

# California Chief Information Officers Perspectives 2003 Report



Prepared by ITMA X Project Team

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## Acknowledgements

*"To reach a significant goal, you must leave your comfort zone".*

-- Hyrum W. Smith

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## Executive Summary

### **Purpose**

The California Chief Information Officers Perspectives 2003 Report is the class project deliverable for the Information Technology Managers Academy X (ITMA X). In the fall of 2002, class members began planning for the class project deliverable. After much discussion, the class decided to survey Chief Information Officers to gain insight on the challenges they face during one of the most difficult economic times in California history. The class wanted to contribute to a shared knowledge of how state information technology (IT) managers, at all levels, face major challenges in the areas of leadership, technology, public access, recruitment and retention of staff. The purpose of this report is to provide a glimpse into how current IT leaders and colleagues react to and address these challenges.

### **Objectives**

In order to accomplish that goal, the class collaborated in a process to survey and interview CIOs and class members on their perceptions on specific subject categories. The class members developed survey questions and conducted interviews with individual CIOs and class members. Upon completion and analysis, the report identifies and compares insights into these various visions, strategies, and perceptions. The insight gained is a reflection of how CIOs and the class members identify and plan for future trends and use their leadership skills to manage in these challenging times.

### **Conclusions**

The following report identifies respondent visions, trends, and themes, which became apparent with the completion of the interview, survey and analysis portion of the project. A comparison of how these collective responses differ is also available. Overall, each individual response represents a snapshot in time of the common themes and trends in leadership, technology, public access, recruitment and staff retention. Here, now for your consideration and reflection is the ITMA X project deliverable:

### **The California Chief Information Officers Perspectives 2003 Report.**

We hope you find this report of value. We also hope that this small piece of research helps you in your own struggles in this era of uncertain economic times.

**Information Technology Managers Academy X  
Presented June 1, 2003**

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## Introduction

### The Report Authors

The Information Technology Managers Academy (ITMA) X is composed of information technology professionals ranging from manager to staff level positions. Upon approval by each member's Department Chief Information Officer (CIO) and acceptance of the ITMA class managers, we came together as a team to gain experience and training. Our class project included two components:

- **California CIO Perspectives 2003** report based on individual interviews of seventeen state CIOs and the ITMA X members; and
- **ITMA Website Repository** containing a list of former participants, class projects and class project deliverables, ITMA class history, and access to the ITMA Application form.

For the California CIO Perspectives 2003 report, the ITMA X class gathered data to identify and discuss current issues and problems facing state CIOs. Upon completion, the class documented these various strategies and perceptions to provide insight into how CIOs prepare, strategize, or identify future trends to manage in these challenging times.

The ITMA X class consists of individuals from IT and/or other business backgrounds in state service, who came together to participate in the leadership training and networking opportunities afforded by the ITMA. The class graduation is dependent upon completion of training and the class project deliverables.

### The Report Purpose

With the guidance and support of our class sponsors and managers, we set off on a journey to identify, discuss and determine what our class project would entail. Thus, we met to brainstorm and discuss current issues, challenges and strategies facing the IT community. As a result, we identified the following categories:

- Recruitment and Retention
- Leadership
- Technology
- Public Access

The class established category review teams. Each team developed questions for each survey category. Once finalized, the class established a data collection matrix for storage of the survey questions and responses. All class members used their diverse experience to develop responses containing their insight and solutions to each of the questions. In areas where the members did not have specific experience, they sought subject matter experts to develop the responses, thus enhancing their own IT knowledge.

The class met on numerous occasions to identify issues, develop interview questions, and create an interview completion process. In order to gain insight, answers, and alternative viewpoints, the class approached state IT leaders at the CIO level and asked for their participation in the interview process. Interview teams then conducted interviews and documented the results in the data collection matrix.

The CIO interview responses were gathered and analyzed to identify the core information gleaned from each interview. Each team summarized and synthesized the data for both the class and CIO responses. Each team then analyzed the responses for trends, and analysis of findings. The result of this effort is now published in the California CIO Perspectives 2003 report.

### The Report Benefits

The ITMA X project provided an opportunity for all participants to enjoy a valuable learning experience while adding value from our efforts. The value added includes:

- Increase ITMA X team knowledge in a variety of information technology disciplines;
- Analyze key issues facing the state IT community from both the ITMA X team and CIO perspectives; and
- Summarize and synthesize the collected data into a concise report to provide useful insight.

