Digital skills in the Netherlands

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Agenda

- Set the scene
- Digital skills
- Challenges
- Advice
- Questions

The Netherlands (NL)

- Inhabitants: 17,5 Million
- Density: 521/km^2
- Currency: €
- Language: Dutch
- World GDP ranking: 17

NL in Digital Economy and Society Index, DESI

CONNECTIVITY

HUMAN CAPITAL

USE OF INTERNET SERVICES

INTEGRATION OF DIGITAL TECHNOLOGY

DIGITAL PUBLIC SERVICES

https://ec.europa.eu/digital-single-market/en/digital-economy-and-society-index-desi
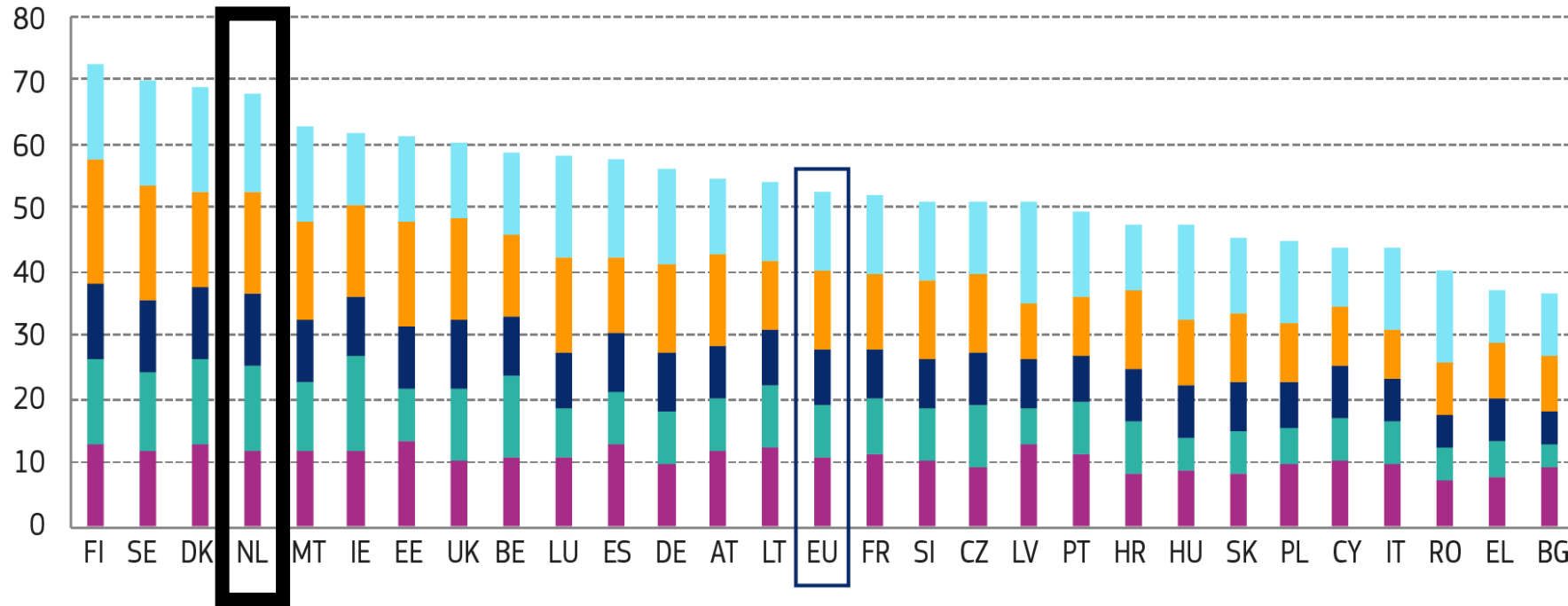
Digital skills for different groups

- Consumers

- Citizen

- Professionals in general

- ICT professionals

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NL ICT professionals

Working in a digital world:

