



Info Tech Talk

A Newsletter on Enabling Information Technologies by the IRMC Information Operations and Technology Department

What's New in eGovernment and Technology

By Carl Clavadetscher, Russell Mattern, and Les Pang

Inside this issue:

Personal Privacy and the Internet	2
Short Message Service (SMS) Text Messaging in the Philippines	4
Notes from an IT Security Conference	6
Ten Ways to Ensure That Your IT Project Fails	11
A Medium Rarely Well Done	12

“...the next phase of E-Government... calls for transformation. To achieve faster processing of citizen needs, it will mean more collaboration internally and across agencies, tearing down silos and addressing human capital requirements.”

FOSE is a popular technology exposition held each year in Washington, D.C. FOSE which means Federal Office Systems Exposition is the largest information technology exposition serving the government marketplace. This year it was held in the new Washington Convention Center in early April.

Here are a few of the highlights of the exposition:

E-Government in North America

One of the keynote sessions was an international panel involving Mark Forman, Associate Director for IT and E-Government Office of Management and Budget; Michelle D'Auray, Chief Information Officer, Canada; and Abraham Sotelo, Chief Information Officer, Mexico.

The panel looked at how the United States, Canada and Mexico each approach E-Government within their own organizational structure and to provide insight into the international impact of E-Government.

Mr. Sotelo related some of Mexico's E-Government initiatives and strategies:

- Mexico is making an effort to overcome the “digital divide” issue by establishing 6,000 community centers that provide web access to citizens throughout the country. Typically housed in post offices, these centers provide a wealth of government services.

- E-Services and E-Procurement are major objectives of the government. He indicated that 100% of tax services are provided online.

Mexico has developed a one-stop citizen portal similar to FirstGov called “.Mex”.

Mr. Forman said that significant progress has been made in the United States in moving toward E-Government. Forty-nine percent of all business interactions with the Government were done on the web and one-third of all citizens interacted with the Federal government over the web.

Beyond placing forms online, he noted that the Federal Government is embarking on the next phase of E-Government that calls for transformation. To achieve faster processing of citizen needs, it will mean more collaboration internally and across agencies, tearing down silos and addressing human capital requirements. He mentioned three focus areas:

- Concentration on cross agency initiatives,
- Consolidation of lines of business to reduce redundant IT spending, and
- Consolidation of office automation such as reducing the number of virtual private lines within agencies.

A key requirement in this new phase was the identification of key performance metrics.

(Continued on page 8)

Personal Privacy and the Internet

By Group Captain Lee Roberts, Royal Australian Air Force

INTRODUCTION

Privacy laws result from the interplay between the aspirations of individuals for strict limits on the use of personal information, and the desire of organizations and individuals to have access to all information that would advance their own interests. The balance struck, and the consequent safeguards put in place, is determined by local culture and political structure. The non-state nature of the internet negates the prohibitions on individuals attempting to access information should it be available from sources external to the state.

The purpose of this article is to research the extent that personal information that can be obtained routinely from the internet. The article will focus on individuals rather than businesses and other entities. While the assessment will be necessarily limited in scope, the research will focus on and compare two countries with similar ideals of personal freedom and governmental structures – the United States of America and Australia.

PRIVACY LAWS

Laws protecting privacy limit the access and transfer of information belonging to or provided to government agencies, businesses and individuals at the federal, state and local level. The NierosGamos Legal Research Centre provides an extensive index of privacy laws and regulations for most countries.

United States Privacy Laws

As a consequence of the rapid and recent growth of the internet, it is understandable that privacy issues are not yet definitive in law. Current legislation, such as it is, and issues applicable to privacy on the internet are described in an excellent article by *Net Attorney*. The article notes that the US federal government regulates only its own databases, leaving private database owners to decide how and when to distribute collected information. Other database owners are only limited when specific legislation is applied, such as the Gramm-

Leach-Bliley Act that regulates financial entities, including *privacy provisions*.

Australian Privacy Laws

Privacy protection in Australia is comprehensively regulated by the national government through the *Federal Privacy Act*. This law contains eleven *Information Privacy Principles* that apply to Commonwealth government agencies. It also has ten *National Privacy Principles* that apply to parts of the private sector and all health service providers. *Part IIIA* of the Privacy Act regulates credit providers and credit reporting agencies in a similar manner to the US Gramm-Leach-Bliley Act. The Office of the Federal Privacy Commissioner provides a one-stop comprehensive index of all privacy laws and regulations in Australia.