### Current Climate

As we write this report, the California IT community is experiencing unprecedented change due to the current fiscal climate. State IT managers at all levels face major challenges in the areas of recruitment and retention, leadership, technology, and public access. This report provides insight to the state's IT community, as it faces similar situations. All ITMA classes produce a project deliverable at the end of their term; the California CIO Perspectives 2003 report is one of the ITMA X deliverables.

## Interview Methodology

### Create the Interview

During the initial exercises on the first day of the academy, several topics emerged as critical issues preventing or inhibiting the members from reaching higher levels of effectiveness within our respective fields. As our academy training progressed, these areas continued to be at the forefront of our thinking and discussion. When the time came to choose a project, the class members agreed that targeting challenges currently facing the IT community was most beneficial for all academy members and other IT managers within state service.

As part of the ITMA application process and requirement, each class member wrote a brief essay, which identified and discussed the greatest future challenges IT managers face in California. This became the foundation of the class project. Soon the class developed CIO survey categories based on the class essay responses. The following categories, derived from those responses, served as the basis for the targeted survey data desired:

- IT Recruitment and Retention
- Procurement and Project Management Processes
- Effective Public Access to Government Information
- Resources and Budget
- IT Oversight
- Technical Challenges
- Customer Service
- Security

These categories were further refined and simplified until only four categories remained. The class identified sub-teams to participate in question development. Each sub-team met to review and develop several questions pertaining to the assigned category. To promote dialog and information exchange between CIOs and class interviewers, the sub-teams gave careful consideration in developing open-ended questions. The class then voted on each question (two per category) to determine the final eight questions.

### Conduct the Interview

The CIOs selected to participate in the CIO Perspective Report came from a broad range of state departments, both large and small. The class ensured that the survey group represented a diverse mix of government and state business functions. The class then formed into three interview teams to schedule and conduct the survey. Each team consisted of six class participants. Initially, the class selected twenty-two prospective CIOs to participate in the interview process. The class distributed the chosen CIOs between the three interview teams. Each team assigned individuals to schedule and

participate in the interviews. Due to scheduling conflicts and other factors, only seventeen CIOs participated in the interview process.

The interview teams provided copies of interview questions to each CIO in advance of the scheduled interview. They also made audio-recordings of each interview to ensure accuracy of the information captured. Additionally, each team provided the CIOs a copy of the interview notes to give them an opportunity to review their responses before finalization.

The team compiled the final notes from all of the interviews. In that process, some common themes and trends surfaced and became apparent. These notes include background information on each of the CIOs and their respective departments. However, the individual CIO responses remain anonymous.

### Analyze the Interview Results

The class members formed teams to review the responses of the CIOs and class members. Where appropriate, the teams synthesized similar responses to capture the core themes or trends. The teams quantified and extracted main themes and common responses for both CIO and class members. Once compiled, the teams analyzed the interview responses and developed report findings.

# Response Analysis

## Recruitment and Retention

**Question 1: What changes do you recommend to the statewide examination and hiring process to meet Information Technology recruitment needs?**

Interview Responses	Number of CIOs	Number of ITMA X members
<b>Recruitment and Hiring</b>		
Keep the on-line exam simple. Determine eligibility only (score pass/fail only)	8	12
Move all hiring-related decisions, such as ranking candidates in exams, down to the department level	6	9
Re-institute on-line exams with the necessary support to make them work	1	9
Open and continuous exam filing	2	2
Exam process needs to focus on technical, analytical and also soft skills		3
Offer opportunities to business staff to retrain for the IT field	2	
Test business staff applicants for IT aptitude	1	
Develop a T&D component/mentorship program for entry level IT staff, to ensure long term success	1	
Recruit, test for IT aptitude and train from within to have staff maintain legacy applications. This gives veteran staff opportunities in new technologies	1	
State should create a consortium (Sacramento State & U.C. Davis) to bring in student talent	1	
Develop expertise within departments by training staff from the entry level	1	
Speed up and improve application and testing process	1	
Quarterly written exams with minimum qualifications set and interviews conducted by SPB		1
<b>Compensation and Classification Structure</b>		
Review/realign IT pay scales to be competitive with other organizations	5	
Revise the IT classification structure to reflect the great diversity of information technology skills needed by the state	1	4
At any level, hire state staff and staff in other organizations	1	4
Implement statewide the Health and Human Services Data Center "broad banding" pilot of a new method of recruitment and classification	1	2
Implement the recommendations of the statewide task force <sup>1</sup>	1	1
Consolidate the Programmer Analyst and Information Systems Analyst series to create a deep class	1	
<b>Other</b>		
Remove restrictions on lateral transfers so that departments can use their staff more efficiently	1	

