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Communications of the Association for Information Systems

COLORADO BENEFITS MANAGEMENT SYSTEM: DECISION TIME

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ABSTRACT

The project to develop the Colorado Benefits Management System (CBMS) was begun with high hopes and the best of intentions. Its vision was to replace six aging legacy systems supporting various State administered welfare programs with a single system using current technologies. The expected benefits from CBMS were better service to clients and assurance that the State's welfare programs were being administered properly. The bulk of the development effort was outsourced to a large systems integration firm, and a comprehensive project oversight structure was put in place. Despite these actions, the project was troubled from the start. Nearing one more projected conversion date, the two executive sponsors of the project were faced with a decision of whether or not to implement the system despite protests from the user community that CBMS was not ready to be put into operation.

Keywords: acquisition**,** consultants, conversion, implementation, IV&V, legacy systems, IT project management, pilots, runaway projects, user acceptance testing

I. INTRODUCTION

Marva Livingston-Hammons and Karen Reinertson, Executive Directors, respectively, of the Colorado Department of Human Services and the Colorado Department of Health Care Policy and Financing, sat across from each other at the small conference table in Marva's office. It was August 15, 2004, and they were discussing the letter dated August 13 from the directors of human services in four Colorado Counties (reproduced as Appendix 1). Marva and Karen were the two senior State officials charged with oversight of the Colorado Benefits Management System (CBMS), which was scheduled to be converted on September 1, 2004 after being postponed several times.

CBMS was undertaken with much optimism and promise. The project was going to change the way Colorado managed its welfare programs. It would replace six existing legacy computer systems with one unified system for collecting data, establishing eligibility, and processing payments in the following welfare programs:

- Temporary Assistance for Needy Families
- Food Stamps
- Medicaid
- Adult Protective Services
- Old Age Pension
- Aid to the Blind
- Aid to the Needy Disabled
- Children's Health Plan Plus

These programs were directed at the State level and administered by the Counties. When CBMS was up and operating, all of Colorado's welfare programs would use a single up-to-date computer system. With CBMS, clients eligible to receive benefits from more than one program would no longer need to find their way to several different offices and file multiple applications. The sick, the hungry, elderly, and children would receive immediate help while the State and the Counties would save money.

In their letter, the county representatives listed several problems and concerns they had with the status of CBMS. They were concerned with:

- the error rate in the user acceptance test (UAT)
- the security of the system
- numerous conversion issues
- compliance with Federal law
- inadequate testing of interfaces to other service programs
- customer service/staff workload issues
- unresolved system defects

The letter concluded by stating:

> *As a result of the above issues, the four pilot Counties adamantly believe that the implementation of CBMS on September 1, 2004, is unacceptable. A premature implementation will result in serious impacts to clients and County Departments of Human Services. We feel the system must first be adequately tested and the pilots successful before moving forward on this major computer conversion.*

Marva and Karen looked at each other with concern in their eyes. When they agreed to be co-chairs of the CBMS project's Executive Oversight Committee (EOC), they had no idea the project was going to be such a frustrating and aggravating experience. After all, they were senior managers in State Government, not IT professionals. CBMS took up too much of their time already and they wanted to get it behind them.

Still, they knew they needed to respond to the Counties' letter and were worried about the issues it documented. On the other hand, the project repeatedly requested funds in excess of the original appropriation over the last four years from the Joint Budget Committee (JBC) of the Colorado Legislature. Marva and Karen were reluctant to ask for more. Further, a number of stakeholders needed to be considered:

- The internal and external IT professionals involved in CBMS
- The end users in the Counties
- The citizens affected by the welfare programs
- The Colorado State Departments
- The Federal Government

The Colorado economy was declining after a decade of prosperity, and the State was facing deficits. Some of the CBMS stakeholders were raising red flags, while others gave no indication there was any reason not to proceed with the September 1 conversion as planned. The November 2004 elections were looming.

Marva and Karen discussed their options, and identified three possible avenues:

1. They could postpone the conversion until all the stakeholders were satisfied.

2. They could abort the project.

3. They could convert on September 1 as scheduled, in spite of the red flags.

II. BACKGROUND

In 1989, it became apparent that the six legacy systems supporting the welfare systems in Colorado were reaching the stage where they needed to be replaced. They were using obsolete technology and were becoming increasingly difficult to maintain. The late eighties and early nineties was the time when many mainframe-based legacy systems were being replaced by client-server architectures, taking advantage of the graphical user interfaces available on personal computers on the desks of knowledge workers in large organizations, and the advances in networking technologies.