A Dutch framework

- Started in 1982

- Last and final edition 2017

ICT professionals: digital skills = competences

CEN TC 428 : ICT professionalism and digital skills: *https://www.ecompetences.eu/*

European e-Competence Framework

Dimension 1 5 e-CF areas	Dimension 2 41 e-Competences identified	Dimension 3 5 e-Competence proficiency levels				
		e-1	e-2	e-3	e-4	e-5
A. PLAN	A.1. Information Systems and Business Strategy Alignment					
	A.2. Service Level Management					
	A.3. Business Plan Development					
	A.4. Product/Service Planning					
	A.5. Architecture Design					
	A.6. Application Design					
	A.7. Technology Trend Monitoring					
	A.8. Sustainability Management					
	A.9. Innovating					
	A.10. User Experience					
B. BUILD	B.1. Application Development					
	B.2. Component Integration					
	B.3. Testing					
	B.4. Solution Deployment					
	B.5. Documentation Production					
	B.6. ICT Systems Engineering					
C. RUN	C.1. User Support					
	C.2. Change Support					
	C.3. Service Delivery					
	C.4. Problem Management					
	C.5. Systems Management					
D. ENABLE	D.1. Information Security Strategy Development					
	D.2. ICT Quality Strategy Development					
	D.3. Education and Training Provision					
	D.4. Purchasing					
	D.5. Sales Development					
	D.6. Digital Marketing					
	D.7. Data Science and Analytics					
	D.8. Contract Management					
	D.9. Personnel Development					
	D.10. Information and Knowledge Management					
	D.11. Needs Identification					
E. MANAGE	E.1. Forecast Development					

+ NEW: 7 e-CF TRANSVERSAL ASPECTS
Being aware of and, if applicable, behaving proactively in

T1 Accessibility, T2 Ethics, T3 ICT legal issues, T4 Privacy, T5 Security, T6 Sustainability, T7 Usability

BODIES OF KNOWLEDGE

EDUCATION AND TRAINING

EN 16234-1

PROFESSIONAL ETHICS

COMPETENCES

4 building blocks:
1 standard, 3 under development

Note: The Bok will :
- connect e-CF profiles through **common knowledge** and
- Provide **basic knowledge** for each individual profile
- provide links to specialised BoKs for each individual profile

LINKS TO SPECIALISED BOKs FOR EACH AREA OF ICT EXPERTISE

BASIC KNOWLEDGE FOR EACH AREA OF ICT EXPERTISE

1 Account Manager Role
2 Business Analyst Role
3 Business Information Manager Role
4 CIO Role
5 Data Administrator Role
6 Developer Role
7 Digital Media Specialist Role
8 Enterprise Architect Role
9 Digital Consultant Role
10 ICT Operations Manager Role
11 Information Security Manager Role
(...) 30 ICT Role Profiles in total

COMMON ICT KNOWLEDGE SHARED BY ALL ICT PROFESSIONALS

EUROPEAN ICT PROFILE FAMILY TREE

Generation 1: SEVEN FAMILIES

PROCESS IMPROVEMENT | BUSINESS | TECHNICAL | DESIGN | DEVELOPMENT | SERVICE & OPERATION | SUPPORT

Generation 2: 30 EUROPEAN ICT PROFESSIONAL ROLE PROFILES

Digital Transformation Leader | Business Information Manager | Quality Assurance Manager | Business Analyst | Developer | Data Administrator | Account Manager

Product Owner | CIO | Cyber Security Manager | Systems Analyst | Digital Media Specialist | Systems Administrator | Digital Educator

Scrum Master | ICT Operations Manager | Project Manager | Enterprise Architect | Test Specialist | Network Specialist | Cyber Security Specialist

DevOps Expert | Data Scientist | Service Manager | Systems Architect | | Technical Specialist | Digital Consultant

