



What is the Value of IT Certification?

Professional Practicum in Computer Science

S.I.T.E., University of Ottawa

*John Boufford, I.S.P., ITCP
Past President (2006-2007)*

February 8, 2012

"The professional association providing leadership in information systems and technologies."





Agenda

- **What is a Professional**
- We Need Better Systems
- How Do We Get There
- CIPS Will Be Important in Making It Happen

“The professional association providing leadership in information systems and technologies.”





Elements of an IT Professional Designation

Legislation

Professional Designation (I.S.P.)

Code of Ethics & Standards of Practice

Core IT Body of Knowledge

Choice of Specializations

- Network Mgmt.
- Database Admin
- Software Develop.
- Quality Assurance
- IT Audit
- Project Mgmt.
- Service Mgmt.
- IT Security
- ⋮
- Other


Domain Knowledge

“The professional association providing leadership in information systems and technologies.”





Agenda

- What is Professional Certification
-  **We Need Better Systems**
- How Do We Get There
- CIPS Will Be Important in Making It Happen

“The professional association providing leadership in information systems and technologies.”





Business & Social Need for Better Systems

- Cobb's Paradox
 - “We know why projects fail; we know how to prevent their failure – so why do they still fail?”
- Errors Need to Be Reduced
- Reliability Needs to Increase
- Security/Privacy Must Improve



Errors Need to Be Reduced

- Software failures illustrate importance of professionalism
 - The Hartwell Group identified 20 recent high profile glitches
 - 61 + million people affected
 - \$30 + million financial impacts
 - Non-quantifiable program impacts such as lost business, privacy, reputation, project delays, additional medical tests, etc.
 - Potential Life/Death impacts
- Failures can be broadly viewed as insufficient IT governance

“The professional association providing leadership in information systems and technologies.”





