
MEMORANDUM

TO: Laurence Millar, Deputy Commissioner of ICT, State Services Commission
FROM: Monika O’Sullivan
DATE: May 19, 2009
SUBJECT: Recommendations for Centralizing e-Government Services in New Zealand

Introduction

The rapid evolution of technology has provided government with the opportunity to conveniently provide services to effectively interact with the public at a faster pace than traditional means. While New Zealand was one of earlier countries to provide government services using the Internet; however, most of its ministries and departments sought their own Internet implementation methods to satisfy and accommodate the unique needs of their individual agencies. To address these service delivery discrepancies between the various agencies and ministries, New Zealand updated its e-Government strategy in 2006. Its aim was to “transform the operation of government...and people’s engagement with government”, with an overall goal of improving how the government meets the needs of the public (Norman, 2007, p. 3).

Despite the promising impacts of integrating e-government services, New Zealand faces some challenges. The implementation of New Public Management (NPM) practices in the late 1980’s, New Zealand’s governmental structure became highly decentralized. This memo provides background on the impact of NPM in New Zealand, identifies the governance options that have been presented in the case, and summarizes the issues for implementing integrated e-Government services in the face of NPM. Lastly, this memo provides recommendations to the

New Zealand State Services Commission (SSC), as the government lead of this initiative, as to how it might address these issues.

Background on New Public Management in New Zealand

In the early 1980's New Zealand faced a fiscal crisis that resulted from steady growing government expenditures accompanied by declining tax revenues due to concessions and subsidies (Scott, Ball, and Dale, 1997). This, coupled with a declining world economy, resulted in a loss of nine percent in New Zealand's gross national product (Scott, Ball, and Dale, 1997). An analysis of the country's fiscal crisis raised awareness about additional problems within the government including poorly managed organizations, and outdated fiscal and planning management practices (Scott, Ball, and Dale, 1997). It also resulted in criticism of government performance in delivering services (Scott, Ball, and Dale, 1997). In response to the country's severe financial crisis, New Zealand's government considered major reforms to improve the efficiency and effectiveness of government services.

In the mid to late 1980's New Zealand's government made dramatic reforms resulting in extensive decentralization of government services. New government officials, elected in 1984, implemented ideologies under the New Public Management (NPM) model to radically change government and address some of the problems that were identified during the fiscal crisis (Scott, Ball, and Dale, 1997; Norman, 2007). The central goal of many of New Zealand's NPM reforms early on was to improve citizen satisfaction with government programs (Kettl, 2002). NPM reforms often result in improving the effectiveness and efficiency of the public sector, improving responsiveness to the public, reducing costs, and improving accountability (Christensen, Lie, and Laegreid, 2007).

NPM is described as a movement to reinvent government (De Souza Briggs, 2008). It is typically characterized by its shift away from traditional bureaucratic government (Lynn, 2006). The NPM model is grounded in the idea that government should “break the grip of bureaucracy through the application of business approaches” (Fairholm, 2007). One aspect of NPM includes outsourcing government services by using strategies such as performance-based contracts (De Souza Briggs, 2008). Other major ideologies of NPM include the structural devolution and decentralization of government and the creation of individual agency autonomy (Jun, 2009).

Major themes of NPM include disaggregation, competition, and incentivization (Dunleavy, Margetts, and Bastow, 2005). Disaggregation refers to the breaking up of large government hierarchies (Dunleavy, Margetts, and Bastow, 2005). In New Zealand, the implementation of NPM structural changes resulted in the formation of hundreds of central agencies and dozens of small ministries (Dunleavy, Margetts, and Bastow, 2005). With the implementation of NPM’s ideologies, New Zealand’s computer services were restructured to encourage competition among the different agencies and ministries (Norman, 2007). Prior to this change, computer services had been centrally managed by the State Services Commission.

