

International ICT Professionalism and Competencies

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About this presentation

- This information presented here is intended to provide:
 - An overview of the research from a number of countries
 - Provide a background on what is happening elsewhere
 - Examine some of the areas in more detail
- It is not what will be implemented in NZ
 - This is still to be determined
 - But it does provide some pointers

IT (Information Technology)

Definition

- ***IT is the technical toolkit***, including the hardware, software, networks, tools, telecommunications equipment and required standards.
- It is the technological framework on which the delivery of information services is based.
- The specification, design, development and operation of the technical infrastructure are the concern of technical service providers.
- They may be internal to the organisation or external.

(Source: SFIA)

IS (Information Systems)

Definition

- An information system is a ***combination of people, methods and tools.***
- Strategy, procedures, policies and management are combined with information and data resources, computer-based business applications, IT-based technology components and human activities in order to deliver information services to users.
- These users may be in the organisation and outside it.
- The requirements for information systems are defined by the business of the organisation.

(Source: SFIA)

**“Certification, in itself,
is not a goal, but
Professionalism is.”**

Professional Maturity Model

A profession's goal is to attain an established level

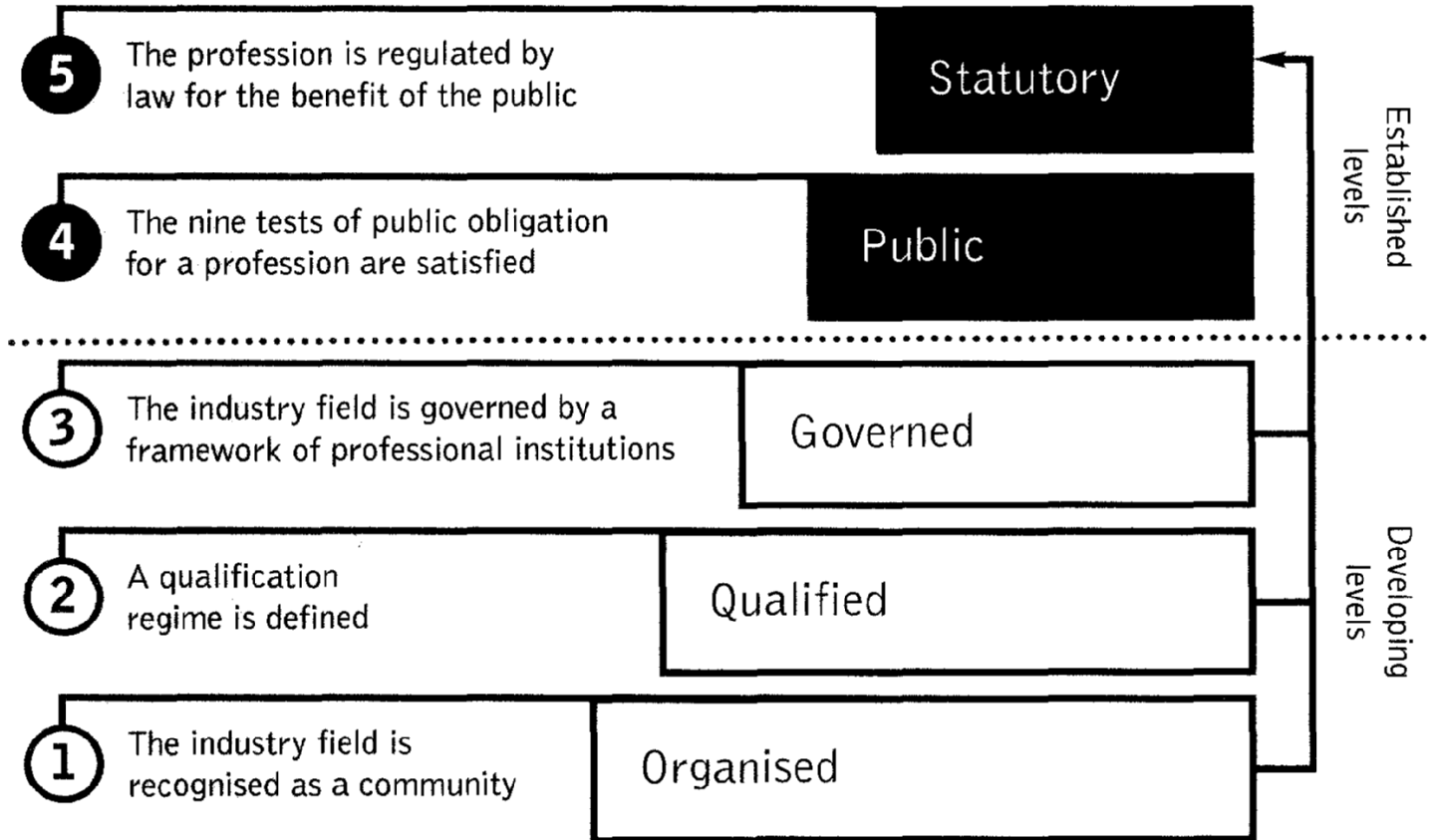


Figure 1. Profession maturity model derived from the Carnegie Mellon University Capability Maturity Model

Professional Maturity Model

LEVEL 1

The industry field is recognised as a community.

Characteristics

- Recognition of a practice in commercial life.
- Disparate specialised qualifications.
- No coherent approach.
- Malpractice not uncommon.
- No independent assessment of skills, experience or behaviour.
- Multiple professional institutions.
- Limited adoption.

Benefits

Understanding of the industry field by customers and employers.

Transferability of skills.

Professional Maturity Model

LEVEL 2

A qualifications regime is defined.

Characteristics

- Professional education linked from universities to chartered qualification regime.
- Professional institutions oversee the regime.
- Professional competence and core knowledge are understood.
- Those qualified are of known minimum capability.

Benefits

Practitioners are independently assessed.

Customer and employer expectations are more frequently met.

Professional Maturity Model

LEVEL 3

The industry field is governed by a framework of professional institutions.

Characteristics

- Profession is well defined.
- Governance and code of conduct drive behaviour.
- Professional membership is the norm.
- Industry stakeholders value the profession.
- Business value of practitioners recognised at senior levels in organisations.

Benefits

Independent governance.

Single voice, backed by the whole community.

Practitioners create more business value.

Professional Maturity Model

LEVEL 4

The nine tests of public obligation for a profession are satisfied.

Characteristics

- The profession serves society.
- Social responsibility prevails over insularity in the behaviour of professionals.
- The profession provides leadership to society.
- Professionals practise with independence.
- Professionals consider the needs of the client over those of the competition and employer.
- Institutional functions of representation and scrutiny are separated.

Benefits

Society benefits from the quality and application of best practice.