Interview Responses	Number of CIOs	Number of ITMA X members
Rely on industry certifications and standards to determine qualification for hiring and promotions	1	
Move IT into its own bargaining unit	1	
The current process is workable and reasonable	1	

1. October 1998 report, "Protecting and Improving the Delivery of Services to California," by the Task Force on Information Technology Staff Recruitment and Retention.

**Trends**

- **Recruitment and Hiring**

Most of the CIOs and ITMA X members agree that the State Personnel Board (SPB) should re-institute and support the on-line open exams. A few respondents indicated open exams should have continuous filing. The exams should be simple to administer and score—SPB should determine only the candidate’s eligibility and leave the hiring decision to departments. Several CIOs recommend training and development or mentoring programs, which would include recruiting, aptitude testing and training staff from business areas.

- **Compensation and Classification Structure**

A few CIOs and several ITMA X members support “broad band” classification structures similar to the Health and Human Services Data Center’s pilot program. This allows departments to hire people with the skill sets needed for the specific job and at the appropriate level, not necessarily at entry level. Some CIOs state that IT pay scales should realign with the industry in general, so the state can better retain staff. In addition, the state should realign the IT classification structure to match the diverse information technology skills needed by the state.

**Analysis of Findings**

Most of the CIOs and class members believe that the on-line exams should continue, but with a simpler exam review and scoring process. SPB should determine eligibility only on a pass/fail basis. Departments would make all hiring-related decisions, since they know the various skill sets needed for each position. By simplifying the on-line exam process, SPB could reduce the effort necessary to score exams on a timely basis. The IT classification structure needs change and each classification must become more job specific. This would also improve the recruitment and testing processes; the hiring department could get to a specific skill set faster rather than having to review numerous candidates for the appropriate skill set. Establish pay scales for each classification to more accurately reflect outside employment trends so that the state could compete with private industry.

**Question 2: What proactive steps does your agency take to address morale issues as staff does more with fewer resources?**

Interview Responses	Number of CIOs	Number of ITMA X members
<b>Celebrate and Reward Staff Achievements</b>		
Reward staff	7	5
Celebrate achievements and success	4	3
<b>Staff Input and Training</b>		
Communicate consistently (staff meetings and question/answer forum)	5	3
Provide training	4	2
Team Building	1	4
Create and communicate a shared vision	2	2
Be honest, visible, open minded and available	1	1
Keep staff excited about their jobs	1	
By introducing new technologies to allow staff to do more with less	1	
Cross Functional Teams	1	
Build trusting relationships between staff		1
Create an atmosphere where staff can be proud of their work		1
Use effective project management		1
Empower staff to resolve problems and make improvements		1
<b>Other</b>		
Prioritize the work to do more with less and consolidate similar IT projects	2	
By hiring consultants	2	
Each individual staff add value	2	
Change management	1	
By not putting the budget reductions on the back of the employees	1	
Job restructuring and organizational change	1	1

**Trends**

Both the CIOs and the academy members felt strongly about rewarding staff and celebrating achievements in order to maintain morale. The two groups also cited training, staff meetings, and question/answer forums as successful tools to create and foster staff morale. The academy members indicated team building as a proactive step, whereas, only one CIO specifically mentioned it.

**Analysis of Findings**

To combat decreased morale during tough budgetary times, it is important to celebrate staff achievements and successes through reward programs and celebration events such as formal award/recognition ceremonies and in social settings to recognize each other's accomplishments. In addition to recognition of staff, it is important to communicate consistently, through regularly scheduled meetings, town halls, or brown bag forums. It is important to seek staff feedback so

that staff does not continuously feel that they have to do more with less and to ensure they are not feeling over committed. Staff awareness can help develop collaboration through cross-functional teams.

Leadership

Question 3: How do you build collaborative relationships across organizations and departments?

