

Defragmenting e-Government in New Zealand

ID #903981967

Date: May 3, 2009

**To: J. Worthington Longfellow
Director, State Services Commission**

From: 903981967

Re: Defragmenting Government in New Zealand

Government agencies in New Zealand realized early on that the internet could be an efficient and cost-effective way to provide services and information to the public. By 1996, 23 of 38 of New Zealand's core agencies had websites, and were offering some services and information on line. However, until the State Services Commission established the Information Technology Taskforce in 1997, there had been no coordination between agencies or central oversight of their efforts, although individual agencies had developed their own websites. The Information Technology Taskforce, after consultation with senior managers, recommended that the government develop a Vision Plan to guide the future development of online services (Millar 2004 p.1).

The completed Vision Statement recommended three broad goals: a well-planned, gradual approach to the provision of online services, with cross-agency collaboration on IT projects; a commitment to using the internet to increase opportunities for citizen participation; and the stated aim that the use of the internet and related technology should be a tool to improve service delivery in the public sector, not an end in itself. (Millar 2004 p. 2) As New Zealand sought to implement the Vision Statement and develop its presence online, it experienced many of the same issues as other countries have experienced in developing e-government initiatives.

When New Zealand's State Service Commission (SSC) was given the responsibility of making e-government services in New Zealand more accessible to the public in 2006, Laurence Millar, the unit's Deputy Commissioner of Information and Communication Technologies (ICT) and his staff faced several obstacles to achieving their goals, one of which was the highly decentralized nature of government in New Zealand. The country has a parliamentary system of government, with no distinct separation of powers between the Executive and Legislative Branches, which are both controlled by the ruling party or coalition government (Scholastic 2009). The Prime Minister and members of the Cabinet ("government") are selected from the ruling party or coalition and are individually and collectively responsible to the legislature.

In the mid-1980's, when the Labour Party came to power, they oversaw the decentralization of government services in New Zealand, using the New Public Management framework, which advocates the application of private-sector principles to the public sector. Although many of New Zealand's government ministries and departments had developed applications suitable for their own needs, most of the applications stood alone as "silos" of services rather than as part of an integrated system. Agencies had purchased a variety of hardware and software platforms which could not communicate with each other, and were a significant barrier to the integration of services. Standardization of hardware and software would facilitate interoperability between systems.

Research

The e-Gov Unit needed information about the level of public access to computers and the Internet, and the types of services the public would like to access online. A telephone survey such as the one conducted for the Pew Internet & American Life Project, "*How Americans Contact Government*" can provide information about the level of computer and Internet usage by the public, the users' preferred means of contacting government agencies, and gauge citizen satisfaction with the delivery of government services (Horrigan 2007). Although telephone surveys can be relatively costly, they allow researchers to ask participants follow-up questions to collect more detailed information. Online surveys are a less expensive alternative to telephone surveys, and are particularly useful for collecting information on emotionally charged topics, but they have drawbacks, including self-selection by the participants and inadequate representation of those without computer and Internet access (Berg 2007 p. 73).

Administrators who use survey results in their work need to be familiar with data collection procedures and statistical analysis techniques so that they can intelligently evaluate conflicting claims and statements, rather than relying on others to interpret data (Meier 2006a p. 5). Once programs have been adopted, follow-up surveys of citizens and agency employees can assess the level of satisfaction with the usefulness, effectiveness, and efficiency of online services. Of particular use in program evaluation is the "interrupted time series analysis" (used in the Pew survey), which tracks results from a program or policy over time,

and is used to evaluate the impact of the program or policy in a specific period of time (Meier 2006b p. 11).

Accessibility

Accessibility issues include not having access to a computer or the Internet at home, limited English skills, inadequate computer skills, having a disability that makes it difficult to use a computer or the Internet, deep dislike or fear of computers or a preference for face-to-face interaction.

As of February, 2008, rural residents, nearly 15% of New Zealand's population, some of whom live in highly remote areas, still lacked "...cell phone coverage (and) a reliable internet connection..." (MAF 2008) The first priority should be providing adequate connectivity to rural areas. Possible solutions include the provision of computers and Internet access at public facilities such as libraries or community centers, "computer-mobiles", which like bookmobiles, could bring computer and internet services to underserved areas. The same facilities could be used to offer training in computer usage. Adaptive devices allow disabled person to use computers and access the internet. These devices could only enable the disabled to more easily interact others, providing an antidote for the isolation that many experience.