Professional Maturity Model

LEVEL 5

The profession is regulated by law for the protection of the public

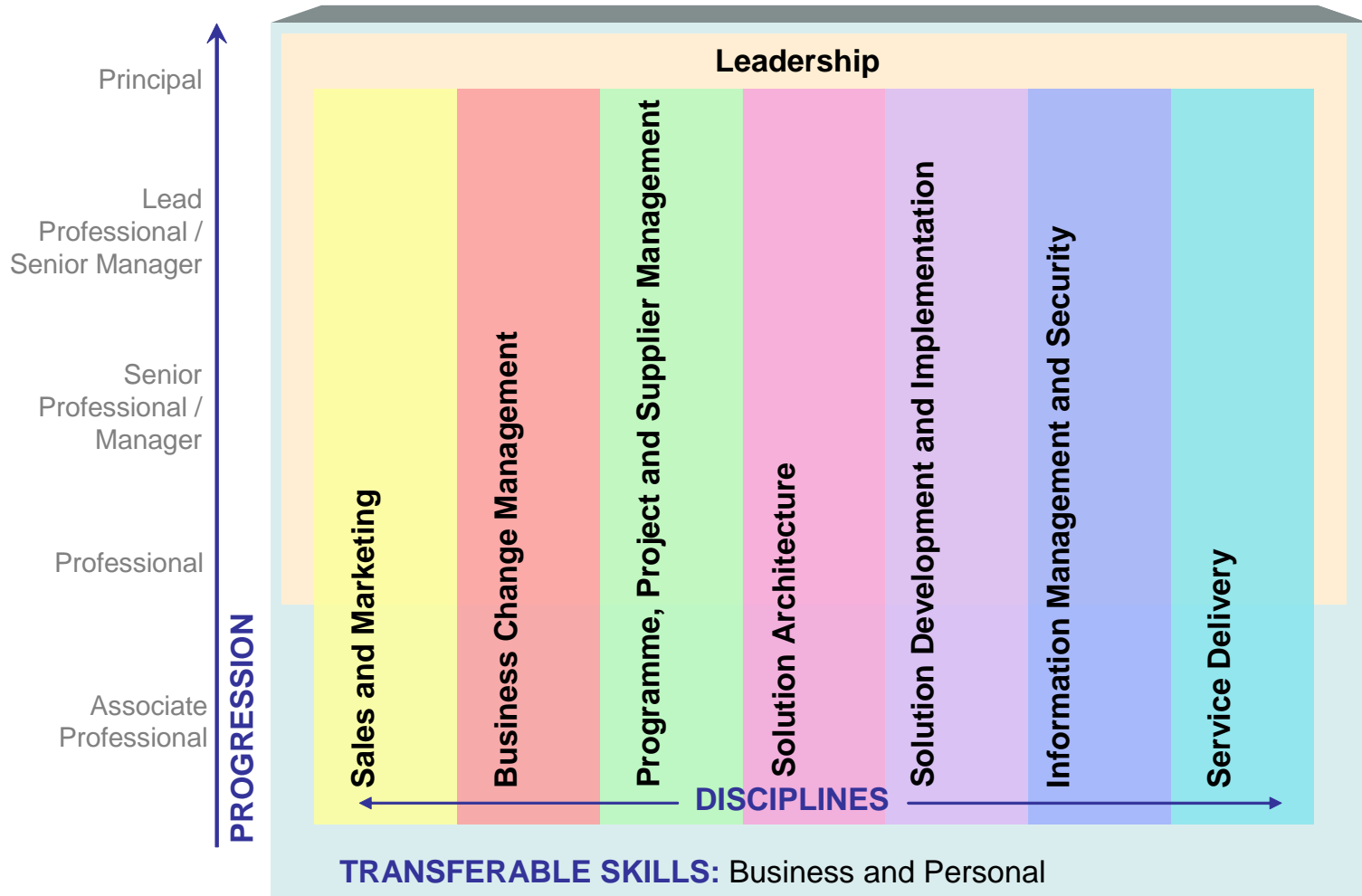
Characteristics

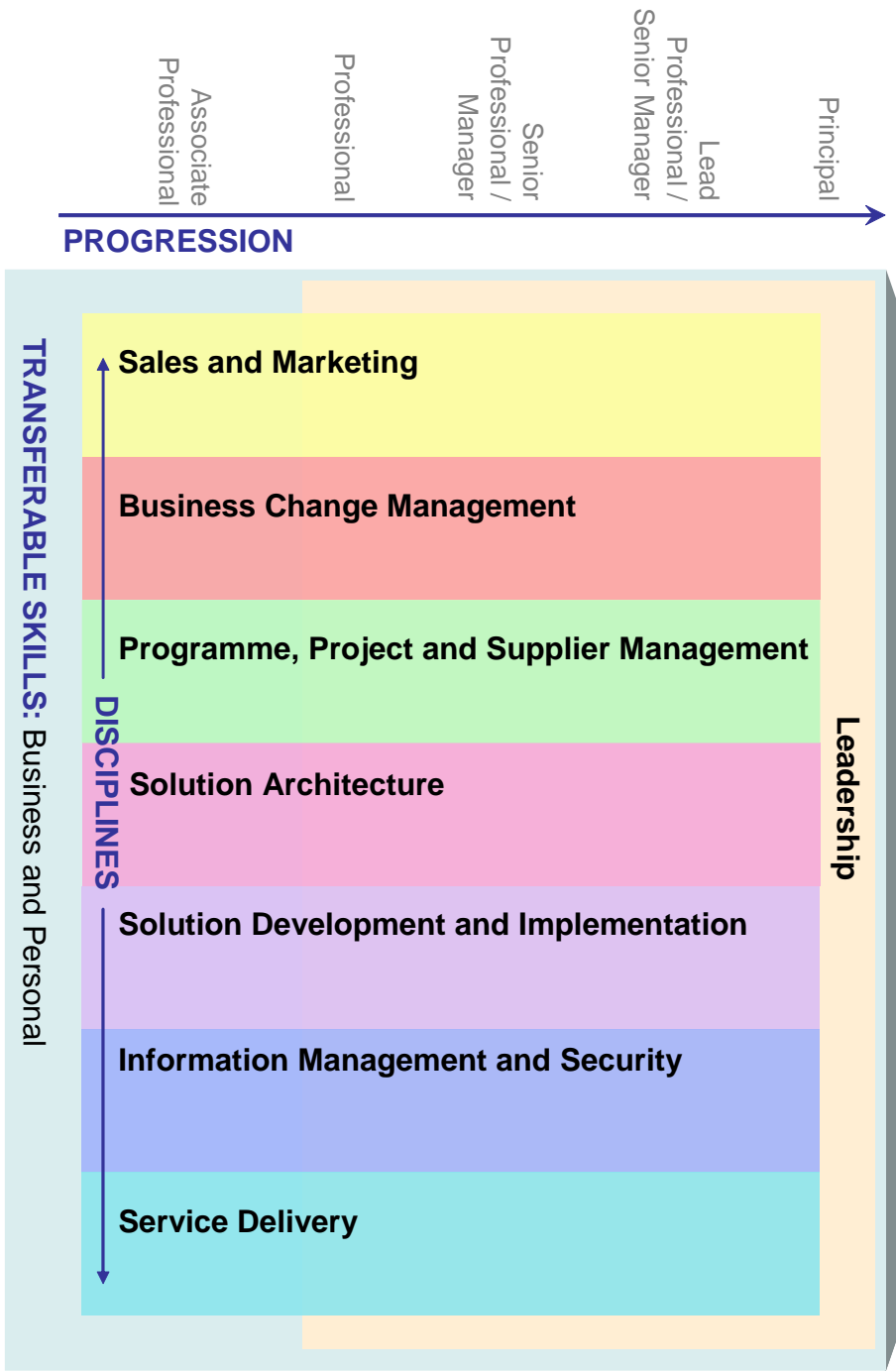
- Some or all areas of the industry field are governed by professional institutions as defined by legislation.
- A defined set of roles and responsibilities are held wholly and exclusively within the profession.

Benefits

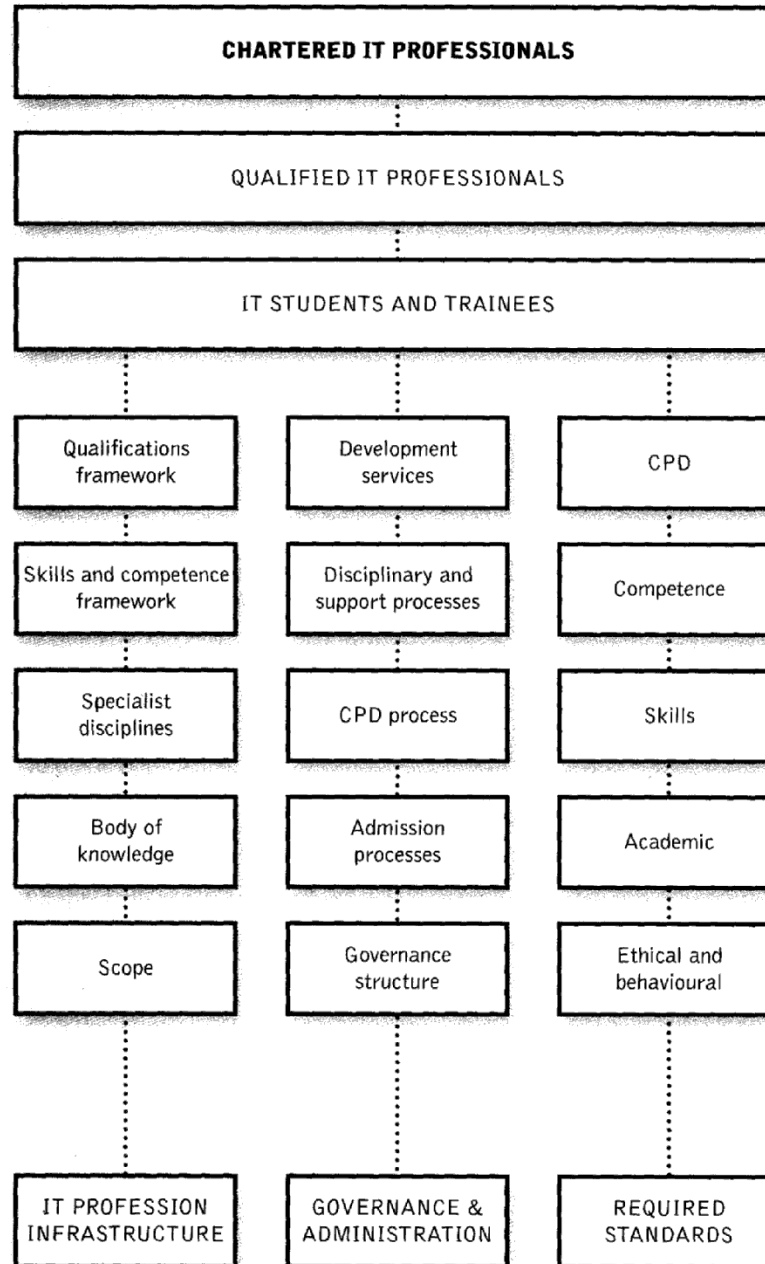
The law operates to protect the public.

