2012/2013 MARIN COUNTY CIVIL GRAND JURY

Marin's Software Saga Continues - But Is There MERIT In ATOM?

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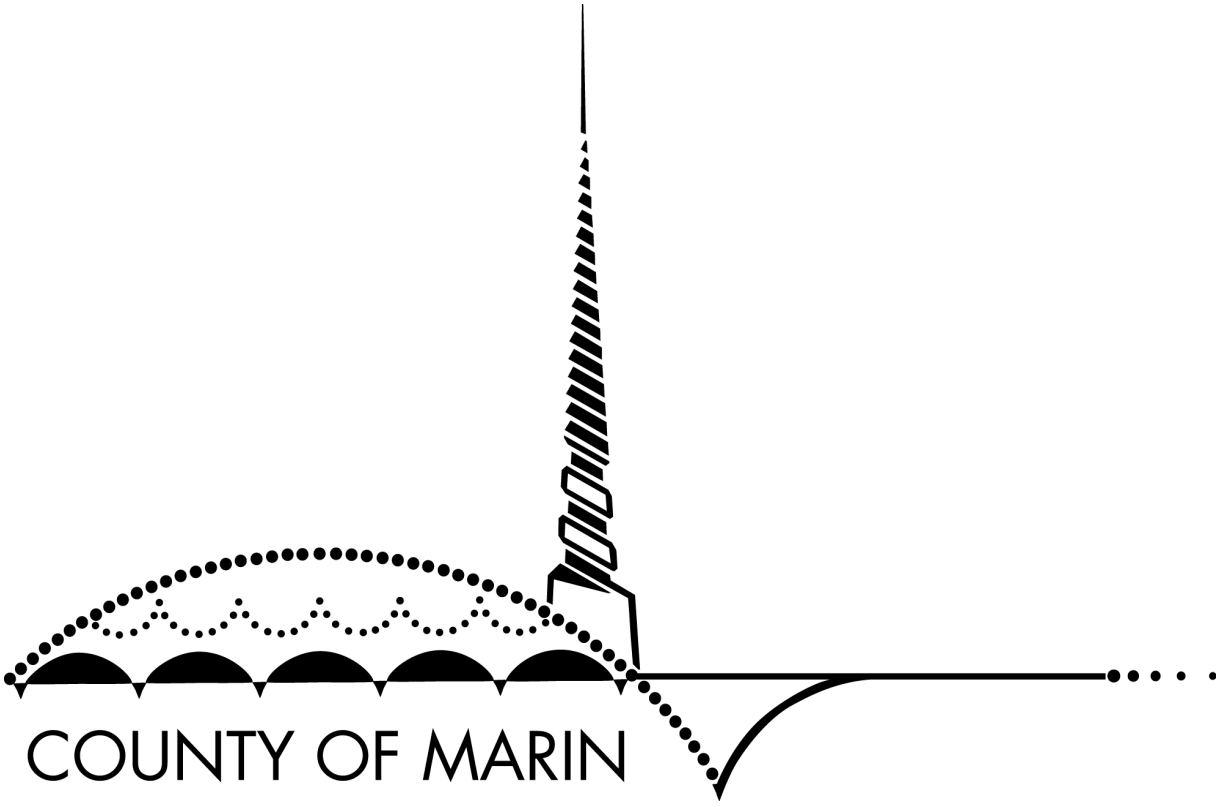


MARIN'S SOFTWARE SAGA CONTINUES – BUT IS THERE MERIT IN ATOM?

SUMMARY

In 2004, the Marin County Board of Supervisors (BOS) realized that the County's antiquated Enterprise Resource Planning (ERP)[1] software system needed to be replaced. This project was given the acronym "MERIT" - Marin Enterprise Resource Integration Technology. Over the past nine years, the Supervisors have spent around $30 Million to achieve this software conversion goal. Today, that ERP system operates at only 50% of what was promised and barely meets Marin County's basic needs, yet costs an alarming $2.5 Million a year to maintain. Consequently, the BOS has recently commissioned another ERP software conversion project called "ATOM" - Administrative Technologies of Marin, scheduled for completion in 2016.

This Grand Jury Report focuses on two questions:

- Did the decisions and ensuing actions of the county's key players contribute to MERIT's poor results?
- Are we seeing any of the deficiencies of the old project (MERIT) showing up in the new project (ATOM)?

The Grand Jury found that some decisions and actions of Marin's key players contributed to the MERIT project failure. Although well intentioned, key players did not appear to have a clear understanding of the complexity and risks inherent in an ERP project. There were many junctures at which the eventual outcome could have been altered. The blame for the failure of this project cannot be narrowed to one specific action or person.

To its credit, the BOS has made some important changes to the ATOM project based on lessons learned from MERIT. However, the Grand Jury believes that certain elements remain in the ATOM projects that are similar to the deficiencies in MERIT. Consequently, the Grand Jury recommends the following:

[1] Enterprise Resource Planning is the name given to a single computer system that integrates all the business functions necessary to manage an organization.

1. That the BOS reconfigure the ATOM project to be more in line with Information Systems Technology (IST) project management standards[2] and:
   - Establish a Project Director role in which both the County IST Director and the County Administrator (CA) take full responsibility for the success of this project.
   - Appoint a full-time senior level ERP Project Manager (PM) to direct all operations of the ATOM project.
   - Require the CA, the IST Director, and the PM to develop a comprehensive project plan and change management plan for ATOM.
   - Establish a clear and effective oversight role for the BOS in the ATOM project.
2. That the BOS set guidelines for themselves to reduce Marin's reliance on outside consultants.
3. That the BOS establish some type of an advisory resource to ensure Supervisors have all the relevant information needed to authorize and oversee this and other large projects.

BACKGROUND

MERIT

Many articles have appeared in Marin's local papers detailing the history of the MERIT project. Below is an outline of the relevant events about this project in chronological order.

In 2004 the BOS authorized the expenditure of funds to begin MERIT.

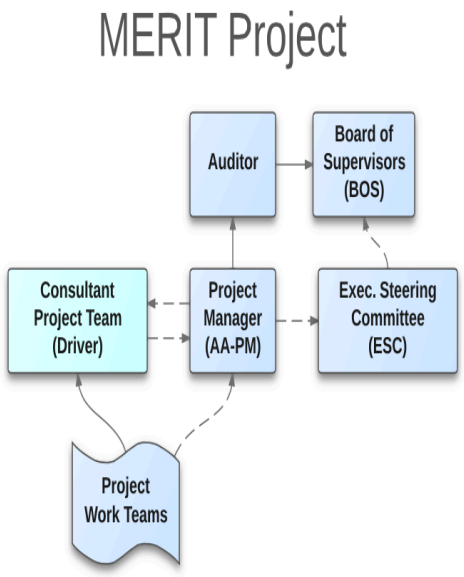
- The BOS hired two outside consultants, Government Finance Officer Association and Velocity Performance Solutions, to design the conversion project and select a vendor.
- Oversight of this ERP conversion project was assigned to the County Auditor's office with the instruction from the BOS to "*Buy the best ERP system possible."*
- The Auditor appointed the Assistant Auditor as the Project Manager (AA-PM).
- The AA-PM hired another outside consultant to help manage the project, but there is no evidence that this consultant had project management experience.
- An Executive Steering Committee was formed, consisting of several department heads and one Supervisor, to assist the Project Manager.
- SAP was chosen as software vendor and Deloitte was chosen as the consultant to implement the software.

Who controlled MERIT?

BOS gave MERIT project → Auditor → AA-PM → Deloitte

[2] "PMBOK Guide and Standards," Project Management Institute, 2013.

Deloitte gladly accepted the Project Manager role! They now drove the project. Along with the AA-PM, they convinced the BOS to keep Marin's IST department totally out of the loop. The County IST's job was to focus only on maintaining the old system until MERIT could be switched on. Deloitte used their own project plan, which they did not share with the AA-PM, and controlled their own performance metrics. The AA-PM rubber-stamped their reviews guaranteeing that Deloitte would be paid at each milestone.



The Grand Jury was unable to determine if an Organization Chart (Org Chart) was ever completed for MERIT. Figure 1 represents the functional relationships of the key players as described to us by the CA and IST staff. It is apparent that the outside consultant controlled the work teams and was the real project manager.

Figure 1. MERIT Functional Org Chart

<u>In 2005</u> a $2.23 Million contract was signed with SAP for one of its most expensive ERP software packages.

- Based on Deloitte's recommendation, Marin purchased a software program from SAP that was a new, unreleased version still being designed and tested (Beta Version[3]).
- An $8.8 Million contract was also signed with the Deloitte consulting firm for installation of the SAP package.

<u>In July 2006</u> the first module (Finance) of MERIT was switched on and failed.