Since residents may prefer to continue to prefer personal interaction, so mail, phone, and walk-up counters should still be available. Some people prefer phone, mail or personal contact because they dislike or fear computers. Introducing them to the benefits of technology may be more challenging, but can be very rewarding for both teacher and student. Ensuring that e-government

services are available to all New Zealanders maximizes the efficiencies associated with e-government and is also the right thing to do.

Ethical Considerations, Protection of Data

Data confidentiality is a major ethical concern to both individual and business users of online services. The risk to citizens of Identity theft, the threat to businesses of industrial espionage or loss of business secrets and proprietary information, can cause potential users to be reluctant to access government services online. One way in which data confidentiality can be assured is by using authentication procedures to verify the user's identity, usually by a username and password. The development of appropriate authentication procedures should be a matter of high priority (Carnegie 2004).

Network Security

However, authentication procedures alone cannot guarantee data confidentiality or Internet security. Businesses and government agencies which collect information about their users have a fiduciary duty to handle the data responsibly, which includes taking appropriate measures to protect the integrity of their systems from break-ins and misuse of data (Mullen 2004b, p. 145-146). In order to encourage full compliance with security procedures, all users, including contractors, should receive thorough initial training in compliance, and mandatory periodic recertification.

Privacy Protection

Private businesses and governments collect and store vast amounts of information in data "warehouses". Information once available only on paper, and

then only to a limited number of people, is now readily available to the public. Data sharing across agencies allows more efficient provision of services to the public, and enables agencies to more accurately evaluate the effectiveness of programs (Mullen 2004a pp. 134-135). Safe handling of identifiable data should be a high priority for data collectors, and is especially critical if data are being shared between agencies or with private companies.

Fiscal Issues

Although there are start-up costs for the provision of online services to the public, online services are more efficient, provide easier public access, and reduce costs. Since spending on e-government projects can affect the resources available for other projects, it is important to ensure that the money is being spent wisely. Standardization of hardware and software programs should provide efficiencies of scale and help control costs. Scalability of systems (that is, the ability to expand and upgrade the systems as needs change) should be considered when making purchasing decisions. .

Efficiency vs. Equity

In the public sphere, efficiency involves deciding whether a society is getting the best use of its scarce resources, while equity means that a society's resources are being distributed fairly among citizens. The role of efficiency versus equity in government policy is especially applicable to the Internet access debate, because those with Internet usage skills, access to computers and an interest in accessing the Internet, will receive the greatest benefit from the

availability of online services. The dilemma faced by government policy makers lies in deciding how to offer Internet services in the most equitable way.

Individual circumstances such as race, social status, income or location, can limit public access to online information and services. This phenomenon has been called “the digital divide”. At one time, race was thought to be a key indicator adversely impacting computer usage; however, recent research by Richard Groper of California State University, Fullerton, suggests that there is a stronger relationship between Internet access and education and income, than between Internet access and race (Groper 2004b pp. 291-302); these findings are not unexpected since educational level is often linked to income (Lee, Johnson & Joyce 2008a pp. 709-713). Dr. Groper suggests closing the “digital divide” by directing funding toward education and training. Free computer training and widespread public access to computers in libraries or other public venues would help close the “divide,” as could early exposure to computers in schools. Other issues of equity exist as well, for example, the disabled may need adaptive computer systems, and citizens who are “computer-phobic” may need extra encouragement to motivate them to accept computers.

Networks

Acquiring and maintaining the infrastructure needed to support Internet services can be expensive. Decisions about the Enterprise Architecture (EA) are critical to the success of an ICT rollout. Enterprise Architecture is “computer-nerd-speak” for a blueprint which addresses the vision and goals of an organization and the steps required to plan, implement and evaluate a project. A

long-range plan (usually considered 3-5 years in government circles because of election cycles), provides a link between the grand scheme and day-to-day activities and decisions (Finkler 2005 p. 35).

Agencies in New Zealand have long used computerized recordkeeping, and like many other large organizations, may have allowed outdated computer programming code to accumulate over decades in aging computers and computer platforms (what Alon Peled calls the growth of “electronic mounds”) (Peled 2001a p. 414). This can happen for a variety of reasons, such as when the useful life of an old computer system is extended to support newer uses, older technologies are retained because they are more reliable than newer ones, or massive amounts of historical data are not converted from one format to another (Peled 2001b p. 427). Computerized files should be reviewed regularly for outdated or incomplete material.

