CANADIAN INFORMATION PROCESSING SOCIETY – CALGARY SECTION
SPRING 2005
CIPScene

Everyday Technology Unveiled

Air traffic control is not as tense as Hollywood can make it seem.

If you hear "Tango one one six, you're number two, behind North Caribou on three four, speed restriction not required. Wind two sixty, twelve gusting twenty. Keep left, hold short on Whisky and contact the ground, one two one," you're not crazy. It's more likely that you have found yourself in the middle of NAV Canada's Calgary Airport Traffic Control Tower.

Loosely translated, an air traffic controller has informed flight Tango 116 that it can land as scheduled on runway 34 and that it does not need to delay arrival for another plane's departure. The wind is from the direction of 260 degrees (from the west) with a speed of 12 knots (nautical miles per hour) with occasional gusts of 20 knots. Once landed, use taxiway W on the left, but do not enter the taxiway until ground traffic control has been contacted on the frequency of 121 GHz.

The air traffic controller gathers the information they need from an Operational Information Display System (OIDS), which is a four-screen console (pictured on page 3). The system includes the Computer Visual Information Display System (CVIDS), the NAV Canada Auxiliary Radar Display System (NARDS), Airport Surface Detection Equipment (ASDE), the Extended Computer Display System (EXCDS), and the NAV Canada Communications System (NVCS).

The screen on the left shows the ground runways and taxiways from which the controller will navigate the landed airplanes in and around the airport to their proper terminals. The screen in the middle is the NARDS, which shows planes approaching the airport, their elevation and speed, and their names and flight numbers. The air traffic controller uses this to coordinate the landings of incoming flights, and to make sure departing aircraft have enough time to get off the ground.

The screen on the right is the ASDE displaying the blueprint of the airport's runways. As soon as the plane touches down it will appear on the screen. This ensures the air traffic controllers can always see traffic on the runway, in case of stalled or slow-moving planes. Incoming and outgoing flights have

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Open Source: A Strategic Overview

Part three of a four-part series looks at desktop options and application environments available.

In the second installment of this series we began looking at the components of an Open Source based environment. In this article we will conclude examining these components including desktop environments, application frameworks and applications.

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In This Issue

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President's Message

Obtaining your I.S.P. Certification is an important step in building our Professional Association.

I'm sure some of these recent headlines have caught your attention:

• Computer Woes Sink WestJet Traffic: Calgary Herald – December 8, 2004

"Disappointingly low traffic figures were due to a series of computer problems with revenue and inventory management systems"

• Glitch is Latest EDS Problem: Globe & Mail – August 24, 2004

"Single programming error, made to live system, grounds hundreds of American Airlines and US Airways flights"

• RBC Glitch—Post Mortem: Computing Canada – June 3, 2004

"Software error prevents millions of RBC clients from accessing accounts at more than 500 branches"

How do these types of events impact the perception of the IT industry? How do we encourage greater responsibility from those providing technology-based products or services? Most would agree that more discipline is required. While our industry is in the early stages of maturity towards becoming recognized as a profession, CIPS has made good progress with federal and local governments and educational institutions in promoting the importance of training and certifying IT Professionals.

CIPS National, together with the local section presidents, has been developing a long-term strategy to evolve towards a more recognized Professional Association. Basic ingredients, evident in other accredited professions, that CIPS is working towards include:

• Methodologies: Set of well-known, well documented rules followed by all adherents to the discipline (Development of a Standards of Practice Guideline)

• Tools: Resources to enable professionals to do their jobs (Development of a Canadian Information Technology Body of Knowledge)

• People: Trained and certified in their profession (I.S.P. Certification and Strengthened Code of Ethics and Standards of Conduct)

Obtaining your I.S.P. Certification is an important step in building our Professional Association. Equally important is your active involvement and input to ensure we evolve in a manner that provides increasing value to our members and community. ■

Sandra Scott – President

CIPS Calgary Section Board of Directors 2004-2005

Roy Babiuk – Ambassador Director
ph: 242-9913 **email:** joroba@telusplanet.net

Shilo Beechinor – Newsletter Director
ph: 230-2783 **email:** shilo@cips.ca

Doug Campanaro – Social Director
ph: 781-1573
email: dcampanaro@mainland.ca

Donna deMan – Academic/Student Liaison
ph: 210-5631 **email:** donna.deman@sait.ca

Stephanie Hiebert – VP Membership
ph: 539-3820 **email:** snhiebert@cips.ca

Derrick LaRiviere – CIO Liaison
ph: 278-1185
email: derrick.lariviere@crisptech.com

Clay Long, I.S.P. – VP Programs
ph: 710-6980 **email:** claylong@corvelle.com

Shawn Mahoney – VP Marketing & Sales
ph: 303-4551
email: shawn.mahoney@allstream.com

Kevin Mitchell – VP Finance/Treasurer
ph: 229-2406 **email:** kmitchell@cleanmax.ca

Talib Nanji, I.S.P. – AB Regional Director
ph: 236-5504 **email:** talib@cips.ca

Mark Olson, I.S.P. – Marketing & Communications
ph: 268-1864 **email:** olsonm@nucleus.com

Sandra Scott – President
ph: 294-1474 **email:** sandra.scott@cgi.com

Mohamed Teja , I.S.P. – Past President
ph: 234-8960 **email:** tejam@shaw.ca

Jeffrey Wallace – Educational/ Professional Director
ph: 294-1474 **email:** jeff.wallace@agti.ca

CIPS Calgary Office
ph: 244-4487 **email:** calgary@cips.ca

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no communication with computer systems in the tower; all communications between flights and the air traffic control centre are voice communications conducted with the NAV Canada Communications System. All programs operate on the Windows NT Operating System with the exception of the ASDE, which runs on a UNIX platform.

Each day in the air traffic control tower there are five controllers and one supervisor who monitor a seven nautical mile radius around the tower, including ground movement in and around the airport apron. There are three active controllers: one in charge of arrivals and departures, one in charge of taxi runways, and one in charge of movement around boarding terminals.

