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Integrating Tomorrow's Government: An Exploratory Case Study of Resistance to Data Consolidation

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ABSTRACT

The manner in which today's government functions is changing both to make use of available technologies and to leverage the power of consolidated operations. In 2002, the State of Louisiana released its IT Master Plan, which provided a framework for modifying and extending the way in which information technology was utilized within the state government. This plan outlined the state's intent to form consolidated data storage facilities, to eliminate redundant IT functions, and to develop more continuity with respect to the hardware and software platforms utilized within the state. This investigation will use a case study approach to examine the status of Louisiana's endeavor and to identify how activities such as data integration, service consolidation, and contract negotiations have transformed because of this initiative. The authors will also explore the presence of resistance to the state's IT Master Plan by project leadership and agency stakeholders.

Keywords

Data integration, resistance theory, public sector.

INTRODUCTION

Today's government agencies and stakeholders are focusing much of their efforts on sharing data and information, improving services, and developing the technological capabilities of government. However, the public sector is not always able to quickly adapt to the needs of the citizenry and to the mandates created by its leadership. These environments can also foster various forms of resistance to accomplishing project goals and achieving success. By design public agencies exist to satisfy some fundamental need of government and can have tremendously different missions. The agencies have existed independently for many years utilizing a multitude of software and hardware platforms and being contractually wedded to different providers for the assorted services. As such, any efforts towards consolidating various functions of e-government across multiple agencies or departments may reach well beyond the walls of an agency.

Inherent within such ambitious initiatives are the issues of trust, power, and political games. Within public organizations information is often regarded as currency and may further promote the "silo-effect" associated with public organizations. Multi-agency sharing activities inherently involve certain amounts of risk, resource constraints, and conflict (Bloomfield et al., 1998; Hardy and Phillips, 1998). Knowing what data and information is important, what to share, and with whom are the fundamental concerns for all of the parties involved in such collaborative systems; however, these matters become convoluted in public, multi-agency efforts because of the differences in organizational goals, project expectations, pre-existing workflows and procedural constraints, size and resources of coordinating agencies, levels of trust, and IT platforms and applications used by the agencies (Andersen et al., 1994; Hosmer, 1995). In addition, the attitude of project leadership and stakeholders towards such projects greatly impacts the likelihood of success.

In 1999 Governor Mike Foster of Louisiana proposed a bold economic initiative entitled *Vision 2020*. This document served as a proclamation that if Louisiana was to compete in a global economy, the state would have to alter its previous economic development strategy. In that same vein, the Foster administration declared that Louisiana's state government should overhaul the manner in which it delivers services to the public. To facilitate this initiative, the governor emphasized investments in technology and e-government state services as top priorities. To meet these goals, Louisiana's Office of Information Technology created a six-year IT master plan in April 2002. This plan established the basic framework for an

enterprise IT architecture along with critical layers necessary to support the programs and services within *Vision 2020*. A major caveat of the IT master plan is the centralization and consolidation of IT assets within the various state government agencies.

This study is exploratory in nature and focuses on the current status of the IT overhaul, which Louisiana has undertaken. It explores the challenges and opportunities that IT leadership and agency stakeholders have faced, as well as, attempts to identify the current status of activities with relation to the objectives and milestones set forth in the IT master plan. To accomplish this, the authors are conducting qualitative, personal interviews with the IT leadership within the involved state agencies and with the CIO for the State of Louisiana. Preliminary results indicate great disparity in the attitudes and feelings toward the consolidation of generic state IT services (i.e. email, web page administration, etc.) and data centers. In addition, resistance to this endeavor is coming from both internal and external sources. For example, as often the case, state agencies and their stakeholders wishing to maintain control of the services targeted for consolidation and wanting to manage what they view as proprietary data and information have voiced their opposition to this plan and demonstrated what some consider to be an unwillingness to cooperate. Externally, major software and hardware providers have been reluctant to bid on various jobs associated with this IT initiative because, in the view of state officials, it is not in the companies' best interests to offer services to a consolidated operation as it would decrease their power in negotiating contracts and their opportunity to make a profit. It is the hope of the authors that this research offers extensive insight into the organizational environment that can be present where multiple government agencies are required to work closely with one another. Furthermore, this work strives to establish "lessons learned" and "best practices" for facilitating the successful completion of both intermediate and final project objectives for an endeavor of this magnitude.