Scope of the Profession





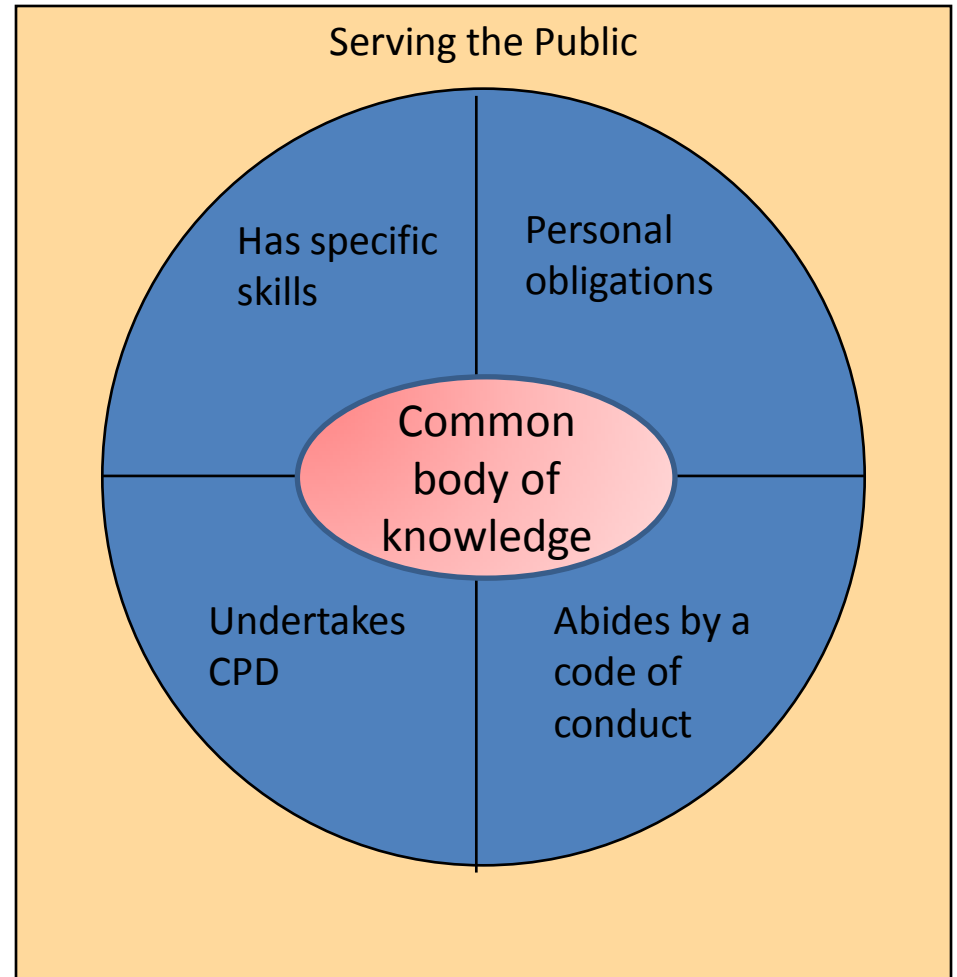
Building the fully effective IT profession



What is an ICT Professional?

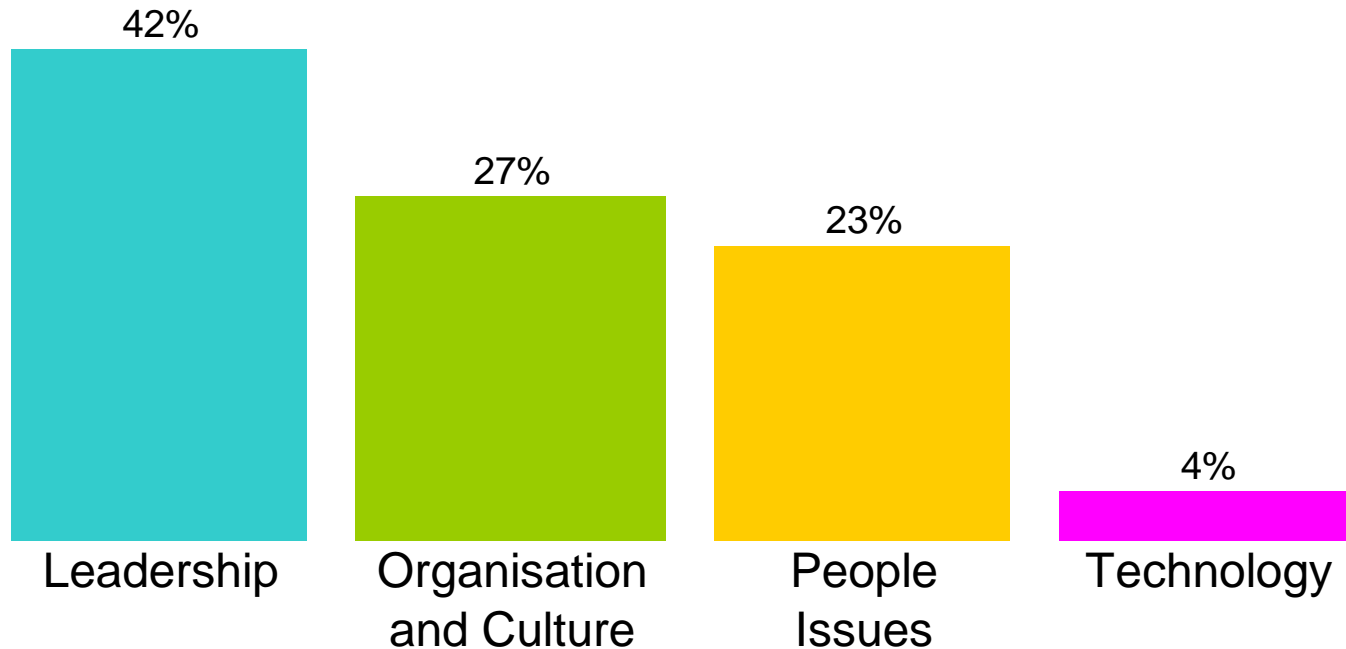
A fully established professional is:

- a practitioner who has specific skills rooted in a broad base
- with appropriate qualifications
- belongs to a regulated body
- undergoes continuous development
- operates to a code of conduct
- recognises personal accountability
- has both skill and competence



Why do we need a Profession

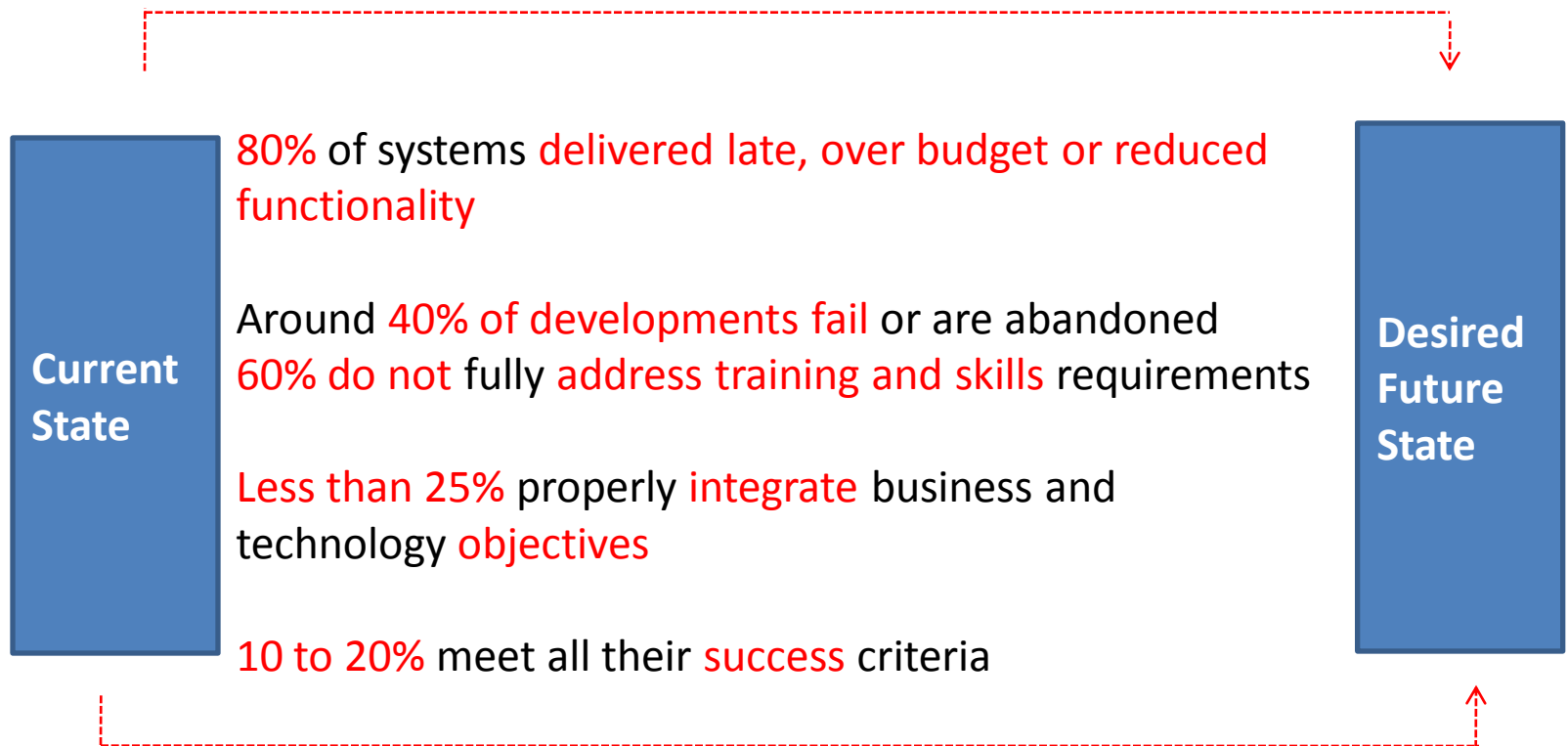
The Failure of Transformational Change Programmes



"Organisation Dynamics" - Jim Markowsky

Why do we need a Profession

The Challenge of Transformational Change Programmes



Why do we need an ICT Profession & Professionals?

The Drivers for Change

- Criticality of IT & forces of globalisation
- Governance and security requirements
- Maturation of IT industry
- Limited potential for competitive advantage from technology infrastructure
- Increasing importance of Information as an asset
- Leadership and business skills
- Assure competence and integrity
- Pride and prestige of IT professionals
- Attracting talented people

Why do we need an ICT Profession & Professionals?