Calgary International Airport is the third busiest airport in Canada behind Toronto and Vancouver. Calgary sees between 700 and 750 movements (arrivals or departures) each day and approximately 250,000 movements a year. With the high growth rate that Calgary has experienced in the last 20 years, the airport has begun discussions of building a fourth runway, which would be the longest at 14,000 feet. Runways in use now are 12,675 feet, 8,000 feet, and 6,200 feet. The new runway will be built parallel to Barlow Trail. The larger runway will be needed for the A380-style airplanes that are presently being developed. The A380 airplane will be the largest commercial airplane in use and will have two levels, much like a double-decker bus.

When asked if air traffic controllers had seen any "close calls", they revealed that air traffic control is not as tense as Hollywood can make it seem. The controllers explained that there are five "bed posts" stationed around the outskirts of Calgary. If the air traffic gets too dense and airplanes arriving cannot land safely one after another, the air traffic controllers will instruct airplanes to circle around a bedpost until a position opens up. Close calls are also averted because of structured "airways." Airways are highways in the sky that planes follow to avoid collisions.

Calgary's air traffic controllers gather the information they need from an Operational Information Display System (OIDS).

With a clear understanding of the process and technology behind air traffic control, travelers can now feel completely at ease the next time they are departing from or arriving at Calgary's beautiful International Airport. ■

Rebecca Darling is currently working on her applied bachelor degree in communications with a minor in French language at Mount Royal College. After Rebecca finishes her program she wants to relax!

Sponsor Profile

Telvent (NASDAQ: TLVT) is pleased to support the CIPS Calgary section.

TELVENT

The IT Services (ITS) division of Telvent provides a comprehensive range of Information Technology services to Calgary clients, primarily in the oil and gas sector. With over 100 consultants and local expertise in infrastructure and enterprise application systems, network and desktop services, change management, security, business continuity and disaster recovery, Telvent is well qualified and committed to helping companies achieve their strategic direction and goals.

The addition of ITS to Telvent's extensive North American IT business provides clients with greater capabilities for integrating operational data with realtime business management systems, while addressing all of their ongoing operational and application lifecycle management requirements.

Telvent's ITS personnel provide and support a full range of IT environment services for clients, with a special focus on application lifecycle management (business analysis, application architecture and development, testing, QA, and sustainment), and service provisioning and assurance (SLA management, operational and resource co-sourcing, change control, resource procurement, asset management, and business solution prioritization).

Telvent, the Global RealTime IT Company, is a specialized provider of high-value-added technology solutions in four industry sectors (energy, traffic, transportation and environment) in Europe, North America, Latin America and China. A public company (NASDAQ: TLVT), Telvent has over 40 years of experience in business process systems and services, industrial automation, information management, and IT co-sourcing and consulting. With more than 2300 highly skilled personnel, Telvent provides the IT infrastructure requirements for an extensive international client base. ■

To learn more about Telvent, and to register for a product draw, please visit www.telvent.com/info.htm

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DESKTOP ENVIRONMENTS

On its own, X windows does not provide the functionality most users would expect of a graphic environment, such as the ability to resize and relocate individual windows or to copy and paste objects between applications. Most systems will run a window manager on top of X windows which provides the functionality we associate with a graphical environment. As a result, users have a choice of running it one of three ways. Running it without any window manager is a good choice for a dedicated use workstation in that the chosen application, and only that application, is available to the user. It can also be run with a simple window manager, which would be suitable for a dedicated use workstation where only a small number of applications are required. Finally, it can be run with a full function desktop environment.

There are two major desktop environments available for Open Source platforms: Gnome and KDE (K Desktop Environment). The two environments offer similar functionality. Historically Gnome has had stronger vendor support, however KDE has broader implementation and is becoming the predominate environment for most users. The choice is best made by using the default of the distribution chosen.

Getty Images

Open Source environments have traditionally been designed, developed, and used by software developers. So it is not surprising that one of the great strengths of Open Source systems are application environments.

APPLICATION FRAMEWORKS

Open Source environments have traditionally been designed, developed, and used by software developers. So it is not surprising that one of the great strengths of Open Source systems are application environments. Many of the popular commercial application platforms are available for execution on Open Source operating systems. However there are also many high quality Open Source application environments.

- The Qt application framework from Trolltech is the basis for the KDE desktop environment. Qt allows for the development of platform independent applications in C++ for X windows (Linux, BSD), Microsoft Windows and Mac OS X. The framework is free for development and deployment on Open Source platforms, but requires a fee for deployment to Windows and OS X.
- The acronym LAMP stands for Linux, Apache, MySql, and PHP/Python/Perl; the Linux server operating system, Apache web server, MySQL database, Python and Perl programming languages, and PHP HTML extensions. LAMP is the most popular architecture for Web based applications, regardless of operating system, and is the foundation for large sites like Yahoo, Amazon.com, and E*TRADE.

APPLICATIONS

There are thousands of applications available for Open Source based systems, addressing almost any requirement. For example, the Debian distribution of Linux has 9,100 packages available for installation. There are a few applications worth specific mention.

- Open Office is the Open Source version of the Star Office suite, owned by Sun. The suite offers a word processor, spreadsheet, and presentation graphics package. Open Office provides similar functionality to the Microsoft suite, and while it can successfully read many Office files it does have difficulty dealing with some esoteric features. As long as an individual does not require frequent exchange of files with users of Microsoft Office, Open Office is a viable alternative for the majority of users.
- Firefox is an Open Source web browser. While its roots can be traced to Netscape Navigator, the current version of Firefox has been essentially re-written. Firefox is available for Linux, Microsoft Windows, and OS X. With the addition of the available JavaScript and Flash plug-ins, Firefox provides a superior browsing environment to Internet Explorer, being less vulnerable to security exploits and offering pop-up ad blocking.