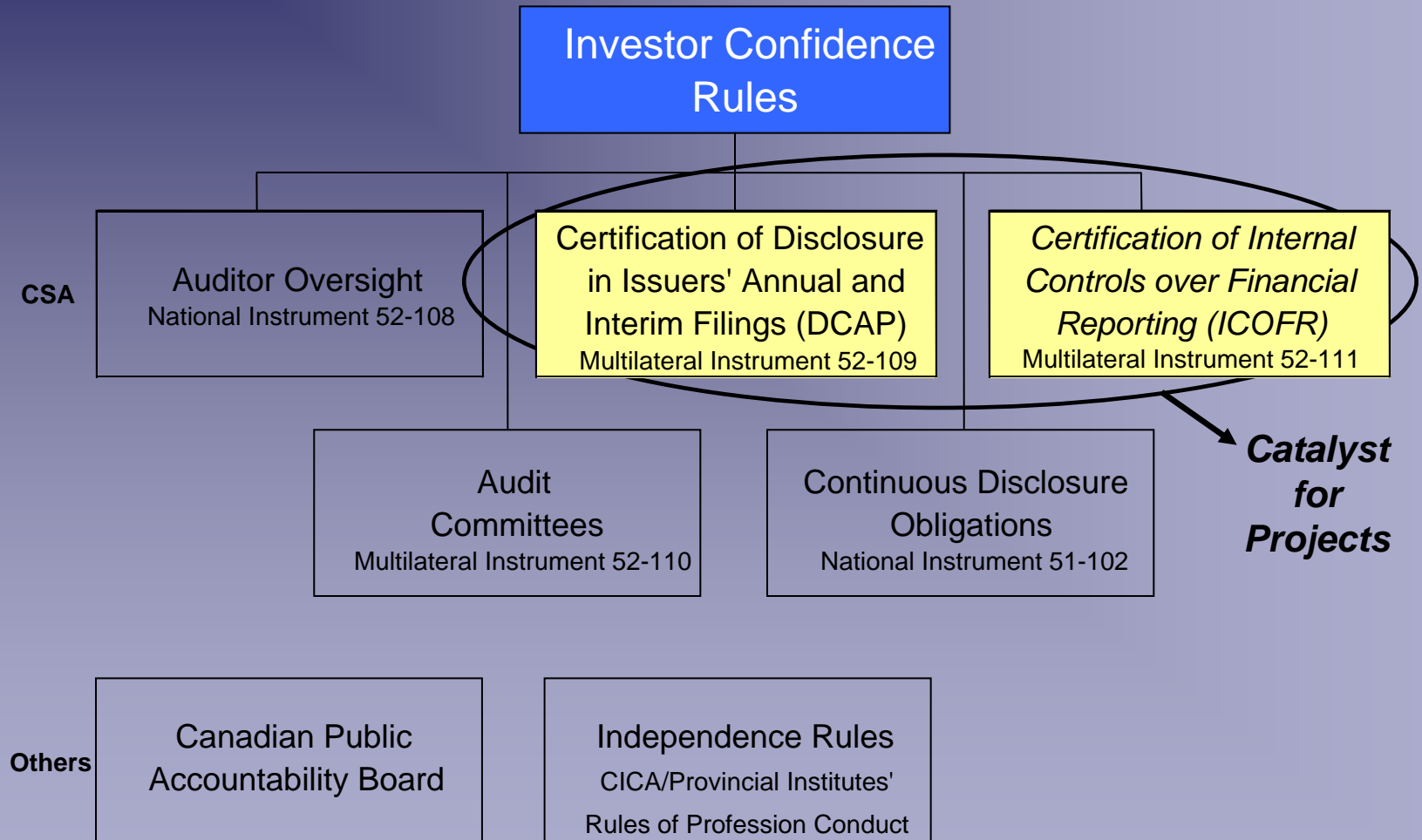
IT Regulatory Compliance

- Regulatory Compliance
 - Sarbanes-Oxley (SOX)
 - C-SOX (Proposed)
 - Privacy Legislation
- All have an impact on IT
 - See following example

“The professional association providing leadership in information systems and technologies.”



Example: Regulatory Requirements



Impact to Enterprise IS Projects

Business Projects

I.S. Projects

Level 1

Automated Application Controls

- Data Validation, Edit Checks & Output Reconciliations
- Interface Controls
- End User Security

Level 2

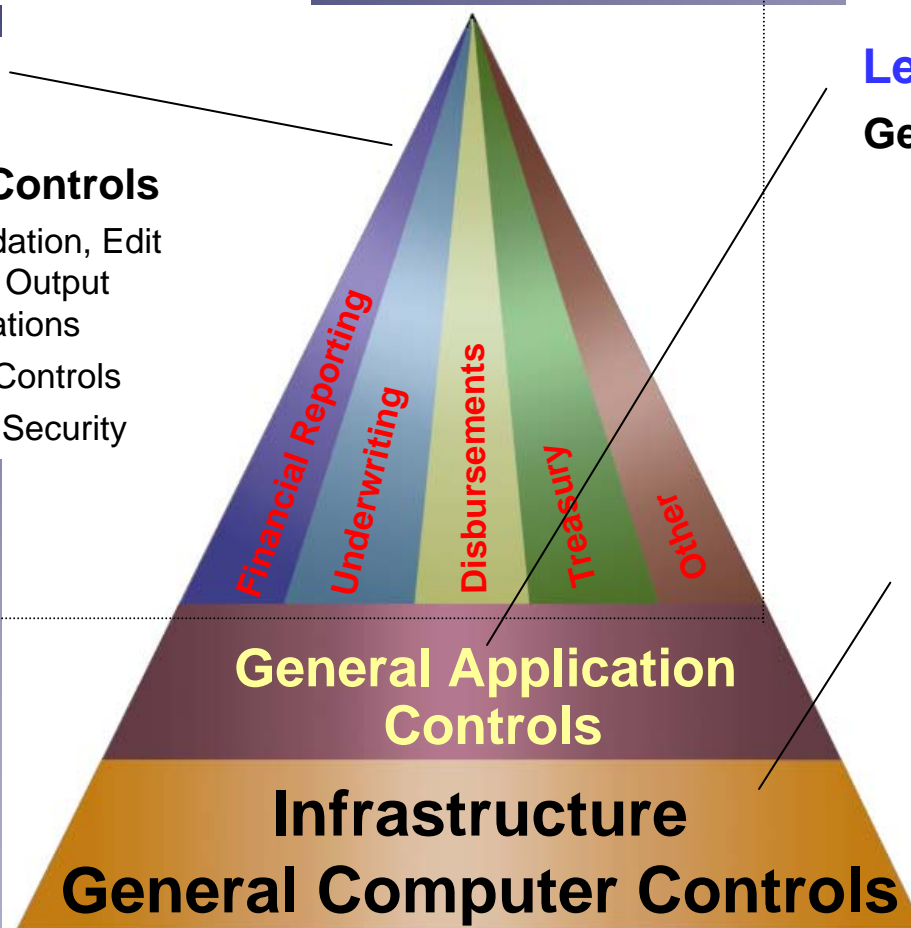
General Application Controls

- System Development
- Change Control
- Data Recovery
- Database Management
- Programmer Security

