Special Report: Idaho E-Government 'Boot Camp' for Policy Makers

Info Tech News

State of Idaho | Information Technology Resource Management Council, Boise, ID | September, 2000

E-Gov Bits, Bytes & Quotes...

"We will continue to move this state of ours forward into that 21st century… it's going to be exciting, dynamic, it will be challenging, but we are equal to that challenge."

-- Gov. Kempthorne

"If I could have attended any one conference this year, this one would be it."

-- 'Boot Camp' attendee

"This is an extraordinary event. Government and democracy are meant to be reinvented over and over. And you are the parents of the new generation's democracy..."

-- Mark Badger

"The digital age will be more than anything else, about people communicating. As policy makers in Idaho, our success will be determined in how well we work together and cooperate on the many e-government challenges that confront us."

-- Pam Ahrens

Inside This Issue:

Featured Speakers:
P.K. Agarwal 2
Mark Badger 3
Dan Houlihan 7
Carol Kelly 7

Idaho Best Practices Booths ..... 4 - 5

Panel Discussions:
IT Training 6
Privacy/Security 6

Governor Kempthorne Challenges Policy Makers

Connectivity, Access Key to Bringing The 'New Economy' to Rural Idaho

Idaho Governor Dirk Kempthorne prepares to give opening comments to the state's leading policy makers at E-Government 'Boot Camp' September 7.

"A youngster in Bonners Ferry ought to have the same technical access to the Internet and its educational advantages as a youngster in Boise. That's a reality, and that's what we have to achieve," said Idaho Governor Dirk Kempthorne, in a challenge to leading government policy and decision makers.

The Governor provided opening comments to the Idaho E-Government 'Boot Camp' for Policy Makers held September 7 at the Boise Centre on the Grove. Theme of the event was *"Making Idaho A Leader in the New Economy."*

"Without affordable access to high speed bandwidth, the new economy will not come to rural Idaho and it *must come* to rural Idaho," Kempthorne stressed.

The Governor acknowledged the state's current ***IDANET*** initiative which is intended to provide for a shared, statewide telecommunications infrastructure to expand access and connectivity to rural Idaho communities. Two IDANET proposals are under evaluation now.

Governor Kempthorne, the new Chairman of the Western Governors Association, said connectivity to rural Idaho and throughout the west is one of his major areas of focus. Another is the successful deployment of a skilled, trained and talented IT workforce in both the public and private sectors.

Looking at the national picture, Kempthorne explained that recent studies by the American Electronics Association of the country's high-tech workforce show supply is not meeting demand. Projections indicate that by 2008 the high tech industry will create an additional two million jobs. The report also says that between 1987 and 1997, the number of bachelor degrees by U.S. students in math declined by 21 percent, declined in computer science by 31 percent, and in electrical engineering by 45 percent. "We are not producing enough skilled workers here at home to fill the high tech jobs that are out there," Kempthorne added.

Governor Kempthorne acknowledged Idaho's recent top rankings in the nationwide Digital States Survey conducted by the Center for Digital Government, Progress and Freedom Foundation, and Government Technology Magazine. As welcome as the recognition is, he emphasized the importance of such events as the 'boot camp' for government to be successful in e-government.

"With technology evolving at remarkable speed the need for such training is critical in order to effectively serve our Idaho citizens," he said.

In closing, the Governor praised the collaborative efforts of the constitutional officers, legislators, agency directors, local government leaders, and private sector experts. "Thank you for what you are doing. You are making a difference. We need you."

P.K. Agarwal: 'Reaching for the Fifth Dimension'

New Economy Driving the Future

"It is not the strongest of the species that survive, nor the most intelligent, but the ones most responsive to change."

-- Charles Darwin

When P.K. Agarwal addresses e-government seminars and conferences throughout the country, his audience is taken on a race back to the future complete with thoughts from opened time capsules, definitions of the new digital economy, and tips for getting out of the e-government starting gate.

Agarwal, Chief Information Officer and Executive Vice President of the National Information Consortium, talked about electronic government trends and what governments and officials must do to be players in the new economy.

He began his remarks to Idaho's leading policy makers attending the 'boot camp' by asking them to keep the following basic question in mind: "Are you (or your children) going to be better off ten or twenty years from now?"