In the final installment of this series we will examine the role of Open Source distributors, and outline some of the opportunities and challenges implementing Open Source systems. ■

Mark Olson, I.S.P., has been using Open Source software since 1995, and speaking and teaching on Open Source since 1999. He is a senior systems professional, and is currently a supervisor within Information Services at The City of Calgary. He may be reached at olsonm@nucleus.com.

5-Year Members

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The Geek Mystique

It's not easy being green and other lessons in improving inter-personal communications.

People in IT are often misunderstood. They are thought of as poor communicators or even anti-social. They can be seen as eccentric, intellectual snobs who dress poorly and don't care about people. That can be the perception. In fact, many people attracted to work in the information technology field are intellectual, analytical and pragmatic problem-solvers. Those are the characteristics that make them successful in technology-related careers.

In every discipline, there are personal characteristics that attract certain types of people. Sales people are often outgoing and competitive, but can be annoyingly irresponsible. Workers in the not-for profit sector are compassionate and unselfish but can be tagged as too "touchy-feely".

In today's competitive business environment, employees from various disciplines often work together on projects. Communication with such a diversity of personalities can be challenging. How can we adapt to make our projects—and ultimately our entire team—successful?

The important thing to remember in improving communication is that everyone is different. Throughout history from Hippocrates to Meyers Briggs, there have been systems that categorize people to better understand their personalities. A program called True Colors™ uses colours to represent the four temperament types because colours are visual and easy to remember: Orange, Blue, Gold and Green.

In this system, orange-dominant personalities are direct, take charge people who are competitive, fun-loving and spontaneous. Contrast that with gold-type people who are responsible, trustworthy and organized. Blue-based personalities are people-oriented, creative types who like to share their feelings, while those with green as their prominent type are self controlled, theoretical perfectionists. As these brief descriptions show, mixing such different personality types on one team can present a few challenges.

When local diversity specialist, Narmin Ismail-Teja took the CIPS Calgary board members through the True Colours™ exercise, she wasn't surprised that the team was predominantly green, with strong orange and gold tendencies. "Each individual has their own unique temperament, which is a combination of the four colours—some more dominant than others," explained Ismail-Teja. Sandra Scott, CIPS Calgary President, who is predominantly orange, with strong gold and green tendencies, found the process to be very enlightening: "Our board members gained a new respect for each other's strengths and how to work more effectively together".

Everyone has worked with someone who absolutely "drives you crazy". How do you determine what dominant colour a colleague might be to foster better relationships? "It's simple," states Ismail-Teja. "Observe how they interact with other people both in person and via email. Then tailor your approach to more closely match their style." Here are a few simple strategies you can use when interacting with colleagues of these True Colours™:

Orange: Try to be more spontaneous and energetic. Don't slow them down or assign them tasks that require a lot of detail planning.

Blue: Spend quality one-on-one time with them and really listen to what they have to say. Be supportive and praise their creativity.

Gold: Strive to be on time and organized. Be dependable and do what you say you are going to do.

Green: Give them tasks that challenge their problem-solving abilities and respect their need for independence.

"Keep in mind that the intent of True Colours™ is not to label yourself or other people," cautions Ismail-Teja. "It is to gain a better understanding of people and to appreciate and value each other's unique characteristics." ■

Monique Chenier is principal at Chenier Communications, a consulting firm helping organizations solve business challenges through effective communications. Monique can be reached at mpchenier@shaw.ca.

Narmin Ismail-Teja is a "Specialist in Creating Inclusive Workplaces" through her company impact@work. She can be reached at Narmin.Ismail-Teja@shaw.ca.

The Code Dependents celebrate their victory at the May 27, 2004 IntensIT competition. From left to right: Damien Jones, Ryan Perry, and Matt Mastracci. Missing: Richard Funk

IntensIT:

Pressure Redefined

IT Case Study: Designed to raise the profile of Alberta's IT community, IntensIT allows computer pros to apply the skills they use each day on the job.

The first-ever event designed to test the abilities of Calgary's IT professionals was held in May 2004. Modeled after TV's "Iron Chef" or "Junkyard Wars", IntensIT is a strenuous competition aimed at members of the IT industry. Designed to raise the profile of Alberta's IT community to regional and national levels, the contest allows computer pros to apply the skills they use each day on the job. The University of Calgary's Tom Keenan says, "instead of saucepans and knives, all these people have is their computers and raw brain power".

Teams of four are supplied with basic necessities from the IT world and called upon to assemble an application in a single business day. In a business environment, these applications can take months to fully develop, program and test. Skills necessary to compete vary from business analysis, database administration, systems administration, application development, web development, and graphic design. The purpose is to simulate a vigorous day-in-the-life of an IT pro when critical business needs and strict deadlines are taken very seriously. The winning team must manage its time well, authoring the most complete system in accordance with the specifications provided while overcoming all challenges. Points are awarded based on executing the highest number of requirements. The final product is functional software that is practical for the user.

Of fourteen teams involved in the event, the Aclaro Softworks team Code Dependents handily won the Gold award in the competition with an impressive score of 8231 points. Aclaro employees Matt Mastracci, Richard Funk, Damien Jones and Ryan Perry spent a week designing their strategy, and felt that winning the event was based on preparation. As IntensIT is a development competition, developers are likely to be a team's most precious asset, and all four members of the Code Dependents filled that role with even contributions. Leader Mastracci believes his team's synergy and good communication were paramount to landing them in the winner's circle. Trans Canada's Cydonia team took the second place Silver trophy with 5785 points, and Brightspot Consulting's Team Indy, scoring 5585, won third place Bronze.

Just how intense is IntensIT? One member of the competition explains: "A four-week project, we have concerns. A 12-hour project, it's suicide." It would follow, then, that the teams faring best in this contest would come away from it with a better ability to handle everyday professional demands. It was simply "another day at work", says winning team member Jones. Collectively, the Aclaro foursome saw this as a well-run effort and the experience of working under crushing pressure was valuable in improving daily efficiency at work. Additionally, it spells good exposure for the company represented by its participants. Mastracci will likely form a team to defend their title at the 2005 edition of IntensIT. When asked what advice he has for other teams, he says people should "work together for a bit to see how everyone fits and just let people do what they do best", adding that less time spent on organizing means more time can be spent on the competition.