Competition in the context of the NPM model government refers to allowing a market for providing government services and diversifying and expanding its pool of suppliers (Dunleavy, Margetts, and Bastow, 2005). As a result of these changes, markets were substituted for traditional government and many government-provided services were privatized in New Zealand (Kettl, 2002). Incentivization focuses on rewarding performance (Dunleavy, Margetts, and Bastow, 2005). New Zealand’s NPM based reforms were also very focused on improving performance measurement throughout government (Jones, 2004). Another result of these changes included the institution of a “comprehensive performance measurement system based on

a new process of measuring the productivity and effectiveness of government agencies”
(Denhardt & Denhardt, 2006, p. 403).

An unintended consequence of NPM, especially in New Zealand, was the fragmentation of roles and vertical specialization of the different agencies and ministries (Jun, 2009). Some NPM concepts also inhibit coordination and cooperation across different agencies (Jun, 2009). These types of changes affected the decentralized manner in which online services are provided to citizens. As it applies to New Zealand’s case, the integration of e-government services is challenged by the fact that many of New Zealand’s agencies and ministries are highly fragmented and autonomous (Norman, 2007). Maintaining and ensuring coordination among the different government entities will be especially challenging in New Zealand’s effort to integrate e-Government services.

New Zealand’s e-Government strategy of 2006 calls for the integration of government services. The country’s decision to defragment e-Government services brings up the notion of what Kettl (2002) identifies as fuzzy boundaries. The fuzzy boundaries dilemma describes the administrative dilemma regarding responsibility in policy creation and implementation across government (Kettl, 2002). It confounds the idea of how to coordinate and solve complex problems in a setting where different levels of administration are involved (Kettl, 2002). In addition to the administrative boundaries, the SSC will also have to deal with boundary tensions such as resources and budget, capacity, and responsibility and accountability (Kettl, 2006). Since the SSC looks to integrate services across different agencies and ministries, these boundary issues will also have to be coordinated among many different levels.

Background of E-Government Services in New Zealand

New Zealand's e-Government strategy started rapidly evolving in the 1990's, and has since been a model to the world of successful digital government. During this time, the benefits of Information and Communications Technologies (ICTs) started to become better known by New Zealand's decentralized agencies and ministries. In 1996, of the 38 core public agencies, only 13 did not have a website (Millar, 2004). However, many of the agencies developed their online initiatives independent of each other. As a result, New Zealand recognized that it needed to aim for a more coordinated approach to providing online services to the public (Millar, 1994).

Starting in the early 2000's, the idea of coordinating and collaborating e-government services among New Zealand's various government agencies and organizations has been gaining momentum, and has resulted in an initiative to integrate online services. New Zealand's e-Government Strategy of 2006, "Enabling Transformation", builds on the digital progress that the country has made in the past decade, but also looks to transform into a more integrated government that meets the needs of its citizens (State Services Commission, 2006). New Zealand's citizens will ultimately benefit from this change to centralize e-government services. By centralizing e-government services, "citizens will have access to all government services regardless of which organization was first approached" (Norman, 2007, p. 2). In addition to the public's benefit, the individual agencies and ministries will also receive benefits from a centralized program.

Benefits of integrating e-Government services would include reducing redundancy, integration of similar databases and knowledge sharing and improved coordination (Garson, 2006; Goldsmith & Eggers, 2004). ICTs have a tendency to "reinforce structures of power, and the tendency of organizations to evolve toward consolidation of control, [by] using distributed networks" (Garson, 2006, p. 467). Lastly, ICTs promote quick and efficient information sharing

without the bureaucratic red tape typically associated with information sharing among different agencies (Culbertson, 2005, p. 98). While the centralization of e-Government services will pose some challenges, it also offers benefits. By identifying and realizing the benefits of integrating e-Government services, both client satisfaction and internal efficiency will improve (Allen, Juillet, Paquet & Roy, 2005, p. 3).