The question is important, Agarwal believes, because from an economic perspective, in order for a generation to be better off, there must be increased productivity. There are two ways to produce more. Either you work longer and harder, or you work smarter, he added.

P.K. Agarwal, National Information Consortium, Sacramento, CA.

"The result of the Industrial Revolution was to make people more productive. Now, we are going through another revolution of the sort. The question is can we become more productive," Agarwal said. "Just because you have a personal computer or a network or something, doesn't mean that you are more productive. Productivity means you have to use your smarts."

We often hear the statement that the costs of using computers just keeps going up. That's because we are barely starting to reach the point where we are using these tools effectively, he added.

"If there is a challenge for this 'boot camp' it's not about more technology, it's how to use that technology intelligently."

Agarwal pointed out that increased productivity drives the new economy. In the United States as a whole, three percent of the workers are in agriculture and 18 percent of the workforce is in manufacturing. That adds up to 21 percent. That leaves 79 percent of the workforce. What do these 79 percent of the people do? Basically, one-half work in the service sector and the remaining half work in the knowledge sector, he continued.

A hundred years ago, probably 80 percent of the United States' population worked in agriculture, now it's down to three percent, because agriculture has become more and more productive. The same goes with manufacturing. Every year it takes 10 percent less labor to produce a car.

"For any state to think about its future workforce and prosperity, you have to consider the new economy, and you have to become a leader in that economy because those old jobs just aren't going to be there because everyone has become more productive," he stated.

Agarwal then provided attendees an overview of what other state governments are doing to become leaders in the new economy.

"This hundred years has given to the world the locomotive and the steamboat, the telegraph, telephone, photograph, electric light, electric motor and many other wise and beneficial discoveries. Have you invented a flying machine or found the North Pole?"

-- From 1896 Cleveland, Ohio, Time Capsule writing to 1996

- **Wyoming,** authorizing use of Y2K funds for on-line government.
- **Hawaii,** working with county mayors to integrate state and local services.
- **Utah**, digital state initiative, high-speed, Internet service in every community within 2 years.
- **Maine,** 80,000 miles of fiber optics, the country's first fully digitally switched network.
- **New Jersey**, $165 million proposed for New Jersey jobs for a new economy.
- **Illinois**, $343 million for Illinois Century network to link schools, libraries, museums, government; $200 million for technology program in schools, Virtual Trade Office.
- **Massachusetts,** 'convince Congress not to tax the things we buy and sell on the Internet.'

Agarwal also cited the trends that government will have to embrace to keep pace in the new economy. These include making government more customer-focused and centered; integration of systems, reorganization of services through Internet portals, having a trained and motivated workforce in place.

Mark Badger: 'The Role of Telecommunications'

Know What Your Customer Wants

"This is like being hit with a fire hose, isn't it?

"The number of issues that are circulating around the new economy, e-government, and the knowledge age are all overwhelming," Internet Strategist Mark Badger of Cisco Systems, San Jose, Ca., told attentive 'boot camp' attendees.

"**My hat is off** to you for being here, for enduring it, for looking ahead in how you can embrace it," he said referring to the many e-government challenges confronting Idaho's policy makers as they prepare state and local government for the 21st century and beyond.

Badger praised the collaborative gathering of nearly 225 participants by calling it a "a rare and extraordinary event." It is extraordinary, he continued, "because government and democracy are meant to be reinvented over and over. And, you are the parents of the new generation's democracy. "

The new economy is also driven by a customer-centric model, one that says that the business *understands* what the customer wants, he added.

"It's the L.L. Bean model of customer service. When you call them, they know who you are because you've opted into their profile system, and as soon as they answer the phone, they ask you if you're calling about those moccasins that you ordered yesterday. Then they tell you they're in the Dallas airport, and that they will be delivered tomorrow."

To illustrate, Badger, the former Chief Information Officer for the State of Alaska, gave the example of his teenage nephew whose parents have given him permission to order pizza every Friday night. He knows he gets a pizza, and that he can call Dominos and order that pizza, Badger continued.

Badger said that when his 13-year-old nephew calls in and orders pizza, Dominos knows who he is through its caller ID system, which is connected to their customer care platform, and they ask him if he wants a large pepperoni? As usual the answer is 'yes', and the charge goes on Dad's MasterCard.

