

TECHNOLOGY

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SERIES

Revolutionizing Constituent Relationships: The Promise of CRM Systems for the Public Sector

Shayne C. Kavanagh, editor

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Government Finance Officers Association

About the publisher

Established in 1906, the Government Finance Officers Association (GFOA) is North America's premier association dedicated to enhancing and promoting the professional management of governments for the public benefit. Along with the GFOA staff, over 16,000 members from local and state/provincial governments in the United States and Canada are committed to the idea of identifying, developing, and advancing leading fiscal strategies and practices. As the premier adviser on the organization and administration of finance functions in the public sector, the GFOA produces publications, administers national training programs, and provides consulting services to governments on an array of financial management practices.

A division of the GFOA, the Research and Consulting Center (RCC) focuses on providing high quality research and advisory services by pairing the lessons learned from a broad membership network with the expertise of a highly educated professional staff that has practical experience working in local government. With a major focus on management and technology consulting, the RCC is a leading provider of consulting assistance for local governments procuring financial and ERP systems. The GFOA's RCC also provides assistance for members and clients on topics as varied as financial practice audits, long-term financial planning, and performance management. Publications both support and stem from the work completed in the field, ranging from white papers on new technology applications to books on budgeting and fiscal policy.

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Additional CRM Resources

For this project, the Government Finance Officers Association (GFOA) worked with other organizations that are dedicated to advancing the field of public management, and the practice of constituent relationship management (CRM) in particular. The Center for Digital Government is committed to providing thought leadership in the CRM arena. A white paper from the Center, *HELLO: The First Word in Reinvigorating the Relationship between Citizens and their Government*, is a useful guide for local government officials on the use of CRM and 311. It can be downloaded, free of charge, from the center's Web site. *Hello* is just one of many freely downloadable white papers, guides, and reports that are available for technology professionals in the public sector. Visit www.centerdigitalgov.com and click on Publications.

The International City/County Management Association (ICMA) is conducting the first-ever national study on 311 and customer service technology used by local governments in the United States. The study will explore the benefits of and barriers to adopting integrated systems for customer service. A national survey, together with information collected from in-depth case studies, will create a portrait of how local governments are using such systems to respond to citizen needs and build the local government- constituent relationship. When viewed together, the survey results and findings from the case study research will present current practices and help identify successful implementation of coordinated systems for customer service. For more information, visit www.icma.org/311study.

Finally, this project would not have been possible without the generous support and funding of the Alfred P. Sloan Foundation. The Alfred P. Sloan Foundation is a philanthropic nonprofit institution, established in 1934 by Alfred Pritchard Sloan, Jr., then President and Chief Executive Officer of the General Motors Corporation.

SECTION 1

An Introduction to CRM

By Shayne C. Kavanagh

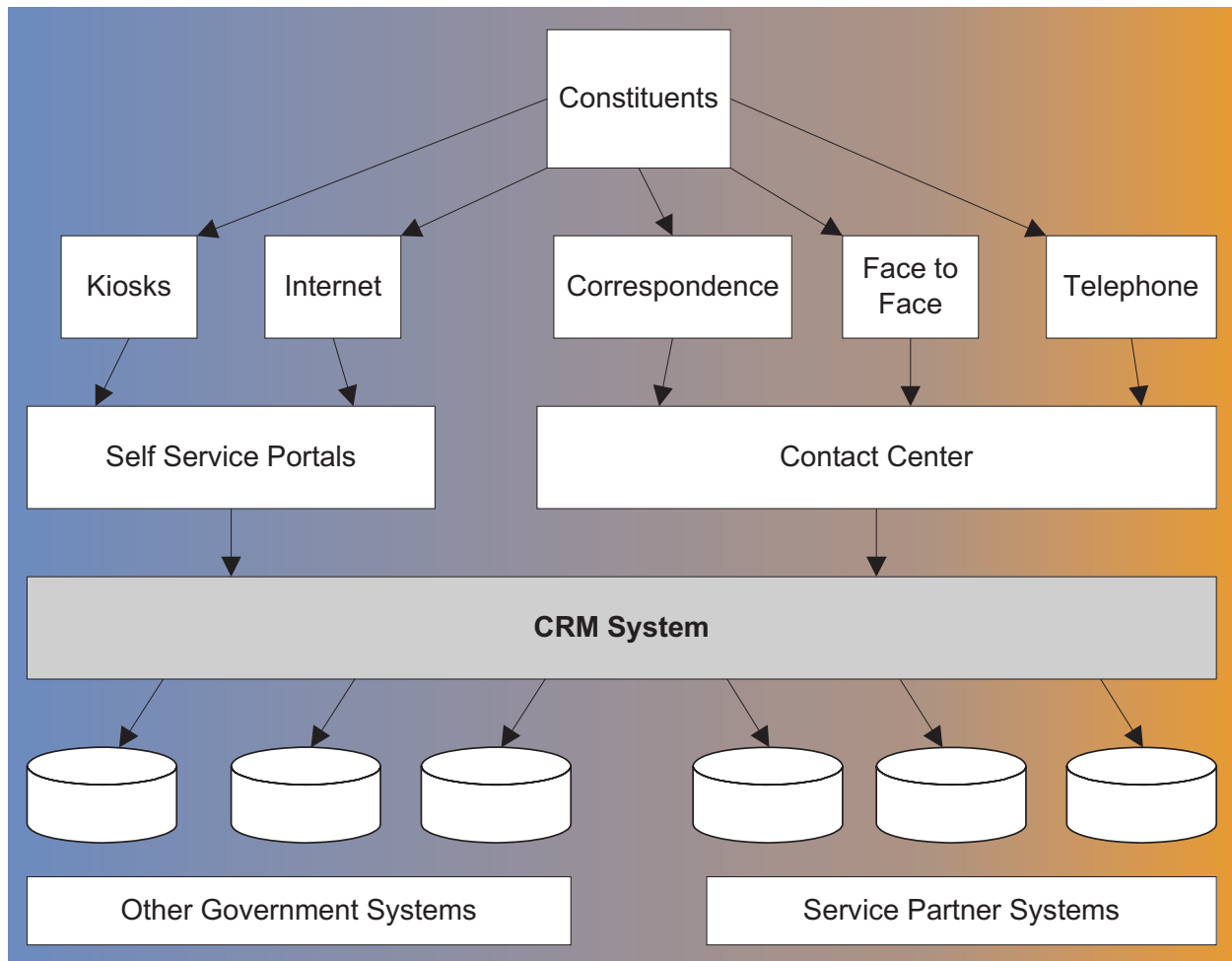
Constituent relationship management (CRM) is a combination of people, processes, and technology used to deliver superior service to the constituent.¹ Superior service means shorter wait times to contact government representatives, less frustration in finding the required services, outcomes that are delivered when promised, and ultimately greater constituent satisfaction. That technology is mentioned last in the definition of CRM is instructive – while modern technology is a crucial enabler, CRM is impossible without government employees whose behavior is attuned to customer service and business processes that focus on outcomes of value to constituents.

The diagram on the next page summarizes the essential concept of CRM. Constituents are able to interact with government through several means, such as Internet Web pages, free-standing kiosks, physical correspondence, telephone, or in person. Any of these channels will result in a consistent constituent service experience. Even though the constituent may be interacting directly with a Web service portal or a contact center, each is ultimately underpinned by a consistent set of data and processes encapsulated by CRM. Further, consistency is maintained even if the constituent moves across contact methods. For example, if the constituent initiates a contact through the Web portal and then later speaks with a government representative on the phone, the representative will have access to information from the initial contact and will treat the constituent consistently with expectations established by the constituent's visit to the portal.

The CRM system interfaces with a variety of other government systems such as a work order system to help guide service requests through to completion or to a geographical information system that adds a crucial geospatial perspective to constituent service issues. The CRM system can also interface with the systems of service delivery partners such as vendors or other government agencies to enable high quality constituent service to be maintained even when a contact requires government to cross organizational boundaries.

Like many technology-led business transformation disciplines, CRM has its roots in the private sector. Companies have sought to discern customer buying habits, increase loyalty, boost sales to top customers, and otherwise improve revenues using CRM. While any advantage that can be gained by private firms in a hypercompetitive global economy is significant, CRM has much more important potential for government. The reinventing government movement arose in the Clinton era due to increasing public cynicism, rising expectations for government, more complicated programs to administer, and political rancor over government effectiveness.² The reinvention movement led to attempts to transform governments across the globe on a massive scale, “unlike anything seen since the turn of the twentieth century.”³ A central tenant of reinvention has been a customer-focused approach to government. However, the citizen has a much more multi-faceted relationship with government than the mere transactional one suggested by

Exhibit 1.1: Constituent Relationship Management Systems



the word *customer*. At best, this complicates the administration of a customer-focused government management strategy and, at worst, may neglect other, and arguably more crucial, relationships of citizens with their government besides that as a customer. The discipline of CRM brings with it practices for process design and enabling technology that can help overcome the challenges of implementing customer-focused government while also addressing the other important relationships citizens have with their government.

Donald Kettl, in his award-winning book, *The Transformation of Governance: Public Administration for Twenty-First Century America*, describes three essential relationships between citizens and government that must be successfully managed in order for government to meet the

CRM Early Adopters

While CRM is in its beginnings in the public sector, this research report features the experiences of a number of governments that are leading the way, including the:

- City of Chicago, Illinois
- City of Albuquerque, New Mexico
- DeKalb County, Georgia
- City and County of Denver, Colorado
- City and County of Indianapolis, Indiana
- City of New York, New York

challenges of the twenty-first century.⁴ The first is citizen-as-service-recipient. This is the role that most directly corresponds to the concept of customers, and CRM is well suited to enhancing this relationship. CRM technology excels in providing access to information on government services and programs and in coordinating service fulfillment. This aspect of CRM has been the primary focus of government CRM implementation to date and is the primary focus of this research report.

The second key relationship is citizen-as-partner-in-service-delivery. In this relationship, the citizen plays a more active role in delivering the result intended by the government program and is exemplified by programs from social services to recreation. CRM helps manage this intricate relationship by maintaining a record of citizen-government interaction that is available throughout the agency and that can even be shared between multiple agencies when administering more complex programs, such as social services. More importantly, CRM emphasizes the technologies, processes, and practices of sharing information while maintaining requisite safeguards on privacy, and stresses keeping the interest of the constituent, rather than the bureaucracy, at the fore. This particular aspect of CRM will not be highlighted in this research report, but there are many examples of how CRM has been used in this respect. One illustration is the Michigan Economic Development Corporation, which uses CRM to create common profiles of businesses located within the State of Michigan and to engage those businesses in economic development programs.⁵

The final relationship is that of the citizen-as-owner, in which the citizen demands accountability and efficiency as a voter and taxpayer. CRM has tremendous potential to improve both accountability and efficiency by virtue of its ability to track data on citizen interactions and service delivery and to make that data available to the public and management. This research report describes a number of examples of how public organizations have used CRM data to improve both accountability and efficiency.

CRM and the Public Trust

Citizens with a Great Deal or Fair Amount of Trust in Government

	Federal	State	Local
2005	53%	67%	70%
1998	65%	80%	77%

Americans have traditionally not put a great deal of trust in their government, but data from the Gallup Poll has shown a decline of public trust in recent years for all three levels of government (federal, state, and local). In 1998, all three enjoyed the highest level of trust and confidence among citizens since the 1970s. Since then, ratings have declined, as the table indicates. Further, analysis by Gallup shows that those living in urban areas have, in the last few years, begun to express less trust in their local government than those living in rural or suburban areas.⁶ CRM has a role to play in arresting and even reversing these trends, especially for cities where the issues associated with urbanization create increased service demands.

A government CRM initiative can encompass a number of specific activities for improving constituent relationships with government. The most common application is the constituent contact center, which provides a single point of contact for constituent inquiry. Perhaps the most well known incarnation of the CRM contact center in government is the 311 telephone number. This service provides constituents with a single point of contact for non-emergency government services, just as 911 provides for emergency services. Simply streamlining the municipal phone book can provide substantial benefit to constituents, as illustrated by the City of New York's successful effort to reduce its twelve-page directory of city services to just one 311 number and, as Mayor Michael R. Bloomberg put it, thereby "end the frustrating bureaucracy New Yorkers encounter when they need help."⁷

CRM vs. 311

CRM and 311 are not synonymous. CRM refers to a discipline of constituent-focused management of government; 311 is simply one possible CRM tool, albeit an important one. Further, the presence of a 311 number does not necessarily mean that a government has implemented CRM. A 311 number is just technology. If it is not built on constituent-focused processes and staff behaviors, it is not CRM.

Other Uses of CRM in Government

CRM can support the work of government in a number of ways besides contact centers:

- **Work Order Management.** CRM can orchestrate the work needed to deliver service after a request has been made through a contact center.
- **Case Management.** Contact centers are designed to handle interactions with constituents that are limited in duration and scope. However, many government services require an ongoing, deeper relationship with the service recipient, like in matters of social welfare services or economic development. CRM can be used to document the progress of service to a constituent and coordinate work between staff members and even between agencies.
- **Outreach.** While a contact center has a reactive nature, CRM can be used as the platform for more proactive public information campaigns.
- **Management Support.** A wealth of service data is collected through CRM that can provide the foundation for management disciplines, such as activity-based costing and performance measurement.

Contact centers can also be used to handle inquiries from channels other than the telephone, such as e-mail, Internet chat, mail, and walk-ins. However, the telephone remains, according to the Pew Internet & American Life Project, constituents' preferred means for contacting government by a 66 percent margin over the next most preferred channel, a Web site.⁸ This means that telephone will likely remain the focus of government CRM for at least the near-term future. Therefore, this report will focus on the people, processes, and technologies necessary for implementing successful CRM contact centers and 311 numbers. The next section outlines the essential features of CRM contact centers.

Essential Features of CRM Contact Centers

CRM contact centers have two primary functions. The first is to respond to standard inquiries and the second is to take service requests. This section examines each along the perspectives of people, processes, and technologies needed for contact centers to accomplish that function.

Inquiry Response

The vast majority of contacts (between 60 and 70 percent⁹) that come into a general-purpose municipal contact center are one-off inquiries that do not require significant follow-up work, if any at all. The lack of follow-up responsibility may give a false impression of simplicity, though. There are a number people, process, and technology elements needed to coordinate the vast amounts of information required for timely and accurate inquiry response through a single contact center.

People. A universal constituent service representative (CSR) is central to successful inquiry response. The universal CSR is capable, with the support of the right processes and technology, of resolving inquiries across a broad range of subject areas. In addition to having the right answer, the CSR must provide a complete service experience by treating constituents with a customer-friendly attitude that is not always associated with government. The City of Albuquerque has put strong focus on providing a superior constituent service experience. For example, the city records calls and reviews them with CSRs to find opportunities for improvement.

A successful universal CSR is backed by an appropriate organization that includes regular customer service training, advancement opportunities, and feedback and incentive structures.

Processes. Coordinating the information needed to support the CSR requires a process for communication with line departments in order to make available the most up-to-date information. The City of Chicago begins this process with the initial training of its CSRs. The CSRs undergo a six-week training course where classes are actually conducted by the operating departments. This serves to familiarize the CSRs with the operating departments and their personnel, and ensures the most up-to-date information from operating departments is included in the training. After initial training, the city has several other mechanisms to make sure its 311 contact center is aligned with its operating departments. Twice per month, the city holds an in-service session between the CSRs and the operating departments where both parties exchange information that will allow them to work together more effectively. The

The City of Chicago rolled out its 311 program to almost 3 million residents in 1999 to provide better access to city services and more timely responses to citizen concerns. Since then, the annual number of calls taken by the city's contact center has grown from 2.8 million to 4.1 million in 2005.