Issues & Recommendations

Many issues raised in New Zealand's case revolve around how to integrate online government services of different agencies and ministries in a government that became highly decentralized with the implementation of NPM in the 1980's. The SSC will have to address how to defragment the agency silos regarding the integration of digital government. The SSC will also have to deal with organizational changes that will accompany the implementation process, which will include deciding whether to make the process mandatory or voluntary and how to formalize the process. Lastly, the SSC must consider the different governance options that can be used to implement the strategy. These governance options consider how to address budgeting and resources, and responsibility and accountability issues. Below is a summary of these issues, recommendations, and a time frame for implementation. Short-term recommendations are those that can take between three and six months to accomplish, followed by mid-term recommendations, which can take between seven and twelve months. Lastly, long-term goals are those that may take more than a year to implement. Ongoing recommendations are those that should take place during the entire duration of the integration process.

Issue: Defragmenting agency silos

The implementation of the NPM model resulted in the restructuring of New Zealand's agencies and ministries into a number of independent and autonomous entities, creating agency silos, or stovepipes. The creation of silos often results in agency isolation, inefficiency in delivery services, and poor resource management (Bannister, 2001). These factors must be considered when trying to integrate e-Government services. These silos pose a challenge during the horizontal integration of e-Government services, especially communication challenges among the different agencies and ministries (Layne and Lee, 2001; Twitchell, Bodrero and Burke, 2007).

The effort to integrate e-Government services will require a lot of coordination on each individual agency's and ministry's behalf. It could prove to be difficult to garner support for collaboration. It could be especially challenging to foster an environment of collaboration between the independent departments and ministries since many of them have individually developed and evolved technology systems.

- *Short-Term Recommendation: Facilitate interagency collaboration*

As the current lead agency for this initiative, the SSC should lead, facilitate, and coordinate open dialogue between and among its agency and the other government entities. This dialogue should consist of open communication and participation from the different agencies.

Communication "aligns and coordinates members' actions, builds mutual understanding and trust, and fosters creative problem solving and commitment" (Crosby & Bryson, 2005, p. 67).

Building trust is critical, as it forms a foundation for building collaborations (Goldsmith & Eggers, 2004).

Collaboration will be an important component of success. Built on trust, it also fosters knowledge sharing (Goldsmith & Eggers, 2004). Some focus should be placed on "bringing

about appropriate collaboration across traditional lines of agency responsibility” (Information Society Commission, 2003). To promote an environment of communication, participation and collaboration, the SSC, in its role as the lead agency should focus on “bridging organizational and interpersonal differences and achieving real value from the partnership” among the different government entities (Kanter, 1994, p. 105).

New Zealand can learn from Singapore’s success in fostering an environment for collaboration. Singapore acknowledged and addressed their issue with their agency silos in its e-Government strategy (Ke & Wei, 2004). To foster a collaborative approach to centralizing e-government services early in its implementation process, Singapore’s government organized “forums, meetings and gatherings so the best practices and knowledge could be shared across agencies” (Ke & Wei, 2004, p. 98). Additionally, research conducted by Coch and French (1948) concluded that one way to ease resistance is through meetings in which management effectively communicates the need for changes and elicits participation throughout the process (p. 428). New Zealand can build upon Singapore’s experience and also modify its method of fostering interagency collaboration to effectively meet the needs of its agencies and ministries. As a starting point the SSC should coordinate and facilitate meetings, inviting heads of the different agencies and ministries, to start the dialogue about integrating e-Government services.

- *Mid-Term Recommendation: Create a strategic plan for agency implementation*

After facilitating interagency collaboration, the SSC, should work with the heads of the agencies and ministries to create a strategic plan. Strategic planning is another way of facilitating participation among the different government entities (Denhardt and Denhardt, 2006). While the SSC has already developed a series of goals, it should also consider creating a strategic plan to provide guidance for agencies to implement an integrated approach to e-Government. A strategic

plan looks at an agency's set of goals and how it will achieve its goals (Cohen & Eimicke, 2002). This type of planning also enables public organizations how they will use their resources to achieve these goals (Pynes, 2003). Part of the strategic planning process includes the assessment external factors that will affect change, and the internal strengths and weaknesses of the organization (Pynes, 2003). Since defragmenting New Zealand's e-Government will be an interagency effort, all participating agencies and ministries should participate.

