

WHAT CAN PROJECT MANAGEMENT HELP US UNDERSTAND ABOUT THE
CALIFORNIA CASE MANAGEMENT SYSTEM (CCMS) IMPLEMENTATION IN
SACRAMENTO COUNTY?

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Abstract

of

WHAT CAN PROJECT MANAGEMENT HELP US UNDERSTAND ABOUT THE CALIFORNIA CASE MANAGEMENT SYSTEM (CCMS) IMPLEMENTATION IN SACRAMENTO COUNTY?

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This thesis investigates implementation of the California Case Management System (CCMS) in Sacramento County. CCMS is the information technology system used by California courts, and is funded through the Trial Court Funding Act of 1997 and the Trial Court Facilities Act of 2002. The system is evaluated using an implementation analysis framework and a set of best practices criteria for information technology transitions. It is recommended that the Legislature require the Administrative Office of the Courts adopt a reporting structure and process to increase accountability, mitigate risks, justify appropriations, and report budgetary expenditures. Sources consulted included case studies, project management reports, books, professional journals and scholarly articles.

Conclusions Reached:

It is recommended that the Legislature require the Administrative Office of the Courts adopt a reporting structure and process to increase accountability, mitigate risks, justify appropriations, and report budgetary expenditures into operation.

 _____, Committee Chair
Mary K. Kirflin, D.P.A.

August 8, 2009
Date

DEDICATION

From My Heart Sincerely,

To My Wonderful Husband, Albert *Michael* Alaniz

Whose Steadfast Love and Confidence in Me
Has Been A Constant Source of Strength

Omnia Vincit Amor
(Love Conquers All)

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Chapter 1

INTRODUCTION

Information Technology and the California Judicial System

California's judicial branch is the largest court system in the nation serving approximately 36 million people. The challenges and magnitude of serving the judicial requirements of this large population is underscored by Chief Justice Ronald M. George (2005) as he describes California as the "...Western World's largest court system, surpassing that of the federal system." California's court system includes more than 1600 judges and 400 court commissions... and until recently, coordination among the courts was sporadic at best" (p. 4), or entirely non-existent resulting in unpredictable and inconsistent processes.

In an effort to meet the growing expectations of the State of California's growing population and enormous judicial system, larger quantities of information must be processed quickly with a high degree of accuracy and a limited amount of resources. As all modern organizations increasingly rely on information technology (IT) systems for many of their core operational business functions, the court's task of processing and managing millions of filings, collecting and reporting revenues from fines, fees, and various court documents filed necessitates a reliable computer system.

Recent California legislative reforms and sweeping structural changes to consolidate all the different trial courts into a single unified whole have further increased the demand for effective services and made the integration of computer systems possible.

It is such integration that can create uniformity of services. Since inception, the judiciary in California and the administration of the courts has been a “hodgepodge of locally directed efforts” and, as a result, operationally led to incompatible computer technology, which created “an electronic Tower of Babel” (George, 2005, p. 5). Although court technology applications had evolved, software applications were dissimilar and ineffective in meeting the public needs. Consequently, all of California’s 58 county superior courthouses operated independently of each other with little or no sharing of information, statewide direction, uniform procedures, or coordination of services (Sipes, 2002, p. 263). To achieve the fundamental goal of the California judiciary, which is to *improve public access to a fair and impartial judicial system*, The Judicial Council of California determined to seek a stable budget source and successfully championed administrative reforms. The reforms transformed the judicial system and enabled the courts to completely overhaul the entire state’s administrative and technical operations.

In 1991, California’s legislature adopted the *Trial Court Realignment and Efficiency Act* and adopted provisions to achieve the technology reorganization desired for the future. Recommendations in this provision included the development of technology that would support the vision of information sharing that was easily accessible through common, well-understood technologies that provided convenient access to records, paperless on-line documentation, data integrated systems, and a comprehensive network that served the entire judicial branch, making court case information available to agency partners (Sipes, 2002, p. 266). In response to these

directives, a Court Technology Advisory Committee was formed in 1995 and subsequent mandates to improve the judicial administration system through the use of information technology led to the development of the California Case Management System also known as CCMS (Sipes, 2002, p. 267). CCMS is a new computer software system that underpins the premise that major judicial administration reforms were needed to resolve common technology problems, and that improved innovation would make the judicial process understandable and more accessible for Californians (Judicial Council of California [Judicial Council], 2007a). Inadequate technology systems threaten the ability of courts to provide impartial administration of justice and inhibit public services from being appropriately dispensed. Court technology was, thus, failing to meet the public expectation that the administration of justice is an impartial experience irrespective of the court size or location.

This thesis assesses the recent efforts to implement a new information technology system for the California Courts. Chapter 2 provides background about the court's structure and administrative needs. Chapter 3 reviews literature about large-scale information technology transfers. Chapter 4 develops a framework and assesses the California Court information technology transfer. Chapter 5 provides closing thoughts about the Court's experience as well as lessons for other entities taking on a large-scale transfer.

Chapter 2

BACKGROUND

The California Judicial Council obtained several long-sought reforms, making it possible for the judicial system to focus on improving business operations. They could also benefit from economies of scale achieved through the statewide application of software development to better accommodate a large demographically diverse population with increasing demands for immediate access to court documents and desire for high performance standards from the judicial system. Specifically:

- 1) In 1997, the *Trial Court Funding Act* shifted funding responsibilities from the counties to the state. This funding shift provided for a more stable computer system and equal form of funding for each constituent county courthouse.
- 2) In 1998, California voters passed a Constitutional amendment that provided for the unification of superior and municipal courts; hence, 220 trial courts were consolidated into 58 superior courts, one in each county.
- 3) In 2002, the *Trial Court Facilities Act* transferred ownership of the local courthouse facilities to the state. These building transfers were designed to improve the quality of California court facilities as well as improve security and structural safety and provide greater access for the handicapped.
- 4) In 2003, the Judicial Council (2007b) approved the implementation of the California Case Management System (CCMS), a statewide computer

technology system. The CCMS project was intended to modernize and interconnect the case management of court operations across the state.

- 5) In 2007, the Judicial Council of California approved major reorganization of the California Rules of Court. This enabled the rules and standards that govern court policy to be renumbered, reordered, better organized, clarified, and more *user friendly* for judiciary staff and the public (Judicial Council, 2007b, p. 2).

The restructuring of the entire court system in California also made it possible to design technology that could be customized for use in all 58 court counties, while still establishing common procedures that allow courts to integrate and exchange case information as well as leverage evolving technology innovations. The configuration of the CCMS system promotes economies of scale as counties benefit from enhanced computer development and sharing of information, while development or input costs for computer maintenance and support of existing obsolete computer programs progressively decrease (CCMS, 2007, p. 2). To meet these goals, in 2001 the administrative branch of the Judicial Council of California, known as the Administrative Office of the Courts (AOC), completed an assessment of the court's computer system in the State of California. AOC subsequently sought proposals from private vendors to assist in the development of CCMS and provide specific analysis, design, architecture, and network development consultation. To understand the context of the technology transfer, it is useful to understand the workings of the Court system.

Political Structure of the Court

One of the most influential writers on legal culture and the philosophy of law is Roscoe Pound. He wrote a seminal speech on administration in the judiciary, entitled *Mechanical Jurisprudence* (1908). In the work, he describes the need for, and importance of, courts having trained judicial administrators within the court system. He also first championed the theory of courts adopting organizational improvements similar to standards embraced by the private sector that promote efficiency in business operations. Pound acknowledged that some people have always been dissatisfied with the law, but contended that the courts need to be administered more effectively and described this in *The Causes of Popular Dissatisfaction with the Administration of Justice* (1906). These and other works by Pound are a treasure trove of ideas concerning the management of courts and include recommendations in administration that are still relevant today. In these articles and subsequent writings, Pound called for considerable improvement in court administration and the need for efficient framework for the advancement of the court to promote a well-organized business operation. Pound concluded that our administration of justice is not decadent; it is simply behind the times.

Judicial administration is sometimes distrusted by the public, in part, because of the notion, held by some, that the law may be unequally applied in favor of the rich as opposed to the poor. This perceived inequity can be exasperated when people perceive unequal access to automation and computer information on pending court matters. The causes of dissatisfaction as outlined by Pound with the system of law, are partly due to

the following: (1) The necessarily mechanical operation of rules, and, hence, of laws; (2) the inevitable difference in rate of progress between law and public opinion; (3) the general popular assumption that the administration of justice is an easy task, to which anyone is competent; and (4) impatience of restraint. Over 100 years later, many court administrators still consider Roscoe Pound's work remains relevant to addressing methods of judicial administrative procedures still needed to modernize the judicial system. There was a time in rural America when judges could singularly satisfy the administrative demands of running a court, but today the complexity of managerial functions, the large number of cases, high volume of people in the judicial process, and need for technological expertise require a variety of staff with specialized training to efficiently direct court operations. The challenge for some court personnel is the adjustment in staff skills required and transference of administrative control necessary to efficiently manage administrative operations. Schaeffer (1953) suggested that one of the principal difficulties encountered in "a centralized administrative control [within the court] has been a general resistance to change on the part of the legal profession" (p. 89). Since its inception, the California judicial system has operated independently without influence or control from other county courts or a centralized administrative agency. That was until recent years when the Administrative Office of the Courts (AOC) began directing processes and distributing resources. According to Harley (1917), there are two main elements in court administration dominant to understanding the judicial administrative business structure, 1) courts are extremely independent, decentralized

operations and 2) they lack characteristic administrative business controls common in most business organizations (p. 2).