The city's contact center handles inquiries and service requests relating to all areas of municipal business in Chicago, including city utilities, police non-emergencies, and many others. One of the city's current directions with 311 is to improve linkages with overlapping jurisdictions, such as the Chicago Public School System and Chicago Park District, in order to better handle calls relating to these agencies.

CSRs also automatically receive the first 100 copies of all new printed materials from operating departments, such as special event brochures or explanations of service program changes. Finally, the 311 center issues a daily update to all of the CSRs that disseminates event updates, service changes, or any other information relevant to addressing incoming calls. The city consolidates these updates through its CRM technology. The scripts that guide the CSRs through the varied types of calls they encounter are continuously reviewed and updated.

There will be cases, however, when the CSR is unable to handle an inquiry and requires help. These instances require a call escalation process, the goal of which should be one-transfer resolution – if the CSR cannot resolve the inquiry alone, at least he or she should be able to accurately identify the nature of the question and put the caller in touch with an individual who is able to answer it. If a CSR at the City of Chicago cannot resolve a call, the first step in the city's escalation process is to engage one of the contact center's supervisors. The supervisor and CSR will first collaborate to resolve the question. In Chicago's process, the CSR will, ideally, remain the single point of contact with the constituent while collaborating with the supervisor. Remaining involved in the call helps the CSR develop professionally and is consistent with the city's policy of minimizing the number of call transfers needed to resolve a citizen concern. If the supervisor and CSR cannot provide a resolution, they can escalate the call to the appropriate operating department. Each operating department has defined contact persons who can take transfers from the contact center when necessary. Further, these contact persons have complete access to all relevant portions of the CRM system so that they can document the call results and participate in any automated workflow related to the call.

Finally, a contact center must have a process for continuous improvement by using data generated by CRM activity and captured by CRM technology to adjust the service provided to constituents. As the City of Chicago's experience with 311 has grown, it has made active use of CRM data for improving performance. To illustrate, sewer cave-ins were often being misdiagnosed by the contact center as pavement cave-ins. This resulted in a work-request being sent to the city's department of transportation rather than the department of water management. Further, the department of transportation did not have effective lateral communication channels in place with water management, so the actual sewer cave-in problem was often not accurately reported to water management even when it was eventually discovered by transportation. These factors led to what the city viewed as unacceptable time periods for the closure of sewer cave-in work orders and repeated calls about the same cave-in issues.

Upon recognizing this problem through the call and work order data logged through the CRM system, the 311 contact center, department of budget, department of transportation, and department of water management met jointly to define a two-fold solution. First, the 311 center made improvements to its call scripts in order to make more accurate initial identifications of sewer cave-ins. For example, when a caller reported a road cave-in, the CSR would now follow up by asking if the cave-in was located near a sewer structure such as a sewer grate. Second, the city made several improvements to how work requests were handled after the 311 center took the initial call. Interdepartmental communication was improved so that the department of transportation's next step after identifying a work ticket as a sewer cave-in issue was to effectively communicate the issue to the department of water management, whereas before the work order was considered closed immediately after the diagnosis. In addition, a step was eliminated that required the department of water management to conduct a second inspection to verify the sewer

cave-in in cases where transportation did report it to them. The city realized that, in the vast majority of cases, the transportation department personnel had sufficient experience to correctly identify a sewer cave-in such that a department of water management repair crew could be dispatched directly without a preliminary inspection. As a result of these solutions, the city was able to reduce pavement cave-in resolution from 11.6 days in 2005 to 2.4 days in 2006 and sewer cave-in resolution times from 23.1 days to 19.1 days.¹⁰

As the city's experience shows, CRM data should be used to improve both the functioning of the front-end contact center and the service provided by operating departments. Secondly, while capturing data with CRM technology is certainly necessary for process improvement, alone it is not sufficient for realizing benefits from performance data. The participants involved in a business process must collaborate to use the data to recognize problems, determine root causes of underperformance, and coordinate their efforts towards a common goal.

Technology. Technology supports CRM inquiry response through a variety of features that facilitate information sharing.

- *Knowledge Base.* A knowledge base catalogs responses to various types of inquiries, which the CSR can access to increase both the quality and the consistency of service. A more streamlined version of the knowledge base may also be made directly available to constituents via a Web portal to enable self-service.
- *Scripts.* Scripts take the CSR through a series of questions with the constituent. These scripts act as flow charts, where the constituent's answer to a question determines the next question or course of action. Web portals and interactive voice response (IVR) telephony can use this same technology to enable more effective self-service for complex inquiries (e.g., eligibility determination).
- *Telephony Integration.* CRM contact centers can be combined with telephony technologies such as touch-tone dialing menus or voice-recognition to gather more information on the customer before they interact with a CSR. The Wisconsin Department of Employee Trust Funds has used this feature to maximize the information available to the department's CSR before actually speaking with the member. This technology can also be used to route callers to the CSR most skilled in handling a particular type of inquiry.
- *Workflow/Call Escalation.* When inquiries must be escalated beyond the initial CSR, workflow technology tracks the call and helps ensure a seamless experience for the constituent through the hand-off. Workflow can be particularly useful with e-mail contacts as it can be used to sort and direct e-mails to the most appropriate CSRs.
- *GIS Integration.* Most government organizations have their jurisdiction defined by a certain spatial boundary. This means that most public sector CRM systems must be location-centric and tightly integrated with geographic information system (GIS) data and functionality. This allows visual representation (e.g., maps) of service areas and contacts, which is essential for tasks such as giving directions and identifying government facilities (e.g., a park) proximate to the constituent. GIS can also incorporate various "layers" that overlay buildings and infrastructure (sewers, drains, utility lines, etc.) that may be helpful in identifying the type of response needed. For example, when a larger number of water leak calls come in, the call-taker can automatically map them on a GIS interface to see if there is a possible connection with a major water main.

- *Multi-channel Capability.* While telephone is the most favored means of communicating with government, other channels remain important as well. Web and e-mail will likely gain in popularity as constituents' Internet usage and familiarity grows. Walk-in service may remain especially important in smaller communities. Free-standing Internet kiosks and automated teller machines (ATMs) provide yet another means for contacting government, which may be particularly important for constituents without Internet access or where the government is serving a dispersed constituency without ready access to a government office. A CRM contact center should ideally accommodate multiple methods of access and maintain consistency of information across each channel.
- *Business Intelligence.* One of the key benefits of CRM is its ability to promote continuous improvement by making relevant data available for decision making. Chicago's experience with sewer cave-ins illustrates this point. GIS integration is an important component of CRM business intelligence – the ability to consolidate call data and relate it to spatial information allows recognition of patterns and issues that otherwise might not be readily apparent.

Service Requests

Compared to general inquiries, service requests are more interactive. Particular information about each request must be gathered and feedback on the status of the request may need to be conveyed to the constituent. Service request management through a contact center requires 1) people in both the contact center and operating departments to work together; 2) processes designed to coordinate work; and 3) technologies to help it all come together.

People. The universal CSR is an integral part of service request fulfillment. A properly trained CSR makes sure the right information is gathered from the constituent and that the request is directed to the proper place for fulfillment.

People in operating departments also play a crucial role in successful request fulfillment. Fulfilling a service request is not just a matter of handing off the task from the CSR to the operating department. The CSR and the service department need to work together to realize a successful outcome. The contact center serves as the single point of accountability for service requests, and the CSR acts as the liaison with the service department on behalf of the constituent. The goal is to create a partnership between the contact center and operating departments where each sees the other as a vital part of achieving their shared mission.

Service Requests vs. Case Management

Service requests do not include the more complex and ongoing interaction associated with casework activity like in social services. Case management is a separate CRM discipline not normally associated with contact centers.

The City of Chicago has found that instituting a culture where good performance is recognized and rewarded is essential to creating a partnership between the contact center and the operating departments. If both operating departments and the contact center actively pursue delivering the best results possible to the citizen, they will naturally form a partnership, as neither can provide optimal results working alone. The City of Chicago uses CRM data to track performance to enforce accountability, and at the same time the mayor actively promotes a culture that values per-

formance by personally applauding the successes of departmental service fulfillment efforts.

Processes. Service request fulfillment entails not only coordination of information, similar to inquiry response, but also coordination of action. Therefore, a service request fulfillment process must address the need to:

- *Transmit.* The CSR must diagnose the request and transmit all required information to the operating department. Accuracy is critical to avoid dispatching the incorrect people or resources for the job. Operating departments should be involved in designing the process used by CSRs to diagnose calls and capture information. This helps operating departments see the contact center as a useful asset rather than as an impediment.
- *Align Resources.* The operating department must organize the right resources to complete the task. Access to proper information on worker skill and resource availability is key at this point.
- *Report Status.* The operating department must report the status of the service request to the contact center so that the constituent can be updated and so that duplicate requests (e.g., a streetlight is out) can be handled appropriately. Such reports should be made at predetermined periodic intervals (such as hourly or daily updates) and whenever significant progress has been made in completing a step in the resolution process.
- *Gather Data.* Finally, relevant data must be gathered at various points in the process for accountability and improvement purposes. For example, information on how long requests remain open compared to performance targets is an important accountability mechanism. Trend data, such as repeated requests for graffiti abatement in a particular geographic area, may reveal the potential for a more proactive strategy to address service problems before constituents need to call.

Technology. Technology helps gather information on service requests and coordinate the efforts needed to complete requests. Important technologies for services requests are:

- *Scripts.* Scripts help CSRs correctly diagnose service requests and gather complete information by leading the CSR through a series of questions pertinent to the request type.
- *Workflow.* Workflow technology moves tasks between the people responsible for fulfilling a request. Workflow also monitors progress towards task completion as participants in the fulfillment process update the workflow when work is accomplished. This second feature also provides a tool for accountability as tasks that have gone past deadline are easily identified.
- *Integration.* CRM technologies must be integrated with other technology systems that support service delivery. For example, integration to a human resources system enables employee skill tracking so that the right people can be dispatched on a request. Asset management and inventory management integration helps make sure the right tools and materials are available as well.

Service Requests and Accountability

The City of Indianapolis's contact center is called the Mayor's Action Center (MAC). As the name implies, the mayor is personally associated with the outcomes delivered to citizens as a result of requests made to the MAC. The mayor's close association with the MAC helps emphasize to the Indianapolis government the importance of completing requests within the parameters promised to constituents.

- *Distributed Access.* Distributed access to the system allows field workers or even citizens to enter data about the request into the CRM system. Self-service means less entry time required of CSRs and often also means greater data entry accuracy.
- *GIS Integration.* Many of the service requests made through a contact center emphasize location. For example, many types of public works requests would fall into this category (e.g., missing or malfunctioning traffic controls, road or utility repair issues). GIS integration is important for pinpointing the location of the request initially and later analyzing service request data from a spatial perspective. The City of Chicago has elaborated on this feature with GPS integration that allows the city to better track and direct its mobile resources to fulfill service requests.

Conclusion

Constituent relationship management is a vital discipline for enhancing the multi-faceted relations that citizens have with their government, and building the trust and confidence constituents have in it. CRM is not primarily a technological initiative. Rather, it is a means for transforming the business of government that dedicates staff to constituent service, that designs business processes that produce the outcomes most valued by constituents, and that helps government give citizens the best value for their tax dollar. The rest of this report will expand upon the following subjects:

- The potential of CRM to improve citizen relationships and serve the public interest is great. Section 2 of this report explores the nexus between **CRM and citizens** in more detail.
- Because CRM is a complex undertaking, a clear business case must be made for a CRM initiative. The business case serves to focus the organization on the most important intended outcomes of the CRM project. Section 3 of this report addresses the **CRM business case**.
- Placing the constituent at the center of government service provision is not the traditional behavior for many governments. Therefore, a CRM initiative will require a significant change in behavior of the people that comprise the government. Section 4 addresses **CRM, people, and the change management process**.
- Just as behaviors of government staff require some adjustment to become consistent with CRM ideals, government business processes may also require adjustment. Section 5 discusses **redesigning business processes for CRM**.
- Section 6 discusses the **enabling technology for CRM**.
- Section 7 reviews the major **cost components** of a CRM project to help public organizations better plan for a CRM project.
- Section 8 concludes this report with a review of the **key lessons and strategies** for CRM success as reported by public servants who have lived them. This section also looks ahead to **major trends** of which those governments formulating a CRM strategy should be aware.

It is the Government Finance Officers Association's hope that, at the end of this report, the reader will have a good understanding of the central people, processes, and technology issues involved in obtaining CRM success and how to build the case for moving forward

with CRM. More importantly, we hope that this report builds understanding of how to ultimately transform relationships with constituents to meet the challenges of modern public service.

Endnotes

1. Definition adapted from Barton J. Goldenberg, *CRM Automation* (Upper Saddle River, New Jersey: Prentice Hall PTR, 2003).
2. Donald F. Kettl, *The Transformation of Governance: Public Administration for Twenty-First Century America* (Baltimore, Maryland: John Hopkins University Press, 2002).
3. Reinvention origins and quote taken from Kettl, *The Transformation of Governance*.
4. Note that the author has condensed Kettl's original four citizen relationships into three for the sake of brevity, but all four of Kettl's original ideas are included.
5. Shayne Kavanagh and Deanna Targosz, "Power to the People: Implementing Constituent Relationship Management in the Public Sector," *Government Finance Review* 17, no. 6 (December 2001): 26-31.
6. Jeffrey M. Jones, "Issues Facing State, Local Governments Affect Public Trust" (The Gallup Organization, October 2003).
7. New York City Mayor Michael R. Bloomberg, January 31, 2002. Quote supplied by the New York Department of Information Technology and Telecommunications.
8. John B. Horrigan, "How Americans Get in Touch With Government" (Pew Internet & American Life Project, May 2004).
9. Based on combined experiences of governments and vendors with CRM implementation experience who were interviewed for this report.
10. Statistics supplied by the City of Chicago Mayor's Office.

SECTION 2

The Citizen and CRM

By Shelley L. Fulla

The evolution of technology and its involvement in our everyday lives has powerful implications for the relationship between government and citizens. Technology has the potential to completely transform the way governments do business and how citizens relate to elected officials and public agencies. At a minimum, today's constituent relationship management (CRM) technologies (telephony, Web systems, etc.) create the possibility for increased efficiency and effectiveness of government. More significantly, these technologies can allow citizens to interact with government officials and staff in more meaningful and civically productive ways.¹

With the proliferation of the Internet and its increased use by citizens for information and government data (reports on initiatives, types of services offered, etc.), online customer transactions and inquiries are becoming an increasingly important communication mode. These phenomena present a number of possibilities for transforming the relationship between citizen and government:

- Eliminating the need to have a government representative in the process of delivering services;²
- Enhancing decision making in the agency;³ and
- Creating greater public confidence in government.⁴

Another area where significant transformation has occurred is in the type of information that is offered online. One of the major themes of modern public management is that the more open government agencies are, the greater the capacity for more effective governance.⁵ With increased openness, governments can be held more accountable for their actions and programs. By holding governments accountable for their actions, citizens are actively engaging in the process of creating more effective governance. Technology increases the capacity to create a more open government where access to the Internet or telephone is geographically closer than physical access to government officials or public agencies.

