

European ICT Body of Knowledge

Creation of a 'go-to' reference for ICT in Europe

e-Skills for Jobs High Level Conference

March 13, 2015



Niels van der Linden

Managing Consultant Capgemini Consulting

+31 615 030 734

@NielsvdLinden

Niels.vander.linden@capgemini.com

Maturing the ICT profession and attracting more professionals in the European Digital Single Market



Bridging the digital gap and make a stronger connection

A comprehensive approach to establishing a European framework for ICT professionalism

ICT professionals:

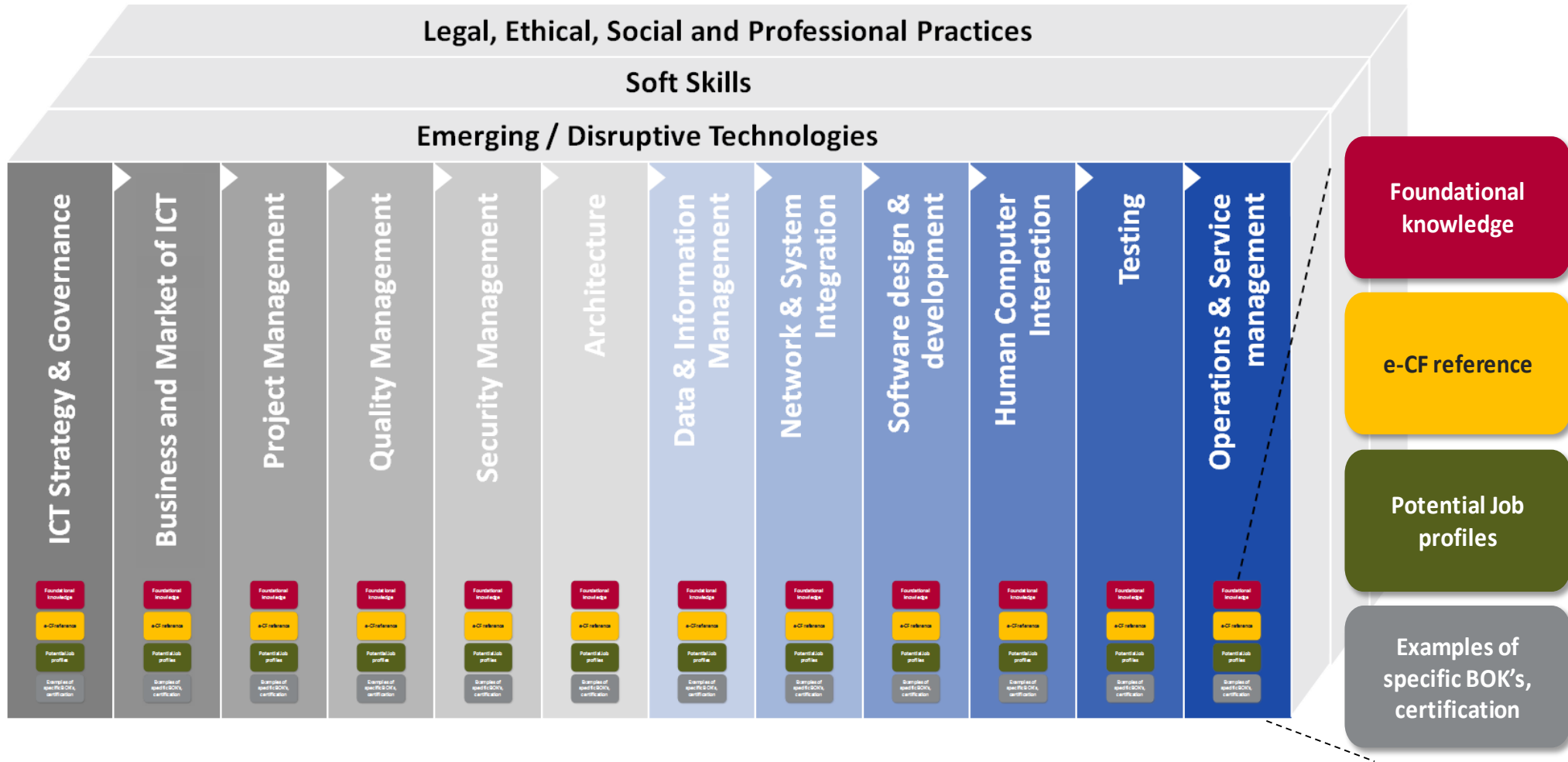
- possess a comprehensive and up-to-date understanding of a relevant body of knowledge
- demonstrate on-going commitment to professional development, via an appropriate combination of qualifications, certifications, work experience, non-formal and/or informal education;
- adhere to an agreed code of ethics/conduct and/or applicable regulatory practices and,
- through competent practice deliver value for stakeholders.



European Framework for ICT professionalism:

- European e-Competence Framework (e-CF)
- **Foundational ICT Body of Knowledge**
- Multiple education and training paths
- Professional ethics code

The European Foundational ICT Body of Knowledge is an essential building block for the promotion of ICT professionalism in the European Digital Single Market



Example of how each knowledge area is described

Software Design and Development

This is about is the application of engineering to the design, development, and maintenance of software. It is necessary to understand how to develop or acquire software (information) systems that satisfy the requirements of users and customers. Knowledge of methodologies and processes for developing systems is also needed.