PERSONAL INFORMATION ON THE INTERNET

This section compares and assesses the impact of these regulations. The research on personal data available on the internet for US citizens was drawn initially from Yahoo and Google search engines to find broad

indexes of popular internet sites with subsequent drill-down. In the case of Australia, Yahoo Australia was used to initially narrow the search. Search topics such as “personal information” generally provided sites that listed databases, largely government owned and available free of charge, while “personal background” and variations of it produced commercial investigators and research services.

United States Results

The ‘top level’ search, disclosed a number of US based sites that indexed both commercial providers of investigative ser-

(Continued on page 3)

(Continued from page 2)

vices and direct access to personal databases. As an example, *JournalismNet* provides access to a vast array of research material for journalists; of which one element is a list of databases providing access to information on individuals. In addition to the usual telephone and e-mail databases, the JournalismNet US Personal Databases' site listed databases, largely government, common to most of the sites accessed. These free databases included birth /death /divorce /marriage, deadbeat parents, property ownership, professional and driver's license records. For some states, there were databases available for current / past prisoners and sex offenders.

Fee for service internet sites fell into two broad categories – self-service access to personal databases and guidance to enable the purchaser to conduct background searches and investigative services where the research would be conducted by the site owner. *Web Detective* is representative of the first group. For \$29.95, *Web Detective* provides additional services such as your own information in FBI and credit report files, social security records and unlisted phone numbers and addresses. An example of the second category is the background searches conducted by *USSearch*. For \$99.95, *USSearch* will conduct the search of all available databases. A sample *USSearch* report provides a good example of the information available.

Australian Results

Unlike the U.S. investigation, the *Yahoo Australia* searches using “personal information,” “personal background,” “personal databases,” “people search,” etc. produced no useful results. The *Google search* of “personal databases Australia” provided a small number of sites. Representative of these sites was *SearchGuide Australia's People Search* which only provided information already in the public domain. One commercial site, *CrimeNet*, maintains a database of criminal convictions but notes that, after a period of time, records are removed to accord with ‘spent convictions’ legislation.

The general conclusion was that the databases available on Australians were limited to public documents such as telephone numbers and addresses, e-mail addresses, family his-

ories and missing persons. One reason for the dearth of search services is the Australian application of personal privacy regulations beyond government databases. The Federal Privacy Act also applies to commercial operations. Businesses must either meet the federal regulation or they may seek approval for a *Business Privacy Code*. Either way, third party use of most databases is prohibited unless the individual has assented to the use of personal data.

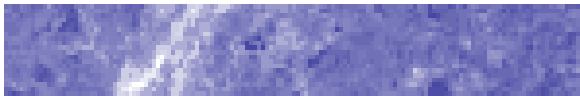
CONCLUSION

Despite the similarities in culture and aspirations for individual freedom from bureaucracy in the United States and Australia, this limited research demonstrated that access to private information on individuals was more freely available in the United States than Australia. The difference in individual privacy protection resulted from the extension of Australian federal privacy regulations to cover commercial businesses in addition to government databases.



Short Message Service (SMS) Text Messaging in the Philippines: Precursor to U.S. Acceptance?

By Colonel Raul del Fierro Heredia, Assistant Chief of Staff for Logistics, G4, Philippine Army



“Text messages combine the pleasures of reading and writing with instant-ness and a handy little gadget. The limitations are one of the best things about it. Having rules and barriers to overcome is very liberating creatively. Creation becomes a game, a test of ingenuity. How can I fit this into 160 characters? That leads to much better poetry than the freedom to express deep thoughts on deep subjects at great length.”

Jovi Tanada Yam, Business World Online

Short Messaging System (SMS) or text messaging has been the most successful form of non-voice communication in the telecommunications industry. It consumes very little network capacity, has no additional content costs and provides a high value service to its customers. There are two broad categories of mobile text messaging worldwide. These are the mobile e-mail and the short messaging service or most popularly called “SMS”, “text messaging” or “texting”. The United States and Japan, who are majority non-GSM service providers, leads in use of mobile e-mail for non-voice communications, while the GSM community in Europe and in Asia uses the SMS text messaging facilities. SMS was introduced to the world about 10 years ago. It allows people to send and receive messages of up to 160 characters on their mobile phones. In a few years of its introduction, it evolved as the most pervasive mode of global wireless communication.

The U.S. has not fully adapted SMS due to incompatibility of U.S. mobile phone systems where users from one network cannot send text messages to users directly on another network. Also, due to ready access to personal computers, American users would tend to use the e-mail than using SMS text messaging in sending their non-voice communications. But in countries like the Philippines where Internet access through personal computers are not affordable to majority of the people, “texting” through mobile phones offers a mode of communication that is within reach of everyone.

The aim of this article is to discuss and analyze the success of text messaging using short messaging service (SMS) technology in the Philippines.