This chapter will examine the benefits to citizens that accrue from CRM technologies, including how CRM enhances governmental accountability, effectiveness, efficiency, and overall responsiveness to the citizen. It is important to identify at the outset the overlap that exists between these categories: by implementing features that increase accountability, governments are also enabling the increased effectiveness and efficiency of their agencies. For example, the tracking of citizen complaints (which increases accountability) is also used as a management tool whereby executive staff may track the amount of time and resources required to provide resolution to a call (effectiveness and efficiency).

CRM, Government Accountability, and Trust

In a CRM environment, governmental agencies are pressed to provide quality services with measurable results. In a 311 environment, this accountability is focused not only on the call-taker who responds to the citizen inquiry/request for service, but also on the employee(s) who are responsible for resolution of the citizen's call. In organizations that have embraced CRM disciplines, it is not acceptable for callers to have to wait inordinate amounts of time to have their calls answered and receive an answer/resolution to their question/problem, or to speak to a representative who is not polite or actively seeking resolution to the caller's concerns. This is the foundation of what CRM provides to constituents.

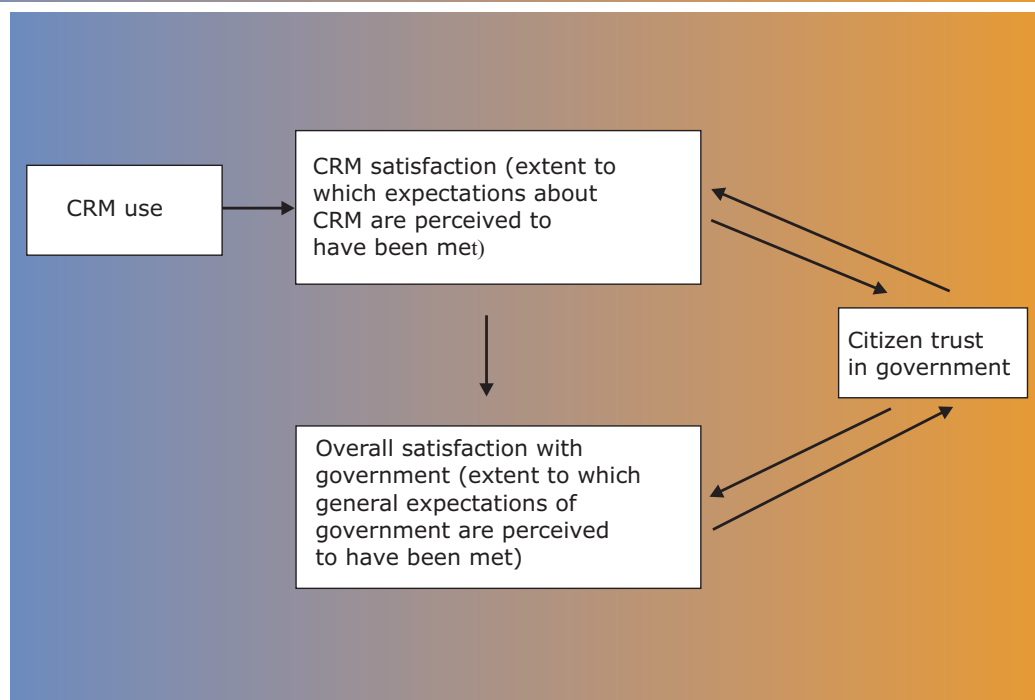
Citizens must be assured that their inquiry will be handled appropriately. To do this, governments can provide callers with a tracking number so that they may check on the status of their request by phone or via Web if the government has made this information available online.

For example, by the end of 2006, the City of Boston will not only provide callers to their 24-hour hotline with a tracking number, but will also provide a status on the service request online. Citizens will be able to check the status of their inquiries/complaints as they move through the various departments within the city. This data will also be used as a management tool: mayoral staff will hold responding departments accountable for the number of unresolved calls/complaints/inquiries. In discussing the usage of this management tool, Mayor Thomas Menino said, "They'll [the departments] know their report, and they'll have to answer to us why they haven't followed through. The city's changing, and my administration has to change too."⁶

Another example of how accountability is enhanced through CRM is illustrated at the City of Albuquerque. The city provides monthly data on the goals and the actual results on calls received. The city strives for an 80 percent phone pick-up rate within 30 seconds. For a twelve-month period (August 2005 – July 2006), the city reports that these goals were exceeded every month with an average call pick-up rate of nearly 99 percent within 30 seconds. Further, the city measures⁷ the quality (the consistency in the delivery of service to citizens) of their calls and has been able to exceed their defined quality standards for a twelve-month period.⁸

One of the by-products of accountability is an increased level of trust in government. By tracking the status of complaints/inquiries and ensuring the expeditious resolution of the problem, governments are poised to enhance the trust that citizens have in government. For constituents, the satisfaction with their CRM experience will be directly related not only to the likelihood that they will again utilize these services, but also to their overall satisfaction with governmental services in general.⁹ Exhibit 2.1 depicts this relationship.

Exhibit 2.1: How CRM Satisfaction Affects Trust in Government



CRM and Government Effectiveness

CRM increases the effectiveness of government. “Effectiveness” refers to government’s ability to achieve service goals and objectives. This directly relates to the amount of time that lapses before citizens receive a resolution to their call/request. By consolidating the citizen inquiry and response monitoring process into a CRM contact center, it is possible for management to assess any overlap that exists between agencies’ services as well as the overall ability of an agency to provide the required services.

One of the central features of CRM is the ability to track incoming calls by service type and status, and to monitor agency progress in responding. By providing management with a performance report on the number of days required to respond to certain types of calls (i.e., pothole filling), staff are able to assess the government’s ability to respond to the citizen’s request (i.e., to fill the pothole). Failure to perform according to defined standards highlights the need for further investigation into the root causes of under-performance. For instance, it is possible that a delay is due to the fact that the material required to fill the pothole is unavailable because of a problem with a purchasing contract (procurement department), the number of trucks available due to mechanical problems (fleet management), or the number of staff available to work on the request (personnel department). Through CRM, management is able to close the loop on accountability by identifying the exact point where service is breaking down and dedicate the resources necessary to eradicate the problem. By resolving the issue, managers are increasing the effectiveness of governmental operations.

At the City of Chicago, graffiti complaints are among the ten most common 311 calls. The agency responsible for responding to graffiti is the department of sanitation. By using CRM data to identify chokepoints in their response, within two years the department was able to halve its turnaround time from complaint to cleanup, despite getting far more service requests since the institution of 311.¹⁰

Citizens benefit from CRM technology because relevant, timely data is put in the hands of the decision makers – those with the ability to overcome institutional problems that frustrate an expeditious resolution of the constituent's request.

CRM and Government Efficiency

Probably one of the most quantifiable benefits of CRM is increased efficiency. Most notably, efficiency improvement comes from the routing of service calls to the most appropriate party. The most prevalent example of this is when the government's emergency system becomes more efficient by diverting non-emergency calls that could impede the city's emergency response. For example, in DeKalb County, Georgia, 911 operators received 1.16 million calls in 2004. Of those calls, 40 percent were non-emergency, informational, and customer-service related calls,¹¹ making 311 a potentially valuable tool for reducing the burden on the county's 911 system. Further, by consolidating call intake, governments are able to reduce the number of duplicate deployments for the same service: CRM programs allow call-takers to identify that calls made by two separate citizens are for the same service request. Eliminating these redundancies can provide significant taxpayer savings.

The City of Baltimore reports that, in the first year of operation, it achieved \$13.2 million in reduced overtime rates, increased productivity, and elimination of wasteful programs as a result of its CRM and performance measurement initiatives;¹² the City of Chicago was able to eliminate several smaller contact centers housed at individual city departments;¹³ and the City of Las Vegas estimates that it is saving up to 4.5 full-time equivalent employees per month through self-service on its Web-based CRM.¹⁴ These are just a few examples of how CRM programs have reduced operating costs.

These cost savings provide tangible evidence to citizens that their government is working for them efficiently. Through the results of ongoing analysis of governmental efficiency, the message is communicated to citizens that their government strives to continually reassess operations in order to maintain (or increase, if possible) the expected level of services for the lowest possible cost.

Conclusion

While implementing CRM technologies in government requires thoughtful planning and considerable resources, the payoff to the citizen (and, ultimately, the government) is immense. By becoming more constituent-focused in its operations, a government is poised to dramatically affect citizens in the following ways:

- By providing a single point of contact through a CRM contact center, citizens are able to hold government accountable for the services that it is charged with performing. Inevitably, this interaction will affect the citizens' satisfaction with government services and, ultimately, their trust in government.

- By monitoring and evaluating efforts to address constituent problems, governments ensure that they become increasingly responsive to citizen inquiries, respond to problems more expeditiously, and enhance the overall effectiveness of government.
- Via consolidation of service request intake, governments are able to reduce redundancies and better coordinate resources.

Endnotes

1. Yuhang Shi and Carmine Scavo, "Citizen Participation and Direct Democracy Through Computer Networking," in *Handbook of Public Information Systems*, G. David Garson, ed. (New York: Marcel Dekker, Inc., 2000), 247-263.
2. M. Bovens and S. Zourdis, "From Street-Level to System-Level Bureaucracies: How Information and Communication Technology is Transforming Administrative Discretion and Constitutional Control," *Public Administration Review* 62, no. 2 (2002): 174-184.
3. A. Chadwick and C. May, "Interaction Between States and Citizens in the Age of the Internet: E-Government in the United States, Britain, and the European Union," *Governance: An International Journal of Policy, Administration and Institutions* 16, no. 2 (2003): 271-300.
4. D. M. West, "E-Government and the Transformation of Service Delivery and Citizen Attitudes," *Public Administration Review* 64, no. 1 (2004): 15-27.
5. Openness refers to the citizen's ability to "see" deep into the organization via information dissemination as well as the level of interactivity that occurs between the government and the citizen. Interactivity can take many forms (i.e., phone, in-person, Internet, mail) but assumes a two-way form of communication.
6. "City to Let Callers View Response to Complaints," *Boston Globe*, August 1, 2006.
7. Albuquerque call quality is measured against a call quality guide developed by all levels of the organization that is reviewed quarterly and revised based on current trends.
8. Click on the "311's Performance" link at <http://www.cabq.gov/crm>.
9. Modified from E. Welch, C. Hinnant, and J. Moon, "Linking Citizen Satisfaction with E-Government with Trust in Government," *Journal of Public Administration Research and Theory* 15 (2005): 371-191.
10. City of Chicago Official Press Release, "Chicago's 311 Program Wins Government Oscar." Readers who would like a copy of this press release are encouraged to visit <http://egov.cityofchicago.org>.
11. <http://www.co.dekalb.ga.us/311/411on311.pdf>
12. David Myron, "CRM.GOV," *Customer Relationship Management* (July 2004): 26-30.
13. City of Chicago Official Press Release, "Chicago's 311 Program Wins Government Oscar." Readers who would like a copy of this press release are encouraged to visit <http://egov.cityofchicago.org>.
14. Myron, "CRM.GOV," *Customer Relationship Management*.

SECTION 3

CRM and the Business Case

By Spencer Stern and Huy T. Nguyen

Constituent relationship management (CRM) projects, like most technology initiatives, entail significant costs as well as internal staff resources. It is therefore important to demonstrate the value of CRM to stakeholders with a business case. The CRM business case will serve as a means to justify the need for a CRM solution and document the potential benefits of such a solution. This chapter will discuss the following elements of a CRM business case:

- Executive vision;
- Critical business issues;
- Critical success factors;
- CRM benefits;
- Key performance indicators; and
- Creating and sustaining executive support.

Executive Vision

The success of CRM is contingent on the strategic vision and goals and support of elected officials (e.g., mayor) and executive leaders (e.g., city manager). A clear and concise strategic vision provides guidance throughout the project, communicates the intended objectives of CRM, and conveys the importance of CRM to staff and external stakeholders.

CRM is a citizen-facing application, and therefore its strategic vision should be focused on objectives that are most relevant to citizen concerns, such as e-government, customer service, and customer satisfaction. Above all, the vision should be strongly supported by the organization's chief executive. The following is New York City's vision statement for its CRM initiative, which was strongly articulated by Mayor Bloomberg:¹

New York City's 311² vision calls for 24/7 service staffed by live operators, streamlined service delivery, centralized/standardized customer service across the city, multi-channel access, and ongoing performance measurement.

The mayor's personal interest in 311 was essential to the city's ultimate success.

Critical Business Issues

While the executive vision defines the interests of top policymakers (like the mayor) in a CRM project, critical business issues define more immediate, day-to-day challenges that

CRM can help resolve, thereby building support among management staff. The main objective is to identify specific weaknesses, gaps, and inefficiencies that impede the ability to provide products and services to constituents. For example, a city's 911 system may be overwhelmed with non-emergency calls. Identification of critical business issues can be achieved by performing a comprehensive analysis of the current system (people, process, and technology) used to manage citizen contacts. The end product is to document the major business issues that can be resolved with a CRM system.

Critical Success Factors

Once the critical business issues are identified, the next step is to determine what a successful CRM initiative looks like, which will orient the initial implementation and ongoing operation and optimization of CRM. Success should be defined in very specific terms regarding the level, quantity, scope, and quality of services. For example, a city could aim to reduce the number of non-emergency calls coming into its 911 number by 50 percent in the course of one year by redirecting callers to a 311 number.

Critical success factors should be shaped also by the priorities and expectations of constituents. This will require conferring with constituents or their representatives (e.g., aldermen) to better understand their public service delivery needs. For example, Kingston-Upon-Hull, a municipality in the United Kingdom, organized a citizen advisory panel where citizens provided the council suggestions to improve public services and requirements for the CRM system.³ Through this process, Kingston-Upon-Hull learned that residents were very interested in seeing trash collection services improved and that there was a strong preference among citizens to contact their government via telephone, rather than the Internet.

CRM Benefits

Benefits of a CRM system should be clearly identified in the business case and should be directly linked to the business issues, success factors, and overall project objectives. This way, the organization can achieve the highest return (benefit) from CRM by focusing its efforts on improving the most important business processes and fixing those that are currently most dysfunctional.

The benefits derived from a CRM system are many and varied. Benefits fall into three main categories: financial return on investment (ROI), tangible strategic, and intangible strategic. Financial ROI benefits are observable, quantifiable benefits that entail either cost savings/avoidance or increases in revenue. Tangible strategic benefits are quantifiable but do not directly result in financial savings or gains. Intangible strategic benefits are neither quantifiable nor directly result in financial savings or gains. The following section discusses the three different types of CRM benefits.

Return on Investment

Financial ROI is the traditional means of demonstrating the benefits and value of proposed projects. ROI consists of identifying the financial benefits (cost savings or revenue enhancements) and total costs of ownership (costs will be discussed in Section 7). Generally, ROI is determined by calculating the difference between the projected costs and benefits, and how soon the organization can recoup its expenditures to pay for the project.⁴

This is referred to as the payback period: the time it takes for benefits to equal the initial cost. In some cases, CRM systems can achieve a relatively quick payback period and literally pay for itself within a few years. For example, in the first year of operation, the City of Baltimore's CRM system, CitiTrack, generated approximately \$306,000 in cost savings for the city's bureau of solid waste from a reduction of employee overtime pay. CitiTrack improved the bureau's ability to schedule workers based on service requests, thereby eliminating duplicate assignments or invalid complaints. The overtime cost savings also aligned with Mayor Martin O'Malley's objective of reducing employee absenteeism and overtime expenses. Based on its apportioned costs for implementing and maintaining CitiTrack and generating financial benefits, the city's bureau of solid waste achieved a three-year payback period.