Like many legacy systems of the time, the six Colorado systems were developed at different points in time, and typically supported a single program, e.g. Food Stamps. The vision of CBMS was to combine the databases required for the six systems into a single database which combined all information concerning a welfare client, and to incorporate the rules for managing each program into computer code. Thus, clients would be better served because a single knowledge worker could handle the processing of benefits for multiple programs, clients would not need to supply the same information to several knowledge workers at different locations, the client information used for all programs would be consistent, and rules for qualification and receipt of benefits would be applied correctly. Since many of the welfare programs were at least partially funded by the US Federal Government, the latter point was important for Colorado State Departments' compliance reporting to Federal Agencies. As an added benefit to clients, knowledge workers would be able to receive assurance from CBMS that clients were receiving all of the benefits they were entitled to receive. As an added incentive to the State and Counties, once the system was installed, it would result in a reduction in headcount. A summary of the scope and anticipated benefits of the project are shown in Appendix II.

Despite the benefits envisioned for CBMS, it took nine years to obtain funding for the design, construction, and installation of the new system from the Colorado Legislature. Like any new project (in either the public or the private sector), CBMS was required to compete with other projects that required incremental funding. CBMS never seemed to rise to the top of the Legislature's priority list. Finally, in 1999, funds were allocated to begin some initial work. Dynamics Research Corporation (DRC) (www.drc.com) was hired to develop a set of requirements for CBMS in sufficient detail to include in a Request for Proposal (RFP). Since IT at that time was thriving as a result of the need to solve the Y2K problem[1] and the Internet boom, skilled IT professionals were in short supply. As a result, state governments found it difficult to compete with the private sector in hiring IT professionals, particularly in those sectors where knowledge of state-of-the-art technologies was required. For this reason, the decision was made to engage a professional services firm to handle the development and operation of CBMS.

The State received two responses to its RFP, one from EDS and the other from IBM. Both were more than $100 million higher than the $220 million the JBC had authorized for the development and operation of CBMS over a ten year period. Accordingly, the State employees responsible for acquisition went back to the vendors and asked them to "clarify" their bids, i.e. to find a way to

[1] The Y2K problem resulted from the use of 2 digits in referring to years (e.g., 98 rather than 1998) in corporate records. It was recognized that computation difficulties would ensue unless the year fields in databases were increased to four digits and the computer programs revised accordingly [Wikipedia, 2005].

lower them to not exceed the amount authorized by the legislature's Joint Budget Committee (JBC).

In the end, EDS (www.eds.com) was awarded the contract. The three factors that led to its selection included the proposal to adopt a "time of touch conversion" (as explained below), a phased rollout, and its experience on similar systems in the States of Florida and Arkansas.

- One key step in a traditional conversion from an old to a new system involves converting system data from the old system(s) to the format needed by the new system. Usually this conversion is done all at once, at the time of conversion. EDS concluded that a "time of touch" conversion, in which data are converted the first time it was accessed by a knowledge worker under the new system, would save both time and money.
- A phased roll-out would make the CBMS available to Counties in phases, rather than all at once. For example, one welfare program might be converted in one County, and then made available to other Counties on a phased basis once the bugs were worked out in the initial County.
- EDS had a troubled conversion in Florida in the early nineties [Glass 1998] and pointed out that they had learned from the mistakes they made there. They also had a similar project underway in Arkansas and proposed to save time by modifying programs from Arkansas to meet Colorado's requirements.

Even though Federal funds would be used to fund more than half the cost of CBMS, the Federal Government did not have a say in the selection of the outside contractor. On the other hand, they could and did specify that an independent verification and validation (IV&V) firm be hired to provide independent oversight and reporting on the project's progress. Maximus (www.maximus.com) was retained as the IV&V firm.

III. PROJECT ORGANIZATION AND OVERSIGHT

Experienced IT professionals know that large systems development projects like CBMS are among the most complex and challenging tasks that human beings undertake. Project complexity tends to increase as the project size increases. In 1999, an income tax system under development for the Colorado Department of Revenue was abandoned after an expenditure of some $15 million. This action caused a flurry of negative publicity. It resulted in establishing the Governor's Office of Innovation and Technology (OIT) by the State Legislature and signed into law by Governor Bill Owens. Among other things, OIT was established to "Transform state government, a key element of the technology infrastructure, through the effective, efficient and innovative use of technology." [Bhattacherjee 2000].

Aborting CBMS after the expenditure of more than $90 million would make taxpayers wonder whether the State really knew how to use technology efficiently and effectively. Recent negative publicity also arose from the troubled IT projects in the US Federal Government. For example, in December 2003, an $8 billion Internal Revenue Service project was 40% over budget after spending $1 billion [Johnston 2003], and the FBI's Virtual Case File system designed to help track terrorists was rumored to be ready for the scrap heap after well over $100 million had been spent [Verton 2004].