Background on the Office of Information Technology

In February, 2001, the State of Louisiana released the *LaConnections, Blueprint for Digital Government* report, which was the result of a six-month planning effort involving department executives and IT professionals throughout state government. Two critical needs identified in the report were to *implement digital government as a means to provide high-quality citizen services* and to *centralize and consolidate the many and varied IT assets within state government into an enterprise operation* (OIT, 2002).

The Louisiana State Office of Information Technology (OIT) is responsible for developing formal IT policies under Act 772 of the 2001 Regular Session of the Louisiana Legislature. Listed below are the major responsibilities of OIT as stated on the OIT website (OIT, 2004b).

- Implementing of IT standards for hardware, software, and consolidation of services.
- Reviewing and coordinating IT planning, procurement, and budgeting.
- Providing oversight for centralization/consolidation of technology initiatives and the sharing of IT resources.
- Assuring compatibility and connectivity of Louisiana's information systems.
- Providing oversight on IT projects and systems for compliance with statewide strategies, goals, and standards.

In addition, OIT has issued IT Policy 002 regarding "Centralization of Information Technology." This is a major IT initiative that, according to the OIT website, specifies that "all computing systems meeting the criteria established in this policy must be housed in one of the two enterprise data centers (the DPS Data Center and the Information Systems Building)." While the initial focus of this policy is on the relocation of facilities, the OIT website (OIT, 2004a) offers some insight into the future phases of this project. These subsequent steps are:

- Operational Consolidation
- Product Standardization
- Support services centralization and consolidation
- Shared lines of service

In the following section of the paper, we identify and explain the theoretical framework that this research initiative will follow. Next, the proposed methods in which this research will be conducted are described. Finally, the overall research objectives and potential benefits of this investigation are presented.

RESEARCH APPROACH

Theoretical Foundation

Like all organizations, change within public sector organizations is often received with resistance. When organizational change involves information systems as the facilitator, resistance may stem from a lack of support from top management, technically poor systems, a lack of user-friendliness, and/or a negative costs-to-benefits analysis (Lucas, 1974; Alter, 1975). Given the inherent political nature of public sector organizations, assessing the socio-political impediments to systems implementation/integration is paramount in identifying the factors leading to resistance.

Markus (2002) provides a theoretical framework to assess the various factors associated with resistance to systems implementation. Drawing on the work of Kling (1980), Ginzberg (1974), and Alter (1975), Markus describes in detail the people-determined, systems-determined, and interaction theories for assessing the resistance to system implementation. The people-determined theory contends that resistance may have occurred because of factors internal to the person or group. The systems-determined theory asserts that resistance may have occurred because of inherent characteristics of the implemented system or application. Finally, the interaction theory maintains that resistance occurs because of interaction conflicts and characteristics related to the people within the organization (see Table 1) (Markus p.21, 2002).

For the purposes of our study we shall use the interaction theory as it provides the best framework with which to assess the multiple origins of resistance associated with the multi-agency data integration project undertaken by the State of Louisiana. Markus states that examples of explanations for resistance derived from the interaction theory are: "systems that centralize control over data are resisted in organizations with decentralized authority structures, systems that alter the balance of power in organizations will be resisted by those who lose power and accepted by those who gain it..." (Markus p.21, 2002). Both examples given are applicable to the present case study and warrant the use of the interaction theory primarily in our analysis. Louisiana's state government data integration project predicts to shift the balance of power in departmental fiefdoms by facilitating transparency of "proprietary" information long held by separate departments. Instead, information will be centralized and accessible by all departments as needed.

METHODS

The organization examined in our study is still in the early stages of its systems integration/implementation efforts. Because of this fact, our study is exploratory in nature and will initially generate more questions than it will answer. Our study fits the following characteristics appropriate for a case-study methodology:

1. Phenomenon is examined in a natural setting
2. Data are collected by multiple means
3. One or few entities are examined
4. The complexity of the unit is studied intensively
5. The focus is on contemporary events
6. Case studies are more suitable for the exploration, classification and hypothesis development stages of the knowledge building process (Benbasat, Goldstein, and Mead p.82, 2002).

We intend to focus our efforts initially on retrieving information from upper-level management from the main entities involved in the integration/implementation process including: Louisiana's Office of Information Technology, Office of Computing Services, and the Department of Public Safety. Through personal interviews, direct observations, and analysis of internal documents we hope to identify the source(s) of resistance to integrating/implementing the systems within these organizations. More specifically, we hope to begin assessing how the redistribution of power, facilitated by data centralization, factors in efforts to resist change.