Denhardt and Denhardt (2006) identify four steps in the strategic planning process that the SSC can utilize to implementation of the centralized e-government services. These steps are:

1. Stating the goals
2. Assessment of the environment
3. Examine the current strengths and weaknesses
4. Identify the values and interests that are important to the agency's future
5. Develop strategy

Since the SSC's goals have been explicitly stated (Step 1) and a time line has been created (see Appendix 3 of Case Study), the SSC, in conjunction with the appropriate agencies and ministries, should heavily focus on steps two through five to successfully carryout the implementation of the overall integration process. After interagency collaboration has been established as in the previous recommendation, interagency workgroups could be created to address these specific steps.

On a smaller scale, strategic planning can also help accomplish smaller goals. As identified in the case, removal of technological barriers would also advance the collaborative agenda (Norman, 2007). An interagency workgroup could apply the strategic planning process to

removal technological barriers. Below is an example of how the strategic planning process could be used to remove technological barriers.

1. Goal	- Remove technological barriers across the different agencies and ministries
2. Environmental assessment	- Identify what hardware and software are used by the different agencies and ministries - Identify the different stages of e-Government each agency and ministry is currently in
3. Strengths	- Removal of barriers would ease communication and data transfer - Removal of barriers would ease knowledge sharing of best practices among agencies and ministries
3. Weakness	- Task may be complex based on environmental assessment - Agency resistance to making any changes (if needed) - Impact on resources (if hardware software must be purchased)
4. Values/interests	- Internal: Training should be offered for any new software/hardware to ease employee resistance/reluctance - External: New website/portal should be easily used by public; service should be minimally disruptive while changes are being made
5. Develop strategy	- Identify which hardware and software are most common among agencies and ministries - Work with the SSC's Information and Communication Technologies branch to procure and install software - Ensure service to the public is not compromised by maintaining current services offered by each agency/ministry until transition to remove any technological barriers is complete

Issue: Stability in Organizational Changes

The integration of e-Government will inevitably result in organizational changes, which are common when implementing these types of e-Government initiatives (Schelin, 2004). Though unclear at the current moment, these organizational changes may include adapting the horizontal orientation and changes in hierarchy and responsibility (Culbertson, 2005). Because of these expected changes, the SSC should anticipate some opposition from the agencies and ministries.

The decision to make integration of e-Government services voluntary or mandatory will have a large impact on New Zealand's ministries and departments. Agencies and ministries could lack commitment especially if the process is made mandatory. Making the e-Government strategy mandatory could also stifle collaboration efforts. To address these issues, the SSC should implement a phased approach at first. In the long run, the SSC should consider policies that will support the e-Government strategy.

- *Mid-Term Recommendation: Implement a phased approach to integration*

Making the process mandatory could result in resistance from a number of agencies or ministries. Beer, Eisenstat, and Spector (1990) suggest that making formal changes too soon could hamper any success. Instead of making formal changes to the implement the e-Government strategy, the SSC should consider taking a voluntary phased, or staged, approach to implementation. This may also help with reducing resistance among the different agencies.

Phased implementation allows for flexibility with a project. It allows implementation "to proceed in waves, in which initial adopters are followed by later adopters, and then by the laggards" (Crosby & Bryson, 2005, p. 336). By creating milestones and measurable targets, a project is allowed to adapt and adjust to realities realized after implementation (Garson, 2006). The SSC should aim for small wins, which are a series of small successful solutions (Crosby & Bryson, 2005). Small successes keep stakeholders motivated in the long run (Garson, 2006). They will also help ease the reluctance of any agencies that may be hesitant or resistant to the centralization strategy.