IT professionals are also aware of studies like the Chaos Reports published by the Standish Group [2003] on IT project successes and failures. For example, the latest publicly available report at that time, based on a 2003 survey of 13,522 U.S. IT projects completed in 2002, showed that just 34% of all IT projects were considered successful, 51% were challenged and 15% were dubbed as outright failures. The report also calculated that "The lost dollar value for U.S. projects in 2002 was estimated at $38 billion with another $17 billion in cost overruns for a total project waste of $55 billion against $255 billion in project spending." [Standish 2003].

Most seasoned IT professionals learn that one of the principal reasons for failed or less than successful projects is a failure to get the business requirements of a new system right. And, in turn, the failure to get the requirements right is most often due to poor communication and insufficient involvement and commitment from the users for whom a new system is being designed.

A typical IT project would be organized along the following lines [Flatten et al 1991]:

- An Executive Sponsor, or product champion, the senior executive in the organization who authorizes and obtains funding for the project;
- A Project Steering Committee, whose members usually are key user managers and a senior IT executive;
- A Project Manager, the individual responsible for the planning and control of the project; and
- The Project Team, individuals assigned to the project with the necessary skills required to execute the project plan.

The CBMS project organization was a bit more complicated than most (Figure 1). It consisted of the following:

- Executive Oversight Committee (EOC). The Executive Oversight Committee was chaired by Karen and Marva and included the State Chief Information Officer (CIO) from OIT, the CIO from the Department of Human Services, the CIO from the Department of Health Care Policy & Financing, and representatives from the following: Counties, Office of State Planning and Budgeting (OSPB), Joint Budget Committee (JBC), and non-county Medical Application providers. The EOC met bi-monthly (or more often if necessary), and was responsible for guiding the project and making appropriate executive decisions regarding the project.
- Colorado Commission on Information Management (IMC). IMC is a unit of OIT, chaired by the State Chief Information Officer. It consists of representatives from the public and private sectors. It oversees IT strategic planning and sets policies for the State of Colorado's Information Systems. The IMC created a CBMS IMC subcommittee which met bi-monthly and provided feedback to the Commission on the progress of CBMS.
- Independent Verification and Validation Contractor (Maximus). The IV&V contractor reported to the OIT. Maximus provided independent analysis and identification of project development risks. It was not part of the development contract, being funded separately. Maximus reviewed all requirements for compliance prior to progressing to the next phase of the project (verification), and reviewed all products to assure they were in accordance with approved requirements (validation).
- CBMS Project Quality Assurance Vendor (QA). An independent QA vendor joined the project on July 31, 2001. Reporting to the EOC, the vendor was responsible for implementing project quality assurance processes, monitoring project activities and work in progress, reviewing and assessing project deliverables, and reporting status findings and recommendations.
- Project Manager. Since a State employee with the requisite skills to serve as project manager for CBMS was not available, the State contracted with AMS (www.ams.com), a systems integration firm, to furnish a full-time project manager.
- Project Team. The project team was a mix of EDS and State employees. Some of the EDS personnel were collocated with the team in Colorado while others worked in remote locations.