The *culture of the court*, often cited by court watchers, refers to the premise that the court is immovable and since the judiciary operates with autonomy, it often exhibits a strong tendency to resist change from within the organization. It is often in opposition to any outside forces that may attempt to impose central control and diminish judicial independence. Noting the judicial resistance to change that exists within the court, Warren E. Burger, The Chief Justice of the Supreme Court of the United States (Burger, 1971) asserted, "since management of the courts are the ultimate responsibility of judges, they first must be convinced of the efficiency that computer technology can bring to management practices and that any changes will not impose on judicial independence" (p. 112). Schaeffer (1953) further asserted this notion of judicial independence stating that the difficulty of change in the court system stems from the general resistance to change on the part of judges. He believes that this mindset can lead to "inefficiency, antiquated practices and low standards of professional [or administrative] competence" (p. 90).

As judges often delay practical administrative reforms, they may at times also fail to recognize that others within the court structure (and public) also have a stake in administrative improvement and changes. Thus, they may realize an organizational scheme may even substantially improve procedural results (p. 90) for their business needs. The difficulty surrounds court autonomy and the judicial approach to business

operations. Schaeffer (1953) defines this as an *absence of integration* within the judicial branch. He asserts that it is an internal struggle for judges as they wish to retain control by using the defense that operational changes may result in process improvements. However, the change may also threaten the dignity of their office (p. 91) if the change requires them to amend any business processes they want to remain unchanged. Harley (1917) saw the desire for extreme decentralization as a lack of judges to effectively administrate and suggested that this position focuses not on efficiency, but instead on assuaging their peers (pp. 2-3). The adherence to judicial precedent and reluctance to make changes in court business processes may also at times inhibit imaginative innovation through the application of new ideas, which could enhance operational efficiency for everyone.

However, it is noteworthy that the court system is not unique in how it faces information technology changes. Davies and Hale (1986) cite the need for successful implementation of technology in public sector management as being dependent on an understanding of what technology can do and a sufficient appreciation of the complexity and dynamic need for improved organizational change processes (p. 516). Information technology transition is a tremendous undertaking even in the best of business environments, and implementing change requires a significant investment of people with skills to manage policy and planning duties, develop strategic objectives, and appropriate resources when resistance to change surfaces (p. 520). New systems and procedures shape the future of business, and success is contingent on the conceptual framework and

sequential patterns of action used to address each policy challenge. While people readily acknowledge the need for change, they are often unclear about how to achieve desired results, and may at times be unable or unwilling to adjust to new job requirements. In actuality, people often perceive change as irreversible and, therefore, sometimes struggle with a perceived personal loss of status, power, position, resources, or even their jobs. Many transition projects have been threatened, sabotaged, or destroyed because leadership did not adequately identify the process by which change could best be introduced, and it did not manage the scope of change and develop a change plan for implementation (Lefever, n.d., pp. 5-6) that could be easily communicated to the team.

California Court System Funding and Administration

Previous to the *Trial Court Funding Act* of 1997, the California Court System suffered from widespread uncertainties and disparities in resources among court systems throughout the state. Courts were unable to engage in long-range planning to improve computer system processes (Judicial Council, 2007a). The *Trial Court Funding Act* was effective in fiscally stabilizing the court, ended a bifurcated support structure between counties, and transferred full responsibility for trial court funding to California residents. This legislative act, thus, removed funding uncertainty and allowed the courts to implement long-overdue changes to its IT systems (Judicial Council, 2007b) incongruent on multiple operational levels. The restructure in California court system funding also permitted the courts to engage in structural reforms and dramatically changed the manner in which the administration of justice would be delivered to Californians.

It is important to note that public opinion about the overall performance of our state courts is vital because a lack of confidence in the judiciary can erode or implicate the fundamental values of our court system. Chief Justice, Phil S. Gibson, in an address to the State Bar (1957), concluded that “Respect for the law depends in large part upon the manner in which it is administered, and it is natural that people look to us, for the leadership that can assure them of an enlightened judicial system” (Judicial Council, 2006, p. 1). Thus, the perception that people have of the courts is closely tied to funding sources as the public demand processes that begin with *equal access to justice* and want assurance that quality and efficient court services will be provided regardless of the county in which the court is located.

While court funding has increased the capacity to provide public services, it has also has shifted accountability for the judiciary to the AOC for procedural items and to the California Legislature for funding, which has somewhat altered the political autonomy of the third branch of government. However, the long-term spending commitments that accompany centralized court funding also necessitate meaningful oversight mechanisms to ensure resources are dispersed appropriately and create continuous improvement.

As judges protect their independence to decision-making and act as administrators in court operations, the initiation of technological process change presents a dilemma in administrative controls for the courts. Friesen (1971) sees the need for change in administrative oversight as necessary, but describes the current court structure with

judges controlling the outcome as detrimental to progress. Friesen describes the need for change stating that “[judges] defending their own independence tend to [believe they are] protecting the individual freedom of all judges in the system, even when such freedom is destructive of necessary administrative action. (p. 122).

Rationale for California’s Court Technology Transition

Prior to CCMS implementation, California superior courts were using more than 70 different case management computer programs, all of which were incompatible with each other and outdated. In addition, in 2002, the AOC determined that a number of courts were facing critical system needs, significant maintenance costs to continually operate the odd assortment of incompatible computer systems that, despite infusions of time and resources, remained unreliable and unable to meet legislative reporting requirements. In an effort to combat growing technology concerns and support the modernization vision of the Judicial Council in 2002, the decision was also made to develop a statewide single computer application (Judicial Council, 2007a) which could be used across the entire state. This directive resulted in the AOC requesting proposals from leading computer software design consultants who could provide analysis, design, and architecture and develop a single unified system that would serve the needs of California courts (Judicial Council, 2007b, ¶ 1). The result of this search led to the California Case Management System (CCMS), which upon deployment would provide users with improved access to court information and achieve the overarching goal of making California court’s venue transparent. Venue transparency enables court users to access

court documents, forms, and relevant case data to conduct court business from any location in the state (Judicial Council, 2006) It includes the ability to simultaneously download or extract information from court files from any location in California. The AOC subsequently created an in-house oversight committee to plan, design, and guide the CCMS project implementation. This committee of decision-makers was comprised of a presiding judge, executive officer, and information technology representatives from superior courts selected to pilot the CCMS project and included Sacramento, Orange, Ventura, San Diego, Los Angeles, Alameda, San Francisco, Monterey, Riverside and San Bernardino counties (Judicial Council, 2008a).

CCMS Central Goals

CCMS was designed to dismantle the disparity among court counties and thereby uphold the principle of *due process* of law established by the Constitution of the United States designed to protect the legal rights of every person and guarantee fair and efficient handling of judicial matters. As it was determined that unequal access to court information unintentionally created barriers to access, the enhanced computer automation of CCMS and venue transparency was considered a requirement, not merely a business objective that would permit people to conduct court business from various locations throughout the State of California (George, 2005). Additional objectives identified for CCMS technological development included the need for uniform case processes, timely adjudication of cases, improved ability to monitor case progress, enhanced trend tracking, and the ability to prepare statistical data reports mandated by the legislature. Most

importantly, it would meet the AOC's goal of *equal access to justice for all Californian's* through venue transparency.

Preliminary CCMS Goals 2004

To stabilize the court computer systems and address information technology challenges in the State of California, the AOC developed nine integrated goals for enhanced services (see Table 2.1) with CCMS as the proposed model (AOC, 2004).

Table 2.1

Preliminary CCMS Goals 2004

Preliminary CCMS Goals 2004	
1	Provide secure mechanism for exchange and sharing of information.
2	Ensure delivery of information from one application system to another.
3	Enable interface with justice partners with minimal changes.
4	Maintain integration functionality and capabilities comparable to current systems.
5	Provide an efficient, cost-effective solution to integration requirements.
6	Facilitate the transition toward unification and standardization.
7	Provide a solution that is robust, scalable, and manageable to meet current and future needs.
8	Support and accelerate adoption of data exchange standards.
9	Eliminate redundant effort and achieve economies of scale in interface development.