- The Finance module was the first phase of a scheduled multi-phase conversion plan. This module included the County's Tax Collecting, and Accounting departments, among others.
- The old system had been discarded so could not be used as backup.
- Finance, Payroll, and Treasury departments had to conduct business using manual documentation.
- The county's financial statements could not be prepared.
- Marin was unable to collect grant money from the State Government.
- Paychecks were late.

[3] SAP used the term "Beta" to describe a software package that has had one test run, Alpha, and was ready for a second trial run to work out remaining "bugs".

- Employee productivity plummeted as manual backup systems were used.[4]

In January 2007 the Human Resources (HR) modules of MERIT were switched on.

- Deloitte had convinced the AA-PM and the BOS to stay on schedule, despite the Finance module failures in July 2006.
- The Payroll module failed and the HR module was not implemented fully.

After these failures, the BOS acknowledged there were systemic problems with MERIT. But at that point, there was no easy fix. The AA-PM was removed from the project by the BOS. However, the County Treasurer was not advised that the AA-PM was no longer in charge of the project and the AA-PM continued to sign off on Deloitte's performance milestones, allowing Deloitte to collect even more money. The MERIT system was barely limping along and needed a tremendous amount of IST tech-time to do just that. Very few of Marin's IST people were sufficiently knowledgeable to work on MERIT because they had been isolated from the project. Therefore, Marin had to continue using Deloitte to get any benefit from MERIT. Deloitte charged another $2.6 Million for this "add-on."

The BOS wanted to know how Deloitte and SAP, world-class consulting companies, had allowed such a failure. The BOS discovered that Deloitte might have not provided the best project management team as promised. They also may have been dishonest in reporting their performance metrics. And they had not sufficiently trained the end users. It also appears that SAP extended a job offer to Marin's AA-PM and the terms of the job offer were being negotiated at the same time as the AA-PM was authorizing payment of SAP / Deloitte invoices. (As of the writing of this report, the AA-PM is working for SAP.) The BOS began to collect the documentation needed for a lawsuit.

The more immediate need was to regain some basic ERP computer system functionality. *This is the one bright spot in the saga. The MERIT team within Marin IST made the heroic effort to learn the SAP software system quickly, allowing the County to terminate Deloitte, which was done in late 2007. This group of about 12 IST professionals has continued to maintain a very flawed SAP system, making it possible for the County to function. Once stabilized, the MERIT system was found to be operating at about 50% of the designed functionality.*

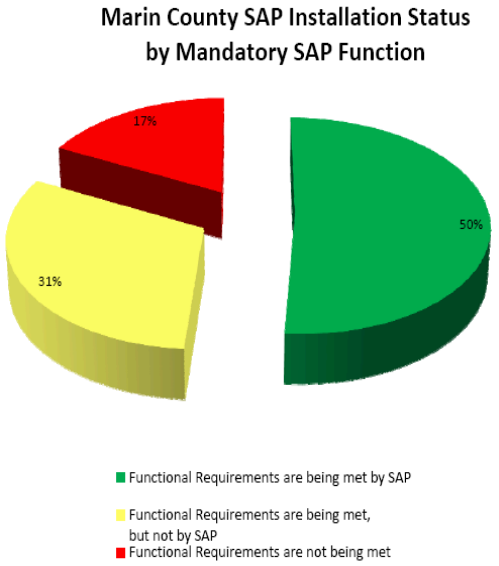


Figure 2. Marin IST systems 2010 functionality[5]

[4] For example, Marin County's Human Resources Director indicates that the department was able to provide only about half of their normal services after Go-Live.

[5] "Assessment of Marin County Software," Marin County Information Systems and Technology Department, July 26, 2010.

It would have been valuable to thoroughly analyze MERIT's failure. In June 2009, the Grand Jury recommended that the BOS "*order a review of the MERIT selection and implementation process to develop lessons learned*."[6] The BOS responded with, "*County staff is currently beginning an ROI (return on investment) analysis that will incorporate lessons learned from our SAP procurement and implementation experience.*"[7] As far as we know, this was never done internally.[8] The BOS filed suit against Deloitte, SAP, and the AA-PM in June 2010, which precipitated some unintended consequences. Because of the pending litigation, and a fear that identifying Marin's errors could weaken the case against Deloitte, many county employees were advised by the County Counsel not to discuss the problems with MERIT.

The total cost to date for the MERIT project is unclear. The CA states that the best approximation of cost is $23.7 Million. This estimated figure does not include a $1 Million litigation shortfall[9] or the annual maintenance cost of $2.5 Million since 2008. When these costs are added in, the total project cost for MERIT is $34.7 Million. The CA points out, however, that $2.5 Million/year for maintaining a tier-one[10] software system is normal, and is a cost the county always expected to pay. Critics submit that had the county purchased a tier-two[11] version, the annual maintenance cost would be about $1.5 Million. So, if we add only the difference in maintenance cost between the customized and off-the-shelf systems ($1 Million) over the last five years, we get a total of $28.7 Million. Consequently, the total cost for MERIT is either $23.7, or $28.7, or $32.7 Million depending on who is doing the math.

Even though the MERIT project had failed, the BOS knew that Marin still needed a new ERP software system to run the County offices efficiently. They began the process anew.

[6] "Marin's Faulty System of Checks and Balances," Marin County Civil Grand Jury, June 15, 2009.
[7] Response To Grand Jury Report, "Marin's Faulty System of Checks and Balances," Marin County Board of Supervisors, September 1, 2009.
[8] An outside consultant, Plante Moran, did a partial ROI on MERIT that we did not see.
[9] The cost of the litigation was approximately $4.5 Million and the case was settled with Marin getting approximately $3.5 Million.
[10] Tier-One refers to very large software systems typically designed for large corporations and then modified to accommodate government organizations.
[11] Tier-Two refers to smaller, more flexible software systems specifically designed for government organizations.

ATOM

In 2010 the BOS hired Phoenix Business Consulting (PBC) to do an assessment of Marin's ERP system.[12] PBC recommended replacing MERIT but cautioned that because of the low level of SAP expertise in-house, and because of Marin's staffing constraints,[13] outside consultants would probably be needed for another conversion.
In June 2011 the BOS began anew the process of finding a replacement ERP system. The project was given the name, Administrative Technologies of Marin (ATOM), and five sequential phases for the project were established:

Phase 1 →	Phase 2 →	Phase 3 →	Phase 4 →	Phase 5
"As-Is" Business and Process & Operations Improvement	Business Requirements Gathering	System Procurement	"To-Be" / Business Process Redesign / Systems Implementation	Change Management (Ongoing across all Phases)

Table 1: The initial five phases of the ATOM Project

The BOS established this ATOM "governance" structure:

County Administrator's Office (CAO):

- Provides overall project sponsorship and support, progress reporting.
- Makes recommendations and reports to the BOS.
- Assistant County Administrator (ACA) focuses on ATOM operations.
- CA monitors and reports to the BOS.

ATOM Executive Steering Committee (ESC):

- Chaired by the ACA.
- Comprised of the Finance Director, HR Director, Director of Public Works, and IST Director.
- Oversees all strategic issues concerning all affected departments.

Leadership Council Advisory Group (LCAG)

- Comprised of department heads.
- ATOM Charter does not provide clear role for this entity.

ATOM Advisory Group (AAG)

- Comprised of representatives from each department
- Provide a department perspective to the ESC.

[12] "Production Assessment of Marin County's SAP ERP System," May 14, 2010. http://www.marincounty.org/depts/ad/divisions/management-and-budget/atom
[13] Most of the staff in IST were devoted to keeping MERIT sufficiently functional to conduct business. Very few staff were available to work on ATOM.

The ATOM governance structure designed by the BOS does not match the current functional ATOM governance structure. Org Charts for both structures are shown in Figure 3 below, for comparison.