IT powers business!

The IT Profession of the Past

Essentially an engineering/technical profession, responsible for the effective delivery of systems to meet requirements specified by '*the business*'

The IT Profession of the Future

A business focussed profession, with a base of both technical and business competences, playing a full part at all stages of IT enabled business change programmes and transformation projects

Benefits and Outcomes

- Practitioners:

- ✓ increased recognition and reward
- ✓ greater mobility
- ✓ career path
- ✓ professional accountability

- Employers:

- ✓ improve risk management and corporate governance
- ✓ more successful IT enabled business change
- ✓ enhance recruitment and talent management
- ✓ larger talent pool

ICT Competence Framework

- SFIA framework
- SFIAplus another dimension to SFIA
- EUCIP framework
- ACS PCP framework



What is it?

- First and foremost its a management tool
- The overall purpose of SFIA is to assist organisations employing IT professionals to:
 - reduce IT project risk
 - retain staff
 - make recruitment effective
 - enhance the effectiveness and efficiency of the IT function
- By developing the right skills, by deploying them to best effect and by providing appropriate development and career paths for IT professionals.
- Simple and logical two dimensional framework consisting of areas of work on one axis and levels of responsibility on the other.
 - Used by more than 1000 organisations in over 150 countries
 - Version 4 will be launched on 4th December 2008 (see www.sfia.org.uk)

Skills Framework for the Information Age version 3.0

	Strategy & planning	Development	Business change	Service provision	Procurement & management support	Auxiliary skills
7	Information strategy Advice and guidance Business/IT strategy planning Technical strategy and planning	System development Human factor	Business change management Installation and integration	Business change management Infrastructure operation User support	Supply management Quality Process management Education and training	Sales and marketing
7	Set strategy, inspire, mobilise					7 Set strategy, inspire, mobilise
6	Initiate, influence					6 Initiate, influence
5	Ensure, advise					5 Ensure, advise
4	Enable					4 Enable
3	Apply					3 Apply
2	Assist					2 Assist
1	Follow					1 Follow

SFIA categories

Strategy & planning

Development

Business change

Service provision

**Procurement and
Management support**

Ancillary skills

SFIA Strategy and planning

- **Information strategy**
 - Information management
- **Advice and guidance**
 - Consultancy
 - Technical specialism
- **Business/IS strategy and planning**
 - Research
 - Innovation
 - Business process improvement
 - Strategic application of information systems
 - Business risk management
 - Information security
 - Information assurance
- **Technical strategy and planning**
 - Systems architecture
 - Emerging technology monitoring
 - Continuity management
 - Software development process improvement
 - Network planning
 - Methods and tools



Development

- **Systems development**
 - Systems development management
 - Data analysis
 - Systems design
 - Network design
 - Database design
 - Programming/software development
 - Safety engineering
 - Web site specialism
 - Systems testing
- **Human factors**
 - Systems ergonomics
 - Content creation
 - Non-functional needs analysis
 - Usability evaluation
 - Human factors integration
- **Installation and integration**
 - Systems integration
 - Porting/software integration
 - Systems installation/decommissioning



Business change

- **Business change management**
 - Business analysis
 - Programme management
 - Project management
 - Business process testing
 - Change implementation planning and management
 - Organisation design and implementation ORDI
 - Benefits management
- **Relationship management**
 - Stakeholder relationship management



Service provision

- **Infrastructure**
 - Configuration management
 - Change management
 - Capacity management
 - Systems software
 - Security administration
 - Radio frequency engineering
 - Availability management
 - Financial management for IT
- **Operation**
 - Data protection
 - Application support
 - Management and operations
 - Network control and operation
 - Database administration
 - Service level management
- **User support**
 - Network support
 - Problem management
 - Service desk and incident management

Procurement and management support



- **Supply management**
 - Procurement
 - Supplier relationship management
- **Quality**
 - Quality management
 - Quality assurance
 - Quality standards
 - Compliance audit
- **Resource management**
 - Project office
 - Asset management
 - Information System coordination
 - Client services management
 - Professional development
 - Resourcing



Ancillary skills

- **Education and training**
 - Education and training management
 - Training materials creation and maintenance
 - Education and training delivery
- **Sales and marketing**
 - Account management
 - Marketing
 - Selling
 - Sales support

SFIA Levels

SFIA LEVELS

7 set strategy, inspire, mobilise

6 initiate, influence

5 ensure, advise

4 enable

3 apply

2 assist

1 follow

Level 1	FOLLOW	SFIPlus3
Autonomy	<ul style="list-style-type: none"> ▪ Works under close supervision. Uses little discretion ▪ Expected to seek guidance in unexpected situations. 	
Influence	<ul style="list-style-type: none"> ▪ Interacts with department 	
Complexity	<ul style="list-style-type: none"> ▪ Performs routine activities in a structured environment ▪ Requires assistance in resolving unexpected problem 	
Business Skills	<ul style="list-style-type: none"> ▪ Uses basic IS functions, applications, and processes ▪ Demonstrates an organised approach to work ▪ Capable of learning new skills and applying newly acquired knowledge ▪ Basic oral and written communication skills ▪ Contributes to identifying own development opportunities 	

Level 2	ASSIST	SFIPlus3
Autonomy	<ul style="list-style-type: none"> ▪ Works under routine supervision ▪ Uses minor discretion in resolving problems or enquiries Works without frequent reference to others 	
Influence	<ul style="list-style-type: none"> ▪ Interacts with and may influence department ▪ May have some external contact with customers and suppliers ▪ May have more influence in own domain 	
Complexity	<ul style="list-style-type: none"> ▪ Performs range of varied work activities in a variety of structured environments 	
Business Skills	<ul style="list-style-type: none"> ▪ Understands and uses appropriate methods tools and applications ▪ Demonstrates a rational and organised approach to work ▪ Awareness of health and safety issues ▪ Identifies and negotiates own development opportunities ▪ Sufficient communication skills for effective dialogue with colleagues ▪ Able to work in a team ▪ Able to plan, schedule and monitor own work within short time horizons ▪ Can absorb technical information when it is presented systematically and apply it effectively 	

Level 3	APPLY	SFIPlus3
Autonomy	<ul style="list-style-type: none"> ▪ Works under general supervision ▪ Uses discretion in identifying and resolving complex problems and assignments ▪ Specific instruction is usually given and work is reviewed at frequent milestones ▪ Determines when problems should be escalated to a higher level. 	
Influence	<ul style="list-style-type: none"> ▪ Interacts with and influences department/project team members ▪ Frequent external contact with customers and suppliers ▪ In predictable and structured areas may supervise others ▪ Decisions may impact work assigned to individual/phases of project. 	
Complexity	<ul style="list-style-type: none"> ▪ Broad range of work, sometimes complex and non routine, in variety of environments. 	
Business Skills	<ul style="list-style-type: none"> ▪ Understands and uses appropriate methods tools and applications ▪ Demonstrates analytical and systematic approach to problem solving ▪ Takes initiative in identifying and negotiating appropriate development opportunities ▪ Demonstrates effective communication skills. Contributes fully to the work of teams ▪ Can plan, schedule and monitor own work (and that of others where applicable) competently within limited time horizons and according to health and safety procedures ▪ Is able to absorb and apply new technical information ▪ Is able to work to required standards and to understand and use the appropriate methods, tools and applications ▪ Appreciates wider field of IS, how own role relates to other IS roles and to the business of the employer or client 	