CCMS was, thus, developed to replace a fragmented state computer system, establish a direction and set priorities for the continual improvement of the court system's

(Judicial Council, 2007a) information technology. Sipes (2002) defines the CCMS goals as the first part of the AOC's effort to develop statewide court automation standards, which resulted in extensive recommendations for the creation of a "preferred future" for the judicial branch by increasing Californians' access to information about court processes. Hence, in 1995, The Judicial Council created the *Court Technology Advisory Committee* and adopted a *Strategic Plan for Court Technology* and a *Tactical Plan for Court Technology* (p. 262), which led to an additional six goals being added to the CCMS technology information blueprint:

1. Access, fairness, and diversity;
2. Independence and accountability;
3. Modernization of management and administration;
4. Quality of justice and service to the public;
5. Education for branch wide professional excellence; and
6. Branch wide infrastructure for service excellence.

Modified CCMS Goals 2007

In 2007, the AOC again expanded CCMS goals as the project scope continued to evolve and the initial goals as defined in 2004, proved insufficient to address project planning and long-range strategic business requirements. Thus, in April 2007, the Judicial Council included IT project management performance measures that could integrate technical design requirements and judicial administration objectives. The Modified

CCMS Goals as presented in the CCMS Report Dated April 2, 2007 are detailed in Table 2.2.

Table 2.2

Modified CCMS Goals 2007

Modified CCMS Goals 2007
1. Manage the needs of the courts by allowing each court to configure CCMS to fit the uniqueness of its county.
2. Support courts of all sizes and maintain local needs and system enhancements, as well as those that arise from legislative changes.
3. Maximize the benefits of automation by standardizing court business processes and by establishing standard procedures that make it easy for courts to use a common solution with minimum customization.
4. Use a common approach for all case types based on best practices, a contemporary architecture, and continued technology evolution.
5. Integrate with state and local justice partners and state administrative systems also known as "venue transparency." This will allow system integration and enable transference of court cases throughout the state without the need to physically move (what can sometimes be) enormous amounts of court documents.
6. Facilitate state ownership and maintenance of developed software to produce cost benefits resulting from transitioning from a vendor to a state system.
7. Ensure reasonable development times and demonstrate capacity to succeed, i.e., deployment and production in a court environment.
8. Maximize economies of scale and leverage shared resources.

Chapter 3

LITERATURE REVIEW

Research concentrates on available studies that relate to IT project success.

However, it also includes IT failure variables most often cited by researchers in the literature and focuses on the factors whose presence or absence have been documented to significantly impact IT project success. The 11 Identified Obstacles to IT transition have been cited by the researchers in Table 3.1 as those most to likely to prevent IT success.

Table 3.1

Identified Obstacles to IT Success

Identified Obstacles	Researcher(s)
<p>1. <u>Failure to assess quantity of activities and duration</u> for task completion. Lack of specifics built into the IT transition process so that activities are estimated, scheduled, and tracked with specific start and stop points.</p>	<p>Schmitt (1978); Davies & Hale (1986); Dainty & Kakabadse (1990); Cats-Baril & Thompson (1995); Larsson, Wall, Norstrom, & Crnkovic (2006); Lefever (n.d.)</p>
<p>2. <u>Conflicting, vague or shifting technology design specifications</u>. Create stable and explicit design requirements and identify key decision makers to prevent contradictory system modifications or experimental testing that causes confusion, delay and cost overruns.</p>	<p>McGowan & Loveless (1981); Davies & Hale (1986); Rubin (1986); Dainty & Kakabadse (1990); Larsson et al. (2006)</p>
<p>3. <u>Ambiguous or undefined roles and responsibilities</u> for those involved in planning IT implementation. Lack of clarity in user involvement and tasks.</p>	<p>McGowan & Loveless (1981); Rubin (1986); Davies & Hale (1986); Willcocks & Lester (1997); Lefever (n.d.)</p>
<p>4. <u>Vague Business project structure</u></p> <p>Project goals insufficiently aligned with a business project plan that details the decision process to be used to identify problems and develop solutions between the outside consultants, internal IT staff and users developing the system.</p>	<p>Schmitt & Kozar (1978); McGowan & Loveless (1981); Rubin (1986); Davies & Hale (1986); Dainty & Kakabadse (1990); Bretschneider (1990); Cats-Baril & Thompson (1995); Willcocks & Lester (1997); Kraemer & Dedrick (1997); Liker, Haddad & Karlin (1999); Bajjaly (1999); Wholey (1999); West & Berman (2001); Larsson et al. (2006); Lefever (n.d.)</p>

Table 3.1 continued

Identified Obstacles	Researcher(s)
5. <u>Poor team communication</u> including performance goals, milestones, and timelines. Share activity information and foster an open environment to discuss goals, shortcomings and provide team guidance.	Davies & Hale (1986); Rubin (1986); Dainty & Kakabadse (1990); Kraemer & Dedrick (1997); West & Berman (2001); Lefever (n.d.).
6. <u>Unidentified activities</u> , critical paths and contract acceptance criteria. Agreement lacks specifics to adequately manage targeted completion of phases.	Schmitt & Kozar (1978); Rubin (1986); Davies & Hale (1986); Dainty & Kakabadse (1990); Willcocks & Lester (1997); West & Berman (2001)
7. <u>Insufficient cost/benefit analysis</u> and/or unrealistic expense commitments. Decisions on data variables to collect and track inefficiencies were not defined or measured.	Rubin (1986); Davies & Hale (1986); Dainty & Kakabadse (1990); Bretschneider (1990); Cats-Baril & Thompson (1995); Willcocks & Lester (1997); Kraemer & Dedrick (1997); Liker & Karlin (1999); Bajjaly (1999); Wholey (1999)
8. <u>Inexperienced staff</u> in IT implementation. Staff inexperienced with IT transition projects complicate the process and create knowledge gap challenges.	McGowan & Loveless. (1981); Rubin (1986); Davies & Hale (1986); Dainty & Kakabadse (1990); Cats-Baril & Thompson (1995); Kraemer, & Dedrick (1997); West & Berman (2001); Larsson et al. (2006)
9. <u>Lack of coordination of activities</u> between work groups and outsourced activities.	Rubin (1986); Dainty & Kakabadse (1990)
10. <u>Ignorance of IT system complexity</u> sufficient to identify system defects or reconcile system design with process changes and develop processes to mitigate risk and prevent failure.	Rubin (1986); Dainty & Kakabadse (1990); Bretschneider (1990); Cats-Baril & Thompson (1995); Kraemer & Dedrick (1997); Bajjaly (1999); Larsson et al. (2006); Lefever (n.d.)

Table 3.1 continued

Identified Obstacles	Researcher(s)
11. <u>Inadequate resource planning</u> including logistics, equipment and staffing needs.	McGowan & Loveless (1981); Rubin (1986); Davies & Hale (1986); Dainty & Kakabadse (1990); Bretschneider (1990); Willcocks & Lester (1997); Wholey (1999); West & Berman (2001); Larsson et al. (2006); Lefever (n.d.)

Information Technology Transition Best Practices

In the recent years since CCMS development, there has been increased attention on California's statewide technology initiatives and project management techniques that are used to improve organizational performance. This focus has led many to suggest that the courts should be more transparent and apply IT management processes to assist the court in meeting goals for deployment. IT research has most often attributed IT transition failure and/or difficulties to management's inability to control, organize, and plan the process to prevent such occurrences. Hence, a project design for the entire State of California is should include a high level of expertise.

There is a wealth of information on information technology transition in both the private and public sectors and this researcher's of this topic discovered that researchers in this field routinely embrace central factors as vital to IT transition process success. The foundational studies in IT and project management techniques conducted by Schmitt and Kozar (1978), McGowan and Loveless (1981), Davies and Hale (1986), Dainty and Kakabadse (1990), Cats-Baril (1995), Kraemer and Dedrick (1997), Willcocks and Lester

(1997), Larrison, Wall, Norstrom, and Crnkovic (2006), Lefever (n.d.) often refer to six primary IT transition success factors. Therefore, the author has elected to concentrate on the aforementioned factors as they routinely appear in the literature as vital elements to success.

The six *IT Transition Success Factors* identified in this research include: 1) the technology size and scope, 2) newness of technology, 3) business and project structure, 4) expectations and goals established, 5) strategy used for implementation, and 6) appropriate cost vs. benefit analysis of implementation. The latter develops performance measurements and enables the analysis of numerical data that can be used to ascertain achievement and correlation of project goals. As evidenced by the literature, *IT Transition Success Factors* are repeatedly cited and, thus, have been selected to form the central focus of this research.