Legal and Economic Policy

Government can play a key role in many aspects of economic policy, by providing a legal framework for transactions between citizens and business interests and by insuring that transactions are carried out using generally accepted accounting principles (Lee, Johnson & Joyce 2008b p. 668). Other important roles of government economic policy are maintaining full employment and promoting economic growth without unacceptable levels of inflation. Because of the volume of government expenditures, purchasing decisions made by government agencies can affect economic growth (Lee, Johnson & Joyce 2008c p. 669). While agencies should have input in planning decisions to

guarantee that their needs are met and to gain their support for the project, the final decisions concerning expenditures for computer systems should be made centrally.

Budget Issues – Managing Assets

Adequate planning is an important component of financial management, particularly in a large undertaking like the e-government project, in which the goal is to integrate internet access in New Zealand. Achieving the financial benefits of improved public computer and Internet access requires a long-term commitment (Forlano 2004 p. 37). A project of this scope is called a *capital project*, because costs and benefits are spread out over a period of years, or “*capitalized*”. Capital investments also require that adequate provision be made for management and maintenance of assets to insure that they attain their full expected life-cycle (Lee, Johnson & Joyce 2008d pp. 473-474).

Accountants use arbitrary cutoff points to distinguish between current expenses and capital projects, based on the amount of the expenditure and the expected useful life of the project. The cutoff point for current expenses is usually one year. Because computer networks require appropriate upgrades to systems at frequent intervals and periodic maintenance, there has been ongoing debate about whether to categorize ICT expenditures as current expenses or capital projects. No matter what decision is made about categorized computer expenditures, in a project as important as the e-government initiative, sufficient funds should be allocated for maintenance of the system, hardware upgrades and writing new software code as needed.

Costs vs. Benefits

The production and distribution of information to the public via the Internet offers the promise of savings in costs and time for both government agencies and private citizens, while making it easier for the public to have more input into policy and governance decisions (Baker & Panagopoulos 2004 p. 99). E-Democracy initiatives, which promote citizen participation in government, offer "...access, convenience, awareness, communication and involvement in political processes..." (Panagopoulos, C., (2004b p. 119). Public participation in community problem solving is an important component of democracy, and has sometimes been lacking in large-scale, modern democracies (Briggs 2008 pp. 9-10).

Public-Private Partnerships

New Public Management theories, the cornerstone of which is the application of strategies used by large companies to the work of government, dominated public management thinking for many years in New Zealand. Variously known as *privatization*, *contracting out*, *outsourcing* or a *public-private partnership*, each of these strategies has advantages, but also has drawbacks. All are types of contractual arrangements, which allow public and private resources to be pooled, and responsibilities allocated to take advantage of the partners' areas of expertise. Partners share in both the risks and rewards (Richardson 2004a p. 200). Partnering with a private company which has employees with specific skills not available in the public sector requires careful oversight of the project by the employing agency, which usually means the

appointment of someone from the agency who is knowledgeable about the requirements of the project to direct the work. All too often, adequate project supervision is lacking because either a supervisor has not been appointed by the agency or the appointee lacks sufficient expertise or time.

The risks associated with public-private partnerships are not limited to financial losses, but also include threats to the privacy of citizens, if the stored data are not protected adequately or are misused by partners. Although government contracts typically specify liability for any security breaches, without oversight, there is still a risk is that the partner may not adhere to appropriate security procedures. Penalties for breach of contract, and even for mishandling of data by agency employees, are not always adequately enforced. (Richardson 2004b pp. 203-206) Other serious risks in public-private partnerships are inadequate services, accountability issues and cost overruns.

Like private-public partnerships, multi-department projects require careful planning and skillful negotiation. In negotiations with private or public partners, it may be necessary to accept a compromise, but doing so doesn't mean giving in to all demands by the other party. In *"Getting to Yes"*, Fisher and Ury suggest a strategy that they call the "BATNA: Best Alternative to a Negotiated Agreement." This strategy includes setting a well-thought-out, predetermined limit; e.g., the lowest price a seller is willing to accept or the highest price the buyer is willing to pay. A negotiator with a clear idea of what the limits should be is less likely to be stampeded into making a bad deal (Fisher & Ury 1981 pp. 97-100).