The average Filipino’s income is about one-tenth of that of the United States making it about 40 in ranking that measures the wealth of nations. However, the Philippines ranks number one, way ahead of most developed nations in an advanced form of wireless communications, text messaging using SMS technology. The vast majority of the world’s 13 billion daily text messages are sent in Europe and Asia, and usage in the Philippines accounts for more than 10 percent of that volume.

The Philippines is an example of the phenomenal success of SMS text messaging that it is being branded as the text messaging capital of the world. It has the highest SMS usage per subscriber in the world with over 300 SMS messages sent per subscriber per month. In a population of 85 million people, there are 13 million mobile phone users in the country trans-

(Continued on page 5)

(Continued from page 4)

mitting up to 200 million text messages daily. This makes more than twice as many mobile phones as landline telephones in the country. The masses or the low-income group constitute the bulk of the users each sending an average of 8 to 10 text messages daily.

Globe Telecommunications and Smart are the top players in the industry providing mobile phone services to the customers. Conglomerate Ayala Corporation, Deutsche Telekom AG, and Singapore Telecom jointly own globe, the company that introduced SMS in the Philippines. It incurred a record net income of \$84.31 million for its SMS operations in 2001. The Philippine Long Distance Telephone owns Smart Inc., the oldest and largest landline operator in the country. Similarly, Smart has incurred huge profits in its wireless SMS venture for the past several years.

REASONS FOR SUCCESS OF TEXT MESSAGING IN THE PHILIPPINES

There is a variety of the reasons why text messaging became so successful in the Philippines only after a few years of its introduction.

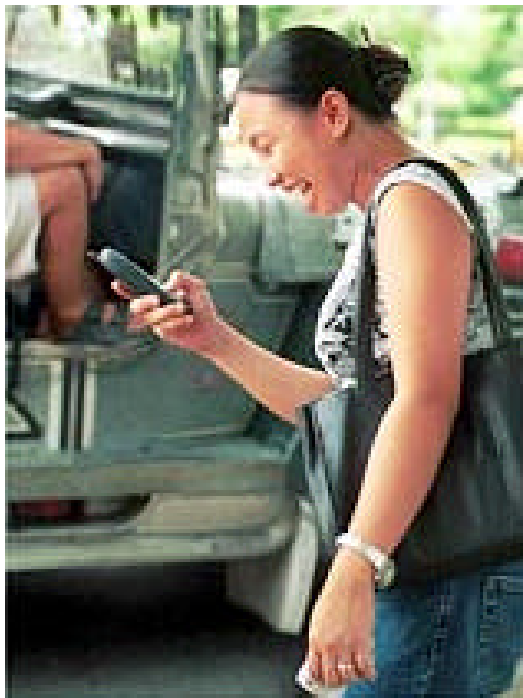
Firstly, is the cost. It is delightfully cheap to send SMS text messages at less than \$.01 cents per message compared to \$.18 cents per message in Europe. It can even be free, depending on the payment plan the subscriber chose in his cell phone. The cheap price of texting transformed the mobile phone from a symbol of privilege and power, to an essential tool among Filipinos regardless of social status.

Secondly, is the unique condition in the Philippines where cell sites are not that frequent and located far apart which can be unreliable from place to place. Text messaging can save the day since they can pass through wafer-thin signals.

Thirdly, it has become a tool for bridging generations due to the non-confrontational culture of the Filipinos. Texting using mobile phones erases shyness and offers a medium for deeper con-

versation between the young and the old, parents and children and lovers alike. It provides a human feel even without the human touch factor in it. Text mates among individuals evolved as a result of the impersonal relationship.

Fourthly, is the love of Filipinos to talk and communicate. Even at war, Philippine Army soldiers and Communist or MILF/Abu Sayyaf rebels are texting and sending insults to each other.



Lastly, text messaging has the potential of reaching a mass audience simultaneously. The technology was used to rally support for political action to oust former president Joseph Estrada from office due to graft and corruption last January 2001. The messages spread virally. They were sent so quickly and spread so widely that the authorities were incapable of controlling the crowds. 70 million daily messages on an in and out basis were sent during the height of the protest movement. There was a 40% increase in the text messages from the daily average at that time. President Estrada can be considered as the only chief of state in the world to be ousted by the text-messaging revolution.

CONCLUSION

Text messaging using SMS technology has become a phenomenal success that the Philippines is now branded as the texting capital of the world. The main reason for its success is its affordability and efficiency. People from all walks of life and generation can afford its cost. They use text messaging more frequently than voice communications in their mobile phones. It has become a tool for bridging generations from parents to children, young and adults and lovers alike. The Filipino penchant of talking and communicating are being used extensively through text messaging. Lastly, it has the potential for reaching a mass of audience simultaneously. It has even brought down to office the corrupt-tainted former president Joseph Estrada in January 2001.