Information Technology Implementation Risks

Why do researchers in the field of information technology and project management repeatedly state that IT projects are risky? What makes information technology projects different than other business tasks? In reality, IT projects are often designed using previous project failures as a guide and are often mapped according to the previous successes and failures of past experience. In fact, numerous case studies exist that attest to the difficulty of technology transition because of the high cost associated with IT transition in a number of areas including the disruption of business operations, the high degree of design variation, staffing requirements, involvement of outside

consultants, unclear expectations, and constricted schedule demands. Successful IT projects are often successful because people have identified strategies that work, have isolated previous pitfalls to avoid repeating them, and are able to apply that knowledge to the current business situation.

Public organizations, such as the court, recognize the value of computers and the technological sophistication that can be achieved to access accurate information and organize enormous amounts of data quickly. However, organizational deficiencies in the area of project planning and risk assessment, and lack of in-house IT expertise often continue to inhibit IT transition. Further, technology studies systematically analyze information technology from the perspective of performance management (Wholey, 1999), quality services and strategic plans (Bajjal, 1999), management philosophy (Liker, Haddad, & Karlin, 1999), differences between the public and private sector (Cats-Baril & Thompson, 1995; Kraemer & Dedrick, 1997), and the lack of attention to planning (Davies & Hale, 1986). However, existing research does not sufficiently blend available IT information and identify the most important factors that can provide detailed direction for the decision-makers on project management. Nor does it allow for easily pinpointing the proven strategies for successful IT transition projects and applying them to their business culture.

Framework for Information Technology Implementation Analysis

To adequately develop processes to mitigate risk, it is important to consider historical project information on similar projects and use the lessons learned as

foundations for planning IT implementation, while also generating ideas through team brainstorming (Kendrick, 2003, p. 10). Dainty and Kakabadse (1990, p. 464) and Liker, Haddad, and Karlin (1999, p. 578) contend that organizational change and successful implementation begin with three primary considerations or business process improvement (BPI) methods that can be expanded upon, but not contracted:

1. The why of change – why change? Define the strategic goals or reason for change and establish the purpose or expectations the change will bring about.
2. The what of change – what specifically is to be changed? Consider the overall content, size, and scope of change, as well as what will change as it relates to the distribution of responsibilities among people affected by the project.
3. The how of change – how will this change be introduced? How the change is developed in terms of the overall process or methods and how this will affect the timing of each phase as the project unfolds.

Authors Dainty and Kakabadse (1990) further build on the above ideas using a framework for the entire IT implementation process using eight organizational steps for the project start to finish (p. 467).

1. Diagnose the problem to be solved
2. Collect data and information
3. Determine goals
4. Select a program design
5. Plan and problem solve
6. Create a climate for change
7. Implement Change
8. Evaluate effectiveness and modify strategy as needed

As most IT transition difficulties are due to management's inability to control, organize, and plan the process to prevent such occurrences, it is important to begin with an IT transition outline that includes clearly defined, achievable expectations and project outcome measures to gauge success.

If business processes are not closely aligned with the organization's goals, successful system performance cannot be adequately measured. It is also important to realize that an organization's goals or "problems to be solved" are the key drivers for the business process and everything including people and resources are aligned to meeting such goals. The next step is organizational change planning, which is contingent on skilled leadership and subject matter experts (SME's) that thoroughly understand the

business process for the collection of case data. It also includes involving the individuals who have a desire for change, making people ready for change, giving appropriate direction, and freezing the change so new processes are deliberate and fixed (Dainty & Kakabadse, 1990, p. 466). Researchers McGowan and Loveless (1981) also suggest the need for knowledge and subject proficiency and refer to the lack of area expertise as a major obstacle to efficient operations when strategizing IT transition. They caution that staff turnover may also be an inhibitor to success (p. 334). While Rubin (1986) has pointed out the complexity of the IT challenge as one that requires skilled personnel, he also notes that projects often struggle with a shortage of knowledgeable personnel in IT transition and suggests that users be extensively involved in the development phase to increase accuracy and commitment (p. 543).

IT Implementation is often evaluated in the context of for-profit business versus non-profit organizations or government agencies. However, the differences in how these businesses should proceed as it relates to IT transition processes deserves consideration as IT projects dramatically affect business operations. Bretschneider (1990), as well as Cats-Baril and Thompson (1995), identified some lessons to be learned in IT implementation in the public sector and suggest the differences in how the public and private sectors' manage IT is in fact a direct issue that can affect overall success. They point to the central differences between the aforementioned organizations but conclude that planning is a major component of management that puts these two sectors in identical places of organizational need. They suggest the differences are that the public

sector is mired in procedural delay (red tape) and lacks management personnel that can adequately evaluate IT process changes at the organizational level (Bretschneider, 1990, p. 537; Cats-Baril & Thompson, 1995, p. 560).

According to Rubin (1986), "the public sector has received little attention to date and this has resulted in a lack of appropriate processes for the development of information systems for public organizations" (p. 540). In addition, he indicates that public organizations do not operate in a "timely manner" and are not sufficiently performance-based to develop appropriate benchmarks and construct competent cost metrics. Authors Dainty and Kakabadse (1990) also cite the need for additional research in public IT transition projects (p. 536) and Cats-Baril and Thompson (1995) note the frameworks do not sufficiently recognize the public sector and techniques that can be applied to both types of organizations (p. 559). Kraemer and Dedrick (1997) note that despite the fact that the use of computers has increased at all levels of government, research on IT in government has declined (p. 89). Studies continue to focus on the differences between the public and private sectors but do not sufficiently focus on management structure, decision-making processes, or organizational politics that resist new technology, all which may include lessons equally applicable. Davies and Hale (1986) suggest that the lack of attention given to the public sector is related to management information and organizational change issues. Further, they contend that state agencies are frequently unable to adequately determine how improved IT processes can support their organizational goals. They often fail to understand the project scope,

underestimate resources (fiscal investment and staffing) required, and, therefore, are unable to incorporate IT business process improvements for IT transition success. Wholey (1999) describes public organizations as grappling with increased demand for effective services and low levels of public trust. He suggests that performance-based management or managing for results would increase accountability and demonstrate measurable progress to better meet program goals.

Summary

Information technology transition is filled with risk and unless project expectations and tasks are clarified and goals identified with specific, manageable intermediate goals; business operations can be overwhelmed. Failed and poorly managed projects cost companies and government agencies billions of dollars every year, yet, in many organizations, there are no formal processes for the effective selection and management of projects. To overcome the failures of poorly managed IT transition projects and the misuse of resources and low employee morale, organizations should look at the reasons their projects are not successful and those that have been run efficiently. Understanding the organization priorities, performing an analysis of why changes are being considered, what is being changed, and how they should be changed will help develop a necessary framework to begin. Then a framework can be built for the different elements that must be considered and the issues that ought to be addressed to ensure that IT transition is smooth and as uneventful as possible using the proven principles of IT management in the planning process. McGowan and Loveless (1981) state that public

administrators are more frequently being called upon to deal with policymaking. Hence, they increasingly need to become adept at developing techniques in information technology transition processes that can be incorporated into the decision-making process by using a variety of information resources to determine responsibilities and organizational controls. The six IT transition success factors have been identified in numerous studies, which indicate that public organizations, such as the courts, share a common characteristic: the need to acquire and expertly manage information in a computer-based information age.

The methodological framework for evaluating IT transition success suggested by Willcocks and Lester (1997), Dainty and Kakabadse (1990), and portions by Larsson et al. (2006) advocate central measures that can be used to assess IT project performance and which this researcher proposes be used to plan successful IT transition.

Chapter 4

METHODOLOGY, ANALYSIS, AND FINDINGS

Information Technology Transition Success Factors

Noting that there are several reasons why projects fail, Phillips, Bothell, and Snead (2002) caution executives that IT projects often fail because they lack a clear or common vision, change direction mid-project, exhibit conflicting and/or unrealistic expectations, begin with insufficient area expertise, illustrate poor planning and communication skills, misallocate staff resources, and consist of poor leadership. The ability to coordinate multiple tasks, for a large number of people coupled with the ability to communicate strategic information is a leadership skill that can maximize monetary investments and increase the probability for project success. Key factors to a successful IT transition include good project management, administrative and technical expertise, and staff participation in the development of realistic goals and system expectations.

West and Berman (2001) focus on the need for *revitalized management* and suggest that IT success also depends on the openness of dialogue, mutual support structures, and the encourage of risk-taking by employees and management alike, which they contend increases organizational effectiveness as employees will identify and creatively solve problems (pp. 235-236). The hypothesis rests on the notion that IT success is contingent on well-designed business process models and leadership's role in closely managing the project to communicate ideas and achieve organization objectives using the team approach (p. 237).

Schmitt and Kozar (1978) provide an IT case study analysis with the central focus that IT success is inhibited by organizational deficiencies in particular citing the project planning and control (p. 7). Further they state that project success rests on user involvement, mission clarity, accountability structures and considerable discipline by those involved in the project (p. 11). Bajjalý's (1999) research on IT transition in the public sector centrally focuses on "reinventing government" and suggests that strategic planning and measuring efficiencies in work processes to be changed should be the central focus, not merely cutting costs, as these factors can best gauge success, but believes that too few agencies have indicators in that can gauge the achievement of redesigned job activity objectives (pp. 40-42).