Quantifying Results

There is an inherent difficulty in quantifying results, particularly in the public sector, where the government may be the only provider of services. For the e-Gov project in New Zealand, the quantifiable targets should not be just the number of government services available online, but also the efficiency of the services, and public use of the online services (Finkler 2005 pp. 36-37).

Carefully written contracts can provide some risk protection for agencies, and might include "...performance measurement, service-level specifications, reporting requirements, warranty clauses, penalties for nonperformance, and dispute resolution mechanisms..." (Chen & Perry 2003 pp. 417).

Cross-Agency Planning

Because the SSC was given oversight of the e-Government Unit, responsibility for the coordination of efforts and oversight lies within its responsibility. In collaborative efforts, people from other offices and/or agencies who have specific skills are often brought together to form a work team for a specific goal (Bowditch & Buono 2005a p. 167). Group members may have different backgrounds or expectations of the group, and there may be conflicts about what needs to be done to achieve the group's goals. Dissent can strain the cohesion of a group but can also stimulate original thinking and spur better decision-making (Staw 2004 p.499).

Because teams need strong, focused leaders, managing a team can be challenging. Richard Beckhard, who has done extensive research on team building, stresses the importance of setting clear goals at the beginning of the project, outlining the expected contributions from each member, and setting the

“rules” for group interaction early in the process. Trust between group members has been shown to be an important indicator of group effectiveness (Bowditch & Buono 2005b p. 168). The outcome of the team effort is dependent upon the willingness of members to put aside differences and work for the good of the unit (Bowditch & Buono 2005c p. 180).

Intergroup conflict can result if two or more groups have disputes over authority, goals, territory, resources or values, which can be a particular problem in public-private partnerships. (Bowditch & Buono 2005d p. 182) In New Zealand, an early project to computerize police records failed because of conflicts between the private partner and the agency’s staff (Norman 2007 p.4).

Collaboration is often a difficult issue, made more difficult in New Zealand by the emphasis on decentralization that had been government policy for many years, and the fact that managers were accustomed to operating independent of central supervision. Although funding for government-wide ICT projects was the responsibility of the central New Zealand government, and determined by Parliament with input from agencies, the agency portion of funding for e-government initiatives was drawn from the agencies normal budgets for ICT, development and other service provision areas. The agencies are also subject to stringent performance measures.

Centralization vs. Decentralization

When authority to make routine decisions is delegated to local managers, such decentralization offers many advantages, including flexibility and responsiveness. However, when too much decision-making is delegated to

lower-level managers, the organization runs the risk of losing control of the decision-making processes, making system-wide planning and coordination more difficult. Centralized, hierarchical management makes it easier to control processes, but detracts from speed and efficiency. In New Zealand, collaboration between agencies has been structured on a hierarchical model, with the department head exercising a great deal of control over the agency, and the SSC responsible for reviewing collaborative efforts and this structure has worked well. Ongoing program assessment during the life of a project can insure continued success.

Governance vs. Technical Issues

Issues of stakeholder interests and accountability are often considered questions of governance, while investments in ICT, which are cost and efficiency oriented, are considered separate technical issues. However, the deployment of technology within an organization can have a dramatic effect upon organization culture, moving "... beyond the integration of data for decision-making and...changing the dynamics and extent of relationships that exist within and external to organizations..." (Allen, Miles, Paquet, et al. 2004 p.83).

Operating Government like a Business

Business-like efficiency and management effectiveness are cited by proponents as the rationale for NGM. However, the goals of private business and those of public government are not the same. Governments have social and community purposes, and engage in activities which promote the general good, while businesses strive to make a profit for their shareholders. Government

workers are expected to put the public interest first and to avoid conflicts of interest (Beckett 2000 p.199); while private sector managers are expected to focus on what is best for the company and its shareholders.

When the SSC created the e-Government Unit (e-Gov Unit) in 2001, the Unit was tasked with leading and inspiring change, but was not given the power to mandate change. The first director of the e-Gov Unit, Brendan Boyle, was confronted by a public sector leadership unaccustomed to collaboration with other agencies, and highly sensitive to infringement upon their prerogatives, particularly in relation to IT services. Even after the push for more cooperative efforts had begun, the final decisions about purchases of hardware and software were still being made at the agency level. Some researchers have questioned whether...”managers and political elites, long educated and socialized in NPM approaches...” will be able to adapt (quickly) to changes required by the de-emphasis upon the precepts of NPM (Dunleavy, Margetts, Bastow & et al, 2009 p. 488).