Text messaging has considerably changed the lives of the Filipinos and will do so in the 21st century. It is not more than just an enabler but has considerably changed the Filipino culture, working its way in how one lives, love, work and play.

Notes from an IT Security Conference

Reported by Les Pang with Commentary by John Saunders

Focusing on enterprise IT security, the Gartner IT Security Summit 2003 was held in early June in Washington, D.C. The following are highlights from the summit including trends, issues, and observations:

- ◇ The model for an enterprise-wide security infrastructure is changing from a heavily protected fortress (aimed to protect against external attacks by the “bad guys”) to one of an airport (offering different levels of protection in different zones). This will eventually evolve to a point-to-point security environment according to the Gartner analysts.
 - ◇ Based on a Gartner survey, the area that will increase the most in terms of 2003 versus 2002 spending is IT security - about 74 percent of the respondents reported a rise in spending. A high growth area has been for security services such as network assessment and architecture development and review.
 - ◇ According to Gartner, IT security spending in 2003 will be 5.4 percent of the total IT budget (in 2002 it was 4.3 percent). (*Commentary: These figures appear low and may not reflect labor costs.*) Government sector spending will grow the fastest.
 - ◇ Seventy percent of all attacks to an organization are internal according to Gartner surveys. If the attack is external, the IT security division is often blamed; while if the attack is internal, the employee’s supervisor is considered at fault.
 - ◇ The security market can be classified as (1) keeping the bad guys out (e.g., anti-virus software, firewalls, intrusion detection), (2) let the good guys in (e.g., VPN, public key infrastructure), and (3) keep the wheels on (e.g., disaster recovery and contingency planning).
 - ◇ An OMB study on U.S. Federal Government security revealed that there was little correlation between increased spending levels and actual security performance. (Source: <http://www.whitehouse.gov/omb/inforeg/fy01securityactreport.pdf>, Pg. 16) [*Commentary: Lies, damned lies, and statistics. This report (2001) is old. I also see this statement (page 16) in the report as flawed logic. First it does not consider mission. You cannot compare IA at Education*
- against IA at the FAA. And what is meant by “increased?” Does this mean there is no difference in residual risk between an agency spending 1% and an agency spending 17%? Or does it mean there is no resulting increase in security when an agency increases its own security budget from one fiscal year to the next? Second, the report states that there is a gap in measuring IA performance. How can it then turn around and use the collected performance measures as a factor in creating a correlation? Third how are agencies supposed to improve security in the itemized areas – awareness training, detecting and sharing vulnerabilities, etc., without additional funding? (This statement reflects the opinion of the author and is not the official position of IRMC or the NDU)]*
 - ◇ One needs to ask if their organizational culture is security-aware. Query your employees the following questions: “How many of you backed up your PC files?” “What would you do if you saw a stranger at one of your co-worker’s workstation?”
 - ◇ Spamming is considered a significant security issue because it is a form of denial of service, an intrusion, and often involves offensive content. (*Commentary: Also becoming more of an issue is Spyware. Many people have these programs running on their computers and do not realize it.*)
 - ◇ The market focus has moved from intrusion detection to intrusion prevention techniques such as deep packet inspection firewalls. (*Commentary: Much of this “Intrusion Detection is dead” message is marketing hype. In talking with our students, most government organizations do a better job than the private sector, yet still do not have the resources to do an adequate job of following up on IDS logs. Firewalls do not know what to block until you tell them. This knowledge can only be gained by human analysis.*)
 - ◇ The IT Security Hype Cycle address the following technologies (Refer to Gartner Note Number: R-19-9974):
 - On the Rise/Technology Trigger: Quantum

(Continued on page 7)

(Continued from page 6)

cryptography, network security platforms, trusted computing platforms, behavior blocking

- At the Peak of Inflated Expectations: Deep packet inspection firewalls, WiFi protected access security, instant messaging security, anti-spam
- Sliding into the Trough of Disillusionment: Federated identity management, web services security standards, managed security service providers, biometrics, advanced encryption standard, intrusion detection systems
- Climbing the Slope of Enlightenment: Identity and access management, enterprise digital rights management, public key infrastructure, tokens/smart cards
- Entering the Plateau of Productivity: Firewall appliances, secure sockets layer