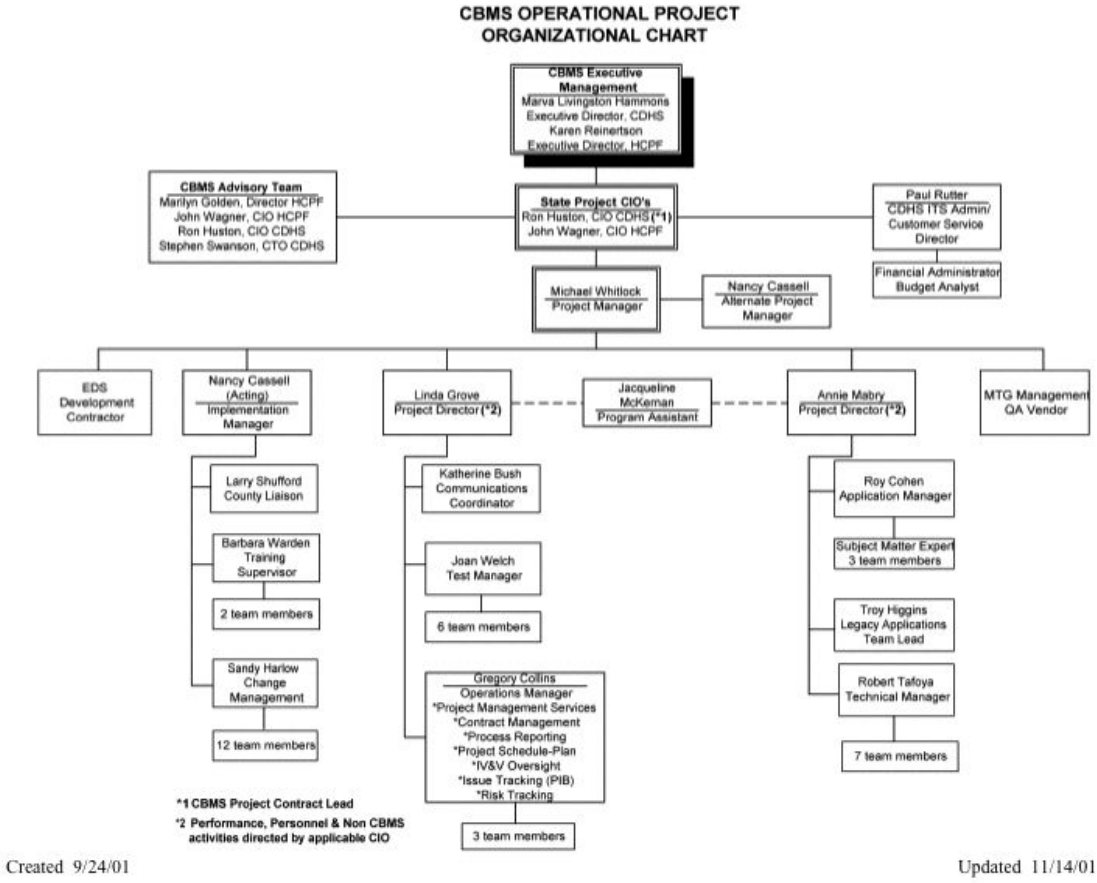

Figure 1. Organization Chart

The EOC believed all stakeholders were adequately represented. However, successful execution required that accountability be clear, that responsibility be focused, that the CBMS vision be truly shared among all stakeholders, and that the efforts of all stakeholders be well coordinated. Furthermore, since CBMS hired both IV&V and QA personnel to perform an independent review of the project's progress, it was important that their periodic reports to the OIT and EOC be carefully considered.

IV. PROJECT EXECUTION

The project was behind schedule virtually from the beginning. The signed contract with EDS was reviewed by IV&V and several concerns were identified:

- No milestones were specified for the project,
- Responsibility for deliverables was not pinpointed, and
- No performance criteria were specified.

A report summarizing these concerns was written and given to OIT. The report went no further, since it was submitted after the contract was already approved.

One of the biggest problems with the contract was its fixed price basis. Typically a project of this size and scope will involve many add-ons. In particular, since the CBMS set of requirements were quite ambiguous and the system was expected to operate in a dynamic environment, the rationale for a fixed price contract was questionable. For example, Congress passed a national Health Insurance Portability and Accountability Act (HIPAA) in 1996. This act created major requirements for how agencies handled health-related data. Compliance with the act required modifications in the design of CBMS. With a fixed price contract, there is little to no motivation on the part of the contractors to complete additional work. EDS wanted to stick to the original requirements and avoid scope creep[2]. Any changes required a change order. Some of the managers estimated that it took two to three weeks to obtain a detailed estimate from EDS on the cost of a change, and another month to make the change.

More and more delays occurred putting the project further behind schedule (Table 1). Stakeholders were feeling pressured in various ways. The State employees were concerned about reports to the Federal Government to assure the programs were in compliance, while the Counties worried about the way CBMS would work in their offices, the looming workload associated with training and data conversion, the ease of use of the system and, of course, the welfare of their clients.

Table 1. Project Timeline

Date	Event
July 14, 2000	Initial Contract with EDS Signed
April 2001	Project is estimated to be behind by three months
November 2001	EDS concluded that code from Arkansas project won't work for CBMS
February 2002	Software toolkit changed to CalWIN
March 2002	Functionality "trade-off" occurs. $16.1 million additional funds are provided and contract is extended nine months
April 2002	EDS abandons Time of Touch
January 2004	Maximus IV&V Contract Expires
March 2004	Problems with access to state portal and higher than anticipated volume of problems with the application limit progress on pilot tests
April 2004	Counties learn they will be responsible for manual data entry
April 2004	JBC indicates no additional funding or release time will be given to CBMS
April 2004	Phased conversion approach is abandoned
July 26-August 6, 2004	Second Pilot test occurs
August 13, 2004	CCI sends letter to State requesting CBMS not be implemented on September 1, 2004

Structural issues were also encountered. It was unusual in the Colorado State government for the prime contractor (EDS) to report to a project manager who was a competitor's employee. Nevertheless, both firms understood their respective roles and worked to cooperate with one another. Even so, within six months the project was three months behind. The original project managers from both EDS and AMS were replaced with more experienced project managers. This turnover was not the only one during the project. For example, four different State Chief

[2] Scope creep refers to changes in a project's scope by adding new requirements or new features that increase time to completion and cost.