Just how intense *is* IntensIT? One member of the competition explains: "A four-week project, we have concerns. A 12-hour project, it's suicide."

IntensIT celebrates Alberta's exemplary strength in information technology, and showcases the accomplishments that led Calgary to recently be awarded the title of "World's Top Intelligent Community". ■

Marty Lawrence has 25 years of broadcasting experience in the Calgary area. He is a graduate of SAIT and the U of C with a BA in Communications. He does voiceover work for animated features, is a drummer for a local band and enjoys writing.

Informatics 2005

Informatics, the annual CIPS national conference, is being hosted this year by CIPS Regina from May 29 to 31, 2005.

The theme of this year's Informatics conference is Business and IT Fusion. Fusion brings the full set of business and IT considerations (and opportunities) into view. It involves translating corporate mandates into interrelated business and IT actions, setting common priorities, balancing needs and making trade-offs all with the same goal in mind—profitable business growth. By fusing business and IT strategies, organizations can simultaneously respond to several fundamental needs: meeting earnings targets today, improving competitive positioning for tomorrow, and establishing a platform for perpetual growth.

This year's conference will feature over 20 workshops and five keynotes, focusing on the themes of CIO Challenge, Technology, Adaptive Organizations, and People, Skills and Professionalism Accreditation.

KEYNOTE TOPICS ARE:

- Work Extension Technology by Dr. Linda Duxbury
- No More Business As Usual for CIOs by Gartner
- How IP and Nanotechnology are Beating Chronic Disease by Douglas Mulhull
- Return on Imagination by Tom Wujec
- Harnessing IT for the Global Community: Launching the World Community Grid by Dan McMurtry

WORKSHOP TOPICS INCLUDE:

- Wireless Security – Evaluating the Risks
- SMART Methodology – Best Practices in Applications Support
- Ensuring Security Compliance
- Insights into Personal Effectiveness
- Values Leadership and Commitment
- Technological Crime and Critical Infrastructure Protection
- Enterprise Architecture—It's not just the Destination, it's the Journey

Register for the full event, keynotes only, or a half-day. Early-bird registration closes March 31, 2005. For more information and to register, please visit www.cipsinformatics.ca. ■

CIPS Calgary Special Interest Groups

Business Analysis
Cheryl-Lee Riess
(403) 250-8686 Ext 275
cheryl-lee.riess@cdilearn.com

Brad Sewall
(403) 234-8960
bsewall@ethierassociates.ca

Project Management
Karen Wright
(403) 234-8960
kwright@ethierassociates.ca

Ken Wiens
(403) 238-7612
ken@kgw-consultants.com

Data Warehousing
Hassan Sherazi
(403) 228-5423
HSherazi@aol.com

.NET SIG (formerly Visual Basic SIG)
Bob Morton
(403) 705-2304
bobm@wardvinge.com

Database SIG
Bruce McCartney
(403) 615-3350
bruce.mccartney@dbinfos-ystems.com

15-Year Members

Ken Ashmead, I.S.P.
Barbara Brunton, I.S.P.
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Leading in Learning

Is technology creating competitive advantage for Alberta? As the debate about the strategic value of technology rages in the business sector, technology investment is alive and well in education.

Technology has the potential to change the context of the learning sector and ultimately the nature of learning. New ways of working together, enabled by technology, are transforming not only what we learn but how we learn. But can technology create competitive advantage? Alberta's investments are signifying it can.

CAN TECHNOLOGY CREATE COMPETITIVE ADVANTAGE?

In his seminal article, "IT Doesn't Matter", Nicholas Carr argues that IT is an infrastructure technology that has reached an innovation plateau. He argues that what makes a resource truly strategic is not its ubiquity but its scarcity. Carr concludes that because the potential of technology for differentiating one company from another declines when it is accessible to all, IT can no longer create competitive advantage. Michael Porter has also questioned the strategic contribution of technology. Porter uses the demise of the dot com companies as proof that a return to fundamentals is the only way to create wealth.

Carr's article in particular sparked a lively debate that continues today. In rebuttal Don Tapscott, among others, argues that neither hardware nor software has reached the plateau of innovation, that the build out is far from complete. Tapscott wrote in response to criticism of the Internet: "It is wrong to trivialize the Net in this way. The Net is much more than just another technology development; the Net represents something qualitatively new—an unprecedented, powerful, universal communications medium." He describes the business web as any combination of businesses that use the Internet for communication and transactions. Business webs are proving to be "more supple, innovative, cost-efficient, and profitable than traditional, vertically-integrated competitors."

DOES TECHNOLOGY CREATE COMPETITIVE ADVANTAGE IN LEARNING?

Technology can differentiate the conditions of learning because it is the connector and enabler that has the potential to change the context of the learning sector and ultimately the nature of learning. The business web, as Tapscott describes it, challenges the owner of K-12 education (which has been the government) to partner beyond the borders of the education community through the Internet to deliver greater value to the public, just as the business owner has done in the private sector. Ultimately the public must decide whether the learning outcomes deliver greater value.

How can technology differentiate? Examples include providing a range of access tools that allow all students to participate regardless of ability, such as voice-to-text and text-to-voice. These tools provide only one example of how technology supports the mandate of public education to provide learning opportunities that optimize the learning potential of all students. Improving access, engaging students in different ways and supporting students in new ways of demonstrating their knowledge are important benefits of leveraging technology in learning environments.

Can we wait to embrace these new tools? The Internet is already profoundly changing the way

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we work and the way we learn. Teachers are embracing to varying degrees the Internet landscape as a source of information but are only beginning to understand the "Net" as an environment for collaboration, shared development and shared responsibility for knowledge creation. The impact of this disruptive technology continues to be felt. Citing President Clinton "even a totally controlled society cannot resist the winds of change that economics and technology and information flow have imposed in this world of ours." The decisions facing us, he continued, are whether we will embrace these changes for tomorrow or resist, hoping that we can preserve the economic structures of today.