It is important to track the financial ROI in order to prove it has been achieved. The organization should define the data types that need to be captured and monitored in order to demonstrate cost savings or increases in revenue over time. For example, the City of Baltimore has its agencies submit biweekly customized data templates that include the amount and percentage of overtime pay expended to date.

Tangible Strategic Benefits

The ability to demonstrate a positive ROI is arguably the most important aspect of a strong business case. In many cases, however, a CRM system, like many government investments, yields important non-financial benefits that advance the strategic mission of the organization. Tangible strategic benefits are those that can be quantified and measured although they do not directly generate revenues or cost savings. Some examples of tangible strategic benefits include:

Better Access to Information. Distributing information and services via electronic means such as the Internet and World Wide Web improves the interaction between constituents and their government. For example, the City of Chicago's Web portal offers numerous sources of information for residents, such as public event schedules, legal notices, and traffic advisories. The site also provides services such as the option of paying parking tickets online, applying for business permits, and requesting city services. Better access to information and services can be measured by calculating the number of people accessing the city's Web site to request information or services. For example, the City of Chicago's 311 system tracked 2 million city service requests in 2003 versus 1.6 million in 2000. This is arguably the most important benefit of CRM because it directly fulfills the primary objective of improving customer service delivery, despite not generating additional revenue.

Employee Productivity. Implementing CRM technology automates many manual business processes resulting in increased worker productivity. For example, New York City's 311 system enabled contact center agents to improve telephone inquiry handling to

Examples of Financial Benefits

Cost Savings/Avoidance

- Reduced overtime costs
- Reduced absenteeism and turnover
- Contact center consolidation
- Ability to respond and process more calls without hiring additional staff
- Improved maintenance of capital assets

Revenue Enhancement

- Increased capacity to assess violation citations
- Improved delinquent accounts receivable collections
- User fee surcharge (e.g., for online credit card payments)
- Access to new funding sources (e.g., federal and state)

95 percent of calls answered within 30 seconds.⁵ CRM also allows contact center agents across the organization to be more productive because they can focus on department-specific inquiries. For example, 311 systems substantially reduce the volume of calls placed into 911 contact centers by handling non-emergency calls, allowing 911 dispatchers to address only emergency calls.

Impact on Property Values and Crime Rate. CRM helps neighborhoods reduce the amount of abandoned vehicles and buildings, graffiti, vacant lots with junk, high weeds, etc. Areas that minimize these problems have fewer problems with crime. A campaign to improve customer service and satisfaction via CRM and clean up urban blight makes the city more attractive to live in, which could lead to more citizens purchasing or renting residences in the city. Statistical evidence from public safety experts confirms that a rigorous anti-graffiti campaign reduces gang activity in specific areas, leading to a lower crime rate and higher property values.⁶

Improved Citizen Efficiency. The City of Tampa, Florida, has implemented an online calculator designed to help citizens compare the cost of performing transactions online vs. in person.⁷ For example, it will calculate the cost savings a citizen can achieve by paying a parking citation online rather than by visiting city offices by taking into account factors such as travel to city offices and time spent waiting in line. CRM databases and data warehouses, coupled with an online payment processing system, enable this type of value-added citizen service.

Intangible Strategic Benefits

CRM can produce a host of other benefits that are more difficult to quantify. However, these can have a significant tangible impact on constituents' lives. These benefits are generally impossible to quantify in monetary terms, but their value is undoubtable. The following are intangible benefits that have been achieved by jurisdictions that have successfully deployed a CRM system.

Impact on Citizens. CRM's primary focus is to make it easier for a city and its residents to interact. CRM prevents citizen complaints from being lost and also provides a tool that allows citizens to check the status of complaint resolution by calling the city or using the Web. This minimizes frustration, and citizens now get service satisfaction with just one phone number. In addition, citizens no longer have to understand how city governments are structured because 311 provides them a single point of contact to all city services.

Business Analytics. A CRM system feeds a data warehouse that can be queried to collect customized data on segments of constituents. Using business intelligence or business analytics software, public sector organizations will have accurate data available for their decision-making process. In addition, the information can be utilized to proactively reach out with customized service offerings. For example, if a citizen purchases an annual park pass, the parks department can send an offer for a discounted renewal when the pass expires, or offer discounts to other public sector recreational venues, such as a golf course.

Usage in Tort Law Proceedings. Cities are frequently sued by citizens injured on city property (e.g., falling on a cracked sidewalk or tripping on a pothole). In these instances, the city is generally not liable if it did not have prior knowledge of the problem. CRM data warehouses help track whether a problem exists, and can be used in court proceedings to defend the city's position that it was unaware that a problem was present.

Employee Benefits. CRM can produce important benefits for government employees. One of the foremost benefits is improved career opportunities for those employees most directly involved in providing constituent service. CRM introduces a discipline of customer service into the organization, which requires new skill sets and organization in order to master. For example, CRM often results in customer service representatives (CSRs) from across the government being consolidated into a single organization (either actual or virtual) and use of sophisticated computer, Internet, and telephony technology. A consolidated organization provides career advancement opportunities that would not otherwise be available within departmental call-centers. For example, CSRs could move into supervisory roles that an enterprise-wide contact center could offer. In addition, they could realize supplementary pay for increasing the breadth of their service expertise. To illustrate the later point, some cities, such as Dallas, have provided CSRs with the opportunity to cross-train as 911 operators and realize an associated pay bonus. The use of new technology provides the opportunity to master additional highly transferable skills, which could lead to higher compensation, more responsibility, and greater job satisfaction.

CRM may also have positive implications for those employees who directly administer services. Though difficult to measure, anecdotal evidence suggests that departmental employees may feel that their daily tasks have improved visibility to their managers, as well as elected officials, thereby increasing the perceived value of their work.

Impact on Elected Officials. Elected officials understand the benefits of CRM and believe that their constituents do as well. For example, Mayor Richard Daley in Chicago and Mayor Lee Brown in Houston have been re-elected since they implemented CRM. According to each mayor's staff, the mayor has taken credit for the implementation of the contact center, and they believe that the success of the contact centers translated into votes.

Key Performance Indicators

Due to the large investment required by a CRM implementation, it is essential the sponsors of the CRM initiative demonstrate clearly the value that CRM is providing the organization. Success is most easily measured by capturing pre- and post-implementation performance metrics and then tracking these metrics over time to indicate continuous improvement. Key performance indicators (KPIs) or performance measures should be created to demonstrate the success of the CRM project by measuring the financial, tangible, and intangible strategic benefits. For example, if the KPI for directing non-emergency calls away from 911 is the percent reduction in incoming non-emergency calls, then a 50 percent reduction could be established as the target value. The important point is that the baseline value of the KPI is identified before CRM is implemented so that improvements can be tracked (e.g., the current number of incoming non-emergency calls). Finally, these KPIs should be periodically measured at pre-defined project milestones (e.g., pre-implementation and at various intervals post-implementation) to demonstrate continuous improvement and progress towards the intended objectives.

Creating and Sustaining Executive Support

A common feature of all successful CRM projects is an executive sponsor who champions change. This sponsor is able to direct resources to the project as well as clearly articulate

the value proposition throughout the organization and garner support from the constituent community. Establishment and maintenance of an executive sponsorship should occur along with the development of the business case via the following three steps:

1. Identify an executive sponsor.
2. Create an effective management and governance structure.
3. Build and sustain momentum utilizing a phased approach and incorporating performance metrics.

Identify an Executive Sponsor

An ideal executive sponsor should be a visionary described as politically astute, persuasive communicator, fervent, well respected, and collaborative. To ensure effectiveness, the sponsor has to secure support at multiple levels within an organization, including:

- Enterprise-wide – Targeting elected and appointed officials;
- Organizational/Departmental – Targeting business units within the organization;
- Employee/Individual – Identifying key individuals who share the vision and become advocates; and
- Customer/Constituents – Identifying and involving individuals and organizations external to the organization (e.g., residents, businesses, and other stakeholders).

Create an Effective Management and Governance Structure

The sponsor must create a single stand-alone organizational division that is tasked with setting the overall direction for CRM and overseeing its operations. Creating this division provides a single point of contact and responsibility. This new division should be independent of existing departments and answer directly to the chief executive or executive sponsor. The value that this team can deliver includes:

- Coordinating and consolidating multiple channels of constituent contact for a consistent constituent service experience;
- Creating and documenting formalized, enterprise-wide, repeatable processes;
- Striving to continuously improve management processes;
- Performing constituent education and outreach;
- Managing the CRM implementation; and
- Operating the 311 center (if one is deployed).

Build and Sustain Momentum Utilizing a Phased Approach

CRM projects are complex undertakings. Therefore, the best chance for implementation success often comes through taking an incremental approach. First, this means implementing CRM in discrete phases. One type of phasing consists of deploying CRM to only certain departments initially (i.e., pilot projects). Pilot projects can be used to showcase the benefits of CRM, making subsequent departments more amenable to deployment. Another type of phasing is to roll out CRM functionality by type of application. For example, the first phase could deal only with telephonic CRM whereas Web-based CRM could

be deferred to another phase. Many organizations choose to utilize both types of phasing approaches in their CRM implementations.

Conclusion

An effective CRM business case will demonstrate the value of CRM to the organization and its constituents based on the strategic vision and goals of the organization, particularly the chief executive. The business case will also provide a foundation for moving forward with the project because it identifies the critical business issues, how CRM intends to resolve those issues, and the data to monitor progress. The three key elements of a business case are:

- Obtain fully committed sponsorship from top-level executives;
- Identify clearly the objectives and benefits of CRM, and relate them to the organization's goals, priorities, and critical business issues; and
- Develop performance measures (e.g., KPIs) to ensure benefits are realized and determine the success of CRM.

Endnotes

1. Shayne Kavanagh and Rowan Miranda, eds., *Technologies for Government Transformation: ERP Systems and Beyond* (Chicago: Government Finance Officers Association, 2006).
2. A 311 system is just one application of CRM that handles information and service requests from constituents via telephone contact centers.
3. Kavanagh and Miranda, eds., *Technologies for Government Transformation*.
4. For an in-depth discussion of how to calculate ROI, see R. Gregory Michel, *Decision Tools for Budgetary Analysis* (Chicago: Government Finance Officers Association, 2001): 50-55.
5. Kavanagh and Miranda, eds., *Technologies for Government Transformation*.
6. Steve Gibbons, "The Cost of Urban Property Crime," *The Economic Journal* 114 (November 2004).
7. http://www.tampagov.net/egov/savings_estimator/

SECTION 4

CRM and People

By Najla M. Mamou and Kristin Howlett Gonzenbach

Constituent relationship management (CRM) is fundamentally about people – government staff delivering service to constituents. Moving from the more traditional model of constituent interaction to a CRM model typically entails a significant change in processes and technology used by government staff, but, most importantly, requires a change in the behaviors of government employees themselves. This chapter describes a basic five-step approach to managing the change process in a CRM project.

- **Awareness of the Need to Change.** The first step is to help employees understand why the organization (and they) need to move to a CRM approach.
- **Desire to Participate and Support the Change.** Once employees understand why the organization must change, an active desire to participate in the change must be created.
- **Knowledge of How to Change.** Change initiatives require that participants know how the change will be accomplished, including their role in the change process.
- **Ability to Implement the Change.** Employees need the tools and training to make the transition and implement the change.
- **Reinforcement of the Change.** Ongoing support of the change by the organization's leadership and an incentive structure designed to align individual behaviors with the objectives of a CRM program cement the change in the organization's culture beyond the initial implementation project.

This chapter also discusses employee resistance to CRM and how it can be mitigated.

Awareness of the Need to Change

Elected officials, administrators, and other top officials spearhead CRM implementations based on a vision for radically improved constituent service. In its report on CRM and 311, “HELLO,” the Center for Digital Government describes how the CRM vision seeks to fundamentally re-orient government towards citizens, making them “the common decision point in everything government does.”¹

A CRM vision must ultimately be realized through the day-to-day efforts of the government's staff. Often, those with customer service responsibilities have minimal or no previous technology experience.² Sometimes, existing processes have been designed more for expediency rather than to best meet citizen needs. The first step in the change process is to build awareness of the shift in focus to the constituent and the technology tools that will be used to accomplish the effort.

Documenting underperformance and failure to meet citizen expectations can provide compelling case studies supporting the need for change. A particularly persuasive example comes from Southwark Council in the United Kingdom (a municipality in the London metropolitan area) and how it deals with disabled people. A young man who had lost both his legs in a motorcycle accident met the leader of the council government and explained to the leader that everyone in the world seemed to accept that he was now disabled, except the council. Each time he interacted with the council he had to re-tell the story and, even worse, re-prove that he was disabled. This was because each council service had its own data-repository and some services required a verification of a disability after a fixed time period. So, in an average year the young man might have to provide the information to three different people. This was, naturally, an unacceptable level of constituent service and helped convince the council of the need to re-examine its constituent service systems and practices. Case studies don't always have to be as dramatic as this one. Another motivator for Southwark's CRM initiative was cost savings. Southwark maintained approximately 250 databases of constituent names and addresses, many of these with their own server and maintenance costs. Consolidating these databases into a CRM system promised substantial savings. In fact, Southwark has realized approximately \$250,000 in cost reductions in the just the first year of operation.

Such examples provide a vivid illustration to staff and elected officials how such weaknesses in constituent interaction not only cause a loss of faith among constituents and result in less efficient use of public resources, but also can impede citizens from properly accessing vital social services. The accompanying sidebar about the City of Indianapolis, Indiana, shows another instance of how shortcomings in the current constituent service environment emphasize the need for change.

In many instances, staff is already well aware of customer service problems.

Many staff will have had direct experience with citizen frustrations when an employee cannot give the status of a complaint or problem reported earlier. These same staff may have been equally frustrated by their inability to help the citizen or even to discern if or when the request was first documented. Working with staff to record and communicate these frustrations to decision makers not only helps build awareness of the need for the project, but engenders positive feelings toward the project among staff as they witness their concerns shaping the initiative.

Finally, a CRM initiative is a major investment, and given the chronic shortage of resources in the public sector, the business case for CRM will likely be built at least partially on the prospects of reducing the cost of government. Given that personnel is the largest component of the government budget, any project that promises to reduce costs raises the specter of layoffs. A CRM awareness campaign should openly and honestly address personnel implications. In most cases, CRM will not result in layoffs – only in restructuring

The Need to Change

The Mayor's Action Center (MAC) in the City of Indianapolis knew the city needed a better way to track citizen requests. As more citizens called the MAC, the call volume made it more difficult to communicate constituent needs to the proper departments because the MAC lacked an integrated technology tool for logging calls, routing work requests to departments, and tracking results. An integrated CRM solution (with an integral contact center) was badly needed to ease the workload, eliminate duplicate data entry, and facilitate information sharing between departments.

and redirecting personnel resources to new tasks. While this may eventually allow government to reduce its reliance on human resources, the reduction is more likely to take place naturally over time, rather than abruptly upon implementation.

Desire to Participate and Support the Change

Once awareness of the need for CRM has been established, the next step is to create a desire to participate in and support the initiative. With the promise of a “better tomorrow” and an understanding that CRM is not intended to make deep cuts in the labor force, employees are able to think objectively about how they can improve their work by redesigning business processes and taking advantage of advanced technology to deliver exceptional customer service to the constituent.

