

Inspiring success

# Common understandings of the challenges facing the ICT Profession

## An Australian Case Study



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# About the ACS

- **22,000 Members**
- **Member of Professions Australia**
- **University ICT course accreditation – over 200 courses across 39 universities under the Seoul Accord**



# ACS Services

- **Skills Assessment against Standard Classification of Occupations - ANZSCO codes**
- **Federal Government's Professional Year Program**
- **Modern Awards - Professional Employee Employment conditions for Government workers**
- **Policy Advice to Federal, State and Territory Governments**



# Overarching Challenges

- **Defining the ICT Profession – ICT is not yet recognised in official statistics as an industry sector in its own rights**
- **Defining Professionalism**
- **Acceptance of the use of capabilities framework (e-CF; SFIA)**
- **Defining a common ICT Professional Body of Knowledge (BoK)**
- **Creating a recognition system for ICT professionals (certification)**



# Other Challenges 1/2

- **Impact of free trade and free movement of ICT workers in a global profession**
- **Widening gap between ICT skills and the supply of qualified practitioners**
- **Lack of regulation of the ICT skills market (there are no licensing requirements)**
- **Lack of agility in responding to skills gaps (curricular time lags)**



## Other Challenges 2/2

- **Lack of ICT capability within primary and high school teachers**
- **Institutional STEM paucity**
- **Lack of ICT graduates**
- **Current employer hiring practices often lack career progression opportunities for ICT practitioners**



# Australian approaches to tackling E-skills Gaps Nationally

- **Government mandated skills demand list (SOL)**

(<http://www.immi.gov.au/skilled/general-skilled-migration/pdf/sol.pdf>) accessed 1<sup>st</sup> March, 2014

## Appropriate migration strategies:

- **457 Visas** (<http://www.immi.gov.au/Visas/Pages/457.aspx>) accessed 1<sup>st</sup> march, 2014
- **Professional Year Program – Federal Government initiative** (<http://acs.org.au/migration-skills-assessment/professional-year-program>) accessed 1<sup>st</sup> March, 2014



# ACS strategies for professional maturation

**ICT Practitioners to engage in:**

- **On going lifelong learning/PD**
- **Code of Ethics**
- **Certification Programs**





# ACS strategies for professional maturation

## ACS commitment to:

- Engage internationally in ICT associations (IFIP; IP3)
- Participate in the development and delivery of:  
national standards - ACARA Digital Technologies  
Curriculum Development



# ACS strategies for professional maturation

## ACS commitment to:

### Advise national government on ICT policies and practices:

- **Cloud consumer protocol**
- **National Vocational Education reform taskforce**
- **Advise state and territory governments on ICT policies and skills development e.g. VIC ICT Governance education program**



# Early Results

- **ICT Skills White Paper shows the benefit of professionalism**



# Australian Examples of Good Practice

- **Australian Workforce & Productivity Agency (AWPA) Report (2013)**
- **Victorian Ombudsman's Report (2012)**
- **ACS' Australian ICT Statistical Compendium (20 year anniversary)**
- **ACS' ICT Skills White Paper (2013)**



# ACS' Commitment to Good Practice Development

**The provision of continuing professional development to advance the ICT profession - mapped to SFIA/certification program** <http://acs.org.au/professional-development> accessed 1<sup>st</sup> March,2014

**The development of professionalism programs such as: Professional Year for overseas born, Australian trained graduates** (<http://acs.org.au/migration-skills-assessment/professional-year-program>) accessed 1<sup>st</sup> March, 2014



# Further Commitments to Good Practice

**Virtual College** (<http://acs.org.au/professional-development/Distance-Courses>) accessed 1<sup>st</sup> March, 2014

## **The Industry Based IT Experience Project (ITBD)**

A collaboration between University of Melbourne/ACS/Industry comprising of two final units embedded within an MIS/MIT

## **Graduate Certificate in Professional Practice (GCPP)**

A collaboration between Federal University/ACS/IBM embedding a 12 month internship within a Graduate Certificate



# Going Forward...possible areas for collaboration

- Defining a common body of knowledge
- Agreeing mutual recognition of standards for education in ICT - e.g. accreditation of ICT programmes <http://acs.org.au/accreditedcourses-and-jobs>, accessed 6<sup>th</sup> March, 2014
- Agreeing a common definition of professionalism



# Draft Common Definition of ICT professionalism

- **Has highly skilled technical knowledge and competence judged against a common body of knowledge**
- **Has made a commitment to ongoing professional development, keeping up to date with advances in the profession**
- **Has made a commitment to follow a code of ethics and professional conduct, which subjects him/her to sanctions for unprofessional conduct, demonstrating public accountability**
- **Observes a high moral code which means the professional takes personal responsibility for his or her work, making good on any inadequacy or insufficiency**





# Going Forward...possible areas for collaboration

- **Defining the ICT profession in light of the rapid changes in technology (Data scientists)**
- **Codifying certain aspects of the ICT profession**
- **Determining mutual recognition provisions for the ICT profession**



# Going Forward IFIP IP3

- **Internationally undertaking the collaboration identified in these slides**



Questions ?