"This is the kind of model that's being created in the minds of your future citizens. "So, the kinds of things that you have been introduced to this morning may seem like, 'Oh yeah, that's all well and good,' but they are alive and well and running the new economy.

"We are all beneficiaries of this new internet economy," he stated, further adding that it is the network-enabled business processes that are propelling the new economy today.

Telecommunications now is really an integrated, converged network, he added. Badger said governments will be challenged

ITRMC Chairman and 'Boot Camp' emcee Pam Ahrens confers with Mark Badger following his remarks to Idaho policy makers.

to adapt quickly to the new economy and the convergence of technologies, i.e., telephone, personal computing, video-conferencing, etc.

All of these technologies will be ultimately accessed at one point or bundled through one common pipe that is IP based (Internet Protocol), and will be similar, as an example, to how we plug an appliance into one, 120 volts AC outlet, he continued.

"The vision we see for the future is that the network will be that ubiquitous. It will be accessible as a plug- in outlet in your new house, just as it is in an office. They call them smart buildings now."

Immediate challenges for government to get ready for the new economy will be:

- Closing the service gap between the private and public sector.
- Improving government efficiency from the customer's perspective.
- Assuring privacy and security.
- Authorizing credit card use.
- Deciding who pays transaction fees and deciding the funding/business model.
- Overcoming RISK aversion.

When Will Your House Be Smart?

"The vision we see for the future is that the network will be ubiquitous. It will be accessible as a plug-in outlet in your new house, just as it is in an office. They call them smart buildings now."

'Best Practices' Booths:

A highlight of the Idaho E-Government 'Boot Camp' was the **"Best Practices" Booth Exhibit** where 22 state and local government agencies demonstrated their on-line e-government applications and respective websites.

Pictured booth participants included, photos, left page: at top left, **Department of Labor;** middle, left, **Idaho Transportation Department** with the **Department of Commerce** in the background; middle right, **Idaho One-Plan Project**; bottom left, **Idaho State Board of Education**; and **Access Idaho**.

Booth participants, photos, right page: at top left, **Department of Water Resources**; top right, **Division of Veterans Services**; middle left, **Department of Parks and Recreation**; middle top, **Department of Finance**; middle bottom, **Idaho State Library;** bottom left, **Idaho Public Television,** Moscow; bottom right, **Dept. of Revenue and Taxation**. ***(more photos on page 8)***

Booth participants not pictured: **Office of the Secretary of State**, **Department of Commerce**, **Department of Correction**, **Department of Health and Welfare**, **Office of the State Controller**, **Department of Environmental Quality**, and **Madison County**.

Idaho E-Government at Work ...

Panel Discussion: Training, Retaining IT Talent

Creating a Competitive Edge for Government

With the speed of technology advances today, the three R's of reading, writing and arithmetic in the education world can be redefined to "retain, retool and recruit" to address the IT personnel shortage in Idaho.

Karen McGee, chairman of the Governor's Workforce Development Council for Idaho and Vice President of the Idaho State Board of Education, said American companies are anticipating 1.6 million new IT jobs this year. "To have the trained workforce in Idaho that we need, we must empower the people to help train the workforce we need."

Under Governor Kempthorne's leadership, the State of Idaho is addressing the IT "skills" shortage issue through a collaborative and partnership approach of training and education coming together with business and government. McGee believes in order to have and retain a highly skilled and trained workforce, the education system will need to be changed from the university level down. "Higher education needs to plant the seed and link up with technology postsecondary education in k through 12."

McGee cited the importance of Idaho "growing its own" technically competent workforce, not just depending upon IT recruitment outside the state or country. "We want to start from kindergarten right now. These kids will be our workforce… how many of you expect to be in business in 20 years? Well, that child born today is your future workforce," she added.

Panelists, from left, Shauna Della, Hewlett-Packard; Pam Ahrens, Moderator; Michael Zeigler, Micron Technology; Karen McGee, Governor's Workforce Development Council.

Shauna Della, IT Infrastructure Manager at Hewlett-Packard in Boise, said creating a challenging and rewarding work environment where employees feel valued and invaluable is important to recruiting and retaining IT professionals.