Once the concern of job elimination via automation is addressed, the “what’s in it for me?” question can be addressed with employees. The answer to this question will depend largely on where the employee sits in the organization, but there are some general concepts that are broadly applicable. First, a CRM system should give staff a sense of accomplishment and satisfaction. Because public servants often bring a stronger sense of intrinsic motivation to the job than their private sector counterparts,³ the prospect of receiving praise for citizen service from the public – the same public that couldn’t get satisfaction before – can be a powerful motivator. CRM also holds out the possibility of more extrinsic rewards. Employees will be challenged to learn new skills. These new skills not only create future job security but can even open up new opportunities. For instance, a CRM project often results in the creation of a consolidated contact center. A consolidated contact center provides more opportunities for constituent service representatives (CSRs), compared to CSR positions that are isolated in separate operating departments.

For example, a consolidated contact center can present a clear career path to supervisory positions within the contact center, whereas a similar path would likely not exist in operating departments. Also, a consolidated contact center might offer greater prospects for supplemental pay, like skill pay for becoming cross-trained in different functional areas. An example of this is when 311 CSRs become cross-trained as 911 operators and can be assigned to temporary duty in the 911 center for a boost in pay.

In communicating a CRM plan to employees, the negative consequences of not embracing the change should be addressed and, in fact, can often provide powerful additional motivation to participate in the initiative. One consequence of not participating is to be left behind as the orga-

The Value of Change Management

The City of Albuquerque, New Mexico, learned the value of dedicated project and change management first-hand. For one technology project, no formal project management process was followed and no change manager was utilized. This project is two years overdue and has yet to be completed. For another project, formal project management was followed without utilizing a change manager. This project took 50 percent longer than planned and exceeded budget by 20 percent. Consequently, Albuquerque enlisted a dedicated project manager and a dedicated change manager for its CRM initiative to raise awareness and instill the desire for the change. *The CRM project was completed early and came in 16 percent under budget as a result.*

nization evolves to new customer service standards. Failure to evolve with the organization will result in outmoded skills that are incompatible with changing duties.

A communications program to encourage enthusiastic participation should address elected officials in addition to employees. From the political perspective, no elected official wants to face complaints from his/her voters about poor communication with government. This single desire alone – to keep the voters satisfied – is often impetus enough for politicians to support a CRM initiative. To illustrate, in the snow-belt states, the coordination of snow removal efforts profoundly influences mayoral races. The use of a CRM system to improve communication and reporting during bad storms could enhance an elected official's chances of re-election. Elected officials will also find the ability of CRM to make government accountable for results to be compelling.

Knowledge of How to Change

Change managers need to use all available means to keep communication open, ongoing, and ubiquitous. A variety of communication methods, such as newsletters, e-mail blasts, videos, and regular meetings should be used to communicate progress on the project, changes in processes and job duties resulting from the CRM program, and information on the assistance available to employees for coping with these changes. For example, communications might publicize training class syllabi and schedules or in-service meetings where staff will have the opportunity to hear directly from the organization's leaders on the CRM initiative.

The foregoing forms of communication are important, but they are only one-way transfers of information, from the CRM implementers to those impacted. A good communication program also provides opportunities for two-way communications. For example, as the project proceeds, questions will arise naturally about matters such as the project schedule and changes to job responsibilities resulting from CRM. An in-service meeting or an interactive Web site provides the opportunity for these (and similar) questions to be asked by staff at any level of the organization and for the answer to be disseminated widely. In addition to these broader communication tools, meetings with the management of affected departments allows more focused information exchange, which then allows managers to keep their employees informed.

Albuquerque and Indianapolis employed continual communications to staff and executive sponsors about project status and expectations through regular status meetings and weekly e-mail updates as a central means to their success. They did not want staff to experience any "surprise" changes in how daily activities would be performed in a CRM environment or to be unclear about what their responsibilities would be under the new system.

Tools for Change

Self-paced, computer-based tutorial tools are being increasingly recognized as invaluable training supplements to traditional classroom, instructor-led training. The City of Albuquerque made these tools an important part of its training strategy.

Ability to Implement the Change

The next step in the change process is to provide training to those impacted by the change. The first phase is project team training. In-depth training prepares a core group of the organization's personnel to help lead implementation, design constituent service processes, develop a training program for end users, and configure and support the enabling technology. The project team then consults affected staff for input on process design and training needs. In addition to technical knowledge, to be effective trainers, the project team members must have facilitative skills in order to successfully engage frontline staff. Demonstrated project leadership from a highly trained project team that takes an active interest in the concerns of stakeholders instills confidence in the project among all.

Training a cadre of staff to serve as trainers of other employees is the next phase. This cadre develops the training guides and customized user manuals for end users. Many times these trainers are accompanied in the first end-user training sessions by consultant staff that can assist in addressing more technical concerns posed by attendees. However, the trainers usually become experts on their CRM subject matter in a short time. The training staff also serves as the real “cheerleaders” and motivators, having some of their most intensive contact regarding CRM with rank and file staff.

Reinforcement of the Change

It is vital to institutionalizing the CRM initiative that new processes and procedures take permanent hold, are monitored continually, evaluated, and when necessary, updated. Key performance indicators (KPIs) are central to reinforcing CRM activities because they establish an explicitly agreed upon performance standard to which staff can be held accountable. KPIs can be used to monitor the performance of the contact center and can also measure the end-to-end process for fulfilling service requests across departmental boundaries. For example, for their contact centers, both Indianapolis and Albuquerque strive to answer 80 percent of inbound calls within twenty seconds. They use this metric when evaluating a CSR's skill attainment, thereby establishing accountability for results.

To measure the performance of request fulfillment, the City of Indianapolis monitors the duration of time needed to close cases, defined as the time from when a problem is first reported until the department performing the service documents the issue as resolved in the CRM system. The city reports the results of this metric to the community via the press and the city's Web site, reinforcing the importance to city staff of closing issues in a timely manner.

CRM Technology and KPIs

CRM technology provides the ability to track performance data and report it quickly and accurately to users and decision makers. Hence, CRM technology is indispensable to the use of KPIs, which in turn reinforces the CRM initiative.

Resistance

Resistance among potential users is a common occurrence with any new system implementation. For example, staff members may believe that their job will be eliminated when manual processes become automated or they may be concerned about how management

will use the enhanced access to performance data and accountability made available by CRM. Hence, there is a need to anticipate resistance and take countervailing action at the earliest stages of the project.

Both Albuquerque and Indianapolis anticipated resistance and actively engaged staff members from the beginning. Indianapolis communicated that the CRM system was, in fact, intended to help the staff complete more work and not to eliminate jobs. The City of Albuquerque's existing systems for managing constituent interactions were becoming increasingly difficult to maintain due to outdated technology and lack of staffing, so the city launched a CRM initiative to reinvigorate its constituent service standards. Both cities found that resistance decreased substantially after staff felt secure in their jobs and understood that their duties would become less cumbersome. To staff, a particularly compelling feature of the CRM project was the job satisfaction that came with citizen approval of their service response.

Both Albuquerque and Indianapolis also actively enlisted participation in the project from the staff members who would use the new system. The cities used these employees to develop requirements, test the software, learn the system features as it applied to their role, and analyze constituent service processes. Employee involvement was crucial to alleviate resistance because it allowed them to experience first-hand both the system and the benefits available to the citizens. Finally, both cities found that maintaining the CRM technology at a high level of performance was key to managing resistance and reinforcing CRM concepts after go-live. Staff members were usually the first to find glitches in the live environment, and quickly resolving these errors illustrated the importance of CRM while removing a source of potential staff frustration. Southwark has institutionalized this strategy by maintaining a permanent CRM user group that collects system issues and then prioritizes them for improvement.

The Indianapolis and Albuquerque examples illustrate the importance of a deliberate change management approach to mitigating employee resistance. Their emphasis on communicating the rationale for the change and involving employees in the solution in the early stages of the project resulted in long-term positive outcomes.

Conclusion

Effective CRM implementation begins with the sponsors and continues with the involved departments and their staff. Demonstrating the value of CRM to the people who “touch the keys” every day will result in an outcome that produces value to constituents. Enlisting staff as full participants in the CRM initiative requires a comprehensive change management and communications program. This section has outlined a five-step approach to change management:

- **Build awareness** of what CRM is and why it is needed.
- **Create a desire to participate** in the CRM initiative by describing the benefits available to stakeholders as well as the consequences of not participating in the initiative.
- Provide **knowledge of what the future CRM-enabled organization will look like** and how the changes to processes and employee functions required by CRM can be accomplished.

- **Provide the ability to act** on the foregoing knowledge by making comprehensive training available.
- **Reinforce the CRM program** by creating a system of performance management and accountability based on key performance indicators.

During any of the above steps, resistance to the CRM initiative can arise. Resistance can be counteracted by dispelling what is often a major concern associated with major technology projects – replacement of jobs via automation. Meaningful participation in the CRM project can also help overcome resistance by establishing credibility for the project among staff and giving them influence over the future of constituent service in the organization.

Endnotes

1. The Center for Digital Government, “HELLO: The First Word in Reinvigorating the Relationship between Citizens and their Government,” 2006.
2. Shayne Kavanagh and Rowan Miranda, eds., *Technologies for Government Transformation: ERP Systems and Beyond* (Chicago: Government Finance Officers Association, 2005).
3. For quantitative and literature-based support see: David J. Houston, “Public-Service Motivation: A Multivariate Test,” *Journal of Public Administration Research and Theory* 10, no. 4 (2000): 713-727.

CRM and Process Improvement

By Nadeen Biddinger and Eva M. Olsaker

The common approach to process redesign has been to focus on organizational subunits, such as departments or divisions. This method is inherently limited because it neglects the interdependencies between departments and consideration of how the entire organization can work together to provide better service delivery. Constituent relationship management (CRM) technology affords organizations the opportunity to address enterprise-wide process improvement. In fact, because the CRM philosophy is one that encompasses the entire organization, not just a few business units, it is imperative to view constituent-service processes from an end-to-end perspective, regardless of the unit boundaries the process might cross.

Hence, implementation of CRM demands a new approach to process improvement - one that capitalizes on the potential for improved data sharing and the exchange of information across organizational boundaries permitted by CRM. This section describes how to redesign processes to take advantage of CRM's full capabilities.

The Steps of Process Redesign

To examine process redesign from an organization-wide perspective, it is important to determine how a process is performed currently and then to consider how it could be completed differently in the future. Review and redesign of business processes includes the following nine steps:

- 1. Understand the Drivers for Change.** The vision and goals for CRM must be explicit and participants in the redesign project must have a shared understanding of the desired outcome of the process. This will enable them to build the process toward achieving a shared vision.
- 2. Understand and Analyze the Current Processes.** Analyzing the current process provides a baseline understanding of existing methods of customer service. Knowledge of the baseline is crucial in later steps of process redesign. Process mapping is a great tool at this step, especially if front-line staff participates in the mapping exercise. Process mapping entails creating a visual workflow diagram of the underlying business processes. This helps staff think critically about how CRM can improve the work of the organization and demonstrates that staff's input is important to the project. Additionally, at the end of process redesign, the new process can be visually compared to the old process to show improvements.
- 3. Redesign the Processes to Realize the Vision/Goals.** At this stage, the designers create the process needed to achieve the drivers for change described in the first step. The outcomes that are important to constituents should always be a leading consider-

ation during process redesign. Identifying tangible measures for process performance, such as performance benchmarking against other organizations, is a useful technique for orienting the redesign efforts and establishing clear efficiency gains via process redesign.

4. **Identify the Gaps between the Current and Redesigned Processes.** The current process and redesigned process are compared to reveal critical differences that will have to be bridged. A typical gap might be lack of experience with information sharing between organizational silos in the current process, or processes that were designed to achieve internal or intermediate needs rather than constituent needs.
5. **Develop Technology Requirements.** CRM technology facilitates bridging gaps. It enhances information sharing by providing a central repository for constituent service data. CRM also provides process monitoring and automation, making it possible to manage processes across subunit boundaries.
6. **Understand Changes Required to Bridge Gap.** CRM technology is only a tool for bridging gaps. Significant changes may need to occur in organizational structure and/or employee behavior to ultimately bridge the gap.
7. **Develop a Plan to Implement.** A plan to implement the redesigned process assigns accountability for the required organizational, behavioral, and technological changes. Ideally, responsibility should be assigned to an empowered process owner who has the ability and resources needed to achieve the defined milestones and project targets.
8. **Implement the Plan.** Finally, the plan for process redesign must be implemented. Central to this task is the composition and quality of the project team assigned to implementation. Not only must the team have the necessary skills and resources to succeed, but team members must be fully committed and dedicated to project success.
9. **Periodically Review and Improve the New Process.** Processes will need to be reviewed regularly and revised to achieve the best results in light of changes in the external environment and shifts in the organization's goals.

Unfortunately, many organizations fail to follow through on the required steps. The most common pitfall is to skip the steps of understanding the current processes and of designing the future processes to achieve the desired end-goals. For example, one large municipal organization developed a request for proposal (RFP) to acquire new technology needed for a cash receipting and CRM solution. However, the RFP went to market requesting a solution based on the organization's current business process, not based on a process redesigned to achieve the vision and goals that spurred the project in the first place. As a result, the enabling technology acquired was remarkably similar to the legacy technology that was failing the organization, and the intended outcome of improved efficiency and effectiveness was not achieved. This not-uncommon occurrence results in a solution that is not aligned with the needs of the organization and is suboptimal in the value that can be realized from CRM.

The Principles of Process Redesign

While moving through the nine-step redesign process, it is helpful to remember several redesign principles that are specific to maximizing CRM capabilities:

- **Abandon Silos.** Letting go of the organizational silos and maintaining an end-to-end view of the constituent service process is the only way to optimize the benefits of a CRM investment. This starts with the initial contact and ends with fulfillment of the constituent request regardless of which subunit boundaries are crossed.
- **Benchmark.** As described earlier, process redesign requires that processes be created with a defined end-goal in mind. Industry benchmarks for customer service (e.g., call abandonment rates, call pick-up times, rate of one-call resolution of issues, etc.) can provide a source of realistic and measurable goals. Further, since citizens will naturally judge the performance of a government CRM program against the customer service they experience from private sector organizations, such benchmarks are a very relevant performance standard.
- **Change Management.** Process redesign effort will often need to be accompanied by dedicated change management to align employee behavior with the intended outcomes of the new process. Section 4 of this report describes a change management approach that complements process redesign.
- **Use CRM to Anticipate Needs.** CRM not only reacts to citizen service requests, it can also anticipate service needs by “pushing out” services to constituents before they request them. Anticipating service needs requires information sharing between departments. For example, when a baby’s birth is recorded, the records department can share that information with the department(s) that offers child-rearing support, day care options, and day camp programs, permitting those department(s) to reach out to families likely in need of those complementary services.
- **Use CRM to Enforce Compliance.** Improved data sharing capabilities can allow an organization to more effectively enforce existing regulations. For instance, knowing that an individual has not paid child support could be a reason to withhold a business license or other privilege. Better enforcement could result in greater direct income to government as it more effectively collects the fees it is rightfully owed, or it could provide additional social benefits, such as single mothers receiving more consistent child-support payments – either outcome substantially increases the return on investment available from CRM.
- **Use CRM for Staff Accountability.** CRM can provide managers with a dashboard of measures that indicate, at a glance, whether the standards set for the redesigned process are being met.
- **Optimize Processes.** It is unlikely that the initial iteration of the redesigned process will be flawless. Rather, it will have to be optimized over time via a series of incremental improvements. This kind of continuous improvement requires that metrics be established to monitor process performance; that responsibility for end-to-end process performance be assigned to a single, empowered authority; and that participants in the process be incentivized to work together, accept and effect change, manage their differences, and apply creativity to develop new solutions to existing problems.