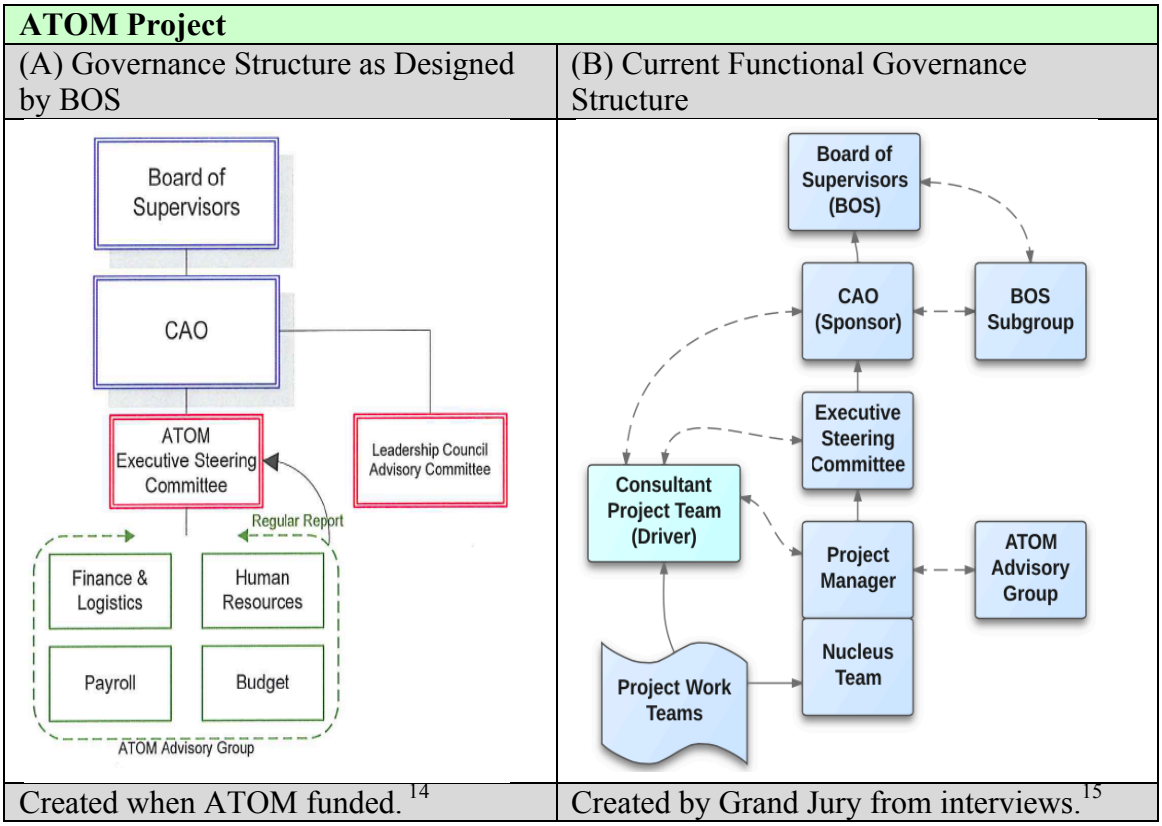


Figure 3: Comparison of original and current Org Charts for ATOM

There are several elements to note when comparing these two Org Charts. The BOS-designed Org Chart (A) does not even list a PM as part of the governance structure. A PM does appear in the Grand Jury's functional Org Chart (B), but with limited authority and responsibility. The IST Director is not identified as part of the governance in either diagram. Also, Org Chart A does not identify a reporting relationship for any outside consultants. This is surprising because the diagram was created when negotiations with outside consultants occurred.

An ATOM BOS-Subgroup[16] has been created for the current governance. The subgroup consists of two Supervisors who will spend more time with the project than the other Supervisors, convey information back to the other Supervisors, and act as executive sponsors within the organization. However, the subgroup apparently meets with the CAO and ESC only on an as needed basis.

[14] ATOM Administrative Technologies of Marin Steering Committee Charter, June, 2011. http://www.marincounty.org/depts/ad/divisions/management-and-budget/atom

[15] The Grand Jury was unable to discover any current Organizational Chart for ATOM and therefore created this functional Org Chart from interviews with all the key players.

[16] Supervisors Kate Sears and Susan Adams currently serve on the ATOM Subgroup.

Plante Moran[17] was hired. Phoenix Business Consulting (PBC) was engaged by the BOS in 2010 to assess how to proceed with ATOM. PBC estimated the cost of hiring a large consulting firm that specializes in government ERP conversions to help Marin identify and purchase the needed ERP software. Bids were sent out and in February 2012, the BOS signed a contract with Plante Moran for $0.6 Million.

In early 2013 Plante Moran and the CAO presented an ATOM status report to the BOS:

- MERIT (from SAP) still operating at 50% of designed capability.
- MERIT maintenance cost about $2.5 Million annually.
- Phase 1 of ATOM nearly completed.
- The addition of a Phase (1b) recommended to "*redesign processes as needed to achieve best business practices*." BOS approved the addition and signed an add-on contract with Plante Moran for $149,000.

At the writing of this report, the BOS is faced with practically the same dilemma faced in 2005. Marin has a faulty ERP software system that is very expensive to maintain and barely provides the basic business software functions needed. The BOS must find a replacement ERP system as soon as possible, yet do it efficiently, reliably, and cost effectively.

Plante Moran is helping the BOS consider and navigate four options:

1. Maintain Status Quo: This is not really an option because it costs $2.5 Million to maintain a system that doesn't meet County needs now, much less in the future. Estimated cost over next ten years is $21.7 Million.
2. Invest further in SAP: This is also a non-starter. This would require an initial expense to upgrade. The upgraded system would be unlikely ever to meet Marin's needs and would take even more IST staff to maintain. Estimated cost over the next ten years is $34.9 Million.
3. Purchase an off-the-shelf ERP system: This is an attractive option because off-the-shelf software already works, and is easiest to install. However, it would mean that some of Marin's more unique business processes might not be integrated well. Estimated cost over next the ten years is $21.9 Million.
4. Purchase a partially customizable ERP System: This is also attractive because most, if not all, of Marin's business practices could be integrated. But it has more potential for cost and time overruns due to the need for customization. Estimated cost over next the ten years is $24 Million.

[17] Consulting firm specializing in public sector ERP and IST strategic planning. They do not sell software or provide software implementation services.

Plante Moran projection for ATOM timeline:

- Adopt best business practices and identify system specifications by Fall 2013
- Request for Proposal (RFP) by the end of 2013,
- Chose a vendor and ERP system by Spring 2014
- Complete conversion to ATOM by the end of 2015

Total cost to date for ATOM is about $0.8 Million in payments or signed contracts with Plante Moran Consultants. Projected cost over the next ten years is between $21.9 and $24 Million. (Assuming Option 3 or 4 above)

The Grand Jury asks, "Have any decisions and actions by the key players in MERIT contributed to its failure, and have any of MERIT's problems recurred in the ATOM project?

APPROACH

First, the Grand Jury began this investigation by reading all the material it could find on the MERIT and ATOM projects. This included local publications: the Independent Journal and the Pacific Sun; websites: ZDnet.com, Computerworld.com, lessons-in-history.com, goingconcern.com, WorldPress.com, vivoinc.com, Marincounty.org, InformationWeek.com, Topix.com, cfoworld.com, InterprisseIrregulars.com - and past Grand Jury reports. Also, we reviewed relevant documents, including contracts, memos, and court filings associated with the MERIT and ATOM projects.

Second, the Grand Jury interviewed past and present staff in the County Administrator's Office, the Finance Department, the IST Department, the Human Resources Department, Plante Moran's Project Director and Project Manager, and members of the BOS.

Last, we contracted with an independent expert in project management who is certified by the Project Management Institute[18] (PMI) to evaluate the information, findings, and recommendations in this report.

DISCUSSION

The discussion focuses on seven specific issues involving the key players in MERIT that contributed to its failure. Each is evaluated in order of importance. The ATOM project is then evaluated to see whether any MERIT persists in ATOM.

[18] Project Management Institute is one of the world's largest not-for-profit project management associations. It provides globally recognized project management standards and certifications, as well as comprehensive project management training and resources. PMI.org.

Issue#	Issues with MERIT	Questions for ATOM
1	Key players initiated Marin's ERP conversion without fully understanding the complexities and risks of an IST project.	Do the BOS and other key players understand the risks and complexities of a major ERP project?
2	Auditor had sole responsibility for MERIT.	N/A (Auditor is no longer an elected position and currently reports to the Finance Director.)
3	Marin's IST Director was not responsible for success of project.	Is Marin's IST Director responsible for the success of ATOM?
4	A senior Project Manager was not managing all project operations.	Does ATOM have an experienced, senior Project Manager with the authority to fully manage the project?
5	There was an over-reliance on outside consultants.	Is there too much reliance on outside consultants?
6	No comprehensive project plan or change management plan was created.	Is there a comprehensive project plan and change management plan for ATOM?
7	County purchased customized and untested version of software rather than a tested and working version.	Is there a focus on obtaining an off-the-shelf product rather than customizable ERP software?
8	There was no clearly defined oversight role for the BOS.	Is there a clearly defined oversight role for the BOS in ATOM?
Legend: Red indicates problems or potential problems in this area. Yellow is a "warning" of unnecessary risk of increased costs and time. Green indicates a task is on track with a good probability of success.		

Table 2: Relationship of MERIT and ATOM

Issue 1: Key players initiated Marin's ERP conversion without fully understanding the complexities and risks of an IST project.

The Grand Jury believes that the BOS initiated the MERIT project without fully realizing the complexities and risks associated with an ERP conversion. Studies show that IST projects within government organizations are notorious for having high failure rates and cost overruns. Only about 30% of these projects are successful, which means completed on time, at cost, and fully functional. About 49% are poorly planned and perform poorly. And about 35% are abandoned within 3 years.[19] If the BOS had been fully aware of these risks, it is likely they would have been more cautious in their approach and insisted on making certain that MERIT had the best project plan and the right people in-house to manage it.