FUTURE FINDINGS & CONTRIBUTIONS

It is the hope of the authors that this research will yield several contributions to the field of E-Government. First, this initiative will provide a thorough examination of Louisiana's current IT initiative, its intended objectives, a progress report based on the milestones set forth in the plan, and the benefits of achieved as a result of change. Second, a goal of this endeavor will be to provide further explanation of the resistance found in multi-agency data integration and service consolidation projects similar to the activities being conducted in Louisiana and to test Markus' predictions of resistance as specified in her 2002 work. Third, it is our hope that this project will offer extensive insight into the complications facing upper management, especially when handling latent issues. Finally, the stakeholder responses will be utilized to compile a list of lessons learned that will hopefully establish a guideline of best practices for navigating these highly-regulated and complex environments successfully.

	People-Determined Theory	System-Determined Theory	Interaction-Theory
Cause of resistance	Factors internal to people & groups---cognitive styles, personality traits, human nature	System factors, such as technical excellence and ergonomics---lack of user friendliness, poor human factors, Inadequate technical design or implementation	Interaction of system and context of use--- Socio-technical variant: interaction of system with division of labour, Political variant: interaction of system with distribution of intra-organizational power
Assumptions about purposes of information systems	Purposes of systems are consistent with Rational Theory of management, can be excluded from further consideration	Purposes of systems are consistent with Rational Theory of Management, van be excluded from further consideration	Socio-technical variant: systems may have the purpose to change organizational culture, not just workflow, Political variant: systems may be intended to change the balance of power
Assumptions about organizations	Organizational goals shared by all participants	Organizational goals shared by all participants	Socio-technical variant: goals conditioned by history Political variant: goals differ by organizational location; conflict is endemic
Assumptions about resistance	Resistance is an attribute of the intended system user; undesirable behaviour	Resistance is an attribute of intended system user; undesirable behaviour	Resistance is a product of the setting, users, and designers; neither desirable nor undesirable.

Table 1. Theories of Resistance and Underlying Assumptions – (Markus, 2002)

REFERENCES

1. Alter, S.L. (1975) *A study of computer-aided decision making in organizations*. MIT, Doctoral Dissertation, Cambridge, MA.
2. Andersen, D., Belardo, S., and Dawes, S. (1994) Strategic Information Management: Conceptual Frameworks for the Public Sector, *Public Productivity & Management Review*, 17, 4, 335-353.
3. Benbasat, I., Goldstein, D.K., and Mead, M. (1987) The case research strategy in studies of information systems, *MIS Quarterly*, 11, 3, 369-386.
4. Bloomfield, P., Westerling, D., and Carey, R. (1998) Innovation and Risk in a Public-Private Partnership: Financing and Construction of a Capital Project in Massachusetts, *Public Productivity & Management Review*, 21, 4, 460-471.
5. Ginzberg, M.J. (1974) *A Detailed Look at Implementation Research*, Massachusetts Institute of Technology, report CISR-4, Cambridge, MA.
6. Hardy, C. and Phillips, N. (1998) Strategies of Engagement: Lessons from the Critical Examination of Collaboration and Conflict in an Interorganizational Domain, *Organization Science*, 9, 2, 217-230.
7. Hosmer, L. T. (1995) Trust: The Connecting Link Between Organizational Theory and Philosophical Ethics, *Academy of Management Review*, 20, 2, 379-403.
8. Kling, R. (1980) Social Analyses of Computing Theoretical Perspectives in Recent Empirical Research, *Computing Surveys*, 12, 1, 61-110.
9. Lucas, H. C. Jr. (1974) *Why information Systems Fail*. Columbia University Press, New York.
10. Markus, M. Lynn. (2002) Power, Politics, and MIS Implementation, in *Qualitative Research in Information Systems*. Ed. by Michael Myers & David Avison. SAGE. London.
11. OIT (2002) *The State IT Master Plan*. Office of Information Technology – State of Louisiana, available at <http://www.state.la.us/oit/publications/master.htm>, accessed on 02/10/04.
12. OIT (2004a) “Centralization,” Office of Information Technology – State of Louisiana, available at http://www.state.la.us/oit/initiatives/ini_centralization.htm, accessed on 02/10/04.
13. OIT (2004b) “Policies,” Office of Information Technology – State of Louisiana, available at http://www.state.la.us/oit/publications/pub_policies.htm, accessed on 02/10/04.