One way to phase the integration process is to do a pilot among a small number of agencies and/or departments. Crosby & Bryson (2005) provide guidance for implementing pilot projects, which include: identifying the validity of the proposed changes, performing the pilot in a

controlled setting with a lot of resources, using different versions of the solution to identify strengths and weaknesses, and measuring effectiveness (p. 337). One suggestion for conducting a pilot project is to start a pilot among agencies and/or ministries who provide similar services and have similar information so the transition to a centralized server will be easier. To begin this process, a cross-sectional study could be conducted of the agencies and ministries. These research designs are typically used to collect data about different variables at one time (O'Sullivan, Rassel, and Berner, 2003). This would help to identify variables such as what information is provided online by each agency and what types of transactions are offered by the agency. This research method would also help to streamline the centralization process by finding commonality among different agencies and ministries to ease transition. Successful implementation of the pilot project could result in the next recommendation to implement formal policies.

- *Long-Term Recommendation: Implement formal policies to support the e-Government strategy when the time is ripe*

Upon successful completion of the pilot project and successful interagency collaboration, the SSC should consider how to institutionalize the changes to formalize the integration of New Zealand's e-Government services (Beer, Eisenstat, and Spector 1990). The e-Government strategy could be further supported through the implementation of formal policies. It is important not to prematurely implement formal policies because they may backfire and result in resistance and or reluctance from the agencies and ministries (Beer, Eisenstat, and Spector 1990). Despite the rapid evolution of technology and e-Government strategies, the SSC should work with New Zealand's legislature and take a punctuated equilibrium approach to implementing e-Government policies.

Similar to a phased approach to implementation, punctuated equilibrium is a theory that explains how dramatic changes can occur while maintaining a stable policy process (Theodoulou and Kofinis, 2004). This approach would be appropriate than the incremental approach to policy because incremental changes are considered inefficient and result in minimal changes (Theodoulou and Kofinis, 2004). While it doesn't take into account the entire policy process, punctuated equilibrium addresses the policy during the agenda setting and decision making stages (Theodoulou and Kofinis, 2004). This allows the SSC flexibility in creating e-Government policies. Some suggested policies could be modeled after the following policies implemented in other countries:

Policy	Country	Description
Clinger-Cogen Act 1996	United States	Requires agencies to acquire IT using the best and most effective technology available (Garson, 2004)
Principles of Information Policy 2004-2006	Estonia	Puts priority on the development e-government services (RISO State Information System, nd)
Electronic Transactions Act 1998	Singapore	Creates secure environment by providing legal basis for electronic signatures (Infocomm Development Authority of Singapore, nd)
E-Government Act of 2002	United States	Established an office to provide oversight of cross-agency standards (Garson, 2006)

Issue: Governance considerations

The SSC has been charged with the role as the lead agency responsible for changing the business of government from “silos of activity to networked, collaborative processes” (Norman, 2007, p. 1). The e-government strategy includes four possible governance options, each maintaining the SSC in a central position. These options include: 1) creating a lead agency that receives its own direct funding, 2) creating a joint venture structure, modeled after the private sector, governed by partners in proportion of the funds each contributes, 3) creating a club funding structure that would take accountability for success and failure, and lastly 4) using an

intermediary to delegate responsibility for delivery to an organization that already had the specialized skills to work on behalf of the government. These four governance options raise issues about how centralized services will be funded and who will ultimately be responsible for implementing the process. The following recommendations address these two issues.

- *Short-Term Recommendation: Horizontal Budgeting*

Budgets typically reflect government priorities that are typically governed by compromise, strategy, bargaining (Rubin, 2005; Stillman, 2005). New Zealand employs an accrual-based budgeting system. Currently the government “has the capacity to plan for the period ahead and align resource allocation with policy priorities” (Reeder & Pandey, 2005, p. 336). New Zealand’s government “anticipates that [future] e-government investments will be recovered through improved efficiency in the use of taxpayer funds” (Reeder & Pandey, 2005, p. 335).