Information Officers served between 2001 to 2004. Overall, CBMS had 32 staff members in key project positions turn over during the duration of the project.

Awareness of the delays was becoming more widespread. Accordingly, the Colorado Social Service Directors Association asked to be involved in the project. Four representatives were appointed to an oversight team: Emmanual Manos from Denver County, Brenda Woolsey from Arapahoe County, Richard Cozzette from Fremont County, and Kirby Stone from Broomfield County. To make things worse, EDS stated that project had been underestimated. Their original estimate to complete CBMS was 8,650 hours. Now they estimated the project would consume 20,000 hours.

The State's Joint Budget Committee began balking at requests to allocate additional funds or release time to CBMS. Therefore, some of the desired features of CBMS (such as electronic signatures, scanning, and fraud detection) were put on the shelf. In November 2001, EDS concluded that the existing code from the State of Arkansas project was not a good fit for Colorado and recommended that CBMS use code that EDS developed for the CALWIN project in California. The proposal to use the CALWIN code was accepted by the directors in February 2002."

In February, 2002, the directors changed the basic "tool kit" to CalWIN, code that EDS developed for the State of California. The project was extended nine months, for an additional $16.1 million. In April, 2002, the time of touch conversion proposal was officially abandoned. Twenty-one months were expended in the effort to use time of touch, the "innovative and proven methodology to convert data into CBMS." The design of the decision tables[3] (DTs), used by the Rules Engine in the CBMS software to determine benefit eligibility, automatically began to run excessively behind schedule. Little by little the dream project was turning into a nightmare.

On January 1, 2004, the IV&V firm submitted their final report. [Maximus, 2004]. The Executive Summary noted that the detailed reports IV&V prepared weekly "were delivered to OIT for disposition, while a summary of each weekly status report was distributed to a number of participating State and Federal organizations as determined by OIT." The final report's Executive Summary went on to say that

> *"Unfortunately, the CBMS environment was not generally conducive to accepting or responding to the IV&V findings in a timely manner, resulting in greater impact to project progress than should have occurred".*

The report summarized major flaws in the following areas:

- The State's vendor acquisition strategies,
- establishment of the initial CBMS requirements baseline,
- technical understanding of the State's requirements versus the vendor's proposed solution, and
- establishment of an adequate State organizational structure (processes, procedures, resources, organizational structure, interfaces, etc.) to manage the CBMS.

All of these issues had been repeatedly raised at various times in IV&V weekly reports between November 2000 and January 2004.

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[3] Decision tables are a precise yet compact way to model complicated logic. Decision tables, like if-then-else and switch-case statements, associate conditions with actions to perform. But, unlike the control structures found in traditional programming languages, decision tables can associate many independent conditions with several actions in an elegant way [Wikipedia, 2005].

The final report gave the following assessment, in part, of the project status as of January 2004:

- Decision Tables, a State responsibility to develop, are difficult for the State to manage with any predictability.
    - ♦ They continue to cause delays in the completion of initial development of the complete suite of CBMS DTs.
    - ♦ A high volume of defects are encountered once the DTs began User Acceptance Testing (UAT).
    - ♦ The DTs cause delays in correcting defects and completing UAT.
    - ♦ The DTs create significant doubt as to the State's ability to manage DTs during Pilot and production.
- A number of key tasks were not planned in detail or assessed against other key project activities and milestones making it difficult to track, report, or predict project progress effectively or accurately.
- County readiness for Pilot or rollout is not clear. Although discussions of readiness occur between the CBMS Project Management Office and the Counties during meetings, structured and systematic progress reporting by the Counties continues to be extremely weak.
- UAT continues to slip, with increased planning of concurrent events that increases the risk of project failure.

The Maximus contract ended in January 2004, as originally scheduled, even though CBMS was still underway. Neither the EOC nor the OIT was able to come up with funding to extend the Maximus contract.

Significant roadblocks were also present in the pilot testing for CBMS. The Counties requested a three-month pilot, but the project pared it down to six weeks. The decision tables were still not completed even during the pilot. In March, 2004, the EOC reported that progress was not made in the pilot as had been planned due to early issues with access to the State Portal and the higher than anticipated volume of problems with the application.