Interview Responses	Number of CIOs	Number of ITMA X members
<b>Communication / Leadership</b>		
Foster communication with business area to build trust and manage stakeholder expectations. Focus on building partnerships between business and IT. Promote communication through both formal and informal channels	10	14
Develop IT managers with "the skills to bridge the gap and translate between business and IT." Recruit from the business area for IT positions	4	1
Cultivate an environment in which each person takes responsibility for communication	2	6
<b>Teams</b>		
Develop cross-functional (business and IT) teams at all levels	10	6
Support and sponsorship of teams by management	1	1
Cultivate an environment where teams work toward the common goals of the department	1	3
<b>Enterprise-wide Perspective</b>		
Focus on developing an enterprise mentality instead of "stove-pipe" solutions	2	1
Focus on internal departmental and external state agencies	2	
Cultivate an environment where all parties involved are responsible for their role in achieving the collaborative effort		1
<b>Process / Standards</b>		
Recognize the importance for consistency, standardization, and project management methodology	4	3
Create a business-technology vision	1	

**Trends**

- **Communication and Leadership**

The majority of the CIOs and ITMA X members identified communication as essential to building collaborative relationships. Communication must transcend vertical and horizontal organizational boundaries. Interestingly, a few CIOs suggested communication advancement through IT recruitment from the business area.

Communication is key to collaborative relationships and received the most responses from each group. Collaborative relationships need mutual trust combined with the understanding that "we're all in the same boat." Both CIOs and class members saw the value and importance in building effective

communications with the business area leading to excellence in customer service.

The CIOs focused on developing managers with effective communication skills to aid in working with the business side, while the class members focused on fostering an environment of open and honest communication amongst staff. In addition, they identified the importance of helping their staff understand their role in the process.

- **Teams**

Both groups focused on the importance of building cross-functional teams comprised of business and IT staff. Both groups understand the importance of team support and sponsorship by management; while the class responded on the importance of teams working toward a common goal.

- **Enterprise-wide Perspective**

While developing an enterprise-wide perspective did not garner as many responses as other categories, both groups recognized the importance of this perspective. The CIOs recognized that collaboration goes beyond departmental boundaries and that state agency partnerships can produce mutual benefits.

- **Process and Standards**

Both groups recognized the need for proven and industry recognized best practices such as Project Management Body of Knowledge, Project Management Institute, and Capability Maturity Model to ensure high quality processes and standards. In addition, the CIOs recognized the need to create a business-technology vision.

### ***Analysis of Findings***

The CIOs and ITMA X recipe for building collaborative relationships across organizations and departments begins with a strong infrastructure composed of functional/technical teams and a vision that includes the “big picture” which fosters effective communication.

**Question 4: How do you, as IT leader, create, promote and maintain a shared vision?**

Interview Responses	Number of CIOs	Number of ITMA X members
<b>Building the Vision</b>		
Build a vision using outside resources (Gartner Group) and share it	9	7
Share the vision, then listen for feedback	2	11
IT tactical visions should match the strategic vision of the organization	2	4
Make sure the work activities are the right ones to support the vision	2	4
Use the strategic plan as living document based on the business/customer needs which is updated regularly	2	4
Develop professional relationships and promote respect and understanding of each others needs, both Business and IT	3	2
Create a shared vision through consensus of stakeholders (modeling the vision in action)	3	1
Vision needs to be practical, based in reality	1	
Needs to be measurable, regular review of progress		1
<b>Communication</b>		
Communicate the department vision to all levels of staff showing them how it relates to their work	3	15
Regular weekly and monthly meetings, each with a different view looking down through the organization	5	
Build strong internal website to share information	4	
Collaborative management philosophy <ul style="list-style-type: none"> <li>• Get lots of input from managers</li> <li>• Make decisions and set direction as a team</li> </ul>	3	1
Embrace new ideas proposed by staff to make them part of the creation of the vision	1	3
Let the business/customer needs drive the technology not the other way around	2	1
Networking with peers	2	

**Trends**

- **Building the Vision**

One-half of the CIOs and one-third of the class thought that outside resources (e.g. Gartner Group, Meta Group, etc.) are critical components in developing and maintaining a shared vision. Interestingly, one-half of the class stated that sharing the vision and listening for feedback is important while only one CIO shared that view.