Mechanisms currently exist in New Zealand’s government “to facilitate cross-agency initiatives” (Reeder & Pandey, 2005, p. 336). However, since the SSC is pushing for an integrated e-Government system, taking a more horizontal approach to funding ICT investments may be more fruitful in garnering resources to support this particular effort to centralize e-government services among all the government agencies. A horizontal approach to budgeting finances and manages projects across organizational lines (Reeder and Pandey, 2005). In doing so, the responsibility of funding e-government services will not fall on the shoulders of one agency. Under this type of funding structure, agency contributions should be fair and proportionate to the size of the agency. Typically initiatives that are undertaken by a lead agency are also developed by the lead agency and behalf of the participating entities (Reeder and Pandey, 2005, p. 336). Based on this, it appears that the first governance option, with the SSC assuming the role as the lead agency, would ease the transition to a centralized system.

- *Ongoing Recommendation: Maintain Accountability*

The centralizing of e-government services among New Zealand's government raises concerns about who will be responsible and accountable for providing and maintaining services. Collaborative networks, especially, draw attention to accountability (Goldsmith & Eggers, 2004). In New Zealand's case, if the first governance option is selected, it will be important for the SSC to be accountable in carrying out its e-government strategy, without compromising service to the public.

In the context of digital government, "accountability refers to the degree to which individuals and groups are made responsible for IT management and the extent to which such management is integrated into the [organization's] objectives" (Allen, Juillet, Miles, Paquet, Roy & Wilkins, 2004). Areas crucial to network and collaborative accountability are: "setting goals, aligning values, establishing trust, structuring incentives, measuring performance, sharing risk, and managing change" (Goldsmith & Eggers, 2004, p. 124). In addition to maintaining organizational accountability, the SSC should also bear in mind the public's personal privacy. Typically data is linked "across departmental silos" (Culbertson, 2005, p. 104). The SSC should carefully ensure that private information is protected and properly managed. However, with this new strategy, e-government services will be evolving towards a centralized system, accountability will also be shared across the different agencies.

To maintain transparency and accountability, performance should be monitored and evaluated, once the process has taken place. It will be important to "[establish a performance-based approach that a horizontal network of accountability]" can support (Allen, Juillet, Miles, Paquet, Roy & Wilkins, 2004, p. 94). One way of measuring e-government performance is through stakeholder performance indicators (Bovaird, 2005). This type of monitoring considers

impacts on the public, impacts on managing the system, and impacts on the centralized process with all involved parties (Bovaird, 2005). Impacts on the public measures whether public access was achieved (Bovaird, 2005). System management considers leadership and infrastructure changes, while impacts on the involved parties look at how well information was integrated (Bovaird, 2005). The SSC can report this information on a quarterly or yearly basis to ensure accountability of the system across all the government agencies involved.

Conclusion

The implementation of NPM ideologies in New Zealand has allowed the country to make improvement in certain areas such as focusing on performance and improving efficiency in service delivery. However, NPM has also had the unintended consequence of creating independent and autonomous agencies and ministries. The e-Government Strategy of 2006, “Enabling Transformation”, seeks to find efficiency in delivering online services to New Zealand’s citizens by integrating it with online government services. With this initiative faces some challenges, given New Zealand’s decentralized government structure. In summary here are the identified issues associated with implementing this initiative and recommendations for each of these issues:

Issue: Defragmenting Agency Silos

Short-Term Recommendation: Facilitate interagency collaboration

Mid-Term Recommendation: Create a strategic plan for agency implementation

Issue: Stability in Organizational Changes

Mid-Term Recommendation: Implement a phased approach

Long-Term Recommendation: Formalize support of the e-Government through policy

Issue: Governance Options

Short-Term Recommendation: Implement horizontal budgeting

Ongoing Recommendation: Provide quarterly accountability reports

Throughout this implementation process, the SSC should ensure that “budget, management and regulatory processes of government are aligned to support” this initiative and future e-government initiatives (Culberston, 2005, p. 90). The SSC faces the challenges of centralizing the e-government services, but with appropriate planning and collaboration, New Zealand will continue to be a leader and model of successful digital government for other countries.

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