Foundational knowledge

- Software elements of a computer system
- Software architecture
- Object-oriented design
- User interface design
- Software design process
- Concept of developing requirements (including types and analysis techniques)
- Programming languages and protocols
- Iterative software development
- Concept of system integration

e-CF reference

- A6 Application Design
- B1 Application Development
- B2 Component Integration
- B4 Solution Deployment
- B6 Systems Engineering
- C1 User Support

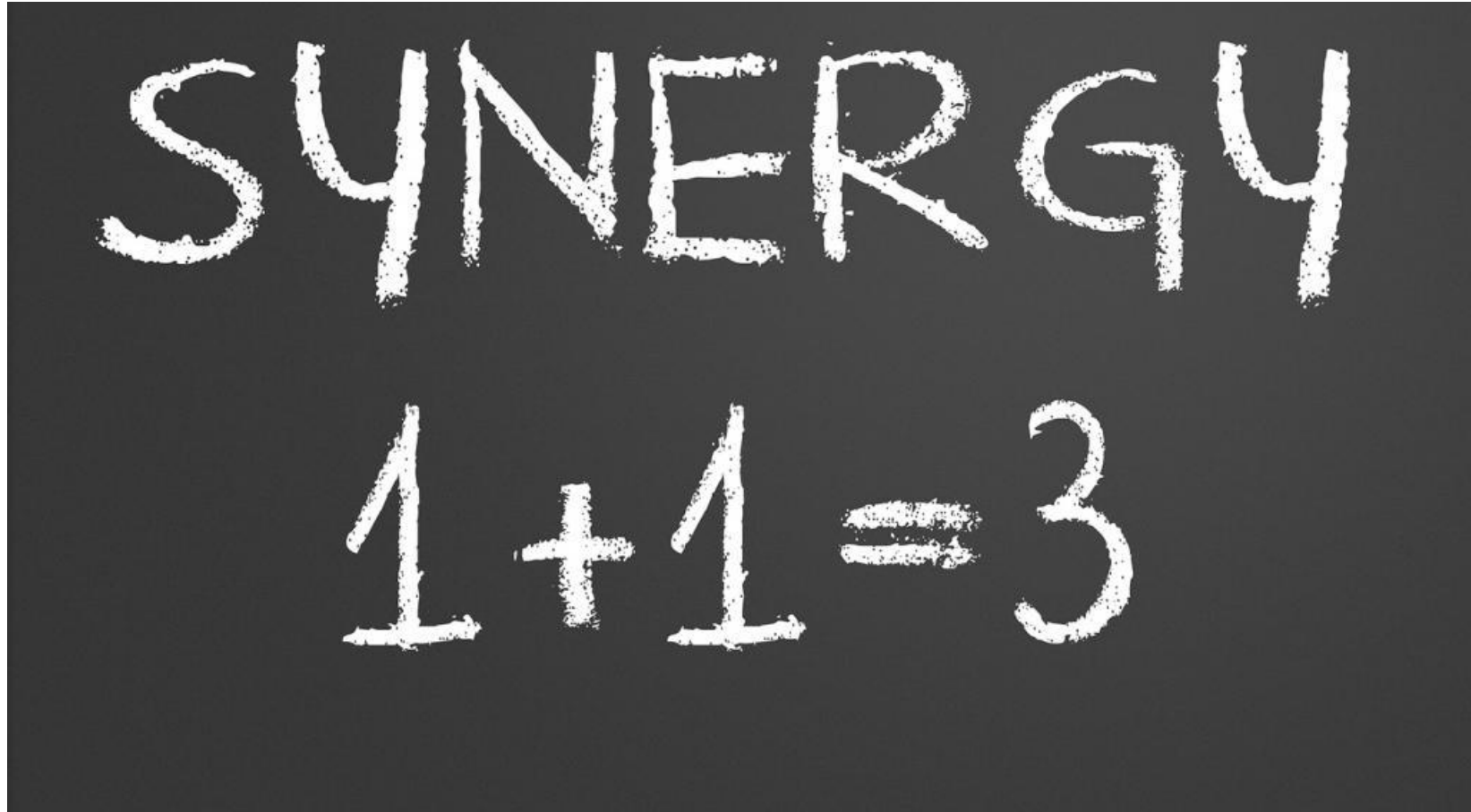
Potential Job profiles

- Systems Analyst
- Systems Architect
- Developer
- Test Specialist
- Systems Administrator
- Network Specialist

Examples of specific BOK's, certification

- SWEBOK v3.0 (Software Engineering BOK– IEEE Computer Society)
- IEEE - Certified Software Development Professional
- CompTIA (Computing Technology Industry & Association)
- Vendor certifications (Microsoft, Cisco, IBM, etc.)
- OMG Certified UML® Professional (OCUP)
- Application Services Library (ASL)
- OPEN CITS (Open Group Certified IT Specialist)

European Digital Single Market: The whole is more than the sum of its parts



Cooperation inside and outside Europe is the key driver to maximise synergy



**Promotion of ICT profession
in global digital economy**

**Alignment, excellence and
adoption of best practices**

**Transparency and
knowledge exchange**



Niels van der Linden

Managing Consultant Capgemini Consulting

+31 615 030 734

@NielsvdLinden

Niels.vander.linden@capgemini.com