It is noteworthy that nearly every researcher in the field of IT project management recognizes the importance of IT project management and share opinions on the numerous pitfalls or failures commonly associated with IT implementation. And, despite the often-repeated citation that insufficient data is available regarding large-scale public sector IT transition projects upon which to base their final analysis, it is my contention that such research is available when these studies are reviewed over a period of years. Research conducted on information technology does recommend steps that can enhance the probability of IT success and the wide variety of sources collected, demonstrates that sufficient indicators do exist to add to the knowledge base of business management processes.

The indicators that have been extracted from this information assisted in the development of the *IT Transition Success Factors* (see Table 4.1). The remainder of this study will focus discussion on the factors in Table 4.1 and provide more discussion on how these could benefit public agencies attempting to adopt IT and specifically relates this to the CCMS project in Sacramento.

Table 4.1

IT Transition Success Factors

Item	Success Factor
1	Size ¹ and Scope of the Project
2	<i>Newness</i> of technology to be implemented
3	Business and project structure
4	Expectations and goals established
5	Strategy used for implementation
6	Cost vs. Benefit ² Analysis of implementation

Information Technology Size & Scope

Researchers Willcocks and Lester (1997) underscore the importance of adequate analysis being performed on the project scope and the size as a primary necessity for organizations to fully appreciate. A failure to adequately determine the total investment

¹ Size: a) Small – department; b) Medium – single organization; c) Large – statewide or company-wide

² Cost/Benefit Analysis is typically measured using financial costs and benefits. Limited financial information exists on this project and intangible items require consideration within this analysis; therefore an estimated value for these are introduced but inevitably brings an element of subjectivity into the process.

of resources required is often the first serious flaw in the planning cycle (p. 1083). The processes include evaluating expectations, measurement of tasks for desired improvement and how success will be measured for each undertaking. A cautionary note is cited by Cats-Baril and Thompson (1995) as public organizations involved in IT transition are frequently over budget, behind schedule, and produce fewer benefits than initially anticipated (p. 55). The inability to reach or measure performance outcome is a consequence of not fully specifying productivity expectations and can be a result of not fully developing a strong correlation between the size of the expenditure, the process features implemented, and the willingness to pay. Further, an important aspect of the business management is being able to make the proper assessment of investments in employee and fiscal resources to determine and evaluate productivity techniques and adopt processes conducive to objectives.

The Judicial Council IT advancement vision for the State of California court system is to dramatically modernize technology so the entire state is unified in operations using uniform systems and all Californians who work or use the court system can simultaneously access court documents. In fact, California Supreme Court Chief Justice Ronald George established an aggressive timeline and scope of the project and indicated that the goal was for all California's 58 counties to be using the California Case Management Systems (CCMS) by 2010. The difficulty appears to be, in part, the enormity of the technological goals to be achieved in a relatively short time frame. This ambitious goal includes the development of a customized computer system sufficiently

flexible to manage legislative changes, fit the specific needs of each county, standardize business processes, leverage shared resources, assist in the fair and prompt disposal of cases, and, at the same time, improve public access to case records. To accomplish this task, the IT transition of 70 different computer systems would have to operate simultaneously with the new CCMS system prior to dismantling the other computer software systems in use. In addition, since a “pre-built” computer information system to meet specific court requirements was unavailable, given the unique needs of the courts, a customized design would be developed with each of the pilot courthouses making recommendations they desired to have incorporated into the final product. To coordinate the design of CCMS and manage the project structure, the AOC sought proposals from IT vendors and made the decision to hire an outside consulting firm (Deloitte Consulting) to build a tailor-made system and work with the designated courts to meet their objectives.

Willcocks and Lester (1997) express the concern in IT out-sourcing, as it is important if not vital to success for vendors to properly assess in-house capabilities and integrate those most knowledgeable about information systems (p. 1089). In addition, the size and scope of decisions need to link not just with evaluation of existing operations but must be tied to methods of organizational assessment for timely decisions and strategic planning. The suggestion is to pay IT vendors for the initial assessment and determination of benchmark and IT enhancements, but promote the notion that in-house knowledge or subject matter experts familiar with the business can most ensure omissions are avoided and goals met. IT efficiency in performance is, in part, contingent on the overall

investment business professionals make in time to adequately develop a precise business strategy and properly evaluate techniques for implementing the new processes with end users. In this regard, reliance on the *LAO Analysis of the 2004-2005 Budget Bill*, which cautions the AOC and at the same time suggests that projects of this size and scope include supporting data to mitigate the risks that are inherent with IT projects of this size are recommendations that should not be overlooked (§ 14-18). The court CCMS project is a statewide project that requires an enormous amount of resources and yet planning data was either insufficiently developed or not made available that could provide reassurance that the size and scope of this IT projects and the multiple layers of tasks were considered.

Newness of Technology to be Implemented

The success of IT transfer is also dependent on factors including the maturity or the “newness” of technology. Authors Larsson and Wall (2006) define the newness of technology as maturity of technology and divide this idea into phases from unclear and ambiguous to thorough crystallization of technology capabilities and knowledge disseminated to the staff (p. 2). The suggestion is that there is a life cycle to technology transition and its maturity or thoroughness in development and completeness in which the product has proven its efficiency and usefulness to the customer. Large-scale transfer of technology requires countless interconnections in programs and extensive hours to work out program “bugs” that are inevitably part of new computer programs and which can create frustration, increase time commitments and result in cost overruns. Many large and

complex IT projects have taken many years by both the IT vendor and user to properly develop and implement systems as intended. IT transition and the development of new processes result in many unanticipated consequences and management must remain focused and ensure that IT is resolving immediate problems, long-term goals remain in focus, and staff retain confidence in the system's long-term ability to meet organization needs. Larsson et al. (2006), caution organizations to develop new technology over a period of years while carefully matching goals to system development and ensuring that long-term strategic goals are being address, not merely short-term difficulties in business performance (p. 2).

IT transition success is affected by several factors, but the newness of technology such as that of CCMS was untested and, thus, required intensive collaboration with IT developers, consultants, and a staff expert on system process requirements. Deployment difficulties and various adjustments to an untested system is evidenced as management continually shifted design specifications and expanded initial 2004 CCMS goals as the 2007 goals move from predominately technical requirements to modified business management process changes. Nevertheless the court did not address the long-term strategic goals for new technology transition as this is a process that takes years to develop and requires a significant amount of project management expertise that includes clear objectives and priorities to prevent daily project adjustments during project transition. Technology transition is fraught with risk and developing long-term strategic goals mitigates this. However, an analysis of the State Trial Courts found that project

development and oversight risks are large and are much more difficult to implement because they require a high degree of IT management expertise (Larsson et al., 2006) as well as a keen understanding of the risks associated with implementing untested technology projects. The LAO (2004a) conducted a *Budget Analysis of the State Trial Court Funding* and concluded that the court's IT transition process was too risky as project development and oversight risks were too large, but there is not a requirement for the judicial branch to provide either the Executive or Legislative branches with relevant project planning or implementation information; significant deficiencies are apparent. However, according to the LAO *Analysis of the 2004-2005 Budget Bill* (2004a), they were unable to obtain any supporting data from the AOC that clearly defined CCMS IT business processes, reports or cost-benefit analysis information to ensure that risk was sufficiently mitigated and oversight plans were in place for a new, state-wide IT project of this type (§ 14-18).

Business and Project Structure

Today, it is second nature in businesses to cite efficiency as a central goal, but it is also necessary to include an IT framework for achieving business objectives. The fact is that CCMS or any project of this size or nature is such an enormous undertaking for any type of business; having a sufficiently detailed business project structure to accomplish the goals is necessary. Research studies (Larsson & Wall, 2006) conclude that there are many drivers that define technology success but suggest that this begins with a strategy that includes intensive collaboration among users (p. 5). The importance of a technique or

strategy that sufficiently develops the project structure to be followed is also expressed by McGowan and Loveless (1981) and Rubin (1986) as the need for information management strategies and operational expertise so problems that occur can be properly valued and resolved.

Other researchers cite the differences between public and private organizations are necessary to understand as defined by Bretschneider (1990) and West and Berman (2001), as management practices define expectations for staff involved in the process. Research studies conducted by Cats-Baril and Thompson (1995), indicate that organizational structures, planning processes, policy formulation, and accountability differ significantly in the public sector as compared to the private sector and this also affects the management techniques used for IT transition projects (p. 560).