In 2006, Laurence Millar, an experienced project leader in both the private and public sectors, was appointed as SSC’s Deputy Commissioner of Information and Communication, and given the responsibility of convincing department managers to join the effort to centralize many aspects of their technology projects. Success of the e-gov project required that management at other agencies be not only supportive of the project, but also, because of existing funding structures, willing to use money from their own budgets to fund many aspects of the change. Periodic status reviews during the course of a project can identify problems,

allow resolution in a timely manner and/or permit policy modifications (Crosby & Bryson 2005 pp. 312-313).

Leadership Style

Millar's leadership style can be best described as Transformational Stewardship, in that although he did not inspire the policy change, he did direct the implementation phase. With his staff, he faced tests of his leadership skills, including the need to meet evolving mission requirements as new needs were identified and meeting stakeholder expectations for a more integrated and user-friendly government website.

Politics and Policy

In New Zealand, as in America, policy making is a complex process, requiring the balancing of policy needs and political considerations. When a new administration comes into power, there may be wide swings in policy direction. In New Zealand, when the Labor Party came to power in 1988, its leaders, entranced by the concepts of New Public Management, called for a revision of government policy, which resulted in the decentralization of many agencies, the outsourcing of work and the application of stringent accountability measures to government agencies. By 2001, it was apparent that there were limitations to the results that could be achieved by with NPM policies.

Collaboration and Relationship Management

Standard guidelines for managing inter-agency projects emphasize the importance of deciding on an equitable allocation of decision rights before a project is undertaken. Once a joint project is underway, governance

arrangements are required. The three important components of governance are: problem definition (i.e., the purpose of the project) and the aspects of the project to be governed (e.g, contract management, standards, pricing, vendor relations); and who will be involved in the project or depend upon it (e.g., agencies, citizens or other stakeholders). The governance style for a particular project may be a group decision-making model, a unitary model with just one decision-maker, or a hybrid arrangement.

Project Implementation

In addition to governance decisions, project design and implementation explores possible constraints and incentives. The design process should include stakeholder input in regard to business strategies such as contract management, service level and interoperability agreements, formation of a dispute resolution process, and decisions about funding arrangements (e.g., central funding as opposed to agency funding, membership fees, and any other costs). The final proposal should be subject to periodic review and reevaluation by the department head, the agency, and stakeholders to ensure that it is making appropriate progress toward its stated goals and meeting the agency's performance criteria.

Human Resources Management and the Organizational Culture

Human resource management can play a key role in encouraging staff productivity; by helping to shape the organization's culture and supporting management efforts to encourage productivity (Berman 2003a p. 194). Abraham Maslow's *Hierarchy of Needs* provides a framework for the understanding of human motivation. He theorized that human beings are motivated by unsatisfied

needs, and that only when the more basic physiological needs such as food and water are satisfied, can higher needs such as for security, social interaction, esteem and self-actualization emerge, "...and these, rather than physiological hungers, (will) dominate the organism..." (Maslow 1943 pp.113).

While B.F. Skinner is not considered a public administration writer, his theory of operant behavior, which recommends the positive reinforcement of desired behaviors, led to the development of behavior modification theory, which is useful in understanding why some individuals are more motivated than others to achieve personal and organizational goals and what reward systems are the most productive (Skinner 1953).

Improving Organizational Efficiency

The organizational environment in which the personnel management system operates influences the effectiveness of staff, and thus, the success of the organization. Human resource management can help shape the organization's culture and support management efforts to encourage productivity (Berman 2003b p. 194). When organizations emphasize staff involvement in decision making, employees are more aware of the requirements for success of a project and tend to be more supportive of the process. Organizations which encourage employee commitment and display flexibility in the face of changing circumstances are likely to be more successful (Daley 2002 p. 26-27). Increased efficiency can be achieved in other ways as well, including strategic planning, better customer services, authorizing employees to make more low-level decisions, collaboration with other agencies, and improvements in technology.

All of these measures have the same basic goal: reducing costs by providing faster, more convenient and improved service (Berman 2003c p. 183-184).