The Participants in Process Redesign

To examine process improvement from an enterprise perspective, it is important to convene a project team whose members come from throughout the organization. A project team with this sort of diverse constitution will: 1) help ensure that the CRM project ad-

dresses the concerns and needs of different operational areas; 2) bring unique and broader perspectives on constituent service issues into the analysis; and 3) help identify existing constituent service initiatives that may be already underway (or in the planning stage), albeit in an isolated capacity, thereby helping to avoid duplication and increase synergy between CRM and other projects.

A CRM implementation team should include representation from the operational departments that will use CRM. An unfortunate tendency is to limit participation to only departmental managers. Although managers make critical decisions, end users and mid-level managers have an intimate understanding of current processes and practices. Often, staff perspectives on process improvements are extremely insightful and grounded in the realities of day-to-day service delivery. As a result, their support in recommending process redesign features is invaluable to a CRM implementation. Further, mid-level managers and end users will play a crucial role in changing the organizational behaviors needed to realize CRM success. Having their participation early in the project, during process analysis and redesign, enhances their understanding of CRM and the likelihood that they will become vocal supporters of the initiative. Therefore, participation of end users and managers should be planned for at the earliest stages of the redesign undertaking.

Frontline Participants

The City of Savannah, Georgia, found the most valuable participants were the call takers on their then-current customer service desk. They had an incredible grasp of the number and types of calls the city received. This helped the city to design its solution to capture all the necessary data from incoming calls and to identify how to best hand-off requests from the contact center to line departments.

The City/County of Denver, Colorado, found that its use of a cross-departmental, collaborative project team marked the first time in the organization's history that it was able to document entire constituent service processes, from initial service request to final fulfillment, as it crossed multiple departments. Internal data on the public's most frequently requested processes – such as potholes, animal control, and marriage certificate information – led the participants to collaboratively determine which processes were the highest priority to address with CRM. Process redesign efforts then focused on achieving the best results in these processes, including the elimination of redundant work efforts that existed within Denver's then-current means of addressing these constituent concerns. CRM technology was, naturally, an important part of Denver's efforts as the power of the CRM tools shaped how the team planned to realize their stated constituent service objectives. Finally, the project team documented these discussions through detailed flow charts that followed the process from initial contact by the constituent through to final issue resolution. This recorded the decisions made and provided a vehicle for communicating the redesigned process to the rest of the organization.

Conclusion

The full benefits of CRM are realized through process management and data sharing at the organization-wide level. However, government organizations have traditionally been managed from a subunit perspective. Therefore, a CRM project must bridge the process-divide between business units. Organization-wide CRM processes enable leadership to formulate strategic decisions at an organization-wide level and foster efficient im-

plementation by operational units. The critical elements of a CRM process redesign approach that delivers these benefits are:

- A **process redesign methodology** that addresses the nine steps of process redesign described in this chapter;
- Adherence to **process redesign principles** that are designed to take advantage of the special capabilities and characteristics of a CRM environment; and
- A **project team** that consists of members from across the organization, bringing multiple perspectives to the analysis of constituent service issues, and that makes certain that the redesigned processes meet the needs of the subunits that will ultimately execute the process.

The most valuable process redesign approach emphasizes results that matter to constituents, regardless of organizational boundaries. Further, using CRM process redesign to engender an atmosphere where subunits feel comfortable working together to solve citizen concerns puts the organization on the path towards long-term and sustainable CRM success.

CRM-Enabling Technologies

By Rita C. Scoggins

While the constituent service requirements of governments can vary greatly, the constituent relationship management (CRM) software packages on the market today are configurable to meet the constituent service requirements of a wide spectrum of public sector organizations. The purpose of this section is to provide an overview of the most important technical features of CRM packages. An understanding of these technical features will help public sector organizations better envision the technology-enabled process improvements that CRM can help them make.

Contact center technology will be the primary topic of this section. Additionally, this section describes several technologies that complement the contact center, such as service management, constituent outreach, and case management. Finally, this section provides a brief discussion of the options for procuring CRM technologies.

Build vs. Buy

This section was written from the perspective of purchasing a commercially available, "off-the-shelf" software solution from a vendor. However, it is still germane to organizations that decide to build their own custom CRM solution, as this application should still incorporate many of the same features.

Contact Centers

CRM contact center functionality provides a configurable framework for customizing the user interface that can be designed to meet the needs of various types of contact centers. Typical user interface features include the following:

- **Constituent Search Capability.** The search feature allows a contact center agent to search for information on a constituent by name, address, identifier, or other combinations of characteristics/values as specified by the organization.
- **Contact History.** After the identity of the constituent or location is confirmed, a listing of prior interactions can be displayed that provides the agent with information on the date, time, and nature of past contacts with the constituent or location.
- **Geospatial Search Capabilities.** Many public sector CRM systems are centered on buildings and/or addresses rather than constituents. This is because constituent information is often not necessary for resolving a contact and because the constituent may sometimes prefer to remain anonymous when contacting government. Hence, the search capabilities of CRM applications can be enhanced to provide a strong geospatial search function that allows the user to search by characteristics of a location such as address, street name, or even to make a visual search of a map via a link with geographic information systems.

- **Geospatial Attributes.** CRM software packages offer great flexibility in allowing the organization to determine what attributes of a building or address should be tracked. For example, perhaps it is important to show the address at which street lights are located for one organization, while for another, the buildings in which water meters are installed is more critical. For many public sector organizations, knowledge of the location of assets in the field is paramount to providing effective constituent service.
- **Action Boxes.** Action boxes provide single-click capability to navigate to other parts of the CRM application (such as to a knowledge base or to initiate a transaction or execute a report), to pre-defined Web sites (such as an intranet site that contains policy and procedure information), or to other back-end systems used by the organization. Input parameters (such as the constituent's identifier or name) can be automatically carried forward from the main contact center screen to the function invoked by the action box, eliminating the need to re-key information already provided or confirmed.
- **Application Area.** The application area typically comprises the majority of the user interface screen and represents a series of screens or views that are automatically populated upon confirmation of the constituent's or location's identity. The screens presented are configurable based on the types of calls handled. The screens can:
 - ➔ Contain key constituent information, such as name, address, contact information, etc.;
 - ➔ Display transactional information, such as account balances and/or a transaction history;
 - ➔ Provide a means to record the contact (i.e., a screen that is used to classify and log information about the contact);
 - ➔ Enable a service request to be entered and dispatched; and
 - ➔ Present the script to be used by the contact center agent to guide the collection of information from the caller.

For location-centered contacts, the application area could be used to show information such as assets installed at that location or open service orders at that location, which would be helpful for avoiding the creation of duplicate service orders for the same issue.
- **Broadcast Messaging.** The broadcast messaging feature is an area of the contact center user interface that can be used to display "streaming" messages to all contact center agents as defined by their supervisor.
- **Call State.** If the CRM software package is integrated with a computer-telephony integration (CTI – see the next page for an expanded definition) software package, the

Knowledge Base Defined

A knowledge base is a database with a configurable classification scheme and robust search engine that may contain a catalog of responses to past inquiries, FAQs, and/or symptoms and solutions. More advanced capabilities can include the ability for users to rate the quality or "fit" of the solution provided and utilities that allow an organization's knowledge manager to monitor database content (i.e., look for responses or solutions with low fit ratings, assign key words to content, etc.).

call state area of the user interface provides a “pop”¹ (a brief summary) of information about the caller, if such information is made available through call pre-screening tools such as interactive voice response (IVR – see below for an expanded definition) prior to the agent taking/answering the call. The call state area also typically provides a running clock to track the duration of the call and a means for the contact center agent to indicate their availability for a subsequent phone call. This feature is particularly useful for an organization like the Wisconsin Department of Employee Trust Funds that provides a highly technical service to its constituents. Arming the constituent service representative with information about the constituent in advance of speaking with the caller makes for a more expeditious call and a more satisfied constituent.

- **Soft Phone Buttons.** If the CRM software package is integrated with a CTI software package, a row of pushbuttons will be available on the contact center screen that will allow the agent to manage, from their computer screen, telephone functions such as answer, hold, transfer, and disconnect/end.

There are a number of complementary software applications that can be implemented in conjunction with a contact center to provide an organization with added capabilities to serve constituents efficiently. Some of these applications are described below:

- **Interactive Voice Response (IVR).** An IVR application provides the means for the caller to identify themselves and indicate the nature of their call prior to the agent taking/answering the call. This “call-attached” data can be passed through CTI software along with call state data (see above) to provide the “pop” of information about the caller to the agent before answering the call. Information on the nature of the call can be used in conjunction with skills-based routing functionality to ensure that the call is routed to an agent or group of agents that have the qualifications to handle the specified type of call. Finally, an IVR may be used to disseminate educational information while a caller is in a wait queue, initiate a transaction, or provide status update information without the need to involve a live agent.
- **Computer-Telephony Integration (CTI).** A CTI application serves as the connecting software between the IVR and the contact center. It enables data entered via the IVR to be passed to the contact center to facilitate a search or look-up function to identify the caller. Additionally, CTI packages offer automatic number identification (ANI) and dialed number identification (DNI) services to identify the directory number from which the call is placed as well as the number dialed. Some CTI applications also offer automated outbound call capa-

CRM Software Packages For Both Large and Small Organizations

Today’s marketplace offers a wide variety of CRM software packages. There are solutions with comprehensive functionality that are intended for larger organizations with a number of complex requirements. However, there are an even larger number of CRM software packages that are designed to meet the needs of small (10 or less users) to medium (10 to 250 users) organizations. These products typically focus on a few key areas of CRM functionality such as contact centers, master data management, or service management, and integrate with commonly used office productivity applications that an organization may already have in place (e.g., Microsoft Outlook) for e-mail, scheduling, notes, and contact management. The key to making a sound software investment choice is to understand and prioritize the organization’s requirements and constraints and to use this information to perform an objective evaluation.

bilities, wherein calls are placed to a specified list of constituents and a recorded message is played or a connection is made with a live agent. Reverse 911,² an emergency notification system, is a good example of this type of application. CTI applications can also offer a reporting package or provide for data extraction to other data warehouse applications.

- **Quality Monitoring (QMON).** Quality monitoring software applications can be integrated with a contact center to monitor and provide feedback on the performance of contact center agents. Through QMON software, not only can the audio portion of the call be captured, but also the data entered on the actual screens the agent used. The recorded interactions can be played back, analyzed by supervisory personnel, and reviewed with the agent to improve performance.
- **Workforce Management (WFM).** Workforce management functionality may be found in a CRM software package or may be a separate software application integrated with the CRM package. WFM software allows an organization to “inventory” their call center agents, skills, work hours, and planned absences relative to expected call volumes and durations. It also provides simulation models to optimize contact center staffing. WFM applications often include a dashboard feature that allows “at-a-glance” monitoring by supervisory personnel of actual contact center performance.
- **Reporting and Analytics.** While CRM packages may have some degree of built-in or standard reporting capability, more robust reporting and analytical requirements can be met through the implementation of a data warehouse. By combining information extracted from a variety of data sources, a data warehouse can facilitate reporting and analyzing all aspects of the contact center function from the telephone connection to completion of a service request.

Master Data Management

CRM applications typically offer robust master data management capabilities. This provides the ability to extend the application through the creation of custom fields, tables, and/or screens to capture information about a constituent or location that goes far beyond the standard name, address, and phone number. Having a more complete profile of constituents (and their locations, associated transactions, and/or services provided) offers opportunities to provide enhanced and more meaningful service. Organizations can use interactions with the constituent or location to verify, update, and gather additional information related to the master data record. The master data functionality in CRM applications is typically architected in such a way that a given record can be extended for use in multiple business applications within the agency or even by multiple agencies, thus eliminating information duplication and fragmentation.

For example, a master record could be created for a person who is the non-custodial parent in a child-support case. This record could be extended to other relationships that person has with government, such as possession of a driver’s or professional license. This enables interactions such as cross-enforcement – perhaps the person who is delinquent on child-support payments will be denied a driver’s license or renewal of a professional license.

Constituent master data can also provide opportunities to serve citizens more proactively. For instance, a birth recorded with a county clerk might be extended to initiate a notification of infant support services to the new parents. This is possible even if these services are administered by different agencies, because CRM master data can be shared across agencies even if they are using different systems. More often, content or document management capabilities are integrated with master data management to provide a comprehensive view of incoming correspondence from and outgoing correspondence to a constituent.

Service Management

Service management functionality is typically integrated with a contact center and/or a self-service portal application and provides a means for constituents to request service. Service requests can be manually assigned to field workers. Sophisticated resource planning and optimization software can be integrated with CRM service management to automatically make/propose field worker assignments based on availability, location, skills, materials, equipment required, etc. Additionally, global positioning software may be integrated with a contact center and/or service management function to accurately identify the location where the service is to be performed.

Service management may be deployed on a mobile basis wherein field workers receive service assignments (including location information and material lists) via mobile devices (such as hand held or tablet computers). As the service is rendered, field workers can make updates via the mobile device to indicate inventory consumed and/or completion status, which then can serve as a trigger for subsequent functions, such as a follow-up call or e-mailing a satisfaction survey.

Financial Integration

In addition to the numerous types of software applications previously described that can be integrated with CRM software packages, CRM packages may contain billing engines or be integrated with accounting systems to provide the ability to bill constituents for certain services and track and age outstanding receivable balances.

Case Management

CRM solutions have increasingly robust case management functionality that allows them to bring together, at one location within the applications, the persons, organizations, their operational roles with respect to the case, and relevant transactional data. Case management functionality typically tracks case status, important dates, and relevant notes. It also offers the capability to log case changes made by users or automated programs.

Case activity functions such as sending notices/correspondence; starting, monitoring, and ending wait periods; and triggering the next appropriate case action can be automated based on business rules, reducing the need for caseworker involvement in routine matters. Workflow capabilities in CRM software packages can be used to alert workers when there is a need for intervention. Worklist capabilities associated with a workflow “inbox” can be used to prioritize work items, set due dates, highlight work items that are within a specified number of days of their due date, and dispatch items to other user groups or to supervisors for review.

Workflow Defined

Workflow is defined as a logical sequence of steps carried out by people or the system to perform a business process. Workflow functionality in CRM applications allows an organization to define the tasks to be performed, the people involved, the required input and output information, and the functions required for each step. Typically, the workflow component in a CRM application will include a “workflow engine” that manages the workflow (i.e., it determines when to move to the next step in the process), a “workflow builder,” which is a modeling tool used for creating/defining workflows, and a workflow information system that provides reporting and analytical capabilities.

Constituent Outreach

Outreach functionality in CRM applications can be used to influence constituent behavior or provide educational or outreach programs. A target group of constituents is identified to receive a message. The definition of the target group can be created by combining characteristics maintained in the constituents’ master data record and transactional history in the CRM system or in a data warehouse. A pertinent message can be developed and dispatched for delivery to the target group through a variety of channels such as phone (through a call list and outbound dialer functionality with a pre-recorded or live agent message), e-mail, or postal mail based on the preferred contact medium contained in the constituent’s master data record. After an appropriate interval has passed, the behavior of the target group can be assessed, with the help of CRM technology, to see if the outreach effort had the desired affect.

Technology Acquisition Options

Organizations contemplating the acquisition and implementation of a commercially available CRM software package have a variety of service/implementation options from which to select:

- An independent organization may be used to assist a public sector organization in developing a business case for the acquisition and implementation of a CRM software package as well as in establishing a framework for measuring post-implementation return on investment (ROI).
- An independent organization may be used to develop procurement documents (i.e., requests for information, requests for proposals, or invitations to negotiate) and provide assistance during the procurement process.
- An independent organization may be used to help evaluate the government’s requirements and facilitate the selection of the suite of CRM products that best fits the requirements.
- After the selection process is completed, software implementation and integration services may be obtained directly from the software vendor(s) or from an independent consulting organization. Additionally, these organizations can provide a wide array of complementary services including project management, business process reengineering, training, and change management.