The last piece of the CBMS's initial innovative vision was abandoned in April 2004. EDS informed the State that the phased conversion wouldn't work. The state of the art described in the original EDS proposal was now completely gone from CBMS. The conversion and rollout plans needed to be redone. In addition, more data needs were identified. It was estimated that only 25-35% of the data could be converted within the new system, and 65-75% of the data needed manual entry and cleansing[4]. The EOC informed the Counties that the planned Centralized Data Entry process to assist Counties with data entry was not feasible. Instead, funds would be allocated to the Counties. Four months from rollout, the Counties learned the manual burden of entering data required by CBMS would be left to them. The Counties projected the time and cost now required for the data entry and EDS claimed the projections were grossly in error. The project was extended to September 1, 2004. JBC called this the "drop dead" date.

From July 26, 2004 to August 6, 2004, three weeks before the planned September 1 rollout, a two-week pilot was held even though some functionalities were not ready for testing. The Counties expressed a concern about the pilots but EDS said they were just afraid of change. EDS said they saw the same fear from their experience in similar projects they led in Arizona, Texas, and Florida. The pilot testing proceeded.

Two sets of scenarios were used in the UAT, one developed by the State, and another developed by the Counties. In the August 13, 2004 letter from the Counties, it was stated, "The pilot planned scenarios experienced a 63% accuracy rate, and the controlled state scenarios a 94% accuracy

[4] Cleansing refers to detecting and removing and/or correcting data that is incorrect, out-of-date, redundant, incomplete, or incorrectly formatted [Webopedia, 2005]

rate." Problems in the pilots included incorrect client notices, poor interfaces, long system response time, requirements for mass changes, overpayments, improper batch authorization, and inaccurate reports. A fallback plan was developed and tested. CBMS would be given 60 days to work, or the Counties would return to the legacy systems.

V. THE DECISION

Marva and Karen wrote their three options on the white board in Marva's office: First, they could postpone the conversion until the stakeholders were satisfied. Second, they could abort the project given the politics and funding issues. Third, they could convert on September 1 as scheduled, in spite of the risks.

Although it was clearly a viable option, they preferred not to postpone the conversion. Postponement would mean they would need to go back to the JBC (again) and ask for more money. Of course, postponement could prevent post-conversion operational problems by addressing issues before launching CBMS. Aborting the project was not appealing to them either. That would risk even worse negative publicity than was experienced by the State Department of Revenue when it abandoned its Income Tax Development System in 1999. Overriding the concerns of the users and going ahead with the conversion on September 1 was their third option. After all, they had been assured by most of the CBMS IT professionals that the Counties were overreacting, and that all large systems encountered problems after conversion. Further, they were told, the project team had sixty days in which they could revert to the old legacy systems if CBMS could not be fixed to everyone's satisfaction. That seemed to be a pretty good safety net in case the doomsayers turned out to be right. On the other hand, the stakeholders were concerned about launching on September 1.

Marva and Karen looked at each other again and wondered, "What should we recommend to Governor Owens, and how should we respond to the Counties' letter?"

Editor's notes: A teaching note for faculty listed in the ISWorld Faculty directory is available from Donald J. McCubbrey (dmccubbr@du.edu). This case was received on August 26, 2005 and was published on October 26, 2005.

REFERENCES

EDITOR'S NOTE: The following reference list contains the address of World Wide Web pages. Readers who have the ability to access the Web directly from their computer or are reading the paper on the Web, can gain direct access to these references. Readers are warned, however, that

1. these links existed as of the date of publication but are not guaranteed to be working thereafter.

2. the contents of Web pages may change over time. Where version information is provided in the References, different versions may not contain the information or the conclusions referenced.

3. the authors of the Web pages, not CAIS, are responsible for the accuracy of their content.

4. the authors of this article, not CAIS, is responsible for the accuracy of the URL and version information.

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APPENDIX I. LETTER FROM DIRECTORS OF HUMAN SERVICES

CITY & COUNTY OF DENVER

Department of Human Services

Roxane White, Manager
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John W. Hickenlooper
Mayor

Accredited by Child Welfare League of America Since 1949

August 13, 2004

Marva Livingston-Hammons
Executive Director
Colorado Department of Human Services

Karen Reinertson
Executive Director
Colorado Department of Health Care
Policy and Financing

Dear Marva and Karen:

I am writing on behalf of Denver, Broomfield, Arapahoe and Fremont Counties. As you know, the four counties have just completed a two week CBMS pilot. It is our understanding that you will be making the final "Go/No GO" decision by Tuesday, August 17, 2004. We therefore feel it is critical that you receive our input and recommendations on this decision prior to that date.

The counties have spent thousands of hours preparing for CBMS, and will continue to do so as we are working towards conversion and implementation. We are enthusiastic about CBMS, its functionalities, and the improved Customer Service it could potentially offer our clients. However, as we stated in the past, we do not want to prematurely convert to a system that may provide inaccurate benefits to over 596,000 Colorado clients. As pilot counties, we have serious concerns regarding the readiness of this project, including conversion issues, potential lawsuits, the high error rate experienced by the pilot planned scenarios, security, procedural papers, Federal sanctions and the number of unresolved Severity I and II problems. Until we feel more comfortable with the maturity of this application, we cannot support a "Go" decision on implementation in September, and in fact, we strongly oppose the roll out as planned.

