



Illustrative Case Study (C)

e-CF for SMEs – competence need analysis and a managerial dashboard

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 micro ICT supplier and SMEs in general.

Key perspectives

- Application in a micro enterprise environment
- e-CF as a marketing aid
- e-CF as a business development tool
- Competence need analysis
- Linking business strategy and competence development
- Develop or buy new competences

Summary

itSECURITY¹ is a small, seven person, Italian enterprise specializing in information security, systems engineering and customized software development. The company needed to understand and promote its capabilities now and in the future.

On one hand, the company needed to clarify which competences were required to sell ICT services more effectively and on the other they needed to analyse competence requirements to support new service offerings. With this information business decisions about whether to develop or buy in new skills were made. The e-CF has supported this decision-making and supported the alignment between the company's competence development and its business strategy.

The e-CF helped clarify ideas and to shift emphasis within its sales capability from that of an entrepreneur to that of a collaborator. Within the e-CF, D7 and E4 competences are articulated at different proficiency levels and suggest some key knowledge and skills. Technical and commercial competences are described and by examining the descriptors, staff development needs were exposed and decisions taken on whether to grow a technicians capability towards sales or to grow a sales manager towards more technical capabilities. It is also likely that a decision will be made to recruit an additional ICT professional with many of the required competence attributes.

itSECURITY investigated the 36 e-CF e-competences and highlighted links between the e-competences and business objectives and purposes. The e-CF Dimension 2 connects e-competences and the business explicitly, especially if using the four business entry points identified in the CEN project "e-CF into SMEs", CWA 16367:

1. Company overview
2. Markets and Customers
3. Innovation and research
4. Business

These entry points, link the reference business areas to the e-competences required to manage them. (See Annex 1)

Dimension 2 of the e-CF helped itSECURITY understand which e-competences needed to be developed to expand their offer for consulting services. They discovered that the e-competence D.7. Sales Management and E.4. Relationship Management required further development to reinforce their commercial activity.

In other examples, where SMEs have 20 or above personnel, the principles are similar but decisions more complex. In large companies, such approaches may be applied to departments and units.

e-CF Value

The e-CF has enabled itSECURITY to better understand their competence requirements in relation to their business strategy, namely reinforce the quality of their communication to clients and enlarge their client network. The competence need analysis was relatively straightforward and fast using the e-CF as a reference.

¹ itSECURITY is a pseudonym representing an enterprise interviewed in the "e-CF into SME" CEN project

Dimension 2 of the e-CF can support SMEs in identifying e-competences that describe their core activities and their business. The e-CF provides the structure and appropriate articulation by which management can analyse current competence capability, future requirements and support the development of business strategy.

Challenges encountered

Competence management is not universally adopted and therefore some ICT users are not familiar with the concept and language of competence. It was therefore necessary to provide an awareness of the e-CF and its structure to clients unfamiliar with competence concepts. However the principles of the e-CF are easily understood and the framework quickly becomes a reference point for establishing a common language for an effective mutual communication.

Benefits highlighted

In this example, the e-CF helped itSECURITY:

- Identify the proper e-competences for their current business;
- Realize which growing/innovating opportunities for the future according to their current e-competences;
- Plan which e-competences to be developed, in order to get future business results.

The method adopted

The approach adopted to navigate the e-CF for a competence need analysis is described below.

Step 1. The entrepreneur and staff go through the four entry points, (see table 2 below).

- 1) Company overview;
- 2) Markets and Customers;
- 3) Innovation and research;
- 4) Business;

looking into the e-competences linked to and clustered under the entry points. (They may even use e-CF Dimension 1 as entry point). For each e-competence, the company analyses the meaning against their own enterprise mission and strategy, and place a comment. Some guiding questions can make the task easier, such as the following:

- Is this competence coherent with my business?
- Have I ever fully practiced this competence?
- If I haven't, for what business aims would it be useful?

Step 2. After answering the above questions, a further analysis is required, to identify which e-competences are needed for the current or future planned business.

Step 3. At this step, the enterprise can identify the best strategy to be undertaken to meet the identified short or mid-term needs.

The following Table 1 can support the three steps.