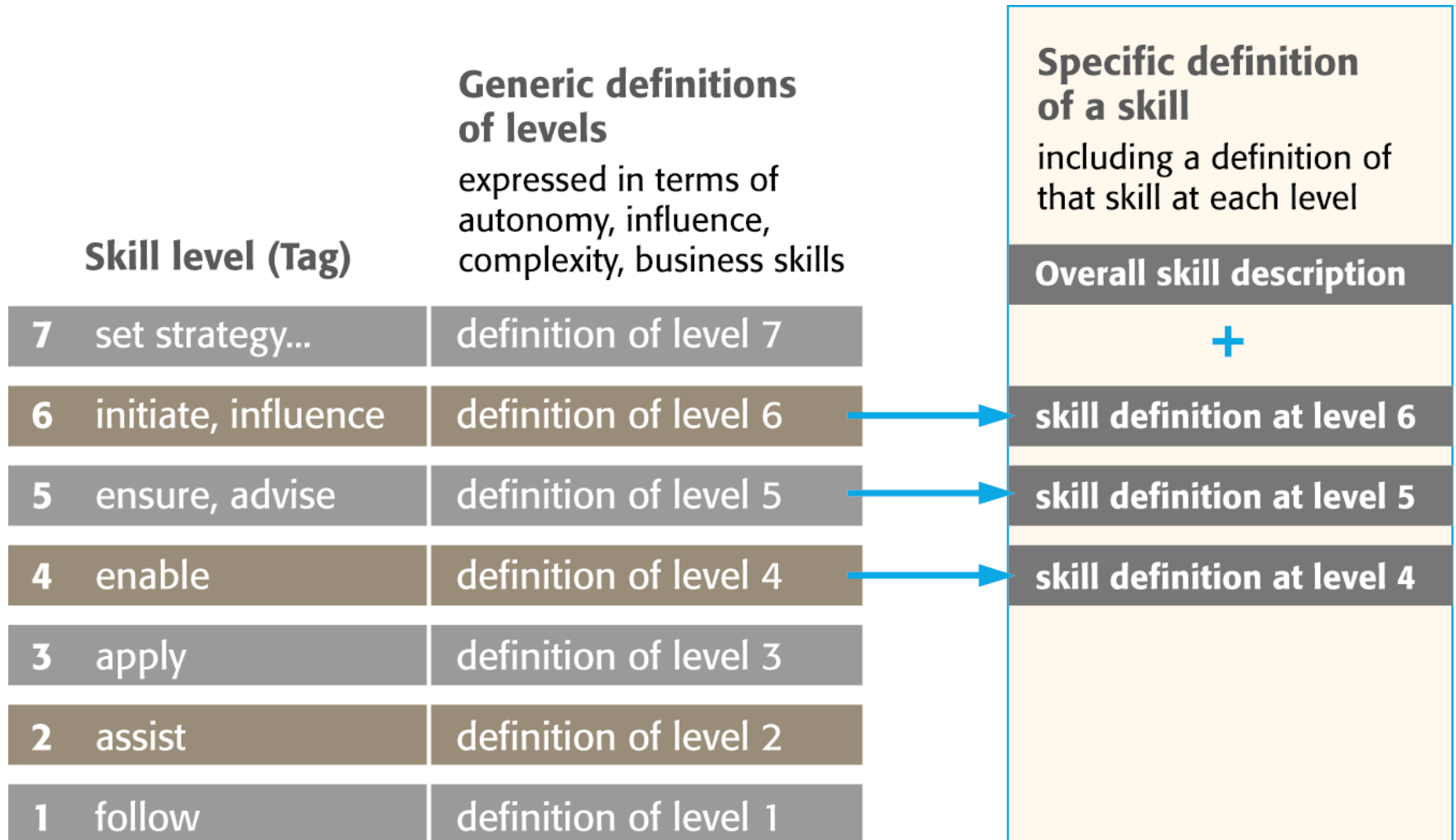
Level 4	ENABLE	SFIPlus3
Autonomy	<ul style="list-style-type: none"> ▪ Works under general direction within a clear framework of accountability ▪ Substantial personal responsibility and autonomy ▪ Plans own work, to meet given objectives and processes. 	
Influence	<ul style="list-style-type: none"> ▪ Influences team, and specialist peers internally ▪ Influences customers at account level and suppliers ▪ Some responsibility for work of others and allocation of resources ▪ Participates in external activities related to specialisation ▪ Decisions influence success of projects and team objectives. 	
Complexity	<ul style="list-style-type: none"> ▪ Broad range of complex technical or professional work activities, in a variety of contexts 	
Business Skills	<ul style="list-style-type: none"> ▪ Selects appropriately from applicable standards, methods, tools and applications and use ▪ Demonstrates analytical and systematic approach to problem solving ▪ Communicates fluently orally and in writing and can present complex technical information to both technical and non-technical audiences ▪ Is able to plan, schedule and monitor work activities in order to meet time and quality targets and in accordance with health and safety procedures ▪ Is able to absorb rapidly new technical information and apply it effectively ▪ Good appreciation of wider field of IS, how IS is used in relevant employment areas and how IS relates to the business activities of the employer or client ▪ Maintains awareness of developing technologies and their application and takes some responsibility for personal development. 	

Level 5	ENSURE,ADVISE	SFI Aplus3
Autonomy	<ul style="list-style-type: none"> ▪ Works under broad direction ▪ Full accountability for own technical work or project/supervisory responsibilities ▪ Receives assignments in the form of objectives ▪ Establishes own milestones, team objectives and delegates assignments ▪ Work is often self-initiated. 	
Influence	<ul style="list-style-type: none"> ▪ Influences organisation, customers, suppliers and peers within industry on contribution of specialisation ▪ Significant responsibility for the work of others and for the allocation of resources ▪ Decisions impact on success of assigned projects i.e. results, deadlines and budget ▪ Develops business relationships with customers. 	
Complexity	<ul style="list-style-type: none"> ▪ Challenging range - variety of complex technical or professional work activities ▪ Work requires application of fundamental principles in a wide and often unpredictable range of contexts ▪ Understands relationship between specialism and wider customer/ organisational requirements 	
Business Skills	<ul style="list-style-type: none"> ▪ Advises on the available standards, methods, tools and applications in own area of specialisation and can make correct choices from alternatives ▪ Can analyse, diagnose, design, plan, execute and evaluate work to time, cost and quality targets ▪ Communicates effectively, formally and informally, with colleagues, subordinates and customers ▪ Demonstrates leadership. Clear understanding of the relationship between own area of responsibility /specialisation to the employing organisation and takes customer requirements into account when making proposals ▪ Takes initiative to keep skills up to date. Maintains awareness of developments in the industry ▪ Can analyse user requirements and advise users on scope and options for operational improvement ▪ Demonstrates creativity and innovation in applying IS solutions for the benefit of the user. 	

Level 6	INITIATE, INFLUENCE	SFIPlus3
Autonomy	<ul style="list-style-type: none"> ▪ Has defined authority and responsibility for a significant area of IS work, including technical, financial and quality aspects. ▪ Establishes organisational objectives and delegates assignments. ▪ Accountable for actions and decisions taken by self and subordinates. 	
Influence	<ul style="list-style-type: none"> ▪ Influences policy formation on contribution of specialisation to business objectives. ▪ Influences at level of division internally and influences customer/suppliers and industry at senior management level. ▪ Decisions impact IS work of employing organisations, achievement of organisational objectives and financial performance. ▪ Develops high-level relationships with customers suppliers and industry leaders. 	
Complexity	<ul style="list-style-type: none"> ▪ Highly complex work activities covering technical, financial and quality aspects and contributing to formulation of IS strategy. ▪ Work involves creative application of wide range of technical and/or management principles. 	
Business Skills	<ul style="list-style-type: none"> ▪ Can absorb complex technical information and communicate effectively at all levels to both technical and non-technical audiences. ▪ Is able to assess and evaluate risk and to understand the implications of new technologies. ▪ Demonstrates clear leadership skills and the ability to influence and persuade. ▪ Has a broad understanding of all aspects of IS and deep understanding of area(s) of specialisation. ▪ Understands and communicates the role and impact of IS in the employing organisation. ▪ Takes initiative to keep both own and subordinates skills up to date and to maintain awareness of developments in the IS industry. 	

Level 7	SET STRATEGY, INSPIRE, MOBILISE		SFIPlus3
Autonomy	<ul style="list-style-type: none"> ▪ Has authority and responsibility for all aspects of a significant area of IS work, including policy formation and application. ▪ Is held fully accountable for actions taken and decisions made, both by self and subordinates. 		
Influence	<ul style="list-style-type: none"> ▪ Decisions critical to organisational success. ▪ Influences developments within IS industry at highest levels. ▪ Advances exploitation of IS within one or more organisations and/or the advancement of IS knowledge. ▪ Develops long-term strategic relationships with customers and industry leaders. 		
Complexity	<ul style="list-style-type: none"> ▪ Leads on formulation and application of IS strategy. ▪ Work involves application of highest level management and leadership skills. ▪ Has deep understanding of IS industry and emerging technologies and implications for the wider business environment. 		
Business Skills	<ul style="list-style-type: none"> ▪ Full range of strategic management and leadership skills. ▪ Understands, explains and presents complex technical ideas to both technical and non-technical audiences at all levels up to the highest in a persuasive and convincing manner. ▪ Has a broad and deep IS knowledge coupled with equivalent knowledge of the activities of those businesses and other organisations who use and exploit IS. ▪ Is able to understand and communicate the potential impact of emerging technologies on organisations and individuals and can analyse the risks of using or not using such technologies. ▪ Takes initiative to keep both own and subordinates skills up to date and to maintain awareness of and, in own area(s) of expertise. 		

How Professional skills map to framework



Illustration

- Development

- Systems Development

- Programming/Software Development

- **General Description**

- “The design, creation, testing and documenting of new and amended programs from supplied specifications in accordance with agreed standards.”

Illustration (cont.)

- Development

- Systems Development

- Programming/Software Development

- General Description

- » **Level 3**

- “Designs, codes, tests, corrects and documents moderately complex programs and program modifications from supplied specifications, using agreed standards and tools. Conducts reviews of supplied specifications, with others as appropriate.”

Illustration (cont.)

- Development

- Systems Development

- Programming/Software Development

- General Description

- » **Level 4**

- “Designs, codes, tests, corrects and documents large and/or complex programs and program modifications from supplied specifications using agreed standards and tools, to achieve a well-engineered result. Takes part in reviews of own work and leads reviews of colleagues’ work.”

Illustration (cont.)