An overview of our primary issues regarding the CBMS pilot are as follows:

- Error rate—The pilot planned scenarios experienced a 63% accuracy rate, and the controlled state scenarios a 94% accuracy rate. The commitment was that CBMS would not be implemented until the accuracy rate was 98-99%. At a 90% accuracy over 60,000 clients would be adversely affected. The current error rate of over 30% is not acceptable, and the system cannot be implemented until we reach, at a minimum, a 98% rate.

- Security—Security continues to be an issue. In Fremont County, a user who should not have had the access, was able to go in and authorize a payment without supervisor intervention. Additionally, a user was able to go into another county and reduce the amount of a claim, while yet another user was able to go into another county and delete a miscellaneous payment. These issues open the door for potential employee fraud and create regulatory compliance issues.

- Conversion Issues—Numerous conversion issues have been identified during Pilot II, mostly due to incorrect data mapping, i.e., data is converted into wrong fields. For instance, children are being converted as to applying for long term care, or adult medical cases are showing that the clients do not meet the level of care. Some persons/cases were not converted.

- Federal law—We remain concerned regarding compliance with the Federal law. In particular, the Food Stamp mass change, based on estimation of benefit change, will incorrectly update the Food Stamp benefits to tens of thousands of clients. This will not meet the Federal requirement of timely and accurate benefits, in addition to the tremendous work load on staff to correct over 80,000 cases prior to the freeze flag being lifted. The recovery effort on this alone is tremendous. The same problems will exist as it relates to the COLA for Adult Programs on December 31, 2004.

  Client noticing has numerous problems, with the most notable being a breach of confidentiality by displaying SSN's, including the Absent Parent's on the Statement of Facts. Also of concern are the legal issues involved with improper noticing, where the incorrect person is cited for the action or the incorrect reason to support the action taken is cited. Other client notice issues include denying benefits for a program area, but sending the notice of a new worker for that program, or denying benefits but noticing the client that benefits were approved. This issue alone may result in an extreme number of appeals and sanctions.

  In addition to these major issues with compliance of the Federal law, we cannot exclude the concern that a 30% error rate in benefit determination/grant calculation, in conjunction with the benefit freeze flag, will result in clients to be paid who should not be paid, or clients to be to be paid incorrectly.

- Interfaces—To date, only 10% of the interfaces to other service programs have been fully tested and found successful. This is of major concern, as problems with CBMS will not only impact client benefits in this system, but could be disastrous to programs such as Child Support, Child Care and Child Welfare. The interface with Social Security (SDX for SSI cases) during the Pilot II testing did not perform as expected for the 1634 cases and can actually duplicate cases.

- Customer Service/Staff workload issues—All of the above issues adversely impact the workload on staff and the level of customer service that we provide to our clients. In addition to the areas previously noted, we are extremely concerned about the large number of procedures that require staff to work around the system. These appear to be volumes, and the training alone to be able to perform these procedures is insurmountable. Additionally, staff are finding the time that it takes to complete AI and II is not reasonable, and staff are even recommending clients complete a paper application and the information be data entered into CBMS, rather than conducting live interviews.

- TPN's and Defects—To date, over 107 catastrophic and disabling problems are still unresolved. Even if the Project Team were able to fix all the errors by roll out, there is no ability for the counties to be able to verify the success of these changes. This translates into our 596,000 plus clients serving as test cases for the system.

- Last Legacy Payment Freeze Flag—The Decision Support System, Conversion Case Program Flag Report, indicates what cases have been assigned the Freeze Flag. Denver, Arapahoe, and Fremont Counties are researching the report because only about one quarter of the County caseload was assigned the Freeze Flag. Consequently, at the time of conversion, 75% of the cases could close.

As a result of the above issues, the four pilot counties adamantly believe that the implementation of CBMS on September 1, 2004, is unacceptable. A premature implementation will result in serious impacts to clients and County Departments of Human Services. We feel the system must first be adequately tested and the pilots successful before moving forward on this major computer conversion.

Thank you for your consideration of this request.

Sincerely,

Roxane White, Manager
Denver Department of Human Services

Brian Field
Arapahoe Department of Human Services

Karen Beye
Broomfield Department of Health & Human Services

Steven Clifton
Fremont Department of Human Services

APPENDIX II. ARCHIVED CBMS PROJECT OVERVIEW

COLORADO BENEFITS MANAGEMENT SYSTEM

August 24, 2005

Archived CBMS Project Overview

[The contents of this page were archived February 21, 2002.]