Issue 2: County Auditor had sole responsibility for MERIT.

Most of the business functions needing a software upgrade in 2005 were in the Auditor's domain. Therefore, it seemed logical to the BOS to let the Auditor volunteer to oversee the

[19] "IST Cost Overruns, Delays, and Contract Terminations", January 10, 2008, ZNET Research: http://www.zdnet.com/blog/projectfailures/new-research-it-cost-overruns-delays-and-contract-terminations/565

IST conversion project. The BOS now admits that was a mistake. The Supervisors knew at the time that the Auditor often worked from home and was not physically in the office. Also, the Auditor's Office had no one with IST project management experience. But most importantly, the Supervisors removed themselves from any oversight role because they did not want to "*undermine the authority of another elected official*." (It should be noted that, as of 2008, the Auditor is no longer an elected position and is now a function of the Finance Department, reporting directly to the BOS.)

Issue 3: Marin's IST Director was not responsible for success of the project.

There was a total misuse of Marin's IST Department. Not only should Marin's IST Director have been part of the implementation process, but he also should have been in charge of the entire project. Project management experts recommend that the internal IST department be represented at the executive level with the IST Director designated as the person responsible for the project's success. Additionally, the IST department should provide an experienced PM.[20] Not having IST involved in planning or managing MERIT guaranteed that no one from within the County with technical knowledge would critically evaluate the work done by outside consultants, SAP and Deloitte.

Issue 4: A senior Project Manager was not managing all project operations.

IST projects have a high failure rate, and studies show that over half of all project failures can be attributed to the project manager.[21] This means that having the wrong project manager is more harmful to an IST project than all other potential problems combined! Once the inexperienced AA-PM was in place, MERIT's fate was pretty well sealed.

Issue 5: There was an over-reliance on outside consultants.

To rely on outside consultants often seems logical and convenient. The BOS doesn't have the time or expertise to micromanage an IST project. If the BOS identifies a world-class consultant like Deloitte, they should be able to delegate the project and trust it will be done right. But even though this decision seems logical, it stems from an incomplete understanding of the consulting world.

If a consulting firm is given control of a project, it is likely to manage that project in ways that inevitably produce the most revenue for itself. This doesn't mean they are bad consultants. They may do a wonderful job or a bad job, but they probably want to make as much money as possible. It is for this reason the need for outside consultants should always be determined by the IST Director as part of a comprehensive project plan. Then the outside consultants must be supervised by a strong PM and be held to a clearly defined scope of service. (The MERIT failure is a classic example of why an outside consultant should never be given be control of an IST project that it is used as a "case study" for project management training organizations.[22])

[20] "*Integrated IST Project Management: A Model-Centric Approach*," Kenneth R. Bainey, p12, 2004 Artech House.
[21] "The Importance of a Great Project Manager," John Curtis, Quotient Blog
[22] "Why Projects Fail", Calleam Consulting LTD., May 28, 2010, http://calleam.com/WTPF/

Issue 6: No comprehensive project plan or change management plan was ever created.

There was no project plan created for MERIT. A project of this size and complexity requires a comprehensive project plan that contains such necessary elements as purpose, scope, objectives, assumptions, deliverables, risk analysis, resource allocation, budget controls, staffing, quality control, etc.[23] The project plan is a necessary blueprint for defining, understanding, and managing any project in a coherent fashion.
It is also essential that any ERP project plan include a change management component.[24] Change management is a specialized focus within the project plan and someone trained in change management theory and skills usually oversees this component. Initial resistance in the face of change is natural for most people. However, every communication, every meeting, and every interaction of the project should be seen as an opportunity to move people along the change curve[25] from resistance to commitment. When this is done properly, employees often become more dedicated and productive.

Issue 7: County purchased customized and untested version of software rather than a tested and working version.

Software vendors, like SAP, like to sell complex software that needs customization because they make more money on it. Software consultants, like Deloitte, push customized software because they make more money helping to implement it. As the BOS approached the decision concerning customized versus off-the-shelf software they should have closely evaluated the possible benefits versus the extra cost, time, and risk. It is commonly known in the IST world that "*custom software generally does not provide the return on investment to justify the investment*."[26] To compound this risky decision, the BOS accepted SAP's last minute offer to install a new (Beta) version ERP package, which was not fully tested and needed extensive redesign at Marin's expense.[27]

Issue 8: There was no clearly defined oversight role for the BOS.

The BOS did not have a clearly defined oversight role with MERIT. They allocated the resources for the project and left the management and oversight entirely in the hands of the Auditor, an elected official, over whom the BOS had no direct authority. This meant that the BOS did not know the true status of MERIT until it was too late.

ATOM Project

We will now compare the ATOM project with each of the eight deficiencies identified in MERIT. We include one caveat: Since the Grand Jury is not recognized as having

[23] See sample project plan Table Of Contents in Appendix A
[24] *The Case for Change Management: Costs and Risks of Poorly Managing Change,* Change Management Learning Center, 2011.
[25] See Appendix D
[26] Wes Trochlil, "Custom Software Vs. Off-The-Shelf: A Case Study, "2013, Prepared for Blog, Effective Database Management, effectivedatabase.com
[27] "What is a Beta Version?,"WiseGeek.com, website: http://www.wisegeek.org/what-is-a-beta-version.html

professional IST project management experience,[28] we contacted a Project Management Institute (PMI) certified project management professional to review the information in this report and its supporting documents.[29] Accordingly, only those deficiencies in ATOM with which the certified PM consultant concurred are presented.

1. Do the BOS and other key players understand the risks and complexities of a major ERP project like ATOM?

The Grand Jury believes that the BOS and other key players have learned lessons from the MERIT failure. Indeed, everyone we talked to expressed a sincere desire to make sure ATOM is done right. There are indications, however, that the decision makers still do not fully understand the risks and complexities of an IST conversion project. This will become evident as we continue the comparison of the two projects.

2. Allowing the independent Auditor to run the project is a moot point now because County Auditor is no longer an elected position.

3. Is Marin's IST Director responsible for the success of ATOM?

The BOS is to be commended for ensuring that the IST department plays an important part in ATOM. The IST Director is on the Executive Steering Committee (ESC) and the designated PM is the manager of an IST team maintaining the current SAP system. However, the Grand Jury believes that the IST Director should play an even bigger role in ATOM.

An ERP conversion is both an IST project and a business project. At its heart, ATOM is a software system that controls computers that must work to support all the business needs of Marin. Consequently, the ATOM project needs to have both a software expert (IST Director) and a government operations expert (the CA) as Project Directors with full and equal responsibility for the project's success. This will allow the ERP system to be defined, selected, and installed to fit Marin.

The Grand Jury believes that the governance structure shown in Figure 4 below is more in line with IST industry standards for ERP conversions than either of the governance structures shown in Figure 3. In the Figure 4 Org Chart, the CA and IST Director share equal responsibility for the project's success. Together, they should have all the expertise necessary to identify the necessary resources, set specific objectives, access the ESC and the BOS-Subgroup, and provide guidance to the PM.

[28] Among the nineteen members of the current Grand Jury, there is a combined total of 135 years general project management experience, but not for ERP conversions.
[29] Amy Neil, PMP, Certified Project Management Professional, Certified by Project Management Institute.

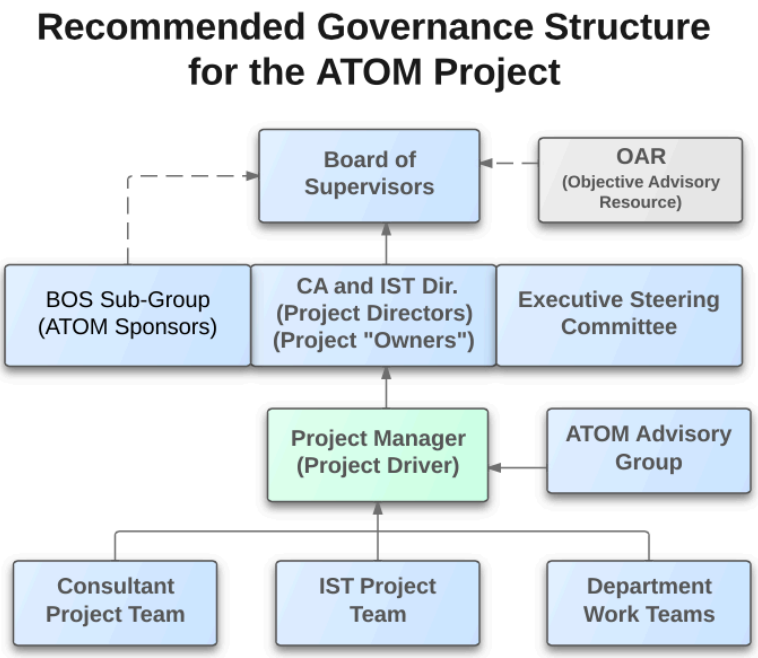


Figure 4: Grand Jury recommended Org Chart for ATOM

The Grand Jury would like to emphasize that this focus of our report is not meant to be a criticism of the current IST Director or the current PM. We have no reason to believe they are not fully competent, hard working professionals. We are simply pointing out that they have not been given the direction, authority, and responsibility usually expected for a project the size and cost of ATOM.