Areas of Concern and Recommendations:

In our recommendations we would like to address six basic areas of concern: systems integration, security, accessibility, funding, private-public projects and relationship management.

Systems Integration: The first challenge that the e-Gov Unit needs to address improving the integration and interoperability of hardware and software systems across government agencies. This will result in more efficient operations and reduced costs.

Security: Stringent provisions for the security, integrity and confidentiality of data should be adopted, and all users, including private contractors, should be trained in security procedures. Authentication procedures to verify the identity of users are needed to insure that only authorized users can log into the systems.

Accessibility: There are a variety of reasons why New Zealanders might not be able or willing to access e-government web sites, but the government must find ways to encourage widespread public internet participation or risk having online initiatives be seen as disproportionately benefiting the rich.

Funding: Funding for Internet initiatives should be sufficient to insure that hardware and software can be maintained and upgraded as required.

Public-Private Partnerships: Proposed projects should be carefully reviewed to insure that the partnership will be in the best interest of the public. Participation

in such projects can be cost-effective or costly failures, depending on how well they are conceived and are managed.

Relationship Management: Agency representatives should be trained to manage relationships with vendors and employees, prepare specifications and contracts carefully, and build in appropriate accountability measures.

When all of these areas of concern are addressed adequately, the result should be an efficient and cost-effective e-government program.

Sources Cited

Allen, B., Juillet, L., Miles, M., Paquet, G., Roy, J., Walkins, K., (2004). The Organizational Culture of Digital Government: Technology, Accountability & Shared Governance, In A. Pavlichev & G.D. Garson (Eds.), *Digital Government: principles and Best Practices*, Hershey, PA: Idea Group Publishing

Baker, P.M.A. & Panagopoulous, C., (2004). Political Implications of Digital (e-) Government In A. Pavlichev & G.D. Garson (Eds.), *Digital Government: principles and Best Practices*, Hershey, PA: Idea Group Publishing

Berg, Bruce L., (2007). *Qualitative Research Methods for the Social Sciences*, Boston: Pearson Education, Inc.

Berman, E., (2003). *Productivity and Privatization: The Human Resource Management Connection*, (S.W. Hays, S.W. & R.C. Kearney, Eds.). Upper Saddle River: Prentice Hall, Pearson Education, Inc.

Bowditch, J.L. and Buono, Anthony F., (2005). *A Primer on Organizational Behavior*, (6th Ed.), Hoboken: John Wiley and Sons, Inc.

Briggs, X. de S., (2008) *Democracy as Problem Solving*. Cambridge, MA: The MIT Press.

Carnegie Mellon University (2004). *Avoiding Social Engineering and Phishing Attacks*, National Cyber Alert System, Cyber Security Tip ST04-014. Retrieved 4/15/2009 from <http://www.us-cert.gov/cas/tips/ST04-014.html>

Chen, Y & Perry, J.P. (2003). Outsourcing for e-government: managing for success, *Public Performance & Management Review*, Vol. 26, No. 4 (Jun., 2003), pp. 417 Published by: M.E. Sharpe, Inc. Retrieved 3/15/2009 from Stable URL: <http://www.jstor.org/stable/3381115>

Crosby, B.C. and Bryson, J.M., (2005). *Leadership for the Common Good: Tackling Public Problems in a Shared-Power World* (2nd Ed.). San Francisco: Jossey-Bass.

Curtis, C., Vowles, J. and Curtis, B., (2004) Channel-surfing: How New Zealanders Access Government, State Services Commission, Prepared by Auckland University's Survey Research Unit, September, 2004. Accessed 4/27/2009 from <http://www.waikato.ac.nz/php/research.php?mode=show&author=121055&mode=show&page=2>

Daley, D.M., (2002). *Strategic Human Resource Management: People and Performance Management in the Public Sector*, Upper Saddle River: Prentice Hall.

Department of State, United States (2009) U.S. Department of State Background Note: New Zealand. Accessed 4/28/2009 from <http://www.infoplease.com/country/profiles/new-zealand.html>

Dunleavy, D., Margetts, H., Bastow, S., and Tinkler, J. (2006) New Public Management is Dead—Long live Digital-Era Governance. *Journal of Public Administration Research and Theory*, 16(3), 467-494. Accessed March 31, 2009 from AB/INFORM Global database (Document ID 1069269981).