WHAT EVIDENCE IS THERE THAT ALBERTA IS USING TECHNOLOGY TO DIFFERENTIATE ITSELF?

Alberta Learning's 2004-2007 Business Plan states its vision is to be the best learning system in the world. The province is showing leadership by investing in technology that creates value for learners and by building connectors to partners in the private sector, in other governments, and in other educational communities. The fundamentals of the vertically-integrated K-12 education sector of today are being altered. New partners, new environments, new communities, and changing practice are creating new fundamentals that challenge the notion of teacher as knowledge provider and education as a delivery model.

Three recent initiatives demonstrate Alberta's investment in technology:

- Learning and Technology Policy Framework
- Technology Standards and Solutions
- International Education Strategy

The Learning and Technology Policy Framework represents a desire to create unique value. Alberta is the only province at the time of writing to invest in the development of a framework first, thereby attempting to future-proof its technology-related policies. Beginning with a framework acknowledges that the ICT industry will continue to evolve and play a significant role in learning.

In the Learning and Technology Policy Framework, the vision describes learning delivery, knowledge and skill acquisition, learning system management, and innovation as components which are enhanced by technology. The goals of the framework represent a combination of cost leadership and differentiation strategies. The principles of the framework describe the understanding and reflect the importance of leveraging the technology to create new partnerships and alliances.

The Learning System Technology Standards and Standards Solution initiative is designed to address issues related to technology integration including enhanced learning opportunities, affordable technology, equitable access to technology, interoperable systems, and sustainable technology solutions. This initiative is clearly a cost leadership strategy designed to bring operational effectiveness to the whole of the technology environment.

The International Education Strategy describes a vision that "Alberta will be internationally recognized as a leading provider of education, skill development and industry training, and Albertans will be well prepared for their role in the global marketplace and as global citizens". Specific investments in online learning are broadening the access to Alberta curriculum on a global scale.

A fourth government initiative, the Alberta Supernet, is an example of the new business model of partnership delivery. Supernet, a broadband network that will connect all libraries, schools, hospitals and government offices, is also an example of significant technology investment that is creating unique value for the citizens of Alberta. The network also represents an opportunity for school districts to share online services and reduce operating costs.

If Alberta is to create sustainable competitive advantage both at home and abroad it must combine the benefit of the technology infrastructure with the intellectual capital of its educators.

Alberta has positioned itself to embrace commercial partnerships and create unique value for learners. A new business strategy is required that seeks partnerships which contribute to the value chain but do not replace the core competency of the learning sector. Teaching and learning is that core competency. If Alberta is to create sustainable competitive advantage both at home and abroad it must combine the benefit of the technology infrastructure with the intellectual capital of its educators. The research is indicating that the teacher plays a significant role, perhaps not as a knowledge provider of the past but more than a facilitator as often now described. The teacher is rather a partner, ensuring inclusivity for all learners while integrating the appropriate set and range of technologies in response to diverse learner needs.

Technology can and is creating competitive advantage. Alberta is recognized nationally and internationally for its technology strategies and its learning achievement results. Alberta will sustain its leadership and competitive advantage if it commits to continued investment not only in technology but also the development of skills in leveraging the business web that it creates. ■

Cindy G. Seibel joined the Calgary Board of Education as the Director of Information Technology Services in 1998 where she has responsibility for the strategic planning, deployment and sustainment of technology for the school district.

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Watch your thoughts;
they become words.
Watch your words;
they become actions.
Watch your actions;
they become habits.
Watch your habits;
they become character.
Watch your character;
it becomes your destiny.

—Frank Outlaw

BA SIG Update

The BA SIG is up and running! We've had a great response to our first event. At the time of writing, we have over 60 people registered for "What is a BA?", the inaugural session. A number of people commented about how much they are looking forward to meeting with other business analysts in a networking forum such as this one.

In conjunction with the event, we sent out a brief survey to our registrants to get their perspective on "What is a BA?". We appreciate the responses to date and look forward to publishing them to our SIG participants. We would like to hear some of your ideas on what the topic of our next event should be—mark May 12, 2005 in your calendar as the next brown bag event. Please email either of the co-Chairs below with your topic ideas.

The CIPS Business Analyst Special Interest Group (BA SIG) is intended to provide professional business analysts a forum for sharing knowledge and best practices with those who share a common interest in business analysis. The BA SIG will contribute to the overall understanding and value of business analysis. Members will have the opportunity to network with peers, subject matter experts, best practices organizations, as well as industry leaders. The membership will be several hundred strong, comprised of business analysts, systems analysts, IT project specialists, process analysts, project managers, business managers, and consultants.

If you have questions about the BA SIG, please contact:

Cheryl-Lee Riess
CDI Education
(403) 250-8686 ext. 275
cheryl-lee.riess@cdilearn.com

Brad Sewall
Ethier Associates
(403) 234-8960
bsewall@ethierassociates.ca

Roy Babiuk,
CIPS Ambassador Director

CIPS Ambassador Program Update

CIPS Calgary started a new program this year, establishing Ambassadors within member's organizations. The group was successfully launched with four members and has already grown. Welcome aboard to two new members: Chris Collins from Trimac and Olivier Aubin from Telvent. They have been a great addition to the team.

The Ambassadors met several times this fall and have provided important feedback to CIPS regarding awareness and improving the value of CIPS to its members. We look forward to further enhancing the CIPS profile and value to the IT community.

Thanks to the following Ambassadors for their participation in the program:

Sean Stratton – Enbridge
Carla Ogryzlo – Quadrus Development
Sheila Chong – Trimac Information Services
David Lowther – First Calgary Savings
Chris Collins – Trimac Information Services
Olivier Aubin – Telvent

If you would like to increase your company's involvement with CIPS while networking with other IT professionals, or would just like to know more about the Ambassador program, please contact Roy Babiuk, CIPS Ambassador Director at (403) 519-1192 or joroba@telusplanet.net

CIPS on Campus

Mount Royal College's Bachelor of Applied Computer Information Systems and Business program was accredited by the CIPS Information Systems and Technology Accreditation Council.