4. Does ATOM have an experienced senior Project Manager with the authority to fully manage the project?

ATOM does have a PM with IST project manager experience. However, it appears that the PM role in ATOM has been limited by design. So far, the PM has been assigned to lead the Nucleus Team, which is governed by the ESC, which is overseen by the CAO, which then reports to the BOS. (See Figure 4) There is no published Org Chart for ATOM and most of the key players we talked with could not even identify the person designated as PM. In addition, the current PM can only devote half time to ATOM while spending the other half of his time supervising the current MERIT maintenance team.

The PM should be responsible for all day-to-day operations, coordinating and integrating all project elements, and maintaining comprehensive progress measurements. In addition, the PM should be able to evaluate and direct any outside consultant that might be needed. (A sample PM job description for an ERP conversion in a county about Marin's size can be found in Appendix C.)

The Grand Jury believes strongly that the ATOM governance structure should be reconfigured to include a full-time senior PM who has full operational responsibility and authority for the project. The PM should report directly to the CA and the IST Director, with input from the ESC and BOS Sub-Group, as shown in Figure 4 above.

5. Is there too much reliance on outside consultants in ATOM?

The reliance on outside consultants is not as extensive as with MERIT. However, the Grand Jury believes that the current level of reliance on outside consultants may be unnecessary and will likely lead to increased costs, extended project time, and less County control.

There are several similarities with MERIT. In 2004, the BOS hired a consultant to evaluate the need for a new ERP system; this was repeated in 2010 for ATOM. In 2005, the BOS hired a consulting company that specialized in government systems to help prepare a Request for Proposal (RFP), and find a vendor; this was done again in 2011. The outside consultant with MERIT, Deloitte, controlled the project. Deloitte maintained its own project plan, prepared most of, if not all, the written communications, conducted most of the briefings, and presented reviews and recommendations to the BOS directly. This dynamic is happening again with Plante Moran taking the lead in ATOM.

Also, as with MERIT, the outside consultants for ATOM are receiving add-on contracts in addition to the original contract. This often occurs when the outside consultant controls the project and/or when there is no comprehensive project plan that clearly defines the scope of the project. For example, Phase 1b of the current ATOM timeline was not a step in the original ATOM design. It was later suggested by Plante Moran and accepted by the BOS. Phase 1b pays Plante Moran another $150,000 to help Marin's Finance Department managers identify best business practices. Additionally, a second outside consultant, Collective HR Solutions, has been hired for $106,475 to partner with Plante Moran in identifying best business practices in Marin's Human Resources Department.[30]

These add-ons troubled the certified IST project management expert we engaged to review this report. She concluded that after a year of mapping Marin's software needs, Plante Moran should have enough data to define the County's ERP needs and put out bids to the vendors of the best government-focused software. Instead, Plante Moran has convinced Marin to spend several months and an additional $256,000 identifying best business practices within at least two departments. The theory is that if Marin identifies and adopts best business practices now, we will be able find the best ERP software to support those best business practices within two departments.

> *The PMI certified expert simply asks, "Why spend the time to identify best business practices now?"*

[30] "*County of Marin hires computer system workshop consultant*," Marin Independent Journal, April 19, 2013.

The best off-the-shelf, government-focused ERP software will have best business practices built into it! Typically, vendors of ERP software gather their clients together once a year, poll them as to work flow improvements, and then modify their software programs accordingly, to offer as an annual system upgrade. Adopting best business practices now is unnecessary since it is likely the software will have these methods built in. Managers and staff will then adopt the best business practices when trained on how to use the software. Outside consultants have an incentive to recommend that Marin identify and adopt best business practices if they think it will result in additional contracts, which it has.

Marin should select a vendor now and then train managers and staff in best business practices as supported by the new software during the system's configuration and implementation phases. This could save money for Marin and shave perhaps six months off the ATOM timeline. Of course, it would mean less money for the outside consultants.

6. Is there a comprehensive project plan and change management plan for ATOM?

Possibly the most glaring deficiency with ATOM is the lack of a comprehensive project plan to guide all the key players and to measure progress. And surprisingly, none of the key players expressed a concern over this deficiency. Even Plante Moran tried to convince the Grand Jury that there was no real need for a comprehensive project plan. Nevertheless, without a project plan, Marin County must rely on Plante Moran even more for guidance and direction. When pressed, Plante Moran did admit that they had created a project plan for their own internal use, but that it wasn't really necessary to share with Marin until the implementation phase of ATOM, if at all.

The current Grand Jury has approximately 135 years of collective project management experience among its members. None of us, nor any project management expert we talked with, nor any project management text we found, recommended embarking on a project of this complexity and size without a comprehensive project plan. As Phil Simon, author of *Why New Systems Fail,* puts it, "*Without a good project plan, it is hard to imagine a multimillion dollar project having a remote chance of success*."[31]

Also, there is no clear change management plan for ATOM. The time spent with Marin employees to identify ERP software needs appears to be very beneficial. The end users are engaged and much more focused on ATOM than they were on MERIT. This focus is an essential element of a change management effort. However, because there is no formal, unified change management plan to implement, it is unclear whether all staff are prepared for the change or how effective the training is.

7. Is there a focus on obtaining an off-the-shelf product rather than customizable ERP software?

In this area there is a definitive positive difference between ATOM and MERIT. The BOS is quite clear that it wants a software vendor with proven county-government software systems currently in operation.

[31] "Why New Systems Fail", Phil Simon, 2011, p123, Published by Course Technology

However, here too, the PMI certified expert who reviewed this report advised that ATOM might be headed toward a problem that occurred with MERIT. Marin currently has two outside consulting firms working with various departments to identify best business practices. If Marin adopts some new methods of workflow and the off-the-shelf ERP software is not specifically designed to support these new methods, then the new software has to be customized. As with MERIT, this will lead to expensive add-on contracts with outside consultants and vendors.

8: Is the oversight role of the BOS clearly defined and effective?

To their credit, the BOS is more involved with ATOM than it was with MERIT. However, the Grand Jury believes that the oversight role of the BOS in the ATOM project is not as clearly defined and not as effective as it could be.

BOS members equate their role to that of a Board of Directors in a large corporation. As several Supervisors stated, "*We make the high-level decisions and trust that our executives will carry them out."* There is truth to this. Supervisors are not elected for their expertise in all areas that impact communities or their executive experience in managing all County Government operations. They are politicians with typically a generalist background. They have to focus on making the high-level decisions to allot resources for the good of the County, and delegate the operational authority to professionals in those areas.

So, what should be expected of the BOS in its oversight of major projects? The Grand Jury believes that the BOS should review every major project at least monthly, using the same process and tools found in large corporations. It is standard practice for a company president or corporate board members to have the project directors and PM give a regular, short briefing on the project status. These briefings are scheduled at weekly, bi-weekly, or monthly intervals, depending on the project's importance. Every major element or task of the project is quickly reviewed as to whether it is on time and on budget. To accomplish this efficiently, oversight entities in the corporate world use a "dashboard," a unique, one or two-page summary of project performance.[32]

Let's use ATOM as an example. A dashboard for the ATOM project would contain all the major elements of the ATOM project, the progress milestones for each, and the current status for achieving that milestone. Beside each major element is a colored square. A green square indicates the tasks for that element are on schedule, a yellow square means there might be some problems, and a red square indicates problems. With this dashboard, the executive team is able to quickly focus only on those areas that need attention. Too many persistent red squares could mean that the project plan is faulty, or the wrong people have been assigned to the project, or the outside consultants are looking for more work. Regardless of what is causing the red squares, this review process allows the BOS (the high-level executive team) to oversee the project efficiently and then direct necessary changes long before there are large cost or time overruns.

[32] See Dashboard sample in Appendix D or Table 2 above.

The BOS has learned lessons from MERIT

In January 2013, the CA issued a memo listing six lessons learned from MERIT. Each is listed below along with a comment on whether this lesson has carried over into ATOM:

1. Select simpler software designed specifically for the public sector.

   This is the stated intention for ATOM.

2. Take an incremental, phased implementation approach based on readiness.

   This is the stated intention for ATOM once software is purchased.

3. Have more direct Board oversight of the project, as compared to the previous project that was operated by the elected Auditor's office.

   There is more BOS oversight with ATOM, but the process and its effectiveness remain unclear.

4. Rely more on our IT department and less on outside consultants.

   The IST department is more involved with ATOM than with MERIT, but has not been delegated the responsibility and authority that it should have. The outside consultants appear to be the driving and controlling force in ATOM.