- ◇ Web services will change the security landscape because many traditional security safeguards will be irrelevant according to Gartner. Because of its nature, web services will demand greater use of Secure Sockets Layer and digital signatures. There is expected to be major trust, identity management, and legal issues when an organization considers making transactions with suppliers they never met. Security standards for web services are evolving.
- ◇ There is increased interest in outsourcing security. Managed Security Service Providers (MSSP) promise to provide the necessary expertise and high business value for organizations. Trust is a major issue in the acceptance of this approach. *(Commentary: MSSP is experiencing an economic downturn right now according to Bruce Schneier of CounterPane Security, one of the largest MSSPs.)*
- ◇ Establishing an “enterprise security architecture” is a must to support integration and interoperability among security technologies and prevent uncontrolled “organic growth” of security applications and components. Such a framework should include architectural principles such as “the organization will not procure unsecured hardware” and “people must be trained in security awareness.” *(Commentary: This is true but in reality this is very difficult to achieve.)*
- ◇ Founded on the Software Capability Maturity Model, one way to measure the level of security compliance is the “Security Process Maturity Model” which defines six levels of Information Security.
- ◇ Passwords will not go away. Considered long living “cockroaches” of security, passwords offer a relatively inexpensive means for authentication compared to smart cards and PKI. *(Commentary: The token, as in RSA’s Secure ID, is an excellent addendum to the password and increases password security significantly.)*
- ◇ Federated identity management systems such as Microsoft Passport and Liberty Alliance have not gained wide acceptance. However, Microsoft will not give up on Passport.
- ◇ One major security issue is the “dead account problem.” When an employee leaves an organization, their e-mail and other accounts often remain active and thereby posing as a security problem.
- ◇ In the past, there has been much focus on ensuring security for servers. There is a need to focus on security for the PC particularly laptops (considering their wireless capabilities).
- ◇ Purchasing “best of breed” security products is expected to continue; most organizations tend to avoid acquiring a suite of security components because often there is just one “killer” application and the rest are mediocre.
- ◇ Smartcards were supposed to be the “holy grail” for security because of its mobility attributes but it has yet to achieve its promise. The military’s Common Access Card (CAC) approach appears very promising for the future as model for other organizations.
- ◇ Enterprise IT security is as strong as its weakest link.

What's New in eGovernment and Technology (Cont.)

(Continued from page 1)

Ms. D'Auray described Canada's efforts to provide broadband connectivity to remote Northern Canada schools using satellite technology. She pointed out the need to integrate service delivery channels to the public to avoid having the citizen repeat their story as they went channel to channel. She discussed the need to leave behind the one service – one department mentality and move toward providing integrated citizen services across government entities. She desired to have citizens see Government as a single enterprise and not as a collection of independent entities. She stated that "we are not quite there yet."

Other Canadian initiatives include a "Consultant" web site where citizens can participate in the rule-making process similar to the U.S.'s hearing process, a payment system which runs across several government agencies, and an entitlement program that also crosses agency boundaries.

During the question and answer session, a member of the audience expressed concern about identity theft and how it can be overcome so that citizens would be more confident about using Government web sites. Mark Forman mentioned that one way to address this is by consolidating the many transaction points to a handful of secure sites through database integration. He also mentioned the E-authentication effort, one of the 24 government-wide E-Government initiatives. The E-Authentication initiative will provide the trusted and secure infrastructure and gateway to support the initiatives, thereby eliminating redundant solutions for the verification of identity and electronic signatures.

In Canada, privacy laws require that any web sites established by the government must undergo a "privacy impact assessment." Online authentication is provided by ePass, a small secure computer file or digital certificate that is issued and downloaded to a client's computer each time a secure Internet transaction is initiated, and remains downloaded only during that transaction. The certificate, once validated by the government department responsible for the program, ensures that the client will be automatically recognized during future transactions with this department. The citizen has a choice whether the citizen is good for one transaction or for a series of transactions with the government.

Another question that came up during the Q&A session was the topic of open source software. In Canada, open source software is often used on servers and mainframe but the desktop remains to be a challenge. Mark Forman indicated that the government wants to see competition on the desktop; interoperability; diverse computing platforms; and security built into open source software. Mexico supports a neutrality posture for open source software.

Segway Human Transporter

Several Segway Human Transporters (HT) were available for trial use by FOSE visitors. Similar in appearance to a large push lawnmower, Segway is a self-balancing, personal transportation device that is designed to operate in a pedestrian environment. It uses gyroscopes and tilt sensors to emulate human balance. When a person leans slightly forward, the transporter moves forward. When leaning back, the transporter moves back. To turn, one would twist one of the handles on the handlebars. Segways can cruise up to 12.5 mph and travel a distance that ranges from 10 to 15 miles on a single charge. Its payload is 250 pounds and the weight of a unit is 83 pounds.

One IRMC professor had an opportunity to operate one of these Segways at FOSE and found that the device to be fun, easy to learn, very stable and highly maneuverable (turning radius is zero). Potential issues concern operating the device in inclement weather, in mixed traffic and its limited storage capacity. Amazon.com currently sells these units for \$4,950.00 each.