In September 2003, Mount Royal College's Bachelor of Applied Computer Information Systems and Business program was accredited by the Canadian Information Processing Society through its Information Systems and Technology Accreditation Council. The program was granted a three-year accreditation for May 2003 to April 2006.

The relationship between CIPS and Mount Royal is longstanding. CIS diploma programs have been accredited for three separate terms: 1990 to 1995, 1995 to 1998 and 1998 to 2001. Since 1998, the two-year diploma has evolved into an Applied Degree. Seeking accreditation for that new program had to be deferred until Spring 2002 when the first class of graduates convocated.

Participation in the CIPS accreditation process is of tremendous value because it involves a detailed independent peer assessment, not only of program content, but also of teaching and administrative practices. The review is rigorous and standards of excellence laid out by CIPS must be met. The feedback provided by the visitation team plays a significant part in the process of self-analysis and improvement to which Mount Royal is committed.

For students, CIPS accreditation means they can depend on the quality of the program. Graduating from a CIPS-accredited program also shortens the road to earning the Information Systems Professional (I.S.P.) designation.

The time frame for the accreditation process, from initiation to completion, ranges from twelve to eighteen months. For an institution with an already-accredited program, it starts with the submission of the next application to the CIPS Secretariat at least 12 months prior to the current accreditation termination date. A key component of the review is an on-site visit by a three-member accreditation team. Once a date has been set for the visit, the institution begins to assemble and submit all required documentation.

The institution must complete a comprehensive questionnaire aimed at providing an overview of the institution, the scope of operations for the program to be reviewed, and the administrative environment in which the program exists. Sections of the questionnaire are devoted to the College environment, faculty, students (e.g. "How are students advised about course and career selection?"), curriculum (e.g. "How does the program ensure that students are exposed to various aspects of professionalism?") and resources (e.g. "What policies and procedures are in place for maintaining and upgrading software and equipment?").

Participation in the CIPS accreditation process is of tremendous value because it involves a detailed independent peer assessment.

During the two-day on-site visit, the accreditation team must have access to all course outlines and teaching materials as well as copies of representative student work. Team members engage in a full slate of tours and meetings with various stakeholders, from senior administrators to personnel in the Registrar's Office, faculty, students and Advisory Committee members. The visit affords the accreditation team the opportunity to assess the program's qualitative factors such as learning environment, quality of staff and facilities.

Mount Royal will soon be applying for re-accreditation of the Applied Degree in Computer Information Systems and Business for the next cycle. Gathering feedback and advice from expert practitioners is an important part of program and curriculum assessment. Without a doubt, participating in the CIPS accreditation process is well worth the effort. ■

Judith Gartaganis has been an instructor in the Department of Computer Science and Information Systems at Mount Royal College since 1992. She is currently serving as Chair of the Department.

The first occurrence of the "Smiley" was found to be on September 19, 1982 when Scott E. Fahlman proposed its use, in a Carnegie Mellon bulletin board posting, to indicate a joke. "I propose that the following character sequence for joke markers: :-) ", wrote Fahlman at the time. "Read it sideways. Actually, it is probably more economical to mark things that are NOT jokes, given current trends. For this, use :-(".

– www.distant.ca/UselessFacts

Event Profiles

CIPS Calgary offers events and programs for every interest. Check out the back page of CIPScene for information on upcoming events.

JANUARY LUNCHEON

Ken Hanley provided an entertaining presentation on the "Dirty Dozen of Project Justification" and shared some project anecdotes from his many project management experiences. He outlined his 12 rules for Project Justification. They included:

1) evaluating a project over the organizations' entire project portfolio rather than in isolation
2) being conservative on your estimates, and using results from past project close-outs to guide your estimates
3) when discussing the project, focus on the "What" not the "How" (i.e. be outcome focused)
4) be sure you know whether the project will require numeric (financial) or non-numeric justification
5) when preparing project estimates, be sure to identify to the sponsor "what you don't know" upfront

Ken stressed that IT Project Managers should really refer to "project selection" rather than "project justification". He suggested that this would help keep emotions out of the process and allow the process to be transparent, objective and repeatable. In addition, he introduced the concept of the Project Performance Center versus the PMO (Project Management Office) to ensure this group was focused on successful project outcomes versus simply project management and control activities. Ken's interactive presentation style and his creative video clips made for an informative and entertaining lunch.

Ken Hanley speaking at the CIPS January Luncheon

At the CIPS January luncheon, Sandra Scott (left), CIPS Calgary President, congratulates Charles Tuckey, I.S.P. (right), for winning a CIPS Across Canada magazine contest.

"Don't judge each day by the harvest you reap, but by the seeds you plant."
—Robert Louis Stevenson

STUDENT ACHIEVEMENT

Each year, CIPS Calgary awards scholarships to high achieving students in the computer science programs at Mount Royal College, SAIT and the University of Calgary. Each of these programs is accredited by CIPS National. Accreditation means that the Accreditation Council recognizes the program as a high quality program, and graduates of the program earn credits towards their I.S.P. designation. (see page 11 for more information on CIPS Accredation) In addition to scholarship money, CIPS Calgary also provides a CIPS Membership to give the student a head start in becoming an active member in our IT community.

This year our award recipients were:

Adam Alinauskas
Adam (pictured at right) is completing his fourth year of the Computer Information Systems Intern Program at Mount Royal College. He has been doing his internship with Medialogic in Calgary, who plan to hire him at a .NET Programmer upon his graduation in January.

Brennan Deschambault
Brennan is currently a student at SAIT and was unavailable for interview.

Ron Davis
Ron has completed three years of his four-year program at the University of Calgary. He is working on is Bachelors of Science with honours in the computer science program, with a concentration in the theory of computation. He is currently doing an internship with IHS Energy (Canada) Ltd., based in Calgary.

Congratulations Adam, Brennan, and Ron!!