5. Provide for greater user input in the development of the system.

   This is being done extremely well in ATOM.

6. Provide better user training prior to go-live.

   This is being done and all indications are that it will continue.

The key players should be commended for evaluating the MERIT project and openly stating how they intend to apply the lessons learned to ATOM. Doing it now is absolutely necessary to avoid repeating mistakes experienced in the MERIT project. The Grand Jury believes that both the MERIT project failure and the ATOM project anomalies described in this Discussion section indicate there are additional lessons to be learned and additional changes that should be made.

Three major changes the BOS needs to make

First: The ATOM project needs revision to conform more to Project Management Institute (PMI) standards. Typically, an ERP conversion project begins with the development of a comprehensive project plan that identifies scope, objectives, assumptions, risks, deliverables, staffing, schedule, budget, etc. (See sample Project Plan Table of Contents in Appendix A.) Because the software conversion must meet the needs of the County's business environment, Marin's CA and IST Director should oversee the project plan development. During this process, a senior PM would be identified to assist in the project plan development and then to manage the day-to-day operations of the project. The IST Director and CA, as project directors, would present this plan to the BOS to inform them and make sure the key players are aware of the complexities and risks inherent in ERP projects. Also, in creating the project plan, the IST Director would identify the specific, limited areas where an outside consultant might be needed. The IST Director and PM would hire and supervise any outside consultants.

This industry standard process did not occur with MERIT and has not yet occurred with ATOM. The Grand Jury believes that the BOS should appoint the CA and the IST Director as the Project Directors (PDs) responsible for the ATOM project. (See Recommended ATOM Org Chart Figure 4.) Also, a full-time, senior level PM position should be established to manage all day-to-day operations and supervise outside consultants. Further, the BOS should direct the PDs and PM to develop a comprehensive project plan and change management plan, in accordance with PMI standards.

It is also standard industry practice for high-level decision makers to review progress summaries on a regular basis. The Grand Jury recommends that the BOS personally review the progress of all major projects at least once a month. The Project Directors and the PM should present a "dashboard" summary of the project's major elements to the BOS. When the BOS sees too many red flags on the dashboard, it is time to call in an objective advisory resource for a second opinion. An independent subject matter expert will be able to give an unbiased analysis of what is going wrong and what needs to happen to fix it. Using this resource prevents the BOS from being informed only by people with a vested interest in not presenting all the facts or shading those facts.

Second: The BOS should set guidelines for hiring outside consultants. It seems apparent that hiring a consultant should be done only if the desired expertise is not available in-house. So the question naturally arises when looking at the recent contract add-ons with ATOM, "*Why is Marin hiring outside consultants to provide best business practices in various departments? . . . Is not the head of each department expected to stay abreast of the best business practices in that area?"*

Hiring outside consultants to identify best business practices implies that either our current department heads do not have the expertise to do this task or that they are too busy. The Grand Jury is generally impressed with the department heads interviewed, especially the CA and the Finance Director. We do not believe there is a lack of best business practices expertise in-house. Nor do we believe that department heads are too busy with regular work. A focus on efficiency and the incorporation of best business practices should always be part of a department head's "normal work."

It would appear that the process of hiring outside consultants has become too convenient for the BOS. The more responsibility an outside consultant takes for a complex problem, the less the in-house key players have to worry about. Consequently, the Grand Jury feels the BOS should set these guidelines for hiring outside consultants:

a. Outside consultants are hired only when there is complete certainty that County employees are not able to provide that expertise.
b. Other than for specialized consulting situations, the project for which an outside consultant's expertise is needed must be implemented in ways that ensure County employees acquire that expertise.

Third: The BOS should establish an objective advisory resource (OAR) to ensure it has all the relevant information needed to oversee the ATOM project.

There is a disparity between general project management standards and the management of ATOM. The Grand Jury recommends that the BOS immediately hire an objective advisory

resource (OAR) to review the current dynamics of the ATOM project, the risks of proceeding as it is now designed, and the recommendations of this report.

The concept of having an OAR is not to be confused with hiring an outside consultant. Instead, using an OAR is like getting a second opinion about a diagnosis or treatment plan. For example, suppose the BOS hears from some citizens that a particular neighborhood in San Rafael needs several of its streets repaved because of newly discovered sink holes.

Appropriately, it would ask the Department of Public Works (DPW) Director to evaluate the situation, present the findings and options, and make a recommendation. The DPW Director is competent to make such an assessment, but since the Supervisors do not have a background in civil engineering, they may not feel their understanding of all the ramifications is adequate. It is at this point that the BOS should get a "second opinion" from an independent expert with that particular expertise.

This expert, or OAR, would not be associated with any consulting company looking for new clients or with any construction company that fixes roads. An OAR might be associated with a college or university, or a certified professional who freelances to assess and report on specific problems. The BOS would pay a small, one-time fee for the OAR to work with the DPW Director to look at the problem with a new set of eyes and report directly to the BOS on the best option. With this information, the BOS is more likely to have the information needed to allot resources appropriately and efficiently.

The BOS could benefit from using an OAR at two points in a project's lifecycle. The first is when the initial problem is defined and best options are explored, as with the example above. The second is when the BOS is overseeing a project it has funded. This is the Grand Jury's recommendation with ATOM. The Board should bring in a totally independent subject matter expert in ERP project management to give the BOS a new perspective. Should the OAR validate any or all of the findings and recommendations of this report, the BOS could then take action that could save money and increase the odds of ATOM's success.

This is not the first time the concept of an OAR has been brought to the BOS. In 2009, the Grand Jury found that "*the implementation of MERIT was botched*" and recommended that the BOS "*Re-launch the Audit Advisory Board as an effective board. . . to act as an advisory/oversight resource"*.[33] The BOS responded with, "*The Audit Advisory Board will be reconstituted as the 'Finance Audit Advisory Committee' with an expanded composition . . .. "*[34] This statement implies that the BOS planned to start using an OAR in its decision-making.

Last year's Grand Jury formally recommended in one of its reports that the BOS create an Independent Budget and Legislative Analyst (IBLA) office to ensure all major decisions are made from a comprehensive base of knowledge.[35] That report cited numerous other government entities with such a function and also listed numerous benefits, which included a

[33] "Marin's Faulty System of Checks and Balances," Marin Civil Grand Jury Report, 2008-09, marincounty.org
[34] The Marin County Board of Supervisor's Responses, "Marin's Faulty System of Checks and Balances," Marin Civil Grand Jury Report, 2008-09.
[35] *Advantages of Creating An Office Of Independent Budget and Legislative Analyst*, Grand Jury Report, 2011-2012, marincounty.org

reference to how a resource like this could have prevented the MERIT failure. The BOS rejected this recommendation, stating it already had independent fiscal oversight through the Financial Audit Advisory Committee and through the Civil Grand Jury.[36]

However, the Financial Audit Advisory Committee (FAAC), convened about once a year since 2009 to meet only on finance issues, has not been asked to evaluate or give advice on any aspect of MERIT or ATOM. And, to our knowledge, the Grand Jury has never been asked by the BOS to evaluate and advise on any aspect of any project prior to the BOS making a decision on it. This report, therefore, is an example of the "oversight" we provide to the BOS. It comes too late for MERIT and, although it was not solicited by the BOS, we hope it will be useful for ATOM.

In ancient Rome, when a conquering general returned from battle there would be a parade called The Roman Triumph. In this citywide celebration, all the armies would march through led by the commanding general. In the chariot standing just behind the general would be a slave, holding high a golden wreath over the general's head to signify the hero and victor. But to help the general avoid hubris the slave would also be whispering in the general's ear, *"Remember you are mortal . . . all glory is fleeting."*[37] We are simply asking that the Supervisors make sure a totally independent expert is there during major decisions to whisper, "*Remember the taxpayer . . . make sure you know enough to achieve efficiency*."

FINDINGS

F1: The Board of Supervisors and other key players made decisions that contributed directly or indirectly to the MERIT project failure.

F2: The ATOM project has been designed and managed in ways that show the BOS has learned lessons from MERIT. However, the current governance structure for ATOM is unclear and does not fully assign responsibilities or give "ownership" of the project to any specific entity or person.

F3: The PM role for ATOM has not been given the authority and responsibility warranted for a project of this size.

F4: ATOM has no comprehensive project plan or change management plan in accordance with Project Management Institute (PMI) standards.

F5: There is a heavy reliance on outside consultants to guide and drive the ATOM project, with no clear plan to acquire the needed expertise to avoid a similar reliance in the future.

F6: The BOS does not have a well-defined oversight role established over ATOM that ensures frequent briefings and comprehensive progress summaries (dashboards).

[36] The Marin County Board of Supervisors' Response, "Advantages of Creating an Independent Office of Budget and Legislative Analysis," September 11, 2012, marincounty.org
[37] Mary Beard, The Roman Triumph, June 2009, p85, Harvard University Press.