Table 1: Table for e-Competence need analysis (example)

	STEP 1		STEP 2	STEP 3
e-CF e-competences	<p>e-competence never practiced in my company; e-competence seen as not needed in my company for my current business</p> <p><i>Please select competences from the e-CF full list with "X"</i></p>	<p>Is this competence coherent with my business?</p> <p>May it be relevant for improving my business?</p> <p>When may it be relevant? For what different business?</p> <p><i>Please put a comment</i></p>	<p>Competences seen as needed/ useful for my current/ future business but not fully/ still practiced</p> <p><i>Please select competences from the e-CF full list with "X"</i></p>	<p>Actions to be undertaken in my company</p> <p>Make (e.g. internal training)</p> <p>Buy (e.g. recruitment)</p> <p>I am not ready to make decisions now</p>
C.4. Problem management			X	
D.2. ICT quality strategy development;	X	Needed if we intend to expand the business in consultancy		
D.7. Sales Management			X	<i>Under discussion whether to train an internal ICT professional or to recruit a sales expert with experience in the ICT context</i>
D.9. Personnel development			X	
E.4. Relationship management			X	
E.5. Process improvement;	X	Within our enterprise is not required at such a level of formalization. It may be a consultancy expertise		
E.6. ICT quality management;	X	There is not a formalized procedure, it is needed within larger enterprises		
E.9. IT governance	X	It's not something you can hire. It has to be done internally in each company by the ICT manager. It is something for large companies		

Expansion to other examples

The above case illustrated how the e-CF has been used as a dashboard, a compass, for competence need analysis. Within this context, the e-CF can also support:

- SMEs self-assessment (see case study D)
- Communication of ICT supply's competences to customers, as a business card

Reference

- CEN Workshop Agreement (CWA) 16367: "e-CF into SME's"
<http://www.cen.eu/cen/Sectors/Sectors/ISSS/CWAdownload/Pages/ICT-Skills.aspx>

Annex

Table 2: Business areas entry point for e-competences

1 Company Overview	Competence to be checked
1.1 Description of company management	A.1. IS and business strategy Alignment
	A.4. Product or project planning
	D.1. Information security strategy development
	D.2. ICT quality strategy development
	D.10. Information and Knowledge Management
	E.2. Project and portfolio management
	E.3. Risk management
	E.6. ICT quality management
1.2 Description of company organisation/departments	E.9. IT governance
	D.4. Purchasing
	D.5. Sales proposal development
	D.7. Sales Management
	D.8. Contract Management
E.8. Information security management	
2 Markets and Customers	Competence to be checked
2.1 Main products & services offered - also if the product(s)/service(s) are standard and/or customised	A.2. Service Level Management
	B.5. Documentation Production
	C.1. User Support
	C.2. Change support
	C.3. Service delivery
	C.4. Problem management
2.2 Target market sectors – describe also if the market is horizontal, vertical and/or both	D.6. Channel management
2.3 Market differentiators (<i>what differentiates their offering within the marketplace?</i>): includes factors such as: <i>technology; product range; customer service; aftersales support; user focus (i.e. in design/application); skills; price.</i>	A.5. Architecture Design
	A.6. Application Design
	B.1. Design and development
	B.2. System integration
	B.3. Testing
2.4 Future positioning: Market trends and how they will change their strategy or approach to the market as a result.	B.4. Solution Deployment
	E.1. Forecast development
	E.5. Process improvement
2.5 Description of main marketing channels: (<i>e.g. advertising, web, exhibitions & fairs, business networks, etc</i>)	E.7. Business change management
	E.4. Relationship management
3 Innovation and Research	Competence to be checked

1 Company Overview	Competence to be checked
3.1. Nature of 'technology watch' activities. <i>(Potential sources include: conferences & seminars; vendor partner programmes; in-house seminars; one-to-one client interactions; technical user forums & focus groups; feedback from distributors)</i>	A.7. Technology Watching
4 Business Environment and Business Competences	Competence to be checked
4.1 Business model and Business processes	A.3. Business Plan Development A.8. Sustainable development
4.2 Human resources: In context of the above include discussion of aspects such as:	D.9. Personnel development
4.3 Approach to training and personal development (inc. job rotation, percentage of HR turnover)	D.3. Education and training