Sandra Scott, CIPS Calgary President congratulates scholarship winner Adam Alinauskas at the CIPS December luncheon.

Keeping on Track

According to Allen Borak, Vice President of Information Services at Canadian Pacific Railway, IT truly is core to running the business. The trains simply can't run without the systems they have in place.

As Vice President of Information Services for Canadian Pacific Railway, Allen Borak is responsible for information technology, communications, computing infrastructure and applications of North America's sixth largest railway. Headquartered in Calgary, CP Rail provides freight transportation services over a 14,000-mile network in Canada and the U.S., generating annual revenues in excess of $3.6 billion.

Prior to joining the railway, Mr. Borak held a variety of positions in IT at Imperial Oil for 17 years in Calgary, Toronto and Houston. He returned to Calgary to join CP as they were relocating their headquarters here from Montreal in 1996. Mr. Borak was instrumental in establishing the IT infrastructure and building the IT team in Calgary upon their relocation. He was appointed Vice President in 1999.

In his personal time, Mr. Borak enjoys outdoor pursuits and spending time with his family both locally and at their property in Invermere. Mr. Borak and his wife—a singer with the CPO—have a daughter attending Queen's University and a son at Mount Royal College.

CIPS: How is Information Technology viewed within your organization?

Borak: One of the reasons I left the oilpatch and came to CP is that IT truly is core to the running of our business. The trains can't run without the systems we have in place. Also, this business is far more data intensive than the oil industry. We generate millions of events a day; every time a car moves, or freight is transferred we track that information, not only to ensure the efficient operation of our business but also to report it to our customers.

CIPS: What challenges do you face at CP Rail and how do they differ from your experiences in other sectors?

Borak: One of the biggest is geography. Maintaining a consistent level of quality in our computing infrastructure across a 14,000 mile rail system can be a challenge.

At a macro level, IT demand far outstrips what we can supply. The rail business is the most capital intensive industry there is. Canadian Pacific re-invests 18% of our revenue annually in locomotives, rail cars, track, and so on. IT is competing in the same capital pool with the rest of the organization for scarce dollars.

The other significant challenge CP faces is that, of the six major railways in North America, we are the smallest. That's significant for a couple of reasons.

One, because there are so few Class 1 or major railways, there are no packaged applications available to run our core business. The market's too small, in terms of number of potential clients, for anyone to build them. So that means either building certain systems we need from scratch or acquiring them from others.

continued on page 14

continued from page 13

Secondly, because we're the smallest of the majors, we have to spread those development costs over a smaller revenue base. Due to our relatively small size versus our competitors, we have to be more nimble and creative in our problem solving. We just don't have the resources to build everything we need from scratch.

CIPS: Can you share a recent success within your organization, where technology has been applied to improve the bottom line?

Borak: We're just in the final stages of implementing a new system called TYES. It's been a $50 million, 4-year initiative that controls how we run our switching yards. The impact on the business will be enormous and will result in noticeable changes in the yards. One of the things it will achieve is to reduce "dwell time"—that is, how long a car stays in the yard—by over 10 percent.

CIPS: It's been about a year since you announced the outsourcing of your computing infrastructure to IBM. What were the business drivers behind that move and how's it working out?

Borak: We've actually outsourced to more than just IBM. They run our data centre, EDS manages our desktop environment, and Bell runs our network. We did it to reduce costs and gain efficiencies. We couldn't afford to build and run a state-of-the-art data centre ourselves. IBM can, and does it very well. In fact, all three parties have done a good job.

"The golden opportunity you are seeking is in yourself. It is not in your environment; it is not in luck or chance, or the help of others; it is in yourself alone."

—Orison Swett Marden

CIPS: What impact has it had on your staff?

Borak: We were very open with our team from the outset that we were considering selective outsourcing so hopefully there were no big surprises. And when the IBM deal was concluded, about 100 of our staff did transition to them. I think for the most part, it's worked out well for the people. Working for a global technology company like IBM opens up all kinds of opportunities for IT professionals. I believe it was disappointing for those who wanted to work for a railway as opposed to a technology company.

CIPS: Further to outsourcing, what is your take on contracting out IT skills overseas?

Borak: I think it's inevitable that work will flow to where it can be done at a lower cost. That's capitalism. A few years ago call centres were moving to the Maritimes because their cost structures, particularly their salaries, were lower.

We'll inevitably end up with a component of our work outsourced overseas. But it will be through a second-order offshore effect. As an example, suppose that we outsource some of our application support to RIS. RIS, in turn, has a Romanian operation where they will send certain of their work to be performed at a lower cost. That, in turn, allows RIS to offer us a cheaper blended rate.

CIPS: How do you think Western Canada stacks up globally with respect to our IT skills and capabilities?

Borak: I think Calgary in particular has a very strong IT sector. We've been fortunate in that the oil industry has had the money to invest in technology and training here over time. CP Rail's re-location certainly injected new IT skills into the local market. Then you also have Shaw, WestJet and other companies headquartered here investing heavily in new technology. I believe Calgary has the opportunity to blossom into the leading IT centre in Canada.

The business now takes a far more active role in IT initiatives: demonstrating strong business sponsorship and ensuring that there's a good business case.

CIPS: From your perspective, how has the role of the CIO evolved in the last few years?

Borak: After Y2K and the dot-com meltdown, a lot of people became disillusioned with the value of IT. Now the business users have far more critical expectations of IT and, specifically, the CIO. This change has been for the better because the business now takes a far more active role in IT initiatives: demonstrating strong business sponsorship and ensuring that there's a good business case. For the CIO, there's a greater role in working with the business to ensure proper change management and a benefits realization plan. The CFO now looks to both the business owner and the CIO to ensure the business benefits are there.

CIPS: You've been around CIPS for over 20 years. How can CIPS continue to be relevant to industry professionals?

Borak: It seems to me that the role of CIPS is to advance both the professional and economic interests of its members. To that end it needs to supply valuable and innovative services. CIPS gives a sense of community to the IT profession and that community needs to be leveraged in both areas like training and services like career counseling and group buying.