- Development

- Systems Development

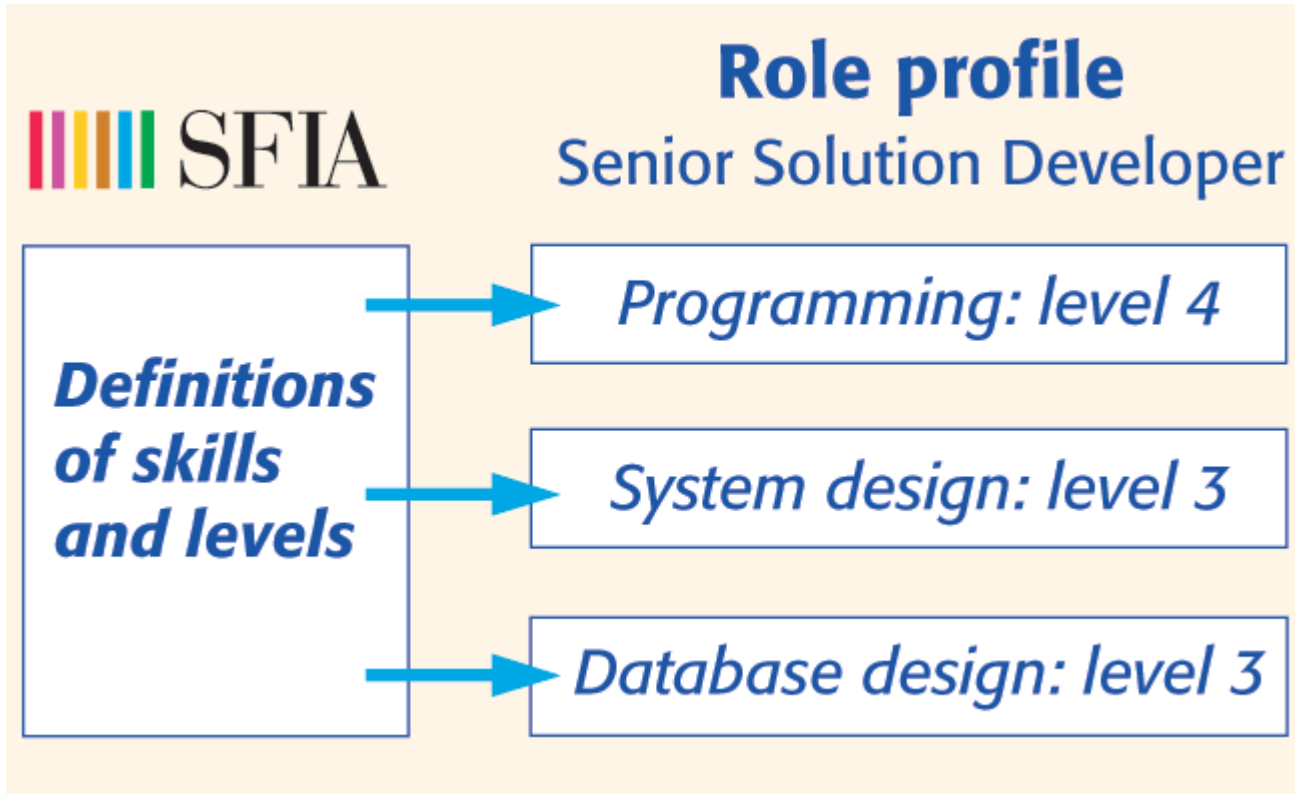
- Programming/Software Development

- General Description

- » **Level 5**

- “Sets standards for programming tools and techniques, advises on their application and ensures compliance. Takes technical responsibility for all stages in the software development process. Prepares project and quality plans and advises systems development teams. Assigns work to programming staff and monitors performance, providing advice, guidance and assistance to less experienced colleagues as required.”

Matching to Professional Profiles



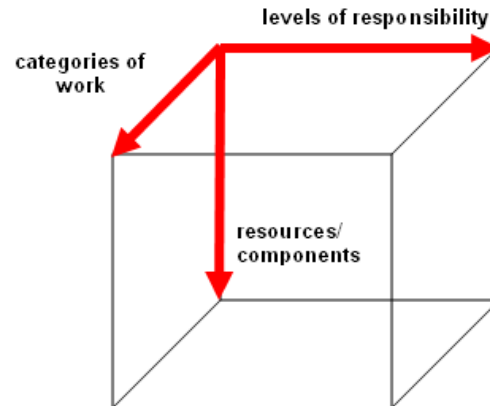
BCS SFIPlus

SFIPlus contains the **SFIA framework of IT skills**
plus detailed training and development resources

Category, Subcategory	<i>Skills</i> are grouped for convenience into categories and subcategories describing broad areas of work
Skill	A recognisable area of IT competence within the workplace.
Skill Resource	Eight detailed SFIPlus topics related to the <i>Skill</i> .
Code	Included to help with <i>Skill identification</i> . The degree of responsibility that an IT practitioner exercises.
Level	<i>A Skill at a Level</i> .
Task	Six additional SFIPlus topics defining
Task Component	the <i>Task</i> .

How does SFIPlus work?

- **There are SIX main categories of work**
 1. Strategy and planning
 2. Development
 3. Business change
 4. Service provision
 5. Procurement and management support
 6. Ancillary skills
- These categories are sub-categorized and divided into **78** specific skills.
- **There are SEVEN levels of responsibility**
 1. Follow
 2. Assist
 3. Apply
 4. Enable
 5. Ensure, advise
 6. Initiate, influence
 7. Set strategy, inspire, mobilise
- A skill at a level is called a task. There **263** tasks.
- **There are EIGHT skill resources**
 1. Related functions
 2. Technical overview
 3. Overview of training, development & qualifications
 4. Career & jobs
 5. Professional bodies
 6. Standards & codes of practice
 7. Communities and events
 8. Publications & events
- **There are SIX task components**
 1. Background
 2. Work activities
 3. Knowledge and skills
 4. Training activities
 5. Professional development activities
 6. Qualifications



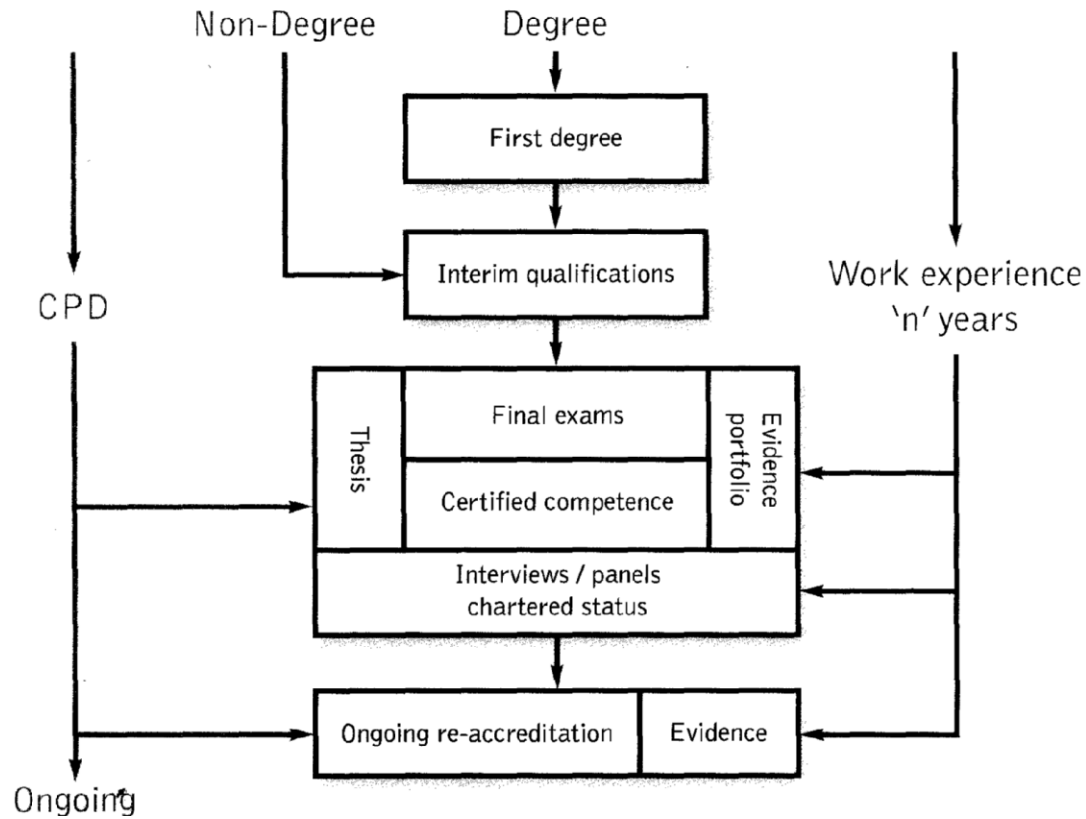
SFIPlus

- established and widely adopted IT skills, training and development model reflecting current industry needs
- allows employers and IT practitioners to identify career paths and plan training and development
- builds on SFIA version 3 by providing additional training and development detail for all 78 skills and 263 tasks
- forms the basis of a range of BCS professional development products and services for both individuals and employers
- maps to ISEB practitioner qualifications and BCS Professional Examinations academic qualifications
- shows the relationship with BCS chartered and incorporated membership grades

BCS CITP

- Chartered IT Professional (CITP)
 - professional credential that demonstrates both competence and
 - a commitment to keep pace with advancing knowledge and
 - the increasing expectations and requirements of the profession.
- Have at least the last 12 months in a role that demonstrates:
 - SFIA level 5
 - Significant influence and responsibility
 - A challenging range of complex work activities
 - Full accountability
 - Well developed business skills
- Typically, you will also have 8-10 years of IT work experience
 - although this may be reduced depending on your academic qualifications
 - or if you are part of a BCS Accredited Professional Development Scheme.
- Your CV / Résumé demonstrates:
 - the scope of your IT work experience.
 - provides evidence that you meet SFIA Level 5 requirements.
 - Provide examples of how you have met the criteria for SFIA Level 5

Generic route to chartered status



ACS PCP

- ACS Practising Computer Professional
- Must complete a one-off education Computer Professional program (the CP Program) of four subjects developed by the ACS
- Maintain their PCP status with 30 hours of structured professional development each year.