- Hosted CRM solutions have enjoyed significant success in the private sector and may be a viable alternative for some public sector organizations. Under this approach, the customer organization contracts with an outsourcing vendor to host and maintain the application.
- Implementation using only in-house resources may be possible for less sophisticated/complex CRM packages.

Conclusion

Constituent relationship management is a combination of people, processes, and technology used to deliver superior service to the constituent. CRM uses tools and techniques made available through advanced data sharing and integration for the purpose of improving real-time decision making and enhancing service delivery. This section focused on the technology aspect of this relationship and described features and functions prevalent in CRM software packages available in the market today.

- CRM software packages offer robust “out-of-the-box” capabilities that can be further enhanced through configuration to meet the constituent service requirements of a wide range of public sector organizations.
- While these CRM software packages can be implemented on a “stand-alone” basis, they also provide an open architecture that allows them to be integrated with other complementary software applications, such as interactive voice response, computer-telephony integration, and geospatial packages for enhanced call center functionality. They can also be integrated with financial management, human resources, and/or work management software to improve CRM’s capabilities to deliver front-line services.
- Public sector organizations can use consulting services to help them procure and implement CRM technology. Government organizations also have the option to host their CRM applications in-house or to outsource this function to a vendor in exchange for a fee.

Endnotes

1. A screen pop is a feature of a CTI application that automatically displays all relevant caller and account information on a call center agent’s screen during a call.
2. Reverse 911 is an auto dialer telecommunications system that makes outbound calls to advise residents or businesses of emergencies that specifically affect them.

SECTION 7

CRM Cost

By Spencer Stern

Understanding the potential costs of a CRM initiative is central to planning a successful project. This section describes the most important cost categories of a CRM project and some of the critical elements for accurately estimating those costs. It also provides an overview of how the different cost categories contribute to an overall CRM project budget.

CRM Cost Categories

Like most technology-led business improvement projects, the highest costs of a CRM initiative occur in the first few years. For example, funds will be needed for a facility to house the contact center, for the purchase of hardware and software, and for personnel to staff the project. Tables 7.1 and 7.2 summarize important cost categories for an initial project budget along with key assumptions that must be defined in order to accurately estimate costs.

Personnel Costs

Personnel costs (internal project team members plus consultants) are typically the largest expenditure in a CRM project, so it is particularly important to be aware of staffing requirements. The positions in a CRM implementation that are usually filled by in-house staff are listed below. The list is organized by positions needed on the initial implementation project team, those required both on the initial project team and after go-live, and those needed only after go-live.

Initial Project Team

- **Project Sponsor.** Communicates the program's overall objectives, goals, deliverables, and budget to project manager or entire project team. This person is not typically involved on a daily basis, but acts as an internal champion to communicate the project's benefits to other key members in the organization. This should be an executive level member of the organization (e.g., CIO, CFO, chief of staff, etc.).
- **Project Manager.** Provides day-to-day oversight of the initial implementation project and is responsible primarily for moving the project forward. Coordinates the entire project team to ensure the goals, metrics, schedule, deliverables, and process improvement are attained.

Table 7.1. Key Requirements and Cost Assumptions

Cost Category	Key Requirements and Cost Assumptions	Description
Facility	<ul style="list-style-type: none"> • Estimated number of total personnel • Square footage requirements • Estimated design and construction costs • Estimated rental and leasing costs • Other building system upgrades 	Design, architecture, physical build-out, furniture, security, HVAC, and other subsystems
Infrastructure, including hardware and server	<ul style="list-style-type: none"> • Telephony equipment requirements • Computer hardware requirements • Network requirements (both for telecommunications and data) 	<p>Telecommunications equipment, cabling, computer-telephony integration (CTI), automatic call distributor (ACD), interactive voice response (IVR), switches, leased lines/T-1s, other voice systems, data networks, wireless, and other subsystems</p> <p>Also includes computer equipment such as: laptops/desktops, servers, network connections, PDAs or other mobile devices, and storage devices</p>

Table 7.2 Cost Estimation Method (including Key Assumptions)

Cost Category	Estimation Method or Assumptions	Description
Project Personnel	<ul style="list-style-type: none"> • Full cost of an employee (salary plus benefits) • Number of internal employees on the project team • Number of employees needed to staff the live contact center, including managerial and support personnel • Number of "backfill" employees to fill roles vacated by project team members • Level of consulting assistance (typically external vendors or temporary employees) required to implement CRM processes and technology 	The internal employees and external consultants required to manage the overall contact center implementation, including full staffing for launch (i.e., "go-live") of the contact center. Governments may also need to be cognizant of how Civil Service, bargaining unit agreements, and other laws and regulations might impact project staffing.

Table 7.2 Cost Estimation Method (including Key Assumptions)

Software Applications	<ul style="list-style-type: none"> • Number of application users • Estimated licensing cost per user • Estimated software installation costs • Estimated ongoing maintenance costs paid to software vendor 	Software license fees for the 311 system and CRM applications, knowledge management tools, workforce management tools, business intelligence tools, data warehousing, and legacy system interfaces
Training	<ul style="list-style-type: none"> • Number of staff to be trained (includes call center and department personnel) • Type of training needed (e.g., technology use, customer service training, etc.) • Training mechanisms to be made available (classroom, computer-based, etc.) • Training location • Level of participation of consultants in training (consultant trainers may increase the effectiveness of training, but will increase costs) 	Training on customer service standards, internal processes and organizational structure, technology/applications, knowledge management tools, and hardware/software basics
Advertising/ Outreach/ Marketing Communications	<ul style="list-style-type: none"> • Scope of the contact center (larger scope may require more intensive outreach) • Number and type of different outreach tools to be used 	Pre-launch events, awareness building, and supporting marketing tactics, formal launch of the contact center, ongoing public education, and special events

- **Process Owners.** Take main responsibility for developing the processes and enabling technology needed to deliver a particular result (ideally, the expected result is defined in a CRM business case). Focus on data collection and synthesis and translating user requirements into improved, more efficient, processes. They are responsible for gathering content for the knowledge base that applies to their specific division or business unit, including frequently asked questions (FAQ) content and reporting needs. These team members may also be responsible for developing and publishing new FAQ content.
- **Subject Matter Experts.** Provide expertise on particular constituent service processes and issues. May be from a specific department, such as public works or animal control, or may have functional expertise in a specific software application.
- **Application Engineers and Developers.** Play a lead role in customizing and/or tuning the application to ensure it meets the functional and business requirements.
- **Network Architect.** Ensures that the applications integrate seamlessly into the existing infrastructure.

Initial Project Team and Post Go-Live

- **Program Manager.** Ultimate responsibility for developing and executing the business plan. Ensures that schedules are followed and decisions are made in timely and efficient manner. All team members report (directly or indirectly) to the program manager.
- **Contact Center Manager/Supervisor.** Supervises the contact center after go-live and should play a key role during the initial implementation in order to build internal expertise on the CRM system.
- **Trainers.** Develop training materials and train users of the CRM system.
- **Systems and Database Administrator.** Technical position dedicated to maintaining supporting technology. Works with other team members to translate the data collected into actionable process improvements, new service offerings, etc.
- **Marketing/Outreach Coordinator.** Promotes the use of the CRM solution with internal and external stakeholders through multiple communication channels including Web-based means, e-mails, direct mailings, outdoor advertising, town hall meetings, etc.
- **Webmaster.** Responsible for the design and content of the Web site and any end-user interfaces. Ensures a consistent “look and feel” on an enterprise-wide basis. Works closely with the systems and database administrators to ensure efficient data collection and reporting.

Post Go-Live

- **Help Desk Personnel.** Responsible for assisting users of the CRM system (both within the contact center and in operating departments) with questions and problems after go-live. Often drawn from participants in implementation project team.
- **Customer Service Representatives.** Staff the contact center after go-live. Ideally, the personnel filling these positions will have participated in the initial implementation in some capacity.
- **User Administrator.** Technical position that manages user profiles.

The program manager and contact center manager/supervisor are typically involved full time at the inception of the project and continuing beyond go-live, while other positions roll on and off the project as circumstances dictate. For example, a project manager may go on to manage other projects after go-live, while customer service representatives might participate only part time in the initial implementation would be full time after go-live.

Consultant personnel are often used to fill some of these roles or to supplement government staff by acting as an expert counterpart. Most commonly, consultants are employed in the project manager, process owner, and subject matter expert roles. To the extent that in-house staff can be dedicated more fully to the project, consultant assistance may be less necessary. However, CRM planners should also be mindful of the fact that consultants may possess particular expertise critical to the initial implementation that simply cannot be replicated by existing in-house staff.

Because staff resources can be difficult to align and reprogram, especially in public sector organizations, CRM planners should work with the appropriate authorities (e.g., project sponsor, HR department) to identify specific personnel resources for the project as early as possible.

In addition to the roles described above, a CRM project requires personnel with a number of particular skill sets. In some cases, only a single position will require a certain skill, while in other cases, the skill may be a competency required across many positions. Table 7.3 lists some of the most critical tasks and activities of a CRM project. This should assist CRM planners in determining what necessary skills are available on staff and where consulting assistance might be needed.

Table 7.3 CRM Roles and Responsibilities

Category	Tasks/Activities Performed
Systems Development	<ul style="list-style-type: none"> • Systems architecture and design • Application customization • Security, privacy, and encryption • Legacy data conversions and systems integration • System and acceptance testing • GIS integration • Web enablement • Database design and set-up
Change Management, Training and Deployment	<ul style="list-style-type: none"> • Training design and development • Change management and internal communications • User data conversion and migration • Systems integration • Laptop, desktop, handheld, and other device configuration • Classroom training delivery • Web-based, multimedia training • Technical support • Device deployment • Hardware replacement • Reporting • Business process redesign • FAQ and information repository development • Data and predictive analysis • Advertising/promotion/marketing

The Total Budget

Table 7.4 depicts the percentage of the overall CRM project budget attributable to each CRM cost category. These estimates were developed based on interviews with industry consultants, software vendors, and municipalities, and may be used as a guideline when developing the budget for a CRM project. Following the table is a discussion of two special situations that have implications for CRM costs: outsourcing CRM and CRM for smaller governments.

Table 7.4 CRM Budget Allocation

Category	Estimated Allocation
Personnel	55%
Network and infrastructure cost	15%
Facility build-out (primarily the contact center) ¹	10%
Software applications	10%
Overhead	5%
Training	3%
Advertising/outreach/marketing communications	2%

1. Assumes space currently exists and needs to be configured.

Outsourcing CRM

In 2002, the City of Baltimore, Maryland, was one of the first public sector organizations to use a CRM vendor to host their data. Since then several other public sector organizations have adopted a hosted model. The primary drivers of outsourcing are reduced cost and increased reliability. Contracting with an outside vendor can transform the large, up-front capital investment needed to purchase and install hardware and software into an amortized annual or monthly payment stream, thereby reducing pressure on the budget. Outsourcing, in some cases, may even reduce costs through a vendor's economies of scale and efficient operating practices. In addition to the cost advantages, a vendor's specialized expertise in application hosting and maintenance increases the reliability and availability of the solution and allows government to divest of responsibility for the technical aspects of CRM and to focus on what is most important – providing excellent service to its constituents.

CRM Costs for Smaller Governments

CRM is not just for larger governments – an affordable CRM solution is within reach of smaller governments as well. Los Alamos County, New Mexico (population 19,000), implemented a CRM solution in 2004. Los Alamos now has a contact center with six full-time personnel who process nearly 5,000 incidents each month. Their CRM system includes an online knowledge base that documents nearly 20,000 common questions and answers and provides the ability to process simple service requests. Los Alamos was able to implement this system for under \$60,000 for the CRM application. (The physical contact center was an additional cost.) The key to minimizing costs was to reduce the need for outside consultants to implement the system. As Table 7.4 shows, personnel costs (which include professional services) are usually the largest area of expenditure in a CRM project, often at least 50 percent of the operating expenses. For a small government such as Los Alamos, the most important strategies were:

- ➔ **Purchasing Less Sophisticated Software.** Less sophisticated CRM software features fewer configuration options and technical intricacies, while still providing im-

portant potential benefits to smaller communities whose constituent service requirements are less complex.

- **Developing a “Train-the-Trainer” Strategy.** Rather than relying entirely on contracted trainers, Los Alamos used consultants to train a cadre of in-house staff who then trained the contact center agents and CRM users.
- **Providing Web-based Support.** An online help desk tool provides support over the Web, reducing the need for on-site support.
- **Employing an Internal Program Manager.** Los Alamos utilized an internal program manager from its IT department rather than a consultant.
- **Implementing an Outsourced/Hosted Solution.** Outsourcing hosting and maintenance of the application reduced the complexity of the initial installation and relieved Los Alamos of many ongoing support responsibilities. Outsourcing also allowed Los Alamos to reduce the overall cost of the project by using the vendor for tasks when the vendor had a distinct cost advantage.

Conclusion

When estimating the cost of a CRM project, costs in the first two years are expected to be much higher than costs in subsequent years. Based on the experiences of organizations that have implemented CRM, the annual operating and maintenance costs of CRM may decline by up to 50 percent from the initial project costs after the CRM program goes live and stabilizes. It is important to develop both accurate initial project costs and ongoing cost estimates into the business case for CRM so that the organization can best evaluate the potential worth of a CRM project and devote the proper resources to it, should the project move forward. The central points to accurate estimation of CRM costs are reviewed below:

- CRM projects have a variety of different cost items, including personnel, facilities, and supporting technology. There are several important assumptions that must be defined for each item in order to accurately estimate costs.
- CRM projects can be implemented in phases or all at once, which will impact the incidence of costs. When estimating costs, governments should clearly understand which implementation strategy will be used so that costs can be most accurately anticipated.
- Personnel costs (both internal staff and external consultant resources) are the most critical cost item. Understanding how to best plan the staffing requires a thorough analysis of project requirements and available staff skills, and an excellent *gut feel* of the team’s capabilities.
- Cost estimates should also consider ongoing operating and maintenance costs of CRM, which are not insignificant.

Strategies and Lessons

By Paul W. Taylor, Mike Riffel, and Anne Spray Kinney

This report has discussed various facets of a constituent relationship management (CRM) system. It has identified the citizen benefits and internal process improvements that are likely to result from the implementation. It has described CRM-related technologies and has defined cost categories and how to most efficiently create a business case to present a CRM/311 project to executive leadership. Once the project has been approved and the CRM software vendor has been selected, what does it take to successfully implement a CRM system? What are some of the leading industry trends in a CRM/311 implementation? How will employees in other parts of the local government react to a change in business processes as a result of a new system? These are only a few of the many questions to consider, as implementing a CRM/311 system is a daunting task for any organization. This section will discuss the important industry trends and key strategies, as well as share the experiences of municipalities that have successfully implemented CRM/311.

CRM Implementation: Key Strategies for Success

Every CRM project manager will have a different approach to a CRM implementation. Though strategies will vary, two facets of a successful CRM project remain consistent: strong executive leadership and stringent management of project costs.

Executive Sponsorship

As explained in Section 3, “CRM and the Business Case,” much of the success of a CRM project is directly correlated to the strategic vision and goals of the elected officials and executive leaders. A clear executive strategic vision provides guidance throughout the project and communicates the importance of CRM to staff and citizens.