Data Specialist | Solution Designer | | Service Support

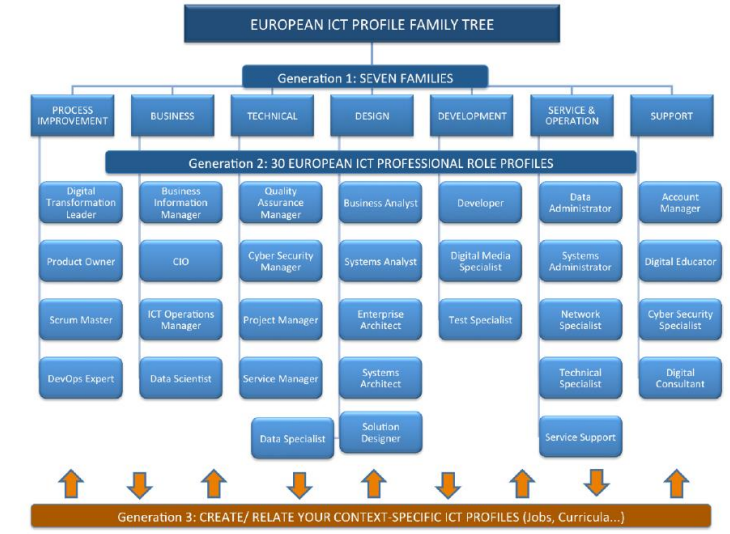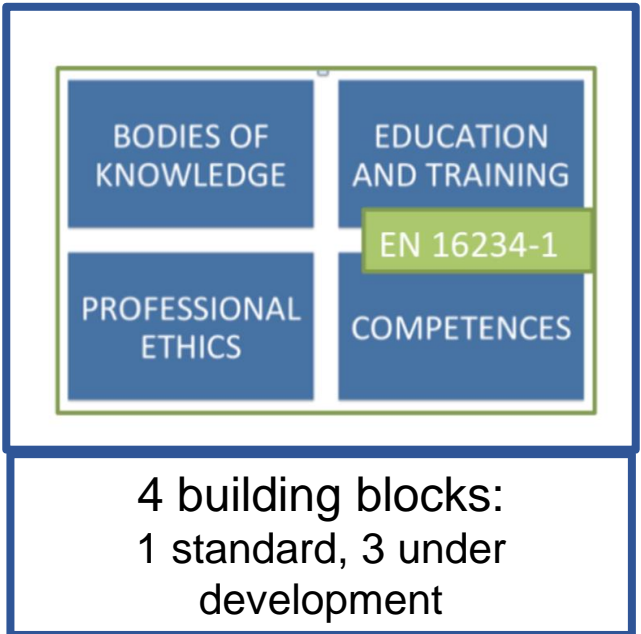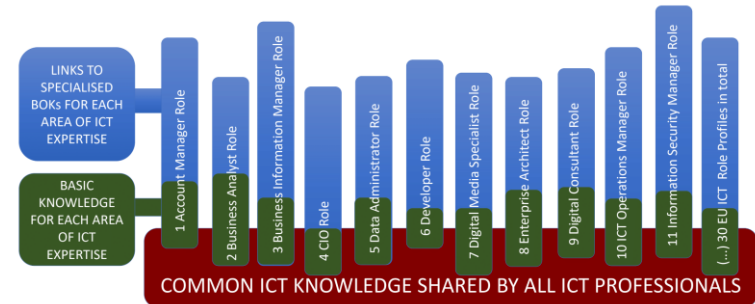Generation 3: CREATE/ RELATE YOUR CONTEXT-SPECIFIC ICT PROFILES (Jobs, Curricula...)

Figure 4: 30 European ICT Professional Role Profiles (generation 2) in seven families (generation 1) at the top of the European ICT Profile Family Tree

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User of e-CF: Dutch Government

Kwaliteitsraamwerk Informatievoorziening (KWIV)

Het KWIV is een aanvullend hulpmateriaal op het FGR en is gericht op competenties en kwaliteit van IV-personeel bij het Rijk.