Level 3

General Computer Controls

- Change & Configuration Management
- Network Administration
- Security Administration
- Data Center Operations
- Database Administration
- O/S Administration






Comments on Regulatory Compliance

- CIO Sign-off Before CEO
- Legal Implications
- Audit practices will permeate all IT audits
- Certified Professionals Are Better Able to Provide the Process Assurances to Allow CIO Sign-off



How Do We Get There?

-  Trusted IT Professionals
- Professionals Who Manage Risk
- Use of Proven Best Practices

“The professional association providing leadership in information systems and technologies.”





About CIPS: Values

- Professionalism
- Innovation and Creativity
- Accountability
- Knowledge Development

“The professional association providing leadership in information systems and technologies.”





CIPS Addresses Business Issues By:

- Certifying/Recertifying individual practitioners
- Accrediting academic institutions
- Adopting standards of practice
- Advocating on behalf of the profession
- Offering professional development
- Working with other IT and engineering bodies
- Disciplining where appropriate

“The professional association providing leadership in information systems and technologies.”





Certification: General Info

- Certification is not vendor specific
- About 1500 I.S.P. holders across Canada
- Provincially-administered National Standard
 - Recognized by statute in 6 provinces as a self-regulating profession
 - Canadian Information Processing Society of Ontario Act, 1998,c.Pr5
- Mutual recognition with other countries

“The professional association providing leadership in information systems and technologies.”





Certification: Goals


- Protection of the public
- Professional credibility
- Personal integrity and competence
- Enhanced customer confidence
- Enhanced professional profile
- Increased value to employer

“The professional association providing leadership in information systems and technologies.”





CIPS Will Be Important in Making This Happen

-  Code of Ethics
- Body of Knowledge
- Risk Conduct Standard
- Best IT Practices

“The professional association providing leadership in information systems and technologies.”





Code of Ethics


- Guiding Document for Professional Practice
- Widely Reviewed and Endorsed
- Standard for Discipline

“The professional association providing leadership in information systems and technologies.”





CIPS Will Be Important in Making This Happen

- Code of Ethics
-  Body of Knowledge
- Risk Conduct Standard
- Best IT Practices

“The professional association providing leadership in information systems and technologies.”






Body of Knowledge

- Adopted the BCS Syllabus
- Moving Towards to Body of Knowledge Similar to Computer Science Graduate
 - Not Necessarily Obtained in Degree Program
 - Alternate Paths to Demonstrate Mastery of BOK



CIPS Will Be Important in Making This Happen

- Code of Ethics
- Body of Knowledge
-  Risk Conduct Standard
- Best IT Practices

“The professional association providing leadership in information systems and technologies.”





Risk Conduct Standard


- Standard of Practice That Would Require a Certified Professional to Assess and Mitigate Risk in Professional Practice

“The professional association providing leadership in information systems and technologies.”





CIPS Will Be Important in Making This Happen

- Code of Ethics
- Body of Knowledge
- Risk Conduct Standard
-  Best IT Practices

“The professional association providing leadership in information systems and technologies.”





Best IT Practices – The Future

- Adopting Best Practices that Will Provide More Rigour to IT Activities
 - Mandatory vs. Recommended vs. Best Practices
 - International Standards
 - Linked to I.S.P. Professional Practice Requirements



Summary

- Business Risks Are Ever-Present
- CIPS Helps Organizations Manage Risk
 - CIPS Offers The Only Professional IT Certification In Canada That Is Recognized By Statute
 - Professional Certification That Embodies Technical Competence AND Professionalism
 - Discipline
 - Accreditation Of Educational Institutions
 - Standards Of Practice Are Emerging
 - Leads To Highly Professional Workforce And Lower Business Risk
 - Trusted Competence
 - Trusted Intentions

“The professional association providing leadership in information systems and technologies.”





Parting Thoughts

- Paul Kent, then CIO at XWAVE speaking about CIPS' certification at Informatics 2007

"The professional association providing leadership in information systems and technologies."





*“The professional association
providing leadership in
information systems and
technologies”*



CIPS

Our Product is Professionalism

I.S.P.@cips.ca or www.cips.ca/standards