Finkler, S.A., (2005). *Financial Management for Public, Health and Non-for-Profit Organizations*, (2nd Ed. Upper Saddle River: Pearson Prentice Hall.

Fisher, R., Ury, W. (1981). *Getting to Yes* (2nd Ed) (B Patton, Ed.) Harvard Negotiation Project, New York: Penguin Books.

Forlano, L. (2004). The Emergence of Digital Government: International Perspectives, In A. Pavlichev & G.D. Garson (Eds.), *Digital Government: principles and Best Practices*, Hershey, PA: Idea Group Publishing

Goldsmith, S. and Eggers, W.D. (2004). *Governing by Network: the New Shape of the Public Sector*. Washington, DC: The Brookings Institution.

Scholastic (2009) *Presidential and Parliamentary Government*, Grolier Online. Accessed May 2, 2009 from <http://teacher.scholastic.com/researchtools/researchstarters/>

Groper, R., Digital Government and the Digital Divide (2004) In A. Pavlichev & G.D. Garson (Eds.), *Digital Government: Principles and Best Practices*, Hershey, PA: Idea Group Publishing

Horrigan, J. (2007) *How Americans Contact Government: A Typology of Information and Communication Technology Users*, Pew Internet & American Life Project, May 6, 2007. Accessed 3/14/2009 from http://www.pewinternet.org/PPF/r/213/report_display.asp

Lee, R.D, Jr, Johnson, R.W. and Joyce, P.G., (2008). *Public Budgeting Systems*. Sudbury: Jones and Bartlett Publishers

Lindner, J. R., (1998) *Understanding Employee Motivation*, The Ohio State University, Piketon Research and Extension Center, Piketon, Ohio.
© Copyright by Extension Journal, Inc. ISSN 1077-5315.
Retrieved 4/12/2009 from <http://www.joe.org/joe/1998june/rb3.php>

Meier, K.J., Brudney, J.L. Bohte, J., (2006) *Applied Statistics for Public and Nonprofit Administration*, (6th Ed.) Belmont, CA., Thomson Wadsworth, Thomas Higher Education.

Ministry of Agriculture and Forestry (MAF) (2008), *Rural Proofing: What is The Rural Community?*, Wellington, NZ: Published by MAF Policy, February, 2009 Accessed 4/12/2009 from www.maf.govt.nz

Mullen, P.R. (2004) Digital Government and Individual Privacy, In A. Pavlichev & G.D. Garson (Eds.), *Digital Government: principles and Best Practices*, Hershey, PA: Idea Group Publishing

Norman, R. (2007) Defragmenting e-Government in New Zealand, Kennedy School of Government Case Study Program, Harvard University

Panagopoulos, C., (2004) Consequences of the Cyberstate: The Political Implications of Digital Government in International Context. In A. Pavlichev & G.D. Garson (Eds.), *Digital Government: principles and Best Practices*, Hershey, PA: Idea Group Publishing

Maslow, A.H., (2007). A Theory of Human Motivation, In Shafritz, J.M. & Hyde, A.C. (Eds) *Classics of Public Administration*. Boston: The Thompson Corporation. (Original work published 1943)

Millar, L. (2004) *Networking government: e-government in New Zealand*, Public Sector, Vol. 27, No. 4, December 2004. Accessed 3/14/2009 from <http://www.e.govt.nz/resources/research/public-sector-2004/index.html>

Peled, A., (2001) Do Computers Cut Red Tape? *The American Review of Public Administration* 2001; 31; 414, 427 Sage Publications on behalf of the American Society for Public Administration, DOI: 10.1177/02750740122065027, downloaded 4/1/2009 from <http://arp.sagepub.com/cgi/content/abstract/31/4/414>

Richardson, C., (2004) Digital Government: Balancing Risk and Reward through Public/Private Partnerships, In A. Pavlichev & G.D. Garson (Eds.), *Digital Government: principles and Best Practices*, Hershey, PA: Idea Group Publishing

Skinner, B.F., (1953) *A Brief Survey of Operant Behavior*, an excerpt from *Science and Human Behavior*, B.F. Skinner Foundation, Cambridge, MA in Lindner 1998 Accessed 4/12/2009 from <http://www.bfskinner.org/home.html> Original work published 1953.

Staw, Barry M., (2004) *Psychological Dimensions of Organizational Behavior*, (3rd Ed.), Upper Saddle River: Pearson Prentice Hall.