The use of a detailed project structure improves the probability for success as IT projects are complex, multi-layered and require constant modification of resources to prevent frustration associated with changes in the workplace. When projects fail to meet expectations, exceed cost estimates and time for implementation, companies and clients are often disappointed, but it is due, in part, to the fact that people involved in IT transition are not necessarily experienced in managing IT transition projects and at times are performing tasks outside of their expertise. According to Phillips et al. (2002), the number of organizations using project managers for IT transition has increased, and this is especially true as it relates to the private sector. Perhaps the increase in the need for project managers is due to the fact that information technology requires a level of IT

expertise and many people do not know how to work on these types of projects to accomplish established goals (p. 4).

The challenges of developing an IT project structure may be further complicated in the courts, as Harley (1917) indicates that transformation in the administration of justice includes two main elements that dominate their business process structure and these are "extreme decentralization and a total lack of administrative control" (p. 2). He further suggests that judges tend not to focus on increasing administrative efficiency, but instead look toward assuaging their peers and adherence to precedence. The business administration of the court is focused on the expertise of judges as arbitrators of the law, not the expertise of administrative support staff and this notion may exhibit the exhaustive business structures necessary for IT transition. Although this may not appear an important consideration, this, in fact, affects the ability of judicial administrators to develop business plans or processes without the full consent of judges. As judges are elevated to administrative positions by regular apportionment or rotation schedules, they do not necessarily value or possess business management skills that could promote efficiency (Harley, 1917, p. 24). This is also suggested by Gable (1971) as a challenge for courts to develop good business project structures, as the practice of rotating judges into administrative roles on the basis of seniority and need to obtain acquiescence on the desirability of management changes (Gable, pp. 135-142) is not conducive to developing efficient business practices. As the presiding judge is selected from elections held every two to four years (depending on the county in which the court resides), this process

leaves the administrative leadership of the court in a constant state of change as new leadership frequently alters the business objectives.

The business structure of the court is a challenge because the court system is inherently predisposed to tradition and extends this idea to judicial individuality and independence, which often prevents business change from occurring. The challenges for the court include employing a staff with sufficient skills to implement complex IT projects and will by necessity require that some administrative authority be decentralized from the judges who exercise control over every facet of administration in the courts. Schaeffer (1953) asserts that this inattention to administrative fundamentals in the courts have often frustrating those interested in improvement and suggest that there are those who simply fail to grasp the process or need for change (p. 93). Further, Schaeffer (1953) indicates that effective court organization techniques and the application of tested business principles are often met with judicial opposition as some judges believe management control or procedural changes are a “threat to their dignity” and judicial independence (p. 91). James Q. Wilson (1989) has written that, “The chief result of the concern for turf and autonomy is that it is extraordinarily difficult to coordinate the work of different agencies...” and government agencies tend to “...view any interagency agreement as a threat to their autonomy” (p. 192). Nevertheless some people recognize the need for CCMS to have strong skilled leadership for the IT transition process, for example Mike Roddy, Chief Executive Administrator of the Superior Court in San Diego County stated that,

The importance of staff expertise is needed for the CCMS IT project

If the data network is to be a reality, statewide leadership will be necessary to: ensure the installation of compatible hardware and software; develop norms and standards for access; create safeguards for transmitting and using sensitive information; and standardize nomenclature and procedures among court staff working as a *blended team* (p. 20) of people serving in different capacities to develop project objectives.

In 2004, the LAO evaluated the oversight project development plan provided by the AOC for CCMS implementation and determined that the courts did not have sufficient information to do their job effectively. This report did not contain the necessary elements to evaluate project exposure and determine risk structures. In fact, as the AOC is not required to follow the State's IT review process to secure approval or funding; reports are either not available or incomplete.

The AOC report does not contain information on cost-benefit analysis or identify measurable project objectives at each phase. Moreover the reports do not establish standards that require certain levels of project oversight or risk management. The LAO concluded that the courts are at great risk for cost overruns, delays and lack adequate funding to complete the project as envisioned and recommend that these deficiencies can be mitigated if the AOC used the same process that other California departments use to obtain project approval and funding (LAO, 2004b, ¶ 18-22). However the AOC is not required to provide either the Executive or Legislative branches with any IT project

planning, development or implementation data for evaluation (LAO, 2004b, ¶ 15-16) and without this impetus it is unlikely that the courts would accept that recommendation despite the possibility that it could assist in the development of CCMS and increase performance goals.

Expectations and Goals Established

The CCMS project was designed to meet goals established by the AOC and create a method for uniform case processing, timely adjudication of cases, improved ability to monitor case processes, enhance trend tracking, and enable the courts to prepare statistical reports as mandated by the legislature. An underpinning to these initial goals was the notion that Californians would be provided *equal access to justice* through venue transparency. The IT goals must be measurable in order to determine if they are successfully achieved. Many of the court goals as outlined in 2004 (see Table 2.1) and 2007 (see Table 2.2) were not quantifiable objectives that could be verified.

First, goals need to be achievable and terminology sufficiently precise. For example, CCMS goals were not defined nor was the terminology used to describe them clear enough to prevent misinterpretation. In fact, many CCMS goals were ambiguous “good intentions” such as CCMS should: increase efficiency, make minimal changes, be a robust system that is cost-effective, eliminate redundancy, be fair, and modernize operations.

Second, goals must be further defined to create sufficient precision for successful IT transition. To determine if goals were achieved, they must be measurable and

specifically defined so they can be tied to specific project tasks assigned to team members. If goals are not sufficiently clear, assignments cannot be delegated and achievement of objectives will remain indefinable as they relate to the determination of overall project success.

Measurable goals clarify:

1. Who will be involved and what results will be achieved;
2. A desired outcome and what should result from the activities assigned;
3. How progress will be measured and what data will be used to determine if expectations correspond with each change;
4. Criteria that will be used for gauging success; and
5. Timeframes for each task to occur.

Although the court had goals to improve the judicial branch IT, objectives were too broad and never refined when the project unfolded so they could be measured and relayed to people involved in the design phase as well as charged with ensuring IT success. The Judicial Council of California (2007) charged the Administrative Office of the Courts (AOC) with the exploration and deployment of the CCMS IT project but it focused on the technological expectations and did not create or require a framework to benchmark goals or recommend measurement techniques.

The courts relied exclusively on outside IT consultants and internal IT staff to provide the necessary direction for IT transition. However, the planning, design and deployment phases did not include measures or targets for individuals involved in testing

and designing CCMS. In addition, the AOC did not assign people to design a single process that would be used by all the courthouses (Sacramento, Orange, Ventura, San Diego, Alameda, San Francisco, Monterey, Riverside, San Bernardino, and Los Angeles Counties) involved in the initial design and deployment of CCMS. Instead, each of the courthouses worked independently of each other and the IT consultants supporting their court made recommendations for each of the tasks with the final decisions being made by court administrative management and the judges. According to the LAO (2004a) *Budget Bill on State Information Technology Projects*, the California Legislature did not require statewide information be made available on how well the state was managing IT projects, such as CCMS (§ 2-5). The lack of transparency is problematic to developing the necessary risk assessment reports that would increase accountability and provide the courts with a framework to better manage IT projects.

Strategy Used for Implementation

It is often said that government institutions are slow to embrace new technologies and sometimes *behind the curve* as compared to private businesses. This has often been attributable to the difference in business philosophy between private and public sector business operations are evidenced in mission objectives. Private businesses only survive if they can remain profitable and provide the services or products the public desires. However, public organizations exist only to provide public services and, therefore, are seldom threatened when the quality or quantity of service declines. As public

organizations are subject to taxpayers, it is incumbent upon public agency management to provide high quality services for those dependent on the services they provide.

The LAO (2004) *Budget Analysis* agrees with the legitimacy and need for operational improvements, and indicates that the success of IT is contingent on proper oversight and project factors for CCMS as they conclude that “the project [in its current format] (1) lacks an assessment of the statewide costs and benefits of the projects and (2) does not sufficiently mitigate risks common to large IT projects” (§ 14-17). The LAO has unsuccessfully advocated for greater AOC transparency including project planning oversight as well as executive and legislative branch evaluation of IT costs and benefit analysis before IT projects are approved under the general fund. My research of CCMS notes that the CCMS IT transition strategy was not documented or fully developed, as it was created in stages and decisions for system design processes developed as the need arose, but not necessarily shared with individuals involved in the process.

The Sacramento court distributed some material, but it was sporadic and related to scheduling of CCMS tasks, did not include short -long terms goals for the project and were not consistently shared with the group. At CCMS program strategy plans were introduced and meetings held to discuss operational items, but these did not inclusive for decisions to be shared nor did they bring together the consultants, IT analysis, and staff testing the system modules. The lack of a strategic plan that encompassed the benefits of CCMS, the resource cost (monetary or individual staff), and project priorities was not evident, and if it was developed, central players of the team were unaware that this

information existed to direct the project goals. This lack of data sharing left people within the group with the impression that management was either unprepared or unclear about how best to respond to CCMS system deficiencies during the development phase.