Office 2003

The Microsoft exhibit included workstations loaded with the beta version of Office 2003. The theme of the upcoming product is its capability to connect to people, information and business processes.

Broader support for XML will be available in Word, Excel and Access which will allow for the improved exchange of documents in support of business processes and workflow both internally and externally.

Another improvement is Microsoft's reading pane. Instead of printing out a copy of a document so you

(Continued on page 9)

(Continued from page 8)

can read it, one would click a button to view a document having the large “ClearType” font placed in a two-page layout.

The Outlook interface will change so that you can see more in the preview pane (uses a separate window), condense e-mail conversation threads (remove redundant “in-between” e-mails in a thread), tag priority messages with color-coded flags, and block objectionable photos often found in spam e-mail by disabling hyperlinks to web sites.

Besides Outlook, Word, Excel, PowerPoint and Access, the Office suite may include one or more of the following new additions:

- OneNote - note-taking management program
 - FrontPage - web site creation and management
 - InfoPath - information gathering and management program for forms management
 - Publisher - marketing and communication materials
 - Visio - business and technical diagramming
- Project – project management.

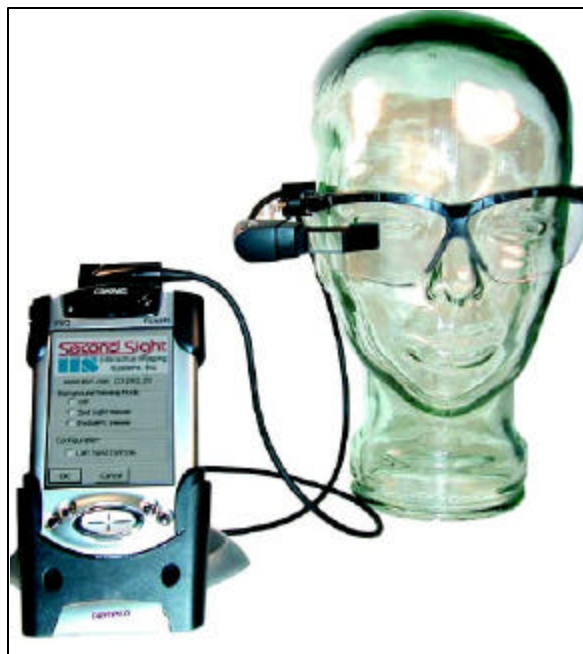
Office 2003 can open documents created by Office XP, Office 2000, and Office 97. Similarly, documents created with Office 2003 can be opened by each of these prior versions (with the exception of Microsoft Access). For users of Access 2000 or earlier, Access 2003 will use the Access 2000 file format by default. If you choose to use the updated file format for Access 2003, those files will not work with Access 2000.

Microsoft expects to make Office 2003 available in the middle of 2003.

Tablet PCs

Many vendors displayed their versions of tablet PCs

to the exposition visitors. Looking like a hybrid between a laptop and a handheld computer, most models have a laptop-sized screen and a pullout or attachable keyboard. They are made to lie flat like a clipboard. Users can write on the screen with a special stylus, and the built-in software recognizes the handwritten words and converts them to digitized text with high accuracy.



A wearable PDA.

Tablet PC runs existing Windows XP-based programs, but also allows users to augment the power of these programs with pen-based markup of documents, handwritten digital notes, and handwritten entries into electronic forms. Microsoft Windows Journal software lets users take handwritten notes and store, retrieve, and search for their handwritten information just as they do in other computer files.

Gartner predicts that vertical industries are likely to be the earliest adopters of tablet PCs. These industries include healthcare, public safety, homeland security, manufacturing/quality control, consumer packaged goods, government inspection agencies and insurance. Early uses revolve around data collection and forms-based applications.

I Can See Clearly Now

While at the Compaq booth, a wearable PDA (HP iPAQ) was demoed that allowed one to view detailed maps of Iraq or the US quite clearly. The resolution was excellent and comfort was more than adequate due to the product's light weight. What was particularly impressive with the display was its small footprint and its ease of focusing. It could be positioned downward out of one's line of sight, thus preserving binocular vision and depth perception while making referencing the map as easy as briefly glancing downward. Gone is the older style reticule

(Continued on page 10)

What's New in eGov and Technology (Cont.)

(Continued from page 9)

that blocked out one eye's entire visual field.

The company representatives stated that they are working on a version of this device for private and commercial pilots whereby they could view their flight instruments without having to look downward into the cockpit. The military affords this capability to fighter pilots via an immovable Heads-Up Display (HUD) which allows them to engage enemy aircraft while simultaneously viewing their main instruments. Options for pilots can include images of their primary instruments and/or approach plates for landings conducted under suboptimal weather conditions.

