Illustrative Case Study (M)

European e-Competence Framework (e-CF)

for assessment and career tools

ABOUT THE e-CF. The European e-Competence Framework (e-CF) provides a reference of 36 competences as required and applied at the Information and Communication Technology (ICT) workplace, using a common language for competences, skills and capability levels that can be understood across Europe. As the first sector-specific implementation of the European Qualifications Framework (EQF), the e-CF was designed and developed for application by ICT service, user and supply companies, for managers and human resource (HR) departments, and for education institutions and training bodies, and other organizations in public and private sectors.

The framework was developed under the umbrella of the CEN ICT Skills Workshop through a process of close cooperation between ICT business and human resource (HR) experts, stakeholders and policy institutions from many different countries and at the EU level. Published by CEN for the first time in 2008 and followed by a further enhanced version 2.0 in 2010, the framework brings benefits to a growing community of users throughout Europe and overseas.

To support e-CF application within multiple environments, a series of illustrative case studies provide examples, benefits and hints of how to make best use of the e-CF.

The following case study illuminates the e-CF application from the perspective of a provider of independent information management certification and accreditation.

Key perspectives

- Assessing an ICT Professional's capability
- Recognition of formal and informal learning

Summary

The e-CF is a valuable framework for assessing an ICT professional's capability. This is exemplified by an ICT application and professional assessment developed by EXIN.

EXIN recognized the need to create an international ICT professional assessment based upon the need to promote 'Professionalism" within the information technology industry. All too often, large IT projects run over budget and over time resulting in a negative perception of the industry and loss of productivity and profitability. Transparency of expertise deployed within major IT projects would support the continuous professional development of ICT staff engaged in critical activities. The solution was to create an assessment of validated ICT processionals recording and accrediting their competence.

A sound methodology was required to underpin the online assessment including consistent measurement of an ICT professional's capability. The chosen method was to use competence as the basis for the assessment. The availability of the e-CF made this a practicable proposition as it provides a consistent structure and articulates ICT professional competence from a European perspective.

The internal plumbing of the professional assessment is provided by the e-CF with the ability to recognize several levels of competence. ICT professionals are able to record their accomplishments, certifications, qualifications and experience in the language of competence and if they wish, pursue competence submission for verification. Dependent upon results, the ICT professional is registered as having achieved the equivalent of e-CF levels 1-5. The assessment application also provides additional functionality by highlighting any competence gaps identified through the assessment process. This insight leads the way to further improvement of the professional.

e-CF Value

The European scope of the e-CF makes it a valuable framework for identifying and benchmarking ICT professional capabilities across the continent. Competence is the commodity sought by employers and customers; the e-CF provides a tangible structure to assess and demonstrate competence. Competence articulated within the e-CF is a holistic concept incorporating, skills and knowledge. The structure of the e-CF provides a simple shorthand identifier (i.e. B1 represents Design and Development) and can be expressed from levels 2 - 5 so for example B.1. level e-5 demonstrates the highest level of competence in Design and Development. Consequently the e-CF is an ideally structured framework for incorporation within software tools as it provides a simple notation for complex concepts.

Challenges encountered

An issue to be faced was how to combine competences in a formula that reliably indicated the overall capability of a registration candidate. A table of rules was devised that identified a minimum number of competences at specified levels to qualify for registration at a certain level. A further challenge was how to verify the competences claimed by an ICT professional. This is not an easy issue to resolve, as a tick box exercise will not suffice.

Benefits highlighted

The e-CF has provided a quantitative and qualitative framework that identifies and enables the recording of an ICT professional's capability. It does not dependent solely upon certification and qualifications but takes into account history, experience and on the job training to provide an understanding of capability.

Competence is based upon the outcome of an individual's education and development rather than the input of education and certification only. It is a combination of knowledge, skills and attitude.

The method adopted

Competence cannot be easily determined by a short test, it is a broad concept requiring comprehensive assessment. Expert and peer reviews, of submitted claims of competence, were the method adopted. In practice, the ICT professional, using the registration tool, self-assesses against the e-CF and then submits evidence of compliance to specific competences and levels. The evidence types, for instance, project reports, appraisals and qualifications; are scrutinized by experienced and knowledgeable auditors.

The outcomes, following audited verification, are then awarded with an overall e-CF level and the candidate's capability is registered.

Expansion to other examples

The above case study demonstrates how the e-CF can be deployed to assess competence by use of an assessment tool. There are other generic examples, based upon using e-CF as a benchmark, they include:

- Simple self-assessment by an individual comparing personal competences to e-CF defined competence, see http://www.ecompetences.eu
- Simple self-assessment by an individual comparing personal competences to pre-defined European typical ICT Professional Profiles, see http://www.ecompetences.eu
- Audit by an ICT Department to access balance of skills across the organization
- Audit by an ICT Department to understand current competences compared to future requirements.