Cost vs. Benefit Analysis of Implementation

Fugitt and Wilcox (1999) assert that the benefits of cost-effective analysis serve several factors to assist policy decision-makers. Cost-benefit analysis provides justification and gives business the ability to prioritize tasks and confirm that the project benefits exceed the costs that will be incurred by taxpayers (p. 16). In addition, given the cost of IT programs such as CCMS for the State of California, an approach of applying cost-benefit analysis to ensure the efficiency high-cost IT system development and transition is warranted in the case of public projects of this nature (p. 9). As taxpayer funding is limited, consideration of economic justification measures should be incorporated into projects such as CCMS to assess the risk, develop a criteria of workable solutions, adopt alternatives, incorporate careful analysis build in accountability and base decisions on realistic data. (p. 10-11). Cats-Baril and Thompson (1995) argue that defined benefits are important and can be developed by working closely with software vendors and consultants who can assist in the development of a workable project framework for management that addresses elements of risk assessment, and takes into account emerging technology while incorporating fiscal controls to avoid cost overruns (pp. 560-561).

IT transition projects and the need for project management expertise is an increasingly important issue in the public sector, especially since the State of California budgetary constraints are so great and recent failed IT projects have received widespread publicity. Although project risk assessment, project management, and cost-benefit analysis is commonplace in the private sector, these management tools have not yet been sufficiently valued and transferred to the public sector. Bretschneider (1990) suggests that the public sector management decision-making processes would be enhanced if more empirical work was done on cost-benefit methodology rather than simply focusing on equality of services provided or interest in procedural equity in the law. Bretschneider believes that if there were more empirical work on cost-benefit analysis and data collection to measure business performance as has been conducted for the private sector, strategies for IT implementation would improve (pp. 537-539).

In addition, Fuguitt and Wilcox (1999) suggest that cost-benefit analysis is one of several factors that can assist policy decision-makers in prioritizing, budgeting and justifying projects and therefore ought to be incorporated to business plans prior to engaging in projects that obligate funds in particular as it relates to social impacts in the long run (p. 13). Measurement of project inputs, activities, outputs, and outcomes can also be conducted so performance measures are collected that include numerical data and service delivery information that can provide a greater understanding of the IT program effectiveness (Wholey, 1999, p. 290). As the judicial system has a different set of constraints and accountability than other state agencies, it is exempt from making public

any cost-benefit analysis data measures or indicators used to support policy objectives as outlined for CCMS by AOC, therefore actual data collection techniques and CCMS proposed efficiency results remain unknown.

An Additional Factor: State Trial Court Budgets

Since shifting fiscal responsibility and support for trial courts from the counties to the State of California and capping county financial obligations, State Trial Court Funding has steadily increased over the years as referenced below in Table 5.1, but adequate oversight for investment of these funds remains non-existent. According to the AOC (2004), the court's IT project development and implementation was not fully developed to address disruptions or a risk mitigation feasibility study report (FSR) as is required for most state IT projects (§ 21-23). The FSR report is intended to demonstrate to the Executive and legislative branches that quantifiable benefits can be realized by IT transition that are cost-effective and provide a detailed plan for the administration and a schedule for projects undertaken.

However, according to the LAO Budget Analysis (2004), the AOC's project planning phase does not require the completion of an FSR or anything remotely resembling it and contend that the courts did not even consider any alternatives to the CCMS project (§ 21), which may have been more suitable or cost effective. Additionally, the LAO (1996) report states the despite the billions of dollars spent on IT projects in California, "neither the executive, judicial, nor legislative branches of government could

access the mountain of data stored in the state's computer files and convert it into useful information" to warrant the high cost of information technology investments (§ 10).

Table 4.2

State Trial Court Budget

State Trial Court Budget ³	
Fiscal Year	Total Appropriations
2004-2005	2.7 Billion
2005-2006	3.0 Billion
2006-2007	3.4 Billion
2007-2008	3.7 Billion ▶ Proposed
Approximately 89% of total Judicial Branch spending is for the Trial Court Funding program, and the remainder is for the "judiciary" program, which includes the Supreme Court, Courts of Appeal, Judicial Council, and the Habeas Corpus Resource Center.	

Source http://www.lao.ca.gov/analysis_2004-2007/crim_justice/cj

Given the magnitude of the importance and fiscal commitment made to CCMS, accountability standards and cost-benefit information should be readily available to the public. According to the LAO (2004), the AOC has not made project expenditure information available and failed to provide requested information to either quantify benefits or substantiate whether any savings or efficiencies were realized (§ 26).

The deficiencies in the court's implementation of CCMS were evident as the system was persistently redesigned, experienced, and repeated implementation delays (two years), and still fails to function as needed to meet court objectives. At the time of the LAO 2004 assessment, California had spent \$32.4 million and their analysis

³ Legislative Analyst's Office, Judiciary & Criminal Justice Analysis of the (2004-2008) Budget Bill.

concluded that the CCMS project would cost several tens of millions of dollars more, which possibly were an unnecessary fiscal exposure if processes for adequate review had been in place (¶ 27).

Summary

The Sacramento Superior court experienced CCMS transition challenges for several reasons. They include the greatest one, the sheer size and scope of CCMS to create a single IT system for all 58 counties in the State of California, which requires coordinated management processes to ensure processes are integrated.

In addition, the newness of the technology required staff to work out system defects while simultaneously being required to write training modules and test the adequacy to file court documents. The subject matter experts (SME) best understood the operational needs of court filings so it was logical to have them test the CCMS system, but many individuals were insufficiently trained to perform in these multi-layered roles and did not possess system design expertise. The business project structure necessary to systematically organize tasks and assign priorities to the team were either not consistently developed or they were not communicated to staff in regular meetings to ensure understanding and coordinate tasks.

Further, the strategy used for CCMS implementation routinely changed direction without explanation when IT consultants were unable to stabilize CCMS performance, and it failed to perform as required or as initially agreed. This difficulty was further complicated when the project time for transition and staff reassignment terms were

underestimated. Staff assigned to CCMS testing began leaving the project, which left the department and project with insufficient staff to perform tasks and perform in the role of SMEs. As people became discouraged with the manner in which the project unfolded and the poor communication they received on project changes, they left the team believing they were no longer an asset and declined future CCMS assignments.

Chapter 5

CONCLUSION

Lessons Learned

Although a substantial body of literature exists on IT transition in the private sector, the public sector, the judicial system, and, specifically, the California AOC has not received investigative research analysis from public policy professionals. Each year, California makes large investments to improve the court system and IT systems to improve the quality of services for the public. However, such fiscal investments require IT expertise and business project structures to control the efficient use of state funds while ensuring consistency with state laws and policies. Historically, the state has struggled to complete IT projects on time and on budget and as discussed, one of the significant contributors to past problems has been the lack of well-defined projects and clear objectives that increase the likelihood for IT transition success.

The exclusion of the court from the State of California, information technology purview is detailed in the *Governor of State of California Executive Order S-13-04* which states that information technology management, consolidation, realignment, security, quality and risk management of information systems and performance improvement measures are effective 2004, but this oversight "...shall not apply to the legislative and judicial branches of government, nor shall it apply to the constitutional officers of this state (§ 13). This division of IT operations and activities prevents proper analysis of the judicial branch and eliminates the requirement that the court's IT goals incorporate

independent assessment and project risk factors which could add objectivity to a complex process.

The LAO 2001-2002 *Analysis of the Budget Bill, Department of Information Technology* (2002) and the 2004-2005 *Budget Bill on State Information Technology Projects* (2004a), confirms that there is sufficient data available that IT projects in the State of California are struggling to ensure appropriate plans, policies and procedures and in place to improve successful transition of IT. However, these reports also fault the Department of Information Technology and cite the lack of reporting structure and recommend that the state only fund those projects that can identify measurable benefits and also require agencies to incorporate policy directives and budgetary controls through the legislature (§ 1-20). Surprisingly, even though the state funds IT projects billions of dollars over the years, the LAO (2004a) report indicates that the legislature has never required nor requested a statewide report on how these projects are being managed (§ 2).

As constructed, the AOC review of IT projects in isolation lacks accountability and does sufficiently coordinate with any state authority as would be beneficial for any endeavor of this size and scope. The California state budget deficit and the size of IT funding projects of this type that are entirely taxpayer funded justifies additional oversight to increase management accountability, oversight, prevent cost overruns and better manage costs. However, this change in the current funding structure for the judiciary is contingent on the Legislature amending the court budget process.

This thesis analyzed the CCMS project to the extent possible given the information restrictions and compared it to known success factors for IT transfers with sobering conclusions. One of the reasons public sector IT projects often fail or exceed anticipated costs is because the public sector *culture* leads to the abdication of responsibility, especially with large projects where procedural elements carry a great deal of political challenges, are plagued by inertia and staff routinely decide to instead develop methods to work around challenges rather than try to change processes or opinions about change.