ICT professionals: IFIP's Code of Ethics

https://www.ipthree.org/ifip-code-of-ethics

4 sections

- 7 common ethical principles
- 9 responsibillities specific to the ICT professions
- 7 responsibillities for those with a leadership position
- Guidance how to apply by professional decisions.

Benefits of the Code

- > Inspires IT professionals
- > Identifies the consistent international conscience of the profession
- > Educates the public
- > An international statement of the intercultural values of global ICT
- > A common ground for international discourse on professional responsibility
- > Educates aspiring ICT professionals about their ethical obligations
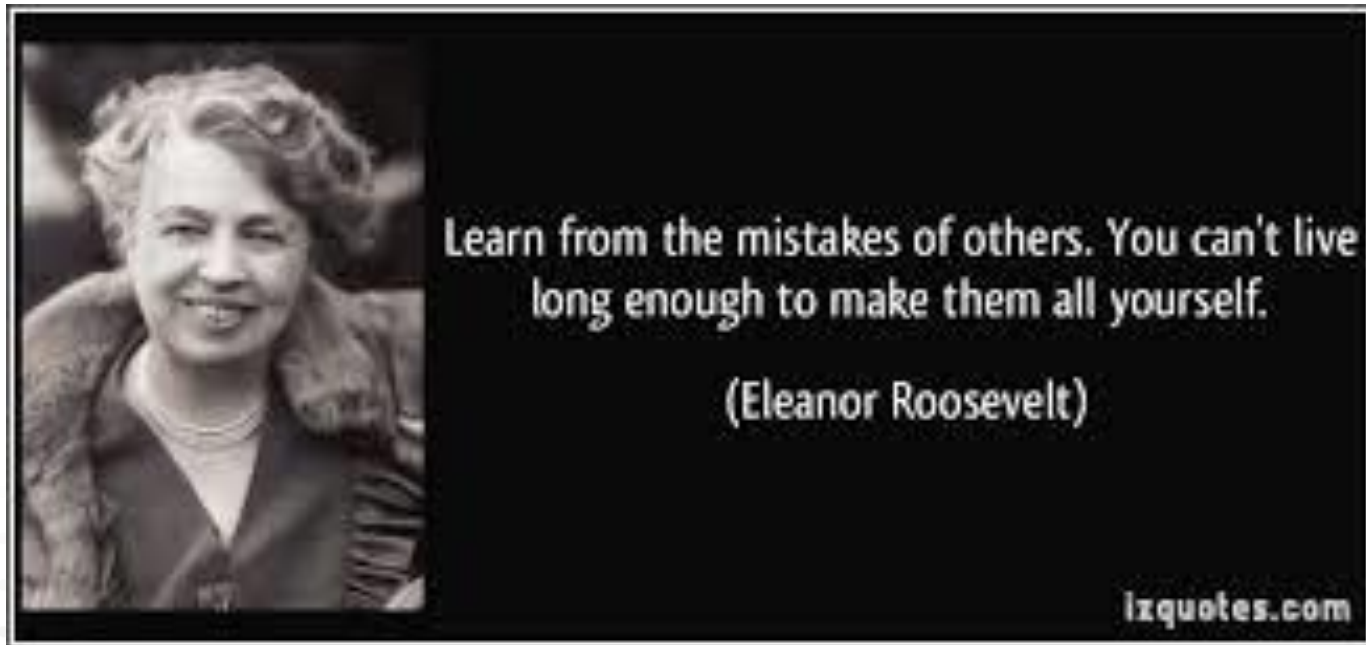- > Consistent with and extends the impact of IP3s Four Pillars

Affirming our obligation to use our skills for the benefit of society

NL Challenges

makes

forgotten

creates

Advice

- Learn, copy and use what has proven to work
- Don't do it on your own

Learn from the mistakes of others. You can't live long enough to make them all yourself.

(Eleanor Roosevelt)

izquotes.com

Thank you! Questions?

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