- **Communication**

Communication comes from many different sources. About one-third of the CIOs use regular meetings to communicate with staff, peers and superiors. About two-thirds of the class thought that communicating the department vision at all levels of staff is important, while only one-sixth of the CIOs gave it

the same importance. About one-half of the CIOs communicate their vision to their staff. This substantiates the findings from three-quarters of the class respondents, which reveals that a mutual and shared vision does exist with their superiors.

***Analysis of Findings***

In these times of austere state budgets, both the CIOs and the class thought that using outside resources is critical to building a vision. While this may seem like an oxymoron, it does make sense, because the diligent use of funds for outside resources can prevent an organization from traveling down the wrong path at greater expense.

Both the CIOs and the class thought that a partnership involving both outside resources and state staff in building and supporting the vision are critical to ensuring the success of any organizational vision.

There is a marked difference in comparison of the CIO responses from the class responses regarding communication. The CIOs appear much more oriented toward regular meetings and the use of technology to share the vision throughout the organization. In contrast, the class responses focus on providing feedback to superiors from staff and ensuring that staff understands how their work fits into the organizational vision.

Technology

Question 5: How do you manage rapid change in technology?

Interview Responses	Number of CIOs	Number of ITMA X members
<b>Staff Development</b>		
Encourage research and development of new technology	1	10
Hire consultants to develop strategy, train staff and keep us informed of the latest trends	5	5
Find out which technology is here for the long term	3	3
Promote training as a key enterprise investment	1	3
Use pilots and prototypes to verify new technology	1	1
Encourage different viewpoints		2
Cross-training	1	
Develop a culture where learning is valued		1
Value staff who keep legacy systems running		1
Reward those who are able to change		1
<b>Environment</b>		
Formalize change management	1	4
Assess technology changes for risk	2	2
Apply new IT to those things that have a rapid return on investment (ROI)	2	
Want equipment refresh budget and staffing to PC ratio to be a baseline budget item	1	1
Develop statewide technology standards	1	1
Communicate the impact of technology change	1	1
Continual revisit technology and business needs	1	
Outsource legacy systems to Teale Data Center	1	
Lease desktop system in order to refresh them regularly	1	
Develop partnerships with other data centers	1	
Long range plans are open to change but not driven by change	1	
Develop a technical architecture plan to provide a migration path to standardize assets and bring them up-to-date	1	
Maintain flexibility		1
Trust that IT shop knows what it's doing		1
Build adaptable environments		1
Maintain human networking		1
<b>Business Needs</b>		
Business needs drive the technology solution	5	2
Take an enterprise view of technology (it's infrastructure and support) and relate it to business processes	2	
<b>Other</b>		
Cannot be managed	1	1
Manage staff expectations		2
Partner with companies that will be there for the long term	1	
Buy, don't build applications	1	

### ***Trends***

The majority of CIOs believe that business needs drive IT. Many rely on consultants to identify IT trends, develop strategy, and train staff. The longevity and stability of technology is also a major concern. The class agreed with these principles, but focused on implementation. However, we feel there needs to be a bridge between the principles and implementation. Primarily, executive management should:

- Increase opportunities for staff to learn new technology and expand IT skills; and
- Create an environment conducive to differing viewpoints, while managing staff expectations

### ***Analysis of Findings***

Although the CIOs agree on the principles that the business needs drive IT, class members feel that executive action is instrumental to prepare, encourage, and support staff to reach this goal.

**Question 6: What is your strategy to obtain business area support for infrastructure upgrades?**

Interview Responses	Number of CIOs	Number of ITMA X members
<b>Communication</b>		
Communicate the need for the upgrades	6	11
Business drives the changes to the infrastructure	5	3
Building trusting relationships	2	2
Breakdown costs by business area	1	1
In the future, promote mentality of upgrades as an investment	1	
If the department is the human body, then IT is the skeleton	1	
Use effective project management		1
<b>Common Direction</b>		
Implementing an enterprise-wide concept	2	1
Focus on a common direction	1	2
Participation in IT Governance	2	
Align projects with business plan	1	
Implementation of a technology budget	1	
Must comply with Legislative mandates	1	
<b>Other</b>		
Maintain a strong technology infrastructure		1

**Trends**

The common response of both CIOs and class members indicates that communication improvement between the business and IT areas is imperative to resolve this issue. In addition, frustration exists due to the lack of infrastructure upgrade costs established within baseline budgets.