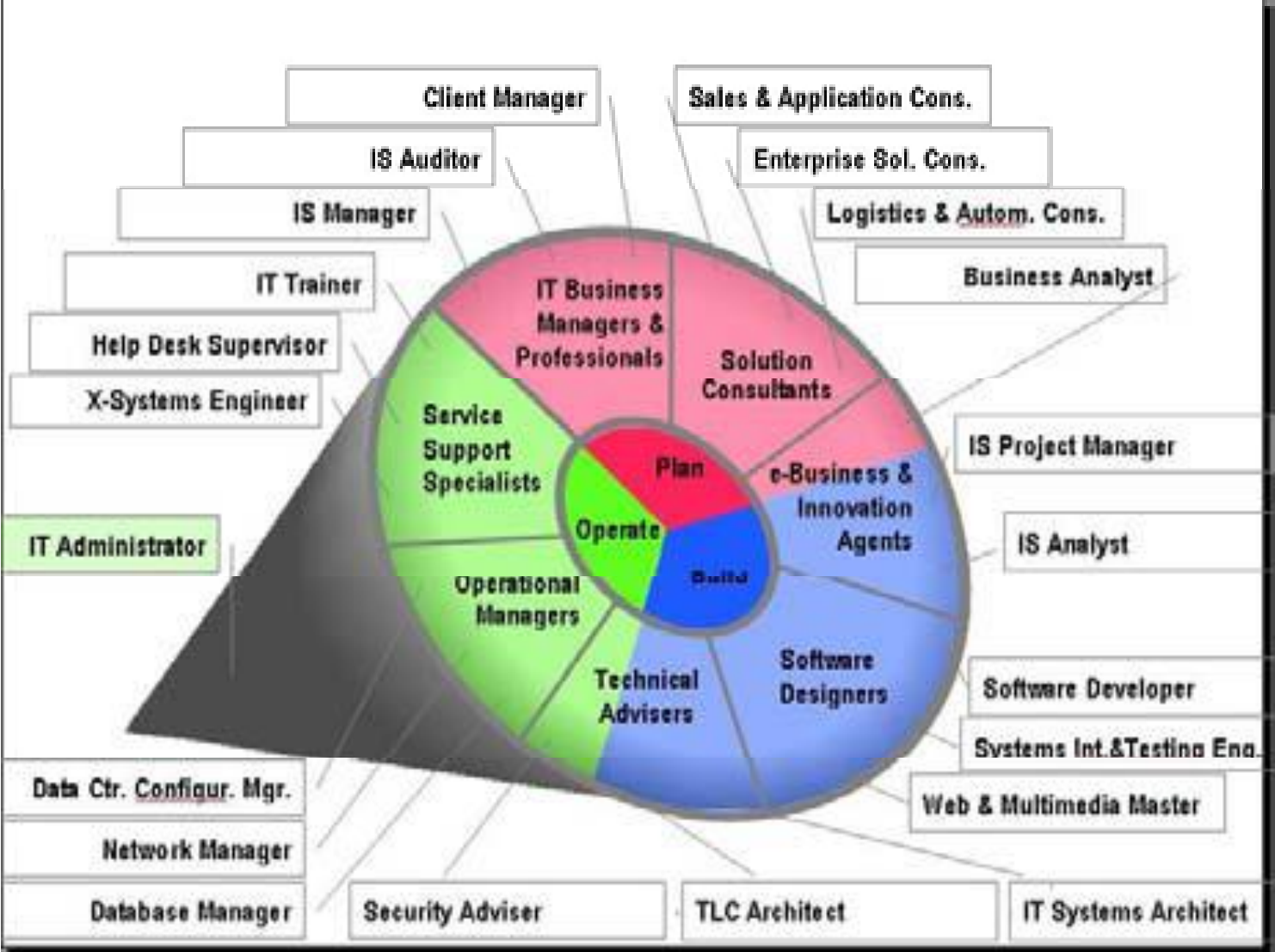
ACS CCP

- ACS Certified Computer Professional
- Must have completed at least one year of relevant work experience after finishing your bachelor degree with a major in ICT
- Already hold the PCP
- Now has IFIP IP3 IITP status

EUCIP

- European Certified Informatics Professional
- Pan Europe
- Similar to SFIA
- The 21 EUCIP elective profiles
 - assign different weights to the technical competences an informatics professional must possess
- Profile competences are subdivided into 18 categories within 3 areas:
 - Plan, Build, Operate.

EUCIP Elective Profiles



IFIP IP3

IP3 – What is it?

- Global programme
- IFIP led, independent & not for profit
- Delivered through member societies
- Promoting professionalism
- Defining global standards
- Creating international infrastructure
- Recognising & certifying professionalism

IFIP IP3

IP3 - The Vision

An International profession that is:

- ❑ Equivalent in prestige to traditional professions
- ❑ Focused on capability to exploit I & T effectively and consistently
- ❑ Respected by its stakeholders
- ❑ A source of aspiration for IT practitioners.

IFIP IP3

IP3 – The Objectives

- ❑ Promote professionalism worldwide:
 - ❑ Improve capability to exploit IT
 - ❑ Build IT professionalism to world standards
 - ❑ Develop a profession which is respected and valued
- ❑ Voice of the IT practitioner clearly expressed
- ❑ Raise IFIP's global profile
- ❑ Represent IT practitioners internationally
- ❑ Provide significant benefits to supporters

IFIP IP3

The Plan

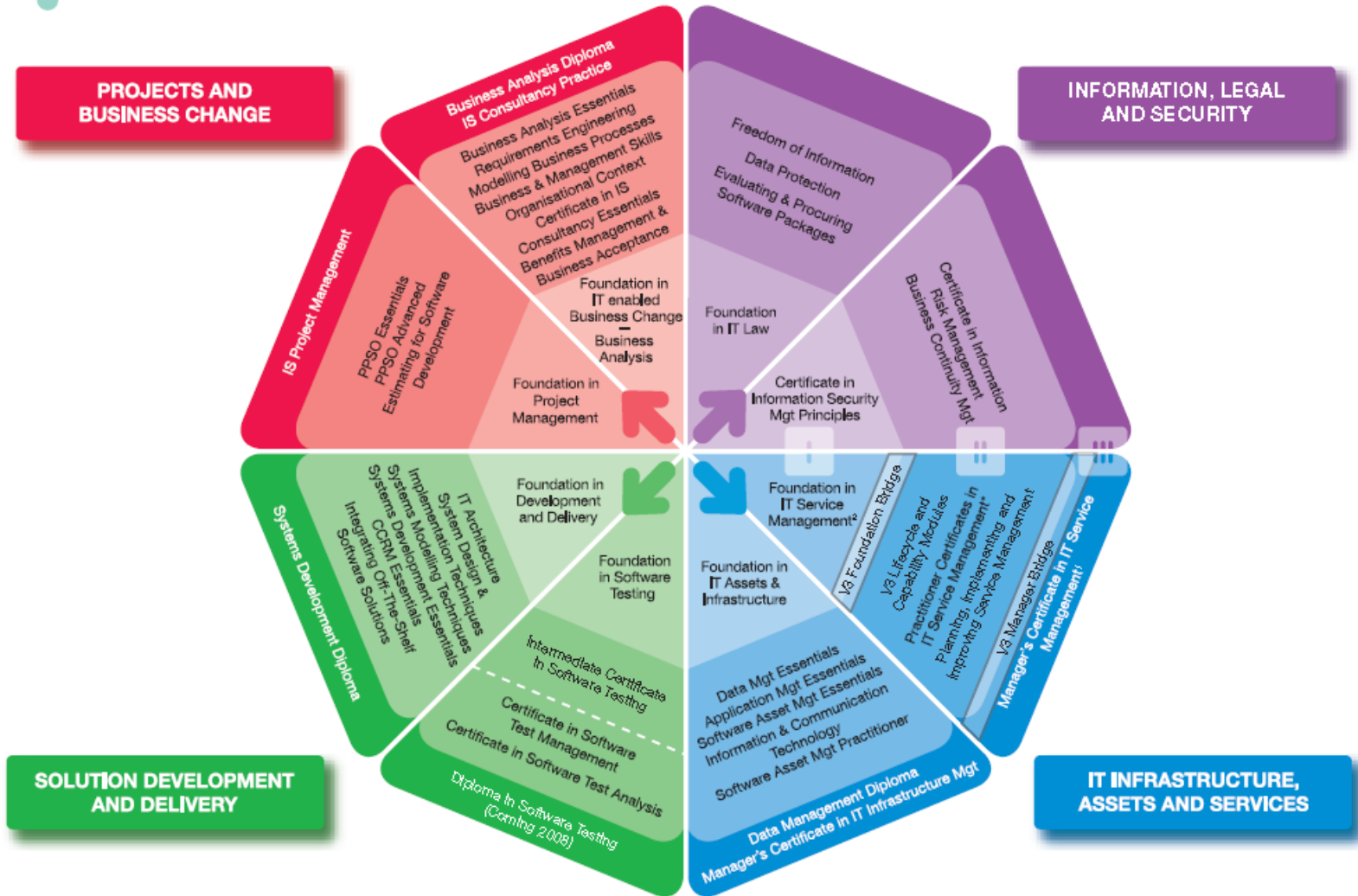
- ❑ World-wide IT profession with overarching professional framework
- ❑ Promoting professionalism & communicating the benefits
- ❑ Delivery through IFIP national member bodies
- ❑ International cadre of IT professionals
- ❑ Developing and recognising practitioners and employers
- ❑ Professional qualifications with IITP as 'gold standard'
- ❑ Inclusive approach embracing existing certifications
- ❑ Rigorous accreditation process
- ❑ Guidance and help for member societies