F7: The BOS did not use an objective advisory resource (OAR) for evaluating major decisions pertaining to MERIT or ATOM.

F8: The BOS does not have a standard procedure for using an OAR when considering or overseeing large projects.

RECOMMENDATIONS

The 2012-2013 Grand Jury recommends that:

R1: The BOS reconfigure the ATOM governance to appoint the CAO and the IST Director as Project Directors with full authority to manage the project, and equal responsibility for its successful completion.

R2: The BOS elevate the current Project Manager role to senior, full-time Project Manager status reporting to the Project Directors and having responsibility for all project operations.

R3: The BOS advise the CA, IST Director, and PM to develop a comprehensive project plan and change management plan for ATOM in accordance with PMI standards.

R4: The BOS establish a schedule of regular briefings at which the ATOM Project Directors and the Project Manager present a progress summary (dashboard) for all major facets of the project.

R5: The BOS reduce Marin's reliance on outside consultants and hire outside consultants only when the requesting department can fully demonstrate the lack of that expertise within the department.

R6: The BOS require departments requesting outside consultants to use the contract with the consultant to acquire the missing expertise, unless the scope of the consulting is unique and limited.

R7: The BOS identify or develop an objective advisory resource (OAR) who is a subject matter expert in IST Project Management, to review the design and governance of ATOM, and to brief the BOS on any potential problems or recommended changes.

R8: The BOS identify or develop an OAR entity and formally insert that resource into its decision-making process for all major projects.

REQUEST FOR RESPONSES

Pursuant to Penal code section 933.05, the grand jury requests responses for all findings and recommendations from the following:

- The County Administrator, F1-6 and R1-6
- The County Finance Director, F1-6 and R1-6
- The County Information Services Technology Director, F1-6 and R1-6
- The County Human Resources Director, F1-6 and R1-6
- The County Department of Public Works Director, F1-6 and R1-6

From the following governing bodies:

- The Marin County Board of Supervisors, All Fs and Rs

The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted subject to the notice, agenda and open meeting requirements of the Brown Act.

Reports issued by the Civil Grand Jury do not identify individuals interviewed. Penal Code Section 929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Civil Grand Jury.

GLOSSARY

AAG – ATOM Advisory Group

AA-PM – Assistant Auditor as the Project Manager

ACA – Assistant County Administrator

ATOM - Administrative Technologies of Marin

BOS – Board of Supervisors

CA – County Administrator

CAO – County Administrator's Office

ERP – Enterprise Resource Planning

ESC – Executive Steering Committee

HR – Human Resources

IST – Information Systems Technology

MERIT – Marin Enterprise Resource Integration Technology

OAR – Objective Advisory Resource

PBC – Phoenix Business Consulting

PDs – Project Directors

PM – Project Manager

DWP – Department of Public Works

RFP – Request for Proposal

SC – Steering Committee

Appendix A

Sample Table of Contents:
Software Project Management Plan (SPMP) for Nirvana National Bank ATM Software Project – Baseline version 1.0, May 8, 2004

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Appendix B

When change management is ignored or done improperly, a great deal of employee time and energy is wasted. Indeed, end user resistance was one of the major problems discovered at MERIT's "go-live." According to the CA, most employees had such little understanding and faith in MERIT that they spent much of their time maintaining manual backup documentation, often referred to as "shadow systems."

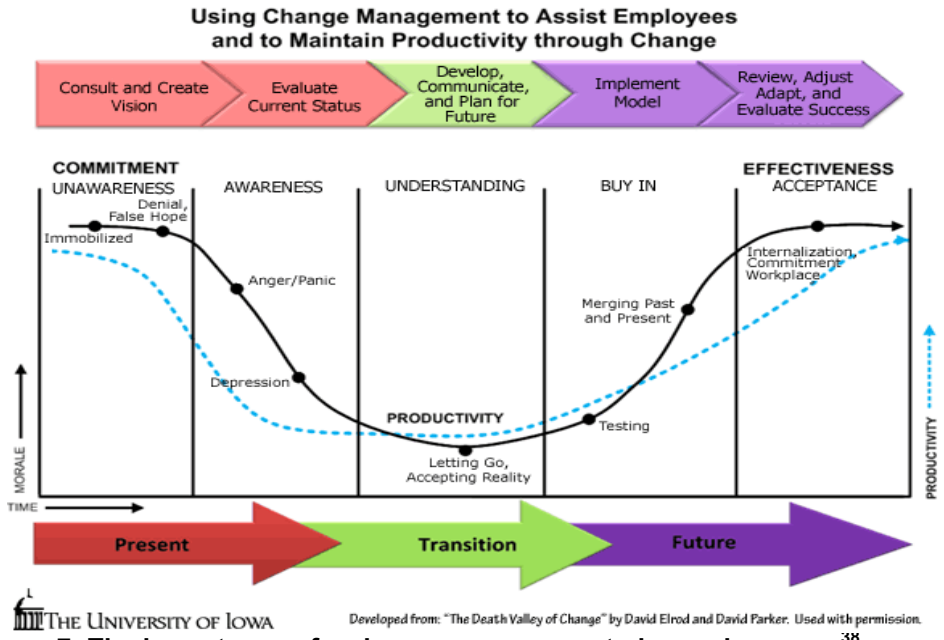


Figure 7: The importance of a change management plan and process[38]

[38] "Workforce and Workload Planning Toolbox," The University of Iowa, 2013, http://www.uiowa.edu/hr/workconsult/toolbox/

APPENDIX C

IT Project Manager

Class Code: 1227

Bargaining Unit: Varies by Department

DAKOTA COUNTY
Established Date: Dec 31, 2002
Revision Date: May 10, 2011

SALARY RANGE

$23.85 - $42.82 Hourly
$1,915.38 - $3,438.46 Biweekly
$4,150.00 - $7,450.00 Monthly
$49,800.00 - $89,400.00 Annually

GENERAL DESCRIPTION:
Class Number: 1227
DBM Level: C43 / IT3
FLSA Status: Exempt

The following is to be used for Posting purposes only
POSTING TYPE:
DEPARTMENT:
HOURS:
HIRING RANGE: $ /year (DBM Level)
SALARY RANGE: $ /year
LOCATION:
UNION:
CLOSE DATE: 4:30 p.m. on

Dakota County is in the process of implementing the IFAS ERP system from SunGard Public Sector. Functional modules being implement include General Ledger, Accounts Payable, Accounts Receivable, Fixed Assets, Purchasing, Contract Management, Payroll and Time Recording, Employee Relations Management, Benefits, Staff Performance, Hiring and Training. The project is setup with multiple subprojects each with a business or IT manager. The successful applicant will be the overall project manager for this multimillion dollar project and will have responsibility for the success implementation of all functions areas.

The position requires minimal supervision, has frequent contact with customers from all areas of the County. A sound knowledge of accounting principles would be a definite advantage. The success applicant will have at least 10 years of information technology project management experience. He/she will have the ability to manage multiple projects, summarize multiple project status reports providing a summary report for management, have experience managing software vendors, write requirement specifications, produce project plans and coordinate the development effort for interface and reporting development in a Microsoft SQL Server environment.

MINIMUM QUALIFICATIONS:
• Bachelor's Degree in computer related field AND
• Six years experience in IT Project Management

PREFERRED EDUCATION AND EXPERIENCE BEYOND MINIMUM QUALS
• 10 years of IT Project Management experience
• Direct experience in implementing multimillion dollar ERP projects using SunGard, Peoplesoft or similar

major ERP software package solution
• Project Management Professional Certification (PMP Certification)

DUTIES & RESPONSIBILITIES:
These examples do not include all possible tasks in this work and do not limit the assignment of related tasks in any position of this classification. Regular attendance according to the position's management approved work schedule is required for all positions.
1. Provide IT Project Management to multiple department, division, and countywide information technology projects of all sizes from small projects to those of larger and complex scale.
2. Provide detailed project planning, execution, including project task identification and estimation; project task scheduling; project budget management; project staff management; project contract management; project communication; project status reporting; vendor and contract management; and risk management and mitigation.
3. Perform IT Contract Management (SOW, RFP, RFP evaluation and vendor/product selection, contract negotiation, contract creation, and contract execution and monitoring, including vendor management).
4. Provide consulting assistance to all areas of IT in developing or improving information systems and provide Project Management and/or Information Architecture expertise where appropriate.
5. Serve as Information Architect to information technology projects of all scales. Provide project initiation; project scope control; detailed requirements identification and management; conceptual level application and database design; logical level application and database design; quality assurance; process re-engineering; standards and policy compliance and project management to department, division, and countywide information technology projects.
6. Effectively applies the County's project management methodology and enforces policies, standards, guidelines, and processes so that users and information technology professionals work within a common framework that enables the integration and accessibility of information.
7. Other duties as assigned.