**Analysis of Findings**

To improve communication, we must build stronger partnerships between business and IT. A successful partnership includes:

- **Trust** - that each group is performing in the best interests of the other
- **Respect** - of each other's skills
- **Knowledge** - of each other's responsibilities
- **Agreement** - on a clear direction and goal

An additional solution is to build the costs of infrastructure upgrades into state baseline budgets.

Public Access

Question 7: Within your department, what is your five-year vision for electronic access to information/services?

Interview Responses	Number of CIOs	Number of ITMA X members
<b>Self-Service</b>		
Self-service tools for customers of state departments - Examples: personal and business tax filing, job applicants to facilities	12	8
<b>Improved Communication/Infrastructure</b>		
Supply data and communications to remote and mobile locations (e.g., parolee data to law enforcement officers' cars, data to fire trucks)	4	
Provide secure remote access for all staff	1	2
Migrate existing infrastructure to current platforms and open architecture		3
Improve inter-agency electronic data exchange (e.g., YA to/from CDC and Justice)	1	1
Standardize and integrate disparate systems	1	1
Improve the IT infrastructure to support electronic services	1	1
Customers should be able to get what they want easily, when they want it, via their preferred medium (web, phone, personal)		2
Created an Internet Group to look for opportunities to provide services for department and the public	1	
Data Centers can become the hub (connectivity) to all of the universities, etc., and provide authentication, the state portal, and the Digital California Project	1	
All applications (regardless of platform) should be able to share information		1
<b>Web Based Technology</b>		
Working towards and improving web-based technology	4	7
To provide all web services within the department (instead of contracting out)	1	

**Trends**

All of the CIOs responded that providing customers access to information was part of their five-year vision. Methods included self-service tools, remote access to information, providing customers easy access to information when they want it and creating in-house user groups to identify opportunities. One-third of the class members agreed that customer access to information is important, but fewer responses targeted how to achieve this.

More than half of the CIOs envision improvements to current web-based technology infrastructure as the means to provide electronic access. The class members agree

on this point, but several responses focused on how to accomplish this including improvement to web-based technology and open architectures.

***Analysis of Findings***

The CIOs and class members agree that customer access to information is essential in realizing the vision of building and improving existing web-based technology infrastructures.

**Question 8: What barriers might hinder this vision (infrastructure, budget, security, etc.)?**

Interview Responses	Number of CIOs	Number of ITMA X members
<b>Resource Issues</b>		
Budget	10	18
Lack of staff (recruitment)	2	7
Staff training	2	6
Hiring Freeze	2	2
Losing Resources and expertise	2	
Economy	1	1
Staff are reduced, but program responsibility and functionality continue during budget cuts.	1	
Managers moving up lack knowledge of IT policies and procedures	1	
<b>Infrastructure Issues</b>		
Security (standard authentication process, identify theft prevention)	5	12
Technical infrastructure	3	6
Physical environment	2	1
Lack of technology standardization	1	1
Proving to upper management technologies ROI	1	
Lack of a statewide procurement requirement for knowledge transfer in all contracts.	1	
Lack of vendor support		1
Not enough documentation of key systems		1
<b>Culture</b>		
Resistance to automation	3	
Digital Divide (those that have computers and those that don't)	2	
Culture	1	1
Managing user expectations	1	
Eroding confidence in the retirement system	1	
<b>Leadership</b>		
Legislative/Politics	2	
Strategic direction	1	
Lack of vision		1

**Trends**

All of the CIOs and class members recognized the greatest barrier to achieving customer ease and accessibility to information lies in the current fiscal crisis. With pending budget cuts, the hiring freeze, state managers inability to recruit qualified staff, and limited training dollars, all have an enormous impact on the state's ability to improve customer service.

One-third of the CIOs stated that security is another barrier in achieving their goal, while one-half of the class members thought this was important. Additionally, two-thirds of the class members identified infrastructure needs as an issue, while only one-half of the CIOs mentioned this issue.

The CIOs are much more cognizant and expressive of the cultural, political and leadership issues surrounding barriers as compared to the class members. Twelve of the responses from CIOs raised these issues while only three of the class members brought up culture and leadership.