Training and Course Accreditation

- Many ICT professional Societies accredit training courses and university degrees
- Many provide training courses or outsource them under license
- Many run examinations and certifications
- Regular audits
- Ensure that quality standards are kept up

Professional Examination Programme

- BCS has ISEB professional course and examination programme
- ISEB maps to SFIAplus
- CBT available for some courses including examination
- ACS runs a professional programme



 **Foundation Qualifications**
 **Practitioner Qualifications**
 **Higher Level Qualifications**

*Problem Mgt, Change Mgt, Configuration Mgt, Service Desk & Incident Mgt, Release Mgt, Availability Mgt, Capacity Mgt, IT Service Continuity Mgt, Service Level Mgt, Financial Mgt for IT Services
¹V3 scheme currently in development ²V2 and V3 now available

Career Pathways

- Using all the above:
- Map out required training and qualifications required to reach professional roles
- Identify the different paths to get qualifications and experience
- Mentoring & Coaching
- Professional exams and assessments

ICT CBOK

- ICT Core Body of Knowledge (CBOK)
- the core knowledge that all certified members would be expected to have
 - must include some information on the cognitive level required for each knowledge area
- Establish a minimum CBOK
 - includes professional, managerial and commercial skills
- Code of Ethics and behavior
- Map knowledge and skills to competency framework SFIA

CPD

- Continued Professional Development
 - Requirement of any profession
- Purpose
 - To keep current with changing technology, methods and best practise
 - Learn from other experience
- But.....
 - What to learn? How do you know?

EUCIP Self Assessment Tool

The screenshot displays the EUCIP Self Assessment Tool interface. The main window shows a list of items with columns for 'Nessuna', 'Base', 'Buona', 'Profonda', and 'Competenza'. A modal dialog box is open, displaying the following text:

La pagina sul server <http://radar.mgeng.com> riporta:

B4.02 - Designing and developing web applications

Choose platforms that support each programming language and environment.

EITHER:

- Master servlets and JSPs, which are the most popular components of the J2EE standard and critical elements used by companies building e-commerce sites;
- Build web-based applications using Java servlets and Java Server Pages (JSP). Know the concepts and use of the servlet API, plus the productive development of applications through Java Server Pages.

OR:

- Master COM/COM+/.NET and ASP;
- Build web-based applications using ASP or VBA in a .NET environment. Know the concepts and use of web services.

OK

The software tool interface for collecting self evaluations

Self Assessment Scale

- Evaluation Scale:
 - None = Almost no knowledge of the subject; confused ideas
 - Core = Knowledge of the principal concepts without in-depth analysis
 - Good = Knowledge of the concepts and application capabilities strengthened by some *direct* experience (including study courses with laboratory hours)
 - Deep = Mastering complete and in-depth understanding of the concepts and application competence provided by extensive experience in complex environments.

Example skill Area

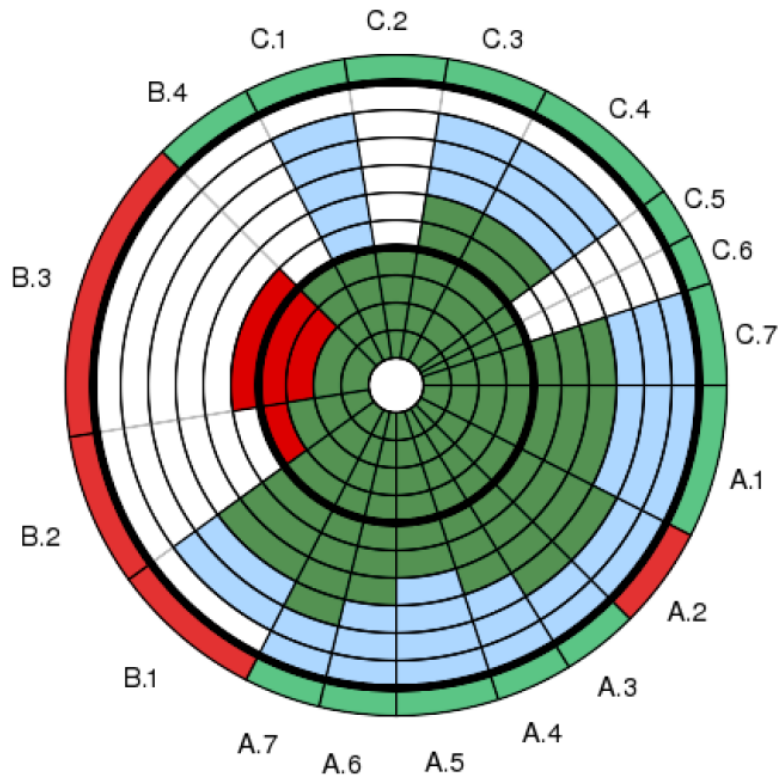
A.5	Project Management	
A5.01	Project Management essentials	Deep
A5.02	Estimating for System Development	Base
A5.03	Project coordination	Good
A5.04	Integration Management	Deep
A5.05	Scope Management	Deep
A5.06	Time Management	Deep
A5.07	Cost Management	Deep
A5.08	Quality Management	Good
A5.09	Human Resource Management	Deep
A5.10	Communication Management	Deep
A5.11	Risk Management	Deep
A5.12	Procurement Management	Deep
A5.13	Project Management Tools	Deep
A5.14	Training programm design	Base

Example Detailed Knowledge

A5.04 Integration management [1]

- Develop a project charter.
- Develop a preliminary project scope statement.
- Develop a project management plan including a measurement plan.
- Direct and manage the project execution.
- Monitor and control the project work.
- Perform an integrated change control.
- Close the project.

Self Assessment Output



The profile you have selected is **EUCIP Information Systems Manager** which presents a **88%** coverage.

The area bordered by **the black ring** inside the "radar" represents the EUCIP core level, compulsory for all 18 categories which contribute to the definition of each of the 21 elective profiles; the radar representation shows, in the area between the internal and external rings, the average level of possession of all the other competences required by the EUCIP elective profile.

The different colours distinguish the competence level corresponding to what is required by the profile (**green**), the competence level less than what is required by the profile (**red**) the competence level in excess of what is required by the profile (**blue**).

NOTE: the **red** colour in the external circumference means that, independently from the internal colours, the Area has a shortage for some competences requested by the selected Profile.

Output of the self-assessment tool showing the best profile proximity indexes and the list of categories missing EUCIP elective level for the selected profile

CPD Link

- CBOOK changes can be identified
- Self Assessment process
- Career path
- Identified areas for CPD
- Training courses can be designed and run
- Seminars provided
- Self study etc

Summary

- There is much to learn from the rest of the world
- No need to start from scratch
- But....

- We have a lot to do

Where to from here?

- Working Group to review the research
- Consider all the option
- Create a consultation discussion paper
- Circulate paper to all stakeholders
- Consultation meetings around the country
- Forums/blogs
- Finalise framework
- Implement it

Acknowledgements

- Grateful thanks to the following organisations for assistance and access to information
 - BCS (CITP/SIFApplus/ISEB) <http://www.bcs.org>
 - SFIA www.sfia.org
 - CEPIS (EUCIP) <http://www.cepis.org>
 - ACS (PCP/CCP) <http://www.acs.org.au>
 - IFIP - IP3 (IITP) <http://www.ifip.org>
 - AICA (RADAR self assessment) <http://www.aicanet.it>
 - All the above for CBOK
 - Other parties to numerous to list here who have assisted

Thank You

ICT Profession Target Vision?

- attract high quality people, inspire high performance and represent a career aspiration and opportunity for a wide spectrum of people;
- provide a framework within which all entrants can develop fully as IT professionals;
- be respected for high standards of professional competence, integrity, responsibility and accountability;
- promote and provide support for the continuous development of technical and non-technical competences throughout the career of every IT professional;
- consistently meet, rising customer expectations;
- contribute to the successful implementation of IT-enabled business change projects and programmes and be recognised for improving capability to exploit the benefits of IT in a global environment;
- communicate and reflect a passion for creating opportunity through the application of information technology and a pride in the contribution made by IT professionals;
- be governed by a framework of professional institutions acting together and speaking with one voice.

Lord Benson's Professional Criteria

1. The profession must be controlled by a governing body, which in professional matters directs the behaviour of its members.
For their part the members have a responsibility to subordinate their selfish private interests in favour of support for the governing body.
2. The governing body must set adequate standards of education as a condition of entry and thereafter ensure that students obtain an acceptable standard of professional competence.
Training and education do not stop at qualification. They must continue throughout the member's professional life.
3. The governing body must set the ethical rules and professional standards that are to be observed by the members.
They should be higher than those established by the general law.
4. The rules and standards enforced by the Governing Body should be designed for the benefit of the public and not for the private advantage of the members.

Lord Benson's Professional Criteria

5. The governing body must take disciplinary action, if necessary expulsion from membership, should the rules and standards it lays down not be observed, or should a member be guilty of bad professional work.
6. Work is often reserved to a profession by statute – not because it was for the advantage of the member, but because of the protection of the public, it should be carried out only by persons with the requisite training, standards and disciplines.
7. The governing body must satisfy itself that there is fair and open competition in the practice of the profession so that the public are not at risk of being exploited. It follows that members in practice must give information to the public about their experience, competence, capacity to do the work and the fees payable.
8. The members of the profession, whether in practice or in employment, must be independent in thought and outlook.
They must not allow themselves to be put under the control or dominance of any persons or organisation that could impair that independence.
9. In its specific field of learning, a profession must give leadership to the public it serves.