It is evident that governments who have successfully implemented CRM systems have executive sponsors who are highly involved in the process with visions of how a CRM system will function for their organization. Executive leadership can take many forms and come from many sources in a CRM project, including:

- **Public Safety.** In the City of Albuquerque, New Mexico, after the city’s 911 system almost failed after being overwhelmed by a large number of non-emergency calls, explicit direction came from the city council in October 2003 to implement a 311 system. The city’s CFO was a project sponsor and it was clear that he had the mayor’s support, and that the mayor was determined to complete the 311 system to take pressure off the emergency 911 system.

- **Customer Service.** In DeKalb County, Georgia, the county CEO had a vision for the county to become customer-driven. Kristin Gonzenbach, director of process improvement for DeKalb County, underscored the importance of executive level support and participation stating, “Without it, the implementation will flounder.”¹ Similarly, executives in the City of Palm Coast, Florida, approached CRM as a central strategy and platform for improving customer service in government.²
- **Performance Monitoring.** The City of Savannah, Georgia, has used a 311-type system for nearly 30 years. When a new council was elected, one of its strategic goals was to improve communication with citizens. The city used this opportunity to build a new CRM system that is fully supportive of the city’s performance monitoring requirements. For example, 311 system results are reported at the mayor’s quarterly town meetings. The system is also used by managers on a day-to-day basis to track performance of city services.
- **Focus on the Back-office Benefits.** As discussed in Section 3, not all individuals will initially see the benefits of a CRM system, and government administrators often must make a compelling business case for CRM to executive leadership. Government officials tend to focus on familiar back-office procedures and it can be a struggle to make them understand the benefits of simplifying things for the constituent. To obtain approval, it is important to include the back-office benefits when building a business case.³
- **Staff CRM Like You Mean It.** The City of Chattanooga, Tennessee, made a tough call to ensure operational success of its 311 service. CRM managers insisted on positions, not people, in the human resource process. They believed that it was more productive to teach new hires with a customer service orientation about government than to convert existing public employees into “Nordstrom-style” customer service representatives.⁴

Decisions made early in a project’s life cycle, such as those described above, are critical to its long-term success and sustainability.

Cost Management

CRM systems are a large investment of a government’s time and money. Properly managing project cost is another important aspect of a successful implementation. As explained in Section 7, comprehending the total costs of a CRM implementation is instrumental in planning and executing a successful project. CRM project costs include personnel, facilities, and technology. Here are some tips from governments who have successfully managed costs and implemented CRM/311 systems efficiently.

- **Hire a Full-Time Project Manager.** Hire a full-time project manager (either an in-house resource or a consultant) to administer the implementation and report back to the executive sponsors regularly. Of course, a consultant project manager may be a more expensive proposition, but may be worth it if he or she brings particular expertise that government lacks.
- **Investigate Company Background.** Be sure to do your homework on the company’s background and past implementations. Does its track record indicate that it is able to deliver on time and on budget?
- **Do Your System Research.** Know what you need and choose the system that best fits your organization and meets your requirements. It is important to recognize that it

is not possible to outsource the process of defining your business requirements – only the government can determine what functionality it needs to accomplish its strategic objectives for CRM/311. Consultants can help, but they only facilitate the process. It is also important to take the time to visit CRM centers in use by other governments – there is no substitute for real-life examples of CRM in action.

- **Use a Test System to Prove Best Fit.** By using a cheaper system for a short period of time, cities have learned that CRM was capable of providing the functionality and benefits they needed. It was a crucial step before making a larger investment in a full-scale system. In addition, cities have been able to identify opportunities for improvement prior to the implementation of a larger, more expensive system. The increasing availability of hosted, on-demand CRM solutions makes a “test system” an increasingly viable strategy, as on-demand systems do not incur the sunk costs of perpetual software licenses and in-house hardware – rather, the CRM solution is “rented” only for as long as the government requires its use.

How to Achieve CRM Success: Lessons Learned from Successful Projects

The lengthy and sometimes bumpy process of implementing CRM/311 systems is both a proving ground for project management disciplines and, with a post implementation review, an opportunity to identify important lessons for those who are contemplating the introduction of CRM in their jurisdiction. A summary of lessons learned by a quartet of local governments follow – complete with the bold moves and the missteps.

City of Albuquerque, New Mexico

In 2005, the City of Albuquerque was one of many cities in the country that received Hurricane Katrina evacuees. The city used its 311 system to take calls from evacuees and volunteers regarding requests for clothes, jobs, housing, and other necessities in a time of emergency. The 311 system was able to handle 12,000 calls in three days and direct other inquiries accordingly. Because of their positive 311 experience, citizens who leave Albuquerque and move elsewhere have asked the Mayor of Albuquerque to call the mayor of the city to where they are relocating and request implementation of a system similar to Albuquerque's.

The CRM project manager in Albuquerque offered numerous tips for a successful implementation:

- **System Choice.** Because most CRM systems are oriented to the private sector, dealing with the difference between the private and public sectors is important. Governments considering CRM must realize that cities are much more location centric/sensitive than their private sector counterparts whose CRM technologies and processes tend to be focused on customers, rather than locations.
- **Evaluate Business Processes.** Do not automate bad or inefficient processes. Why spend any money on a system or customize a system that will automate bad business processes? Section 5 of this report discussed reviewing customer service processes.
- **Implement Change Management.** If you want a return on your technical investment, invest in organizational change management. Section 4 of this report discussed this topic in more depth.

- **Customer Discontent.** Do not attempt to please everybody. The point of a new system is not to please everyone, but rather to try and improve services for as many people as possible.

City of Palm Coast, Florida

In Florida, the City of Palm Coast city council uses the new system to report any issues they hear from constituents. This is a major business process improvement as service requests may now be entered by the councilperson or citizen into the CRM portal and be automatically and electronically transferred into the city's work order system, rather than be called and reported to city hall. In addition, if there is any action on a reported issue, the individual who reported it (e.g., the councilperson or citizen) receives an e-mail describing the resolution status.

We have always dealt with citizen issues; this is just a normal evolution of how to approach customer service.

-Dick Kelton, City Manager,
City of Palm Coast, Florida

Overall, CRM (and its integration with GIS) has improved logistics in public works. The city can now identify physical clusters of common service areas, which allows the city to more efficiently dispatch resources. The information the city gathers from CRM and integrates into GIS creates an invaluable multi-faceted history and perspective that incorporates the two most important elements of any community – constituent views and physical characteristics.

The city manager in Palm Coast identified the following tips and traps to be aware of for a successful implementation:

- **Stable GIS System.** Make sure that the government has a firm/stable GIS system. Lack of a fully stable GIS system at the point of implementation may result in problems with the new CRM system “freezing up” until the GIS system is stabilized.
- **Digital Divide.** A drawback of the system is that not everyone in the city has Internet access. If this is the case, keep some of the other reporting systems in place.
- **Maintenance.** Be sure you have money to maintain and improve the system. If an organization implements a solution but does not put money into the system, it will be very difficult to upgrade.
- **Customer Accountability.** Consider requiring registration to utilize the system. When registration is optional, more people will utilize the system, but there is little (if any) accountability. For example, if a citizen identifies an issue but forgets to leave a physical address and/or contact information, the city would be unable to contact him to resolve the issue. A system that requires registration will be utilized less frequently, but it will be much easier to follow up and resolve problems in a shorter time period. On the other hand, some governments have found that requiring registration is such a serious impediment to enticing constituents to use the system that mandatory registration simply is not possible. Each government will have to consider the characteristics of its community to see which approach makes the most sense.

DeKalb County and City of Savannah, Georgia

In a Georgia city and county, CRM has had a positive impact for citizens and elected officials alike. In DeKalb County, the system is designed to provide the board of commissioners' staff with the ability to input data as well as to access archived data. Commission staff can review calls and complaints everyday and can analyze call data in the system, utilize the system to submit a service request on behalf of their constituents, and check the status of service requests that have been submitted. The 311 system saves the commission staff

time because prior customer contacts can be quickly retrieved and responded to while on the phone with the caller. The commissioners also benefit more directly as they now have citizen inquiry and service request data at their fingertips, enabling them, for instance, to respond more effectively to concerns raised during a meeting with a citizen about the disposition of a maintenance issue previously reported to the county.

In Savannah, 311 benefits the stormwater management department. For years, the department was overwhelmed with trying to most effectively use limited capital funds to maintain an aging stormwater infrastructure. Within months of the new CRM system "go-live," the department was able to correlate particular stormwater lines with the highest number of leak calls reported to the 311 system. This data was then used to target capital maintenance funds to the lines most in need of attention. With the new system, citizens not only had their specific needs addressed, but also provided information that could be used for directing scarce capital funds.

Project managers in both Georgia communities identified the following lessons from their implementation:

- **Strong Project Management.** Have a strong full-time project manager who is engaged and focused on success. It is important that the project manager has technical and facilitative skills in order to control the implementation.
- **Resistance.** As in any new implementation, there will be issues with egos throughout the process, and some employees will be reluctant to let go of their old processes. It is important to involve staff in major business process changes in order to gain their support.
- **Marketing.** Find ways to induce constituents to use the CRM solution. Make people aware that the system exists once it is implemented. However, realize that some people will want to call a known government source rather than utilizing a 311 or a Web-based system.
- **Training.** Training is very important for the user community. In fact, it is likely that repeat training will be necessary to fully master a CRM system.
- **Evolution.** Depending on the organization's goals, it may make sense to focus the CRM on a few services (e.g., public works) and then systematically expand it until it covers all non-emergency services and information requests. This incremental approach increases the likelihood of meeting expectations and also helps build support for CRM in the organization by building on success.

The project managers echo a common theme about the temptation to cut both change management and training when the budget and schedule get tight. One veteran project

With our new system, citizens essentially become part of the day-to-day operations of the city.

-Chris Morrill, City of Savannah, Georgia

manager reminds us that success often relies on resisting such an urge. In fact, when you are tempted to cut either one, do more of each.

CRM represents a moving target – characterized by changing business drivers, political mandates, and citizen expectations. To add to that, the technologies behind these three little letters are also in a continuing state of flux. *Caveat emptor* (let the buyer beware).

Important Industry Trends

The still nascent CRM industry continues to adapt to the demands of institutional customers and changes in the wider environment. Even as the industry creates multiple hybrids – ranging from stand-alone systems to those that are modules within a larger enterprise resource planning (ERP) package – there are three larger developments that should have a bearing on how the public sector plans migrations and upgrades in constituent care.

First and perhaps counterintuitively, recognize that the types of information coming into the system are changing. Consider the announcement by New York City Mayor Michael Bloomberg in early 2007 of a world first, for any city, anywhere – namely, the city’s 911 and 311 systems being updated to allow citizens to upload digital images and videos to the respective call centers. In his state of the city address, Bloomberg said:

This year, we’ll begin a revolutionary innovation in crime-fighting: equipping 911 call centers to receive digital images and videos New Yorkers send from cell phones and computers – something no other city in the world is doing.

If you see a crime in progress or a dangerous building condition, you’ll be able to transmit images to 911, or online to NYC.GOV. And we’ll start extending the same technology to 311 to allow New Yorkers to step forward and document non-emergency quality of life concerns holding city agencies accountable for correcting them quickly and efficiently.⁵

With innovation comes risk. Call center operators will have to triage the input from legions of cell phone users with an insatiable YouTube habit.⁶ The images are likely to include the irrelevant, the indecipherable, and even the obscene. Even if the images were all relevant, handling them would change and add to work load in the call centers. Still, the nation’s largest city is placing a bet that citizen eyes on the life of the city can be a vital part of surveillance strategies and provide a head start in responding to service needs.

Second, New York is also among the cities planning on retrofitting the CRM call center into a contact center such that each point of contact – call center, Web site or portal, and front counter services – would all use common data in providing consistent and comprehensive care. The City of Chicago has used CRM to consolidate its social services delivery – providing one-stop access to a range of services from previously discrete agencies for families in need. Multi-channel CRM, in which a single database drives the Web and call center channels, is common in many recent implementations, but was out of scope when early adopters began their projects.

Third, there are a growing number of options for implementing CRM systems that give civic planners increased flexibility and new ways to improve constituent care while changing the way government works. It is no longer necessary to actually own or install the systems, because CRM is widely available as a software service. Moreover, in another break from brick-and-mortar operations, CRM no longer assumes the existence of a physical call center because calls can be routed to service representatives in their homes or

other facilities. These developments have significant implications in meeting “telework” (e.g., telecommuting, etc.)⁷ objectives and increasing organizational resiliency as part of a business continuity regime.⁸

In all of this, CRM has imbedded itself into the work of government. First introduced as a useful add-on that scratched an otherwise hard-to-reach itch in public sector service delivery, the systems quickly became mission-critical. Beyond their obvious role, CRM is being used to manage workload from external requests and provide an internal workflow management engine. The rapidity of change wrought through CRM is perhaps most clearly seen in an oversight made by even the most forward-leaning jurisdictions – their CRM systems are conspicuously absent from their disaster recovery and business continuity plans.

Conclusion

Like other system types developed by and for the commercial sector, CRM originated to lay the customer bare. Customer relationship management was the process used to record and analyze the identity, buying habits, spending patterns, and interests of each of its customers in order to sell more product. Government turns the original model on its head. To be more responsive to constituent requests, the simple and compelling idea behind government CRM is to analyze the aggregated information it holds about its own activities in order to monitor its own performance and contribute to data-driven planning and decisions.

Indeed, in the public sector, CRM has been defined as a thought process with a broad citizen focus that maintains and optimizes relationships and encourages citizenship.⁹ It has also been described as technology that provides governments with the tools to manage their citizen relationships.¹⁰ Overall, it is important to remember that CRM is focused on improving constituent service. Successfully moving to a CRM platform will require a large financial investment with proper management, strong executive vision, and an emphasis on change management within the organization. Though the implementation process is lengthy and at times difficult, the tangible benefits, such as superior service, shorter wait times, and greater two-way communication, will ultimately result in more satisfied citizens.

Endnotes

1. GFOA staff interview with Kristin Gonzenbach, director of process improvement, DeKalb County, Georgia, on August 22, 2006.
2. GFOA staff interview with Richard Kelton, city manager, City of Palm Coast, Florida, on August 24, 2006.
3. GFOA staff interview with David Kuenzel, SAP, in August 2006.
4. Cathilea Robinett et al., *Hello: An Introduction to Citizen Service Technologies and 3-1-1* (Center for Digital Government, 2005), 13-14.
5. Mayor Bloomberg delivers 2007 state of the city address “Taking the Next Step,” PR- 014-07, at New York City College of Technology in Brooklyn, January 17, 2007.
6. YouTube is a Web site where people can share, view, and comment on videos that they or others upload to the site.

7. See Todd Sander and Paul W. Taylor, *Telework 360: A Best Practices Digest and Guide to Getting Telework Right in the Public Sector* (Center for Digital Government, 2006).
8. See Al Sherwood, Paul W. Taylor, and Richard J. H. Varn, *Getting Back Online by Going off the Beaten Path: A Practical Guide to Protecting Your Information Assets and Ten Things You Wished You Knew Before the Disaster Struck* (Center for Digital Government, 2006).
9. Alexander Schellong, "CRM in the Public Sector – Toward a Conceptual Research Framework," *ACM International Conference Preceding Series* 89 (2005): 326-332.
10. Shayne Kavanaugh, "Constituent Relationship Management System: A Primer for Public Managers," *Government Finance Review* 17, no. 2 (2001): 35-39.