Interactive Imaging Systems calls their new wearable display, Second Sight, which plugs into a Compact-Flash or PCMCIA slot, that can be used by a PDA or computer device (handheld or desktop), and fastens onto the bow of your glasses giving the user a wearable computer display. The cost is under \$1000.

However, one reservation with the device is its potential use on the highway for reading maps, office memos, e-books, or worse, watching television. Video phone calls cannot be far behind. With cell phones currently providing significant distractions on the highways, consider the impact of a wearable computer.

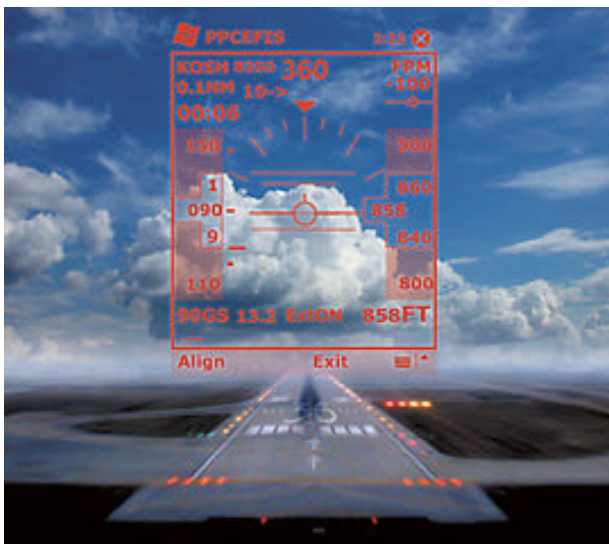
Small Packages with Big Implications

Kingston has a PCMCIA Type II portable drive, for laptops or other PCMCIA slot applications, in 5GB uncompressed or 10GB compressed capacity, with an optional USB-PCMCIA device for any computer

with a USB port. They will introduce shortly devices with 2x and 4x the capacity of the current device. Prices for the current model are under \$300. These are the size of a fat credit card.

Kanguru MicroDrive using flash memory uses your USB port and starts at \$40. These micro devices use "digital camera" memory and have 1000G shock resistance. These are about the size of your car key.

Kanguru QuickSilver external hard drives using USB or Firewire come in many storage sizes, starting at 20GB for \$160, and have 200G shock resistance. These are smaller than a small paperback book and about as light.



Example of a Heads-Up Display.

"modest" compared against the \$875 chairs used by DAU at some of their regional campuses (such as Huntsville). Comfortable fully adjustable ergonomic chairs started at just over \$200 (No, not Herman Miller) and seemed to be far more comfortable and provide substantially more lower back (lumbar) support than generic offerings.

What does it mean? We should be able to sit at work without pain, without financial cost pain.

What does it mean? You can easily and cheaply move your data to any device at any location without carrying a computer. Just download to the external device and carry to another computer.

The Seat of Government

Attendees at FOSE were able to observe and count nearly a dozen vendors selling "healthy chairs." Ergonomic design was offered at reduced prices. Two IRMC professors spent significant time exercising relevant body parts trying out many of the offerings. Prices were

(Continued on page 11)



Ten Ways to Ensure That Your IT Project Fails

By Les Pang, Mary Cole Carroll & Mary Polydys

(Continued from page 10)

Reproduction Made Easy

The FOSE show highlighted a number of similar products for mass production of CD's. IRM College currently has one such device, absent the ability to produce labels. Current technology is an "all in one" approach with an inkjet printer putting a label, B&W or color, onto the CD as a final manufacturing step. These devices can be network enabled so that a file with the label master and a file with the content master can be brought together from different servers by "remote" network access and a pile of finished, labeled CD's can be produced without ever accessing the room where the machine resides, assuming of course that someone fed it relevant blanks.

Plextor introduced a new DVD+R/RW and CD-R/RW combined drive that will cost under \$300 at the show. They have come up with a proprietary technology for write strategy that allows very high write speeds (40X) with virtually error free results.

What does it mean? We can produce class resources, when that is relevant, in a remote hands-off one-step process, at a cost below what the device we are now using cost us.

Reveal Codes in Word

When you use Word, do you miss reveal codes that is a standard part of WordPerfect? Ever wish you had a document-format revealer that would let you see every bit of formatting in a Word document? A product called Levit & James's CrossEyes add-in is useful tool for finding unusual formatting problems that can turn parts of a document into gibberish. It allows you see tables, sections, field codes, and all character, paragraph, and style formats. You can also excise misbehaving formats in the code-revealing window, or copy and paste to apply formatting from elsewhere in the document. You can even enter and edit text in the code window. The program works with Word versions 97 through XP. It costs \$75.00.

