a project, it is important to achieve a common definition of success with your consultant. The information you supply to your consultant to ensure a successful project can include:

- **Explicit and clear expectations** – What skills does the consultant need? Make these expectations clear in your initial conversations with the consultant, as well as in the contract with the firm. If you expect a certain number of hours, onsite meetings, or status reports of a specified frequency or format, be sure to articulate this verbally and in writing. Do not assume that the consultant knows what you are thinking or what your expectations are.

- **Unambiguous and clearly defined scope of work** – Consultants need to cover their expenses and make a profit to stay in business, so it is very important that the agency realize that the consultant’s time is valuable and worth money to them. They will be unable to go repeatedly beyond the scope of the defined work and have their engagement with you be cost effective. Know that they are in business and usually answer to a boss who will examine their hours and work product. Be fair. Define roles and responsibilities and be specific.

- **A complete list of deliverables** – What deliverables are expected, and when are deliverables due? What level of detail are you expecting? What should the consultant complete by the end of the engagement? What format are deliverables to be provided in, and how many copies are to be provided? Will there be multiple revisions and review cycles? How much time is allocated for internal review as well as for final editing by the consultant?

- **Unambiguous statement as to the timeframe allotted for the work product or deliverables** – What is the timeframe of the engagement? What milestones need to be met? Are schedule constraints fixed or is there flexibility in some milestones?

- **Open and honest communications with the consultant** – There should be no hidden agendas. Do not hire a consultant with the idea in mind that you are looking for a scapegoat if the project should fail. Do not hesitate to discuss any project detail with the consultant if at any time you are concerned or dissatisfied. Do not let a feeling, opinion, perception, or misunderstanding fester – clear the air, the sooner the better.

- **Established chain of command, reporting, and decision-making structure** – Make the hierarchy and decision-making structure clear to the consultant. What are the types of decisions that he/she is empowered to make and when must he/she seek agency authority?
- Detailed understanding of the resources that will be available – This can range from workspace, to staff, to use of facilities such as computers, copiers, typists, and more. Determine what internal subject matter experts the consultant will have access to and the time allotted. What will you, the client, be providing to the consultant? What services will your staff provide? What will be the roles and responsibilities for both the consultant and your staff?

- Quantifiable success measures – Is there agreement on measures of success for this project? Define and document project success criteria. How will you determine if your goals have been met?

**Additional Evaluation Considerations**

If you are interviewing a number of consultants and their qualifications appear to be similar, you may want to make inquiries as to that status of the following:

- Are the consultants an active participant in industry organizations such as the IJIS Institute?
- Do the consultants participate in, and demonstrate at, trade shows such as APCO, NENA, IACP, etc.
- Are the consultants listed by the respective certifying agency?
- Do neighboring agencies recommend the consultants and share their experiences? The best advertising is by word of mouth from a satisfied client.
- Are service providers familiar with the consultants’ capabilities, quality of work, objectivity, and performance? If so, they can provide guidance.

**Conclusion**

Consultants can add a tremendous amount of expertise, quality, and value so that you are more likely to realize success at the conclusion of the project. However, the wrong consultant can be a waste of time and money, dampen enthusiasm for the project, and negatively impact confidence in project and agency leadership. Agencies must expend considerable effort in evaluating the need for a consultant as well as selecting the right consultant for the project.

There are many great consulting firms and subject matter experts in the public safety space – unfortunately there are just as many who will borrow your watch to tell you what time it is. Agencies must expect to spend quality time conducting due diligence on their consulting partner as they would for an employee, because the consultant should become part of the team. Take care and do your homework!

**Acronyms**

- APCO ......................Association of Public Safety Communications Officials
- CAD ......................Computer Aided Dispatch
- CMC ......................Certified Management Consultant
- ENP ......................Emergency Number Professional
- IACP ......................International Association of Chiefs of Police
- IJIS ......................Integrated Justice Information Systems Institute
- JRA ......................Justice Reference Architecture
- N-DEx ......................FBI Law Enforcement National Data Exchange
- NENA ......................National Emergency Number Association
- NG9-1-1 ..................Next Generation 9-1-1
- NIEM ......................National Information Exchange Model
- PE ......................Professional Engineer
- PMP ......................Project Management Professional
About the IJIS Institute

The IJIS Institute, a 501(c)(3) nonprofit corporation, represents industry’s leading companies who collaborate with local, state, tribal, and Federal agencies to provide technical assistance, training, and support services for information exchange and technology initiatives. Serving as the voice of industry, the IJIS Institute unites the private and public sectors to improve mission-critical information sharing for those who protect and serve our communities.

The IJIS Institute was founded in 2001 as a result of the U.S. Department of Justice’s interest in raising private sector participation in the advancement of national initiatives affecting justice and public safety, and more recently homeland security. Today, the IJIS Institute represents the leading companies serving these and other related sectors. The IJIS Institute provides assistance to government agencies by bringing industry to the table in a constructive role, and continuing to drive toward achieving high regard for the companies that are dedicated to helping the public sector find high value solutions. The IJIS Institute is funded through a combination of Federal grants, industry contributions, and partnership agreements.

The IJIS Institute thanks the many companies who have joined as members that contribute to the work of the Institute and share in the commitment to improving justice, public safety, and homeland security information sharing.

See www.ijis.org for more information.