ESSENTIAL JOB FUNCTIONS: 1-6

KNOWLEDGE, SKILLS & ABILITIES AND WORK ENVIRONMENT:
• Ten (10) years' experience in Information Technology Project Management.
• Experience in implementing multimillion dollar ERP projects.
• Accounting qualifications/education would be a definite advantage
• Excellent verbal and written communication skills along with listening skills.
• Excellent consulting, customer service and people skills.
• Experience with project management methodology and Systems Development Life Cycle (SDLC).
• Experience with MS Project and all the MS Office products
• Ability to multi-task effectively.
• Self-motivated and ability to work with minimal supervision.

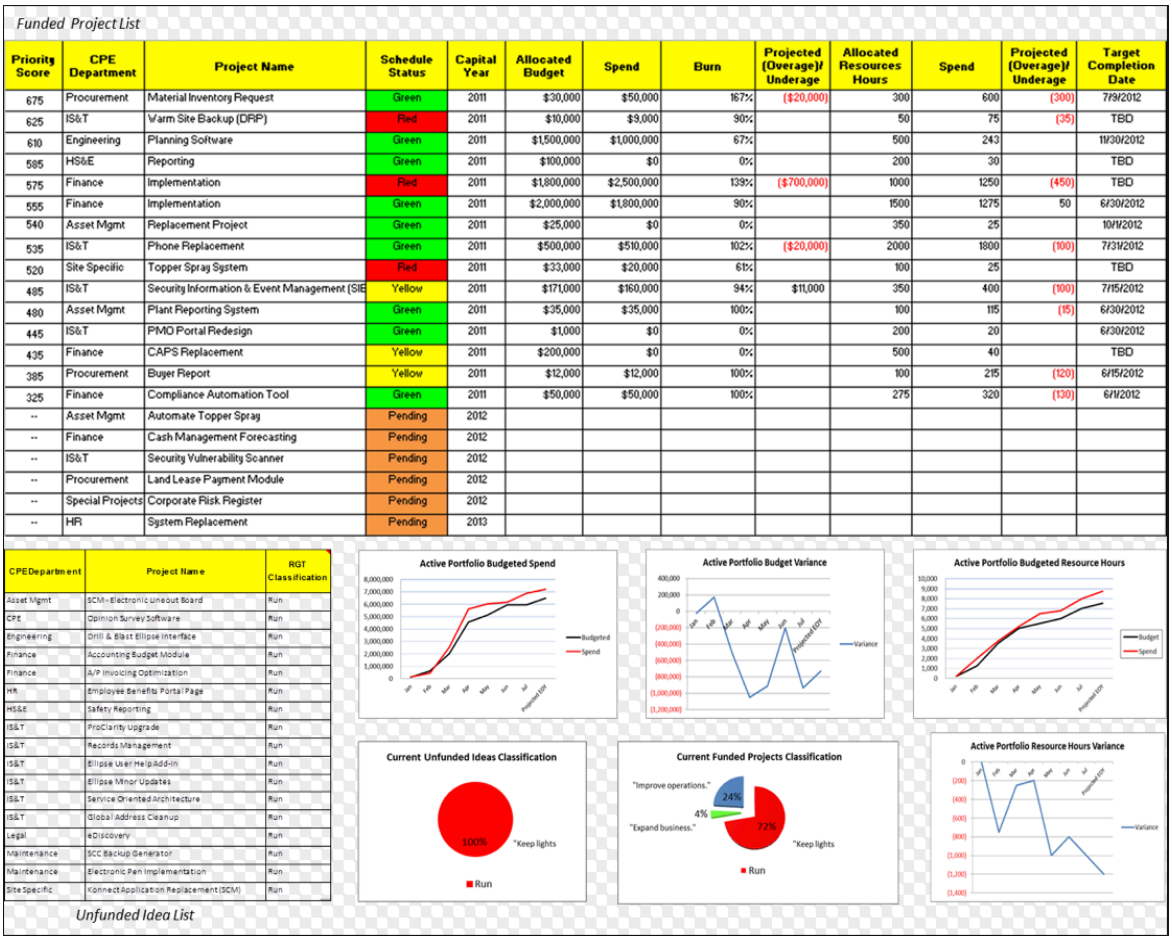
WORK ENVIRONMENT: Work is performed in a County office building. Some travel is required. Lifting requirement of up to 50 pounds on an occasional basis. Exposure to hazardous physical conditions such as mechanical parts, electrical currents, and vibration, exposure to atmospheric conditions such as fumes, odors, dusts, gases and poor ventilation, and exposure to hazardous materials such as chemicals, blood, and other body fluids may occur on the job. Equipment used may include, but is not limited to, personal computer, printer, mainframe computer, mainframe printer, copier, FAX, IVR, word processing software, data modeling software, presentation software, graphical modeling software, and program languages.

SELECTION PROCESS: The examination/selection process for this classification will consist of a rating of your training and experience from the application materials submitted. The top scoring candidates will be forwarded to the hiring department for further consideration.

Dakota County Employee Relations
www.co.dakota.mn.us
Main Number 651.438.4435
(contact 8 a.m - 4:30 p.m. Monday - Friday)

Appendix D

Below is a sample "Dashboard" used by senior level executives to quickly evaluate the progress and performance of complex projects. All major tasks are listed, followed by the status comment, and then highlighted with the color Green, Yellow, or Red. Green means that the task is on schedule and budget. Yellow means that there are problems that need to be addressed. Red means that the task is behind schedule and/or over budget. Thus, with one or two pages of metrics, an executive can quickly review complex projects and direct resources accordingly.



Funded Project List

Priority Score	CPE Department	Project Name	Schedule Status	Capital Year	Allocated Budget	Spend	Burn	Projected (Overage)/ Underage	Allocated Resources Hours	Spend	Projected (Overage)/ Underage	Target Completion Date
675	Procurement	Material Inventory Request	Green	2011	$30,000	$50,000	167%	($20,000)	300	600	(300)	7/9/2012
625	IS&T	Warm Site Backup (DRP)	Red	2011	$10,000	$9,000	90%		50	75	(35)	TBD
610	Engineering	Planning Software	Green	2011	$1,500,000	$1,000,000	67%		500	243		11/30/2012
585	HS&E	Reporting	Green	2011	$100,000	$0	0%		200	30		TBD
575	Finance	Implementation	Red	2011	$1,800,000	$2,500,000	139%	($700,000)	1000	1250	(450)	TBD
555	Finance	Implementation	Green	2011	$2,000,000	$1,800,000	90%		1500	1275	50	6/30/2012
540	Asset Mgmt	Replacement Project	Green	2011	$25,000	$0	0%		350	25		10/1/2012
535	IS&T	Phone Replacement	Green	2011	$500,000	$510,000	102%	($20,000)	2000	1800	(100)	7/31/2012
520	Site Specific	Topper Spray System	Red	2011	$33,000	$20,000	61%		100	25		TBD
485	IS&T	Security Information & Event Management (SIE	Yellow	2011	$171,000	$160,000	94%	$11,000	350	400	(100)	7/15/2012
480	Asset Mgmt	Plant Reporting System	Green	2011	$35,000	$35,000	100%		100	115	(15)	6/30/2012
445	IS&T	PMO Portal Redesign	Green	2011	$1,000	$0	0%		200	20		6/30/2012
435	Finance	CAPS Replacement	Yellow	2011	$200,000	$0	0%		500	40		TBD
385	Procurement	Buyer Report	Yellow	2011	$12,000	$12,000	100%		100	215	(120)	6/15/2012
325	Finance	Compliance Automation Tool	Green	2011	$50,000	$50,000	100%		275	320	(130)	6/1/2012
--	Asset Mgmt	Automate Topper Spray	Pending	2012								
--	Finance	Cash Management Forecasting	Pending	2012								
--	IS&T	Security Vulnerability Scanner	Pending	2012								
--	Procurement	Land Lease Payment Module	Pending	2012								
--	Special Projects	Corporate Risk Register	Pending	2012								
--	HR	System Replacement	Pending	2013								

CPE Department	Project Name	RGT Classification
Asset Mgmt	SCM - Electronic Line Out Board	Run
CPE	Opinion Survey Software	Run
Engineering	Drill & Blast Ellipse Interface	Run
Finance	Accounting Budget Module	Run
Finance	A/P Invoicing Optimization	Run
HR	Employee Benefits Portal Page	Run
HS&E	Safety Reporting	Run
IS&T	ProClarity Upgrade	Run
IS&T	Records Management	Run
IS&T	Ellipse User Help Add-in	Run
IS&T	Ellipse Minor Updates	Run
IS&T	Service Oriented Architecture	Run
IS&T	Global Address Cleanup	Run
Legal	eDiscovery	Run
Maintenance	SCC Backup Generator	Run
Maintenance	Electronic Pen Implementation	Run
Site Specific	Konnect Application Replacement (SCM)	Run

Unfunded Idea List