***Analysis of Findings***

The current fiscal environment affects each department's ability to hire, develop and train necessary staff to support the development of increased security, implement needed infrastructure, and provide quality self-service applications for state customers. Finally, the lack of resources also influences our overall ability to enhance and strengthen the infrastructure.

## Conclusion

### Recruitment and Retention

Respondents agreed that the current exam and hiring process needs change. However, their solutions varied based on individual department size and needs. In contrast, respondents universally agreed on the methods of maintaining and improving morale.

### Leadership

Although communication, teamwork, and trust contribute to collaborative relationships, success depends on having an infrastructure or process in place that mandates it.

The responses to create, promote, and maintain a vision differed between the CIO and the class members due to differing roles and responsibilities. The CIOs focused on “create”, while the class concentrated on “promote and share”.

### Technology

To improve business support of infrastructure upgrades; IT must establish stronger partnerships between business and IT. Although the CIOs agree that business needs drive IT, class members focused on executive actions needed to obtain this goal.

### Public Access

Respondents agree that within the next five years online services and data sharing must improve. Unfortunately, the current economic environment may make it difficult to reach this goal.

## Appendices

### ITMA X Class Members Surveyed

Name	Department	Years State Service / IT Service	Dept Size	IT Size
Wayne Babby	California Youth Authority	15 / 5	5,000	64
Liana Bailey-Crimmins	California Youth Authority	15 / 15	5,000	64
Terri Bollinger	California Department of Social Services	18 / 10	4,000 - 5,000	136 plus field PC techs
Elizabeth Brownfield	Health and Human Service Agency Data Center	3 / 18	525	400
Lester Chew	CalPERS	15 / 15	1,900	330
Pat Crenshaw	California Lottery	33 / 14	650	100
Laurye Gage	Franchise Tax Board	11.5 / 4	5,395	1,150
Nicole Garris	Department of Finance	25 / 26	420	35
Janice Hansen	CalSTRS	20 / 13	600	125
Dennis Hayes	Board of Equalization	17 / 12	4,000	240
Jeff Jong	Department of Insurance	22 / 22	1,100	70
Mike Kanemoto	DOJ – Hawkins Data Center	30 / 5	5,500	400
David Ladd	Franchise Tax Board	9 / decades	5,395	1,150
Sara Mitchell	State Controllers Office	13 / 10	1,200	121
Archie Monico	Franchise Tax Board	9 / 15	5,395	1,150
Jeanne Nakamura	Employment Development Department	26 / 13	10,000	550
Patricia Peterburs	California Department of Social Services	14 / 11	4,000 - 5,000	136 plus field PC techs
Therese Rinkel	Department of Justice	30 / 17	5,500	400
Andria Rushton	Employment Development Department	28 / 20	10,000	550
Jeff Shevlin	Board of Equalization	23 / 28	4,000	240
Richard Stephan	Franchise Tax Board	27 / 20	5,395	1,150
Victor Stiles	Franchise Tax Board	29 / 19	5,395	1,150
Melissa Willis	Franchise Tax Board	9 / 2	5,395	1,150

Chief Information Officers Interviewed

Name	Department	Years State Service / IT Service	Dept Size	IT Size
Mike Auman	Department of Finance	25 / 23	420	35
Bob Austin	Board of Equalization	28 / 28	4,000	240
Dick Brothers	Franchise Tax Board	36 / 33	5,395	1,150
Terese Butler	Employment Development Department	23 / 17	10,000	550
Jack Corrie	CalPERS	25 / 25	1,900	330
Dave Dawson	State Controllers Office	7 / 29	1,050	250
Nick Dedier	Department of Justice	27 / 24	6,000	1,500
Bill Hobbs	California State Teachers Retirement System	24 / 16	600	158
Clark Kelso	State of California CIO	10 / 26	3	3
Dianne Koelzer	California Lottery	22 / 13	650	123
Joe Panora	California Youth Authority	23 / 23	5,000	63
Christy Quinlan	Department of Corrections	31 / 30	50,000	280
Ron Ralph	Department of Forestry	9 / 9	5,000	65
Carlos Ramos	Stephen P. Teale Data Center	16 / 5	400	350
Cal Rogers	California Department of Social Services	25 / 10	4,000 - 5,000	136 plus field PC techs
Joe Sogge	Department of General Services	26 / 12	4,000	200
Bill Welty	Air Resources Board	29 / 18	1,200	50