The court's challenge is to increase court responsiveness to shifts in society and merge these with the requisite needs of the public. Though the legitimacy of the CCMS project is not in question, the lack of transparency suggests that it would be appropriate for the State of California to evaluate the business project structures and determine whether this IT transition project or others could benefit from further review and assessment. Further I believe that the court would benefit from using the state's IT process to demonstrate need, justify expenditures, mitigate risk, ensure cost-effectiveness and increase legislative oversight for the California judicial system.

Public agencies have an obligation to prevent mismanagement of public funds and this can be achieved when better management controls are promoted and budgetary transparency is available to promote the public interest. CCMS implementation in Sacramento is a Case Study that provided valuable lessons about how IT projects could be managed. It is difficult to comprehend the full complexity of the justice system and the

difficulty the courts encountered designing and deploying CCMS while trying to use a “one-size fits all approach” for 58 different counties across the state. However, this IT challenge will – once fully operational provide a valuable service to the people of the State of California.

REFERENCES

- Aikman, A. B. (2007). *The art and practice of court administration* (pp. 361-156). Boca Raton, FL: Auerbach Publications.
- Bajjaly, S. T. (1999, September). Managing emerging information systems in the public sector. *Public Productivity & Management Review*, 23(1), 40-47.
- Bardach, E. (2000). *A practical guide for policy analysis: The eightfold path to more effective problem solving* (pp. 20-21). New York: Chatham House Publishers.
- Bretschneider, S. (1990, September/October). Management information systems in public and private organizations: An empirical test. *Public Administration Review*, 50(5), 536-545.
- Burger, W. E. (1971). Symposium on judicial administration. *Public Administration Review*, March/April, 31(2), 112-113.
- Cats-Baril, W., & Thompson, R. (1995, November/December). Managing information technology projects in the public sector. *Public Administration Review*, 55(6), 559-566.
- Dainty, P., & Kakabadse, A. (1990, June). Organizational change: A strategy for successful implementation. *Journal of Business and Psychology*, 4(4), 463-481.
Retrieved March 19, 2009, from <http://www.jstor.org/stable/25092253>
- Davies, T. R., & Hale, W. M. (1986, November). Implementing a policy and planning process for managing state use of information technology resources. *Public Administration Review*, Special Issue, 46, 516-521.

- Drucker, P. F. (1973). *Management tasks, responsibilities, practices* (pp. 98-128). New York: Harper & Row.
- Finley, R. C. (1965). Upgrading court organization and administration: A small blueprint for a big job. *Duke Law Journal*, 2, 322-328.
- Friesen, E. C. (1971). Constraints and conflicts in court administration. *Public Administration Review*, March/April, 120-124.
- Fuguitt, D., & Wilcox, S. J. (1999). *Cost-benefit analysis for public sector decision markers* (pp. 4-19). Santa Barbara, CA: Greenwood Publishing Group.
- Gable, R. W. (1971). Modernizing court administration: The case of the Los Angeles superior court. *Public Administration Review*, March/April, 133-143.
- George, R. M. (2005, November). Challenges facing an independent judiciary. *New York University Law Review (N.Y.U.L.)*, Lecture, 80, Rev. 1345, 1-18.
- Harley, H. (1917). Business management for the courts. *Virginia Law Review*, 5(1), 1-26.
- Judicial Council of California (2007a, May). *Fact sheet, California case management system (CCMS)*. Retrieved February 2, 2008, from <http://www.courtinfo.ca.gov/reference/documents/factsheets/ccms.pdf>
- Judicial Council of California (2007b, March). *Fact sheet, Judicial Council of California*. Retrieved February 2, 2008, from <http://www.courtinfo.ca.gov/reference/documents/factsheets/ccms.pdf>

- Judicial Council of California (2008a, September). *Fact sheet, Judicial Council of California: Court case management system (CCMS)*. Retrieved January 6, 2009, from <http://www.courtinfo.ca.gov/reference/documents/factsheets/ccms.pdf>
- Judicial Council of California (2008b, September). *Fact sheet, Judicial Council of California: Transfer of court facilities*. Retrieved January 7, 2009, from <http://www.courtinfo.ca.gov/reference/documents/factsheets/ccms.pdf>
- Judicial Council of California. (2006). *Profile* (4th ed., pp. 1-49). San Francisco: Administrative Office of the Courts. Retrieved February 2, 2008, from <http://www.courtinfo.ca.gov/reference/documents/factsheets/ccms.pdf>
- Judicial Council of California. (2006). *Profile*, (4th ed., p. 7). San Francisco: Administrative Office of the Courts.
- Kendrick, T. (2004). *The project management tool kit, 100 tips and techniques for getting the job done right* (pp. 201-202). New York: American Management Association (AMACOM) Books.
- Kraemer, K., & Dedrick, J. (1997). Computing and public organizations. *Journal of Public Administration Research and Theory: J-PART*, 7(1), 89-112. Retrieved March 18, 2009, from <http://www.jstor.org/stable/1181547>
- Larsson, M., Wall, A., Norstrom, C., & Crnkovic, I. (2006). *Technology transfer: Why some succeed and some don't*. The ACM Digital Library. Retrieved March 17, 2009, from <http://www.mrtc.mdh.se/publications/1096.pdf>

Lefever, D. R. (n.d.). *Managing organizational transitions: Taking the chance out of change* (pp. 1-17). Ann Arbor: University of Michigan Health System, The Department of Family Medicine.

Legislative Analyst's Office (1996, January). *State information technology: An update*.

Retrieved May 5, 2008, from

http://www.lao.ca.gov/1996/012396_it_update/pb12396.html

Legislative Analyst's Office. (2002). *Analysis of the 2001-2002 budget bill*. Department of Information Technology. Retrieved May 5, 2008, from

http://www.lao.ca.gov/analysis_2001/general_govt/gen_06_0505_Dept_Information_Technology_anl01.htm

Legislative Analyst's Office. (2004a, February). *Analysis of the 2004-2005 budget bill, state information technology projects, State trial court funding*. Retrieved June 1, 2008, from

http://www.lao.ca.gov/analysis_2004/general_govt/gen_03_cc_it_anl04.htm

Legislative Analyst's Office. (2004b, February). *Judiciary & criminal justice analysis of the 2004-2005 budget bill*. Retrieved September 22, 2007, from

http://www.lao.ca.gov/analysis_2004/crim_justice/crimjust_anl04.pdf

Liker, J., Haddad, C. J., & Karlin, J. (1999). Perspectives on technology and work organization. *Annual Review of Sociology*, 25, 575-596. Retrieved March 19, 2009, from <http://www.jstor.org/stable/223517>

- McGowan, R. P., & Loveless, S. (1981, May/June). Strategies for information management: The administrator's perspective. *Public Administration Review*, 41(3), 331-339.
- Phillips, J. J., Bothell, T. W., & Snead, L. G. (2002). *The project management scorecard, measuring the success of project management solutions*. New York: Butterworth Heinemann.
- Pound, R. (1906). *Causes of popular dissatisfaction with the administration of justice*. Retrieved June 8, 2008, from <http://law.jrank.org/pages/11783/Causes-Popular-Dissatisfaction-with-Administration-Justice.html>
- Pound, R. (1908). *Mechanical Jurisprudence*. Retrieved June 8, 2008, from <http://law.jrank.org/pages/11780/Mechanical-Jurisprudence-Mechanical-Jurisprudence.html>
- Roddy, M., Beard, T. L., & Slater, A. (2007). CCMS Goes Live. *California Courts Review, A Forum for the State Judicial Branch, Protecting California Justice System, Winter*, 19-22.
- Rubin, B. M. (1986). Information systems for public management: Design and implementation. *Special Issue: Public Administration Review*, 46, 540-552.
- Schaeffer, W. G. (1953). Management in the Judiciary. *Public Administration Review*, 13(2), 89-96.
- Schmitt, J. W., & Kozar, K. A. (1978). Management's role in information system development failures: A case study. *MIS Quarterly*, June, 7-16.

- Sipes, L. L. (2002). *Committed to justice: The rise of judicial administration in California* (pp. 266-267). San Francisco: Administrative Office of the California Courts.
- Tydings, J. D. (1971). The courts and Congress, *Public Administration Review*, *March/April*, 113-119.
- West, J. P., & Berman, E. M. (2001). The impact of revitalized management practices on the adoption of information technology, A national survey of local governments. *Public Performance & Management Review*, *24(3)*, 233-253.
- Wholey, J. S. (1999). Performance-based management: Responding to the challenges. *Public Productivity & Management Review*, *22(3)*, 288-307.
- Willcocks, L. P., & Lester, S. (1997). In search of information technology productivity: Assessment issues. *The Journal of the Operational Research Society*, *48(11)*, 1082-1094.
- Wilson, J. Q. (1989). *Bureaucracy: What government agencies do and why they do it*. New York: Basic Books, Inc.