"I am happy to tell you that money isn't everything and there are other things you can do to compensate for the astronomical

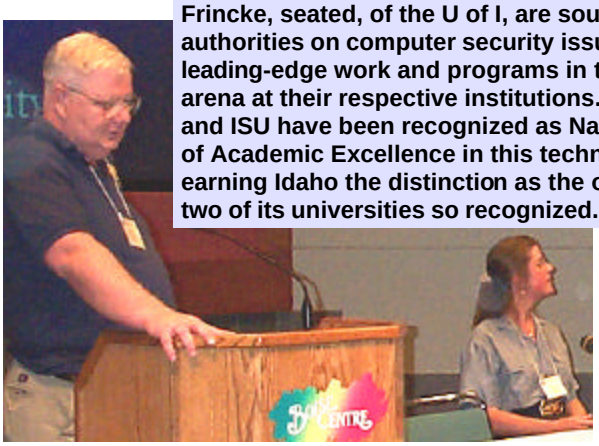
(continued on page 8)

Panel Discussion: Security and Privacy

Building Public Confidence in E-Transactions

According to **Jim Schueren**,Vice President of Sales and Marketing for CRI Advantage in Boise, and moderator for the panel discussion on security and privacy, the most critical, the most confusing, and frankly, the most frightening aspects of information technology revolve around those two subjects.

He referred to a recent research project he was involved in studying the methods used by hackers to gain unauthorized entry into computers. "Knowing we would be talking to hackers, we prepared and protected ourselves with every bit of technology and staffing we could possibly put in place," he said. After tracking project results for the first nine months, Schueren said they were very much surprised to discover that despite all the precautions, attempts to attack their computing system were taking place every 24 seconds, 24 hours a day, seven days a week from just about every country in the world.



Dr. Corey Schou, left, of ISU, and Dr. Deborah Frincke, seated, of the U of I, are sought as national authorities on computer security issues. They direct leading-edge work and programs in the security arena at their respective institutions. Both the U of I and ISU have been recognized as National Centers of Academic Excellence in this technology arena, earning Idaho the distinction as the only state with two of its universities so recognized.

With that in mind, panelists **Carol Kelly** of META Group; **Dr. Deborah Frincke**, University of Idaho; and **Dr. Corey Schou**, Idaho State University, began a dialogue to look at the policies, infrastructures, and enabling technologies that will be required to assure Idaho citizens they can trust government to protect their privacy and provide security for their one-line transactions and information needs.

Kelly recommended that government put in place a common security policy framework that addresses policies, process and procedures, standards, and technology before citizens will have confidence to fully utilize e-government services.

As co-presenters, Schou and Frincke provided attendees an

(continued on page 8)

Dan Houlihan: Government Funding Strategies in Internet Age

Budget Planning Not Keeping Pace

What we are seeing now is how the rate of change is personally affecting us and impacting our lives, says Dan Houlihan, Chief Operating Officer for NIC Technologies.

"Thirty years ago, when that mainframe computer went from a size of a room to a half a room, it didn't affect us. Or, when it went from a half room down to a mini-computer, it didn't affect us."

Today, it's a much different story, Houlihan says, describing the onslaught of mobile computing devices, moving from PC's to laptops to personal digital assistance products. Growth in this particular area is accelerating at an incredibly fast pace, he added.

Because of constant change and evolving technologies, the result will be an environment of "perpetual, technical obsolescence." The implication for state government budget planners is clear according to Houlihan. Given the typical two-year budget planning process most used, "state governments are out of cycle with the rate of change in technology."

The opportunities for government are just as clear, he continued. He says it is critical for budget planners to look at hardware replenishment in terms of building those replenishment costs into the initial budget estimates. He also emphasized the option of lease versus buying where many states are approaching the vendor community for the latest in computing capability and processing and asking them to provide the resources at lower costs. In addition, many states are utilizing just in time, real-time procurement solutions, the next big wave in electronic government, he predicted.

Citing the rapid growth of the Internet, Houlihan pointed out that in 1999, 27 percent of U.S. households had Internet access. By the end of 1999, Gartner Group reported the total had increased to 39 percent. In just the first quarter of this year, that figure is now up to 48 percent, he explained.