1. **Focus on technology and forget about aligning your project with your organization's mission. Don't consider people or business processes. Experimenting with new technology is fun and exciting... and that's what counts!**
2. **Give unrealistically high expectations for your project. This is called marketing.**
3. **Don't worry about security and information assurance until the project is operational – you will get help finding your vulnerabilities then.**
4. **Avoid standards...they only get in the way! Also, forget about enterprise architecture. If your project is successful, others will just have to learn to fit *their* system with *yours*.**
5. **Get an inexperienced project manager. This will be a fine opportunity for someone to receive on-the-job training. Also, don't bother developing a project plan, communication plan, or any other plan. They get changed anyway and who follows them anyway?**
6. **Throw performance metrics out the window. It's just a buzz word. Measurements take a lot of time and effort – implementing a new technology is success in itself.**
7. **Don't spend time and effort trying to develop a sound business case. It's just a bunch of meaningless words and numbers anyway that no one reads. To make sure you get the project through, don't mention the hidden costs of your project such as maintenance and support – these items only hike up the cost of the project. Your problems are over once you get your system up and running.**
8. **Get a vendor based on the best dog-and-pony show presented and the freebies they give. Don't worry about how financially stable they are...the hype given to them by the media will mean that they will be around forever.**
9. **Don't train your users or your help desk on how to use the system. It should be user-friendly enough and bug-free that anyone can use it.**
10. **Be a Lone Ranger. Don't bother to collaborate with others in the development of your project. What do others know anyway? And, of course, forget about getting buy-in and commitment from upper management and the rest of the user community. Build it and they will come!**

A Medium Rarely Well Done

By Jim Kasprzak

When the President of NBC was asked why David Brinkley was so successful as a television news commentator back in 1956, he replied, "He knew when to keep his mouth shut." By this he meant that on the radio, "the worst thing in the world" was to have "dead air time". Brinkley understood that the strength of TV was in visuals and action. While others continued to practice good "radio" reporting on television, he stepped back to let the viewer more immediately experience the news of the world. In retrospect we can see that the medium of TV was transforming broadcasting, but at the time it was not at all obvious that its professionals would need to abandon tried "principles" and entirely relearn their skills.

The same kind of media shift is taking place as we develop programs of distance learning. Text is significantly harder to read on a video screen, and some presentation formats, like large spreadsheets, complex diagrams and blueprints, are absurdly ill-suited to the medium. Many instructors seem to ignore all the advances made in typography and text readability over the last five hundred years. Collaboration is also only very weakly emulated over the Internet. Synchronous chat rooms and Instant Messaging, for example, are very awkward to use over multiple time zones, although they can be useful to the local students of a metropolitan or regional university. The richness of seminar room interactions simply is not there.

So what are the strengths of the distance learning medium? How about access to remote resources, instant research capability, time to prepare a considered response? A class can be structured so that there is no place to hide, no way to avoid the instructor's "eye". Above all, the distance learning medium has great visual and auditory potential. No class should entirely consist of text -- or worse -- PowerPoint slides.

College administrators will also need to rethink how to deal with the DL medium. For example, most DL platforms provide "measurements" (words, lines of text, time on line, number of responses) by which students or faculty may be measured and judged. We need to think about that. Is it useful to judge a student by the number of "lines of text" she uttered in a classroom? How about judging the instructor by the number of times he "interacted" with the students in a seminar room? Interestingly enough, one of the best things about DL is that the computer never tires, and can give repeated, near-instantaneous responses. So, models and simulations would seem good material for DL courses. An instructor might spend a great deal of time preparing a simulation, but during a "lesson" of this type, there might be no direct faculty/student interaction at all.

It's almost certain that DL will be a large, large component of adult education and training systems. It offers lower costs, greater convenience, more immediate access to education for millions of people. But if we learn from David Brinkley, we will need to understand the strengths and weaknesses of the medium, and to shape our materials into a form which promotes -- and doesn't actually impede -- learning.

So, good night, David... and good night from NBC.

We will need to understand the strengths and weaknesses of the (DL) medium, and to shape our materials into a form which promotes -- and doesn't actually impede -- learning.

Here's Our Web Address!!!

<http://www.ndu.edu/irmc/elearning/infotech.html>
CHECK OUT OUR PREVIOUS ISSUES!

INFORMATION RESOURCES
MANAGEMENT COLLEGE

**The World Leader in
Information Resources Management
Education**

300 5th Avenue Marshall Hall (Building 62)
Fort Lesley J. McNair, DC 20319
(202) 685-2096
<http://www.ndu.edu/irmc/>

**Department Chair: Dr. Chrisan Herrod
Newsletter Editor: Dr. Les Pang**