CIPS: What keeps you interested and challenged in your role?

Borak: Certainly the amount and rate of technological change keeps you learning.

Beyond that, there's an interesting dichotomy here at CP Rail. We have a history dating back almost 120 years, and there are still some things that are done literally the same way they were when we were founded. At the same time, we're continually introducing the latest systems and technologies to improve the way we operate. Working here offers a fascinating blend of the old and the new. ■

Converge at Convergence

Convergence, the largest information technology conference and exposition in Western Canada, is being held this year in Calgary on May 17, 18 and 19. Convergence has been running for nine years, and typically attracts 400 people to the conference and 4,000 to 5,000 people to the exhibition.

The goals of Convergence are:
- To align Information Technology with Business
- Provide insight into local and global technology trends
- Provide a venue for users and providers of Information Technology to meet and network

What are the themes of Convergence 2005?
- Aligning IT with Business
- Information Management
- Regulatory Compliance

Who is the target audience?
- Business and Information Technology leaders
- Information Technology professionals
- Business professionals with technology responsibilities or interests

Interested in speaking at the conference?
All speakers are being asked to focus on business issues related to their topic first and on the technical elements second. Preference is also being given towards case studies as they tend to highlight the business elements in their topics.

Plan now to join the Leadership Team on May 17, 18 & 19
- Pat Daniel, CEO, Enbridge Inc. and Honorary Chair of Convergence 2005
- Andy Papadopoulos, President, TheWebMarket.com Inc.
- Mark Thompson, Technical Architect, Consultant.
- Dave Botterill, Director, Business Development, Metafore
- Jim Swanson, Lawyer, Burnet Duckworth & Palmer
- Don Van Mierlo, Chairman of Board, WellPoint, CEO of StarDot
- Scott Ackerman, Program Manager, Hewlett Packard

For more information, visit our website at www.convergexpo.com.

CIPScene

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Suite 400
1040 - 7th Avenue S.W
Calgary, Alberta T2P 3G9

Telephone: (403) 244-4487
Fax: (403) 244-2340
Email: calgary@cips.ca
www.calgary.cips.ca

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CIPS welcomes articles or story ideas from readers. To submit an article please contact shilo@cips.ca.

CIPS in the News

The following question and answer appeared in the December 10, 2004 issue of Computing Canada (Vol. 30 No. 18)

Ask an Expert: How can the ISP designation help CIOs improve their bottom line?
by ITBusiness Staff

The ISP designation enables CIOs to maximize their return on investment by reducing risk in their hiring decisions. By hiring staff or contractors that are ISP certified, CIOs can be rest assured those they have hired have maintained up-to-date skills and are knowledgeable about the latest IT trends and best practices. This translates into a more professional, ethical and productive workforce that can impact the bottom line by undertaking IT projects thoroughly, quickly and successfully—on time and on budget.

The ISP designation allows CIOs to get an accurate representation of IT workers and skills. To become ISP certified, IT workers must have mastered an applicable body of knowledge and shown that they are able to apply their knowledge in a professional setting. They are trustworthy both in terms of ethical behaviour and in terms of competence.

Think of the ISP as a form of quality control. When you want a qualified professional to solve an engineering problem, you look for a P.Eng. When you want a professional qualified to solve an IT problem, look for an ISP.

Rick Penton, ISP
President
CIPS

A jiffy is an actual unit of time for 1/100th of a second. Thus the saying, I will be there in a jiffy.

– www.amusingfacts.com

Luncheons are held at the Chamber of Commerce.
11:30am registration, noon presentation.
Please refer to www.calgary.cips.ca for more information.

CIPS Events

Getty Images

LUNCHEONS

Wednesday, Mar 02/05
IT Trends
Quadrus

Wednesday, Apr 06/05
Linux/ITIL
Speaker: TBA

Regulatory Compliance
This luncheon has been replaced with a breakfast on May 17th in conjunction with Convergence.
Location: Telus Convention Centre
Register at: www.convergexpo.com

Wednesday, June 1/05
C-SOX Implementation
Tim Snell – CGI

MEMBERSHIP BONUS PACK **– Sign up for all remaining luncheons and get 15% off. Corporate Luncheon Packages—call Shawn Mahoney at 303-4451.**

DATABASE SIG
Date: Tuesday, February 8, 2005
Time: 4:30 pm
Location: TBD
Speaker: Oracle Magazine's 2004 Author of the Year, Cary Millsap from Hotsos
Contact: bruce.mccartney@dbinfosystems.com

BUSINESS ANALYST SIG
Date: Thursday, May 12, 2005
Time: 12:00 noon to 1:00 pm
Location: Fifth Avenue Place Conference Centre 2nd Floor, West Tower, 237 - 4 Avenue SW
Brown Bag Lunch
Topic: TBD
Details and Registration at:
www.calgary.cips.ca/events/cipsig/

CONVERGENCE
Dates: May 17–19, 2005
Details and Registration at: www.convergexpo.com
CIPS Calgary members receive a 10% discount.

CIPS INFORMATICS 2005: BUSINESS AND IT FUSION
Dates: May 29-31, 2005
Location: Regina Inn Hotel & Conference Centre
Features: 5 Keynote Sessions and over 20 Workshops
Details: www.cipsinformatics.ca
Early Registration Deadline: March 31, 2005

ATTENTION I.S.P. HOLDERS:
Attend INFORMATICS 2005 and earn one quarter of your annual education re-certification credits!

CIPS ANNUAL GOLF TOURNAMENT
Date: Tuesday, June 7, 2005
Time: 8:30am to 1:00pm
Location: Lynx Ridge Golf Course
Details and Registration at: www.calgary.cips.ca

CIPScene *Watch for your next newsletter in your mailbox June 2005.*

WHAT IS CIPS?

CIPS is a professional association providing leadership in information systems and technologies. We offer the only IT professional designation (the I.S.P) in Canada. Our national and local activities are dedicated to promoting continuous learning and the ongoing development of an interconnected and world class IT workforce.

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