Houlihan stressed with the growing use of the Internet, the "Digital Divide" still exists, and as budget and policy makers look at funding options and opportunities, attention should be placed at how the monies can be leveraged to assure connectivity to rural citizens. He also reminded attendees that 99 percent of America's households have televisions, which explains the mad scramble by cable and telephone companies along with countless mergers, to capitalize on this market where eventually everyone will have Internet access.

In summary, to be world class in terms of moving to e-government, there must be a common vision and collaboration to achieve that vision. He said data will show that customer-centric focusing is going to produce savings. And, as government looks at how it wants to approach things, it ought to be asking itself, "who is the customer"? and then build applications to meet those customers' needs. The challenges, or inhibitors, could be *siloed* government, competition between agencies, and lack of funding. "The ITRMC will play an incredibly important role in breaking down those silos and getting the various entities to focus on that customer."

Dan Houlihan, Westlake Village, Ca, addresses Idaho policy makers.

"Citizens want to interact with government in the most painless way possible… For business it is speed, for citizens it is convenience."

E-Government Defined …

Carol Kelly, Vice President and Service Director, META Group

E-Government is:

- The capability of obtaining government services through non-traditional means
- Access to government information anytime, anywhere
- Capability of completing transactions anytime, anywhere
- Suppliers of services more tightly linked in the value chain
- Allows delivery beyond the traditional "brick and mortar"

Other E-Government trends …

- Over 90 percent of Chief Information Officers will be forced by elected officials to enable e-government implementations by 2003-4.
- Public policy cannot be separated from e-government
- Adaptive infrastructure, security, and operational excellence are key

'Best Practices' Booths ...

Continued from pages 4-5

Photo above, and clockwise, Liza Fox, ITRMC Project Team and 'Boot Camp' Coordinator, left, visits with attendees; Department of Administration booth; and ITRMC Chairman Pam Ahrens, completes television news interview about day's activities and booths exhibit.

Costs associated with this electronic report and hard copy distribution are available from the Department of Administration in accordance with **Idaho Code Section 60-202.**

InfoTech News Special Report:

Idaho E-Government 'Boot Camp' for Policy Makers

Online:
www.state.id.us/itrmc

Information Technology Resource Management Council
Pam Ahrens, Chairman

ITRMC Project Team
208 332-1876

Pat Wynn,
Communications Manager
Department of Administration
650 W. State Street,
Room 100
Boise, ID 83720

e-mail:
pwynn@adm.state.id.us

Tel: 208 332-1827
Fax: 208 334-2307

IT Training Panel ...

(continued from page 6)

salaries that Idaho government and business must compete with," she said. HP has developed robust college and high school internship programs, establishing and maintaining ongoing relationships with college IT departments. She added that HP liberally out sources routine maintenance, generic and IT support positions requiring less creative and innovative skills. Redefine and make key IT jobs the ones that you can market, attract and retain IT professionals, she said.

Michael Zeigler, IT Director for Semiconductor Operations for Micron Technologies, commended the state for its three-year downward trend on attrition, especially given the IT labor market.

He recommended government do more in marketing itself and to find ways it can differentiate its IT departments from the private sector. Zeigler also suggested establishing a regular presence at universities and an internship program. Support training and look for cross-training opportunities. Communicate openly with employees. The more we communicate with our team members, the better they feel, and the better they like the work environment, he told the audience.

Privacy, Security Panel ...

(continued from page 6)

awareness of the security issues, what information is considered secure and where it resides, who is responsible for it, and what the key challenges will be for Idaho government leaders.

"Security plans do not have to be difficult," Schou said, "but they do have to be thought out as you do them, because what you are really trying to do is risk management."

Both also emphasized the importance of having a security plan in place to address potential problems. Such a plan would contain technology, policies, practices, awareness, training, and education.

Dr. Frincke pointed out that because there has been much media attention regarding security issues, and companies are getting involved, there are more solutions and expertise available now than several years ago. She said products are commercially available that will enable security for computers and network systems.

Summing up, Schou told the attendees that they have two major state universities that are absolutely cooperating to help and stand ready to support whatever the policy makers need to do in order to address this critical issue.