History

As eligibility criteria and programs for public and medical assistance have grown increasingly complex, projects with goals similar to those of CBMS have been discussed for many years. In 1995, the Department of Human Services (CDHS) & Health Care Policy & Financing (CDHCPF) received approval from the legislature and federal agencies to engage a planning contractor for a project that would integrate all the functions of several aging automated systems and automated eligibility rules, as well as streamline application, eligibility determination, benefit calculation, and other business processes.

After defining business objectives and needs, CDHS and CDHCPF studied and re-engineered the business processes at the county and state levels. Upon completion of the effort at the end of 1996, the departments and the counties conducted a Feasibility Study, which supported a business model consistent with the Business Process Re-engineering effort. Key features of the proposed model included:

- Shared infrastructure among programs
- Common business processes where possible
- Generalist workers at the county Departments of Social Services
- Extensive use of automation in a paper free environment
- Outsourcing of systems development and technical support
- Internet enabled access from non-county Medical Application (MA) sites

In August of 1997, the CDHCPF agreed to an integrated CBMS that included CDHS programs, medical assistance programs, and non-county MA site applications.

Following the development of a conceptual design, CDHS and CDHCPF conducted a series of Joint Application Design sessions, which developed design requirements for each function of the system. These sessions involved more than one hundred business experts from both CDHS and CDHCPF, numerous county departments of social services,

and non-county MA sites. With the completion of the Detailed Design in 1998, the Implementation Advanced Planning Document (IAPD) was prepared and submitted for federal approval. In December 1998, a Request for Proposal was released to the vendor community.

Two proposals were received in April 1999. They were evaluated through mid-May by a team of twelve representatives from a broad spectrum of stakeholders. After the proposals were scored on their functional and technical merits, the cost proposals were opened by the Director of Procurement, who then declared the procurement "unsuccessful" due to the disparity between the costs proposed and the amount budgeted by the legislature.

Since that time, CBMS staff engaged in two phases of competitive negotiations under the guidance of the Executive Directors of CDHS, CDHCPF, and the office of procurement. The negotiations resulted in the submission of new proposals. The proposal submitted by Electronic Data Systems (EDS) included all functional and technical requirements reaffirmed by stakeholders during an extensive review. An Intent to Award was issued to EDS on September 22, 1999, with joint Executive Director approval. Contract negotiations began immediately. They were suspended October 15, 1999, at the request of members of the Joint Budget Committee, who wished to clarify several issues before recommending budget authorization for FY 2000.

Goals

As stated in the Request for Proposal, the goals of the CBMS project are:

- To integrate public and medical assistance application, eligibility, and benefits data in a way that improves service, continuity, and coordination
- To speed the accurate determination of eligibility according to program rules
- To realize efficiencies in delivery of public benefits
- To promote self-sufficiency among clients of public and medical assistance programs
- To increase access to medical care for underserved and at-risk eligible persons

Scope

CBMS will support TANF, Food Stamps, Medicaid, Adult Protective Services, Old Age Pension, Aid to the Blind, Aid to the Needy Disabled, Children's Health Plan Plus, and the Colorado Indigent Care Program. It will replace these systems: COIN, CAFFS, CHP+, CACTIS, CEF, and CICP (a manual system).

More broadly, CBMS will:

- Shift workers focus of providing benefits from paperwork and

processes to the client
- Permit applicants to give information only once for consideration for all programs supported by CBMS
- Store data in a single integrated database available for later reference by other authorized agencies
- Share client clearance processes and infrastructure with CFMS (County Fiscal Management System) and CYF (Children, Youth, and Families)
- Improve resource management through more timely and efficient reporting

Guiding Principles

- Be customer focused
- Be knowledgeable
- Provide uniform technical features and characteristics assuring all organizations will be able to share information and integrate services within an environment that satisfies the appropriate level of security
- Be comprised of competent and well-trained staff
- Provide quality systems, service delivery, and support, as well as utilize internal staff and public/private partnerships to effectively provide services
- Propose and encourage new organizational values and a new service delivery culture
- Build positive relationships with and communicate effectively to all customers at all times

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LIST OF ABBREVIATIONS

CBMS	Colorado Benefits Management System
CIO	Chief Information Officer
DT	Decision Table
EOC	Executive Oversight Committee
HIPAA	Health Insurance Portablity and Accountability Act
IMC	Information Management Commission
IV&V	Independent verification and validiation
JBC	Joint Budget Committee
OIT	Office of Innovation and Technology
OSPB	Office of State Planning and Budgeting
QA	Quality Assurance
RFP	Request for Proposal
UAT	User Acceptance Test

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