

Workshop IT Star 2015

e-CFplus System to support ICT Professional Portfolio Management

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AICA

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**e-CFplus
System**

agenda

- 1. AICA experience to build up an e-Cfplus System to support ICT Professional Portfolio Management**
- 2. The results of an e-Cfplus System application**
 - For the individual professional and manager
 - For the Enterprise / Public Administration (CIO and/or CHRM)



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**e-CFplus
System**

**How to build up a specialized people
management system based on a
public competence framework?**

Italy's new norms and AICA's experience

- ❑ Lex 13/13 established the National Certification System
- ❑ UNI published the Norm 11506 in September 2013 based on e-CF
- ❑ AICA's and CEPIS's EUCIP experience inspired the adoption of e-CF as a basic framework for ICT Professional Portfolio Management
 - Low level of competence granularity: sufficient for personal orientation in the labour market, with e-CF
 - High level of competence granularity: fit the needs of organizations to manage resources
- ❑ FPM (*) research supply following recommendations
 - Personalization of Portfolio Profiles
 - Alignment between competence framework and management system
 - Importance of the System Set up to apply correctly the e-Cf*plus* system
 - Emerging Trend of digital competence innovation
- ❑ AICA's decided to design and realized a new e-CF*plus* System, e-CF compliant, with an updated offering to support competences and profiles management system, including assessment tools and certifications accreditation

(*)FPM-Fondazione Politecnico di Milano



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Sviluppo
Professionale e
Formazione ICT

e-CFplus

Sviluppare le competenze per creare vantaggio competitivo

e-CFplus, basato sullo standard European e-Competence Framework, è la soluzione per sviluppare le competenze digitali.

Aziende e professionisti trovano in e-CFplus un linguaggio comune per definire competenze ed esperienze professionali, una struttura condivisa su cui far crescere capacità individuali e vantaggio competitivo dell'organizzazione.

Utilizzando e-CFplus aziende aperte al mondo globalizzato possono sviluppare la professionalità dei loro team informatici e garantire la coerenza tra competenze digitali ed obiettivi aziendali.

e-CFplus System

Objectives

Specify an ICT enriched competence and profiles portfolio to satisfy following requirements

- Compliancy with Italian Technical UNI Norm 11506, e-CF framework and CWA 16458 on European Professional Profiles
- Sustain the convergens of schools and universities towards a competence and profile system accomplishing ICT discipline and labour market requirements (eCF compliant with EQF)
- Allow to implement and deploy services to manage those competencies and profiles including their certification

e-Cfplus in detail

European e-Competence Framework (e-CF) (*) is a structured system of skills that describes high-level knowledge and skills required in the context of ICT processes of an organization. It can be used by all types of companies and is supported by the European Union. In Italy is also supported by the Italian Government.

Based on the e-CF skills, the CEN has defined 23 “European ICT Professional Profiles” which outline some typical ICT roles in terms of mission, deliverables, key activities and KPI.

e-CFplus starts from the e-CF framework to detail in operational terms the professional digital skills, and offers tools to evaluate and develop them.

e-CFplus adds the value of detailed and structured knowledge and operational skills, provides well known methods and web tools to manage the assets of business skills in a simple and effective way. e-CFplus can also adapt and customize the entire system to the specific characteristics of the organization.

e-CF covers the entire field of managerial and technical ICT skills through brief descriptions of 40 skills, divided into several levels (2 to 4) according to a scale of 5 “qualifications” compatible with the European Qualification Framework (EQF). Each competence is accompanied by some examples of knowledge and skills that delineate their content.

e-CFplus enriches the 40 e-CF skills with more than 2,200 building blocks grouped into 157 homogeneous sets of knowledge items and skills; these elementary components enrich the 23 CEN profiles, that can be defined by each organization, with the possible methodological support of AICA

e-CFplus is a modular, open and scalable system that defines the skills of an individual, a business unit or corporate department, an entire organization.

(*)

Focus on the digital area

e-CF*plus* was conceived, written and reviewed by well-experienced ICT professionals and managers to ensure a vision that is complete, accurate and consistent with the best practices in the industry.

It capitalizes on the experience gained with EUCIP by the Council of European Professional Informatics Societies. It is aligned with CEPIS' and AICA professional certifications, as well as with other relevant frameworks such as ITIL® PMBOK® Guide and AgID Guidelines.

e-CFplus can be used in any organization

e-CF*plus* helps professionals understand their position in an organization, see where they can grow, and what they need to advance in their careers.

For organizations, e-CF*plus* helps ICT managers and Human Resources to identify and clearly define the professional development of their employees, and to plan effective training and development activities.

Enriched Competence e-CF_{plus}: D7- Sales Management + (example)

Dimension 2	D.7. Sales Management				
e-competence: Title + generic description	Drives the achievement of sales results through the establishment of a sales strategy. Demonstrates the added value of the organisations products and services to new or existing customers and prospects. Establishes a sales support procedure providing efficient response to sales enquiries, consistent with company strategy and policy. Establishes a systematic approach to the entire sales process, including understanding customer needs, forecasting, prospect evaluation, negotiation tactics and sales closure.				
Dimension 3	Level 1	Level 2	Level 3	Level 4	Level 5
e-Competence proficiency levels e-1 to e-5, related to EQF levels 3 to 8	--	--	Contributes to the sales process by effectively presenting products or services to customers.	Assesses and estimates appropriate sales strategies to deliver company results. Decides and allocates annual sales targets and adjusts incentives to meet market conditions.	Assumes ultimate responsibility for the sales performance of the organisation. Authorises resource allocation, prioritises product and service promotions, advises board directors of sales performance.
Dimension 4	K1 customer organisation (needs, budget allocation and decision makers) K2 company specific processes (sales, ITIL, etc.) K3 market trends and own service offering portfolio K4 legal, financial and contractual rules K5 project management procedures K6 current market imperatives e.g. risks, changes, innovation				
Knowledge examples <i>Knows/ aware of/ familiar with</i>					
Skills examples <i>Is able to</i>	S1 develop strong co-operation between customers and own organisation S2 keep abreast of market news e.g. risks, changes, innovations and communicate to internal business units, to improve service and product portfolio S3 react proactively to customer business changes and communicate them internally S4 generate sustainable customer relationships S5 analyse sales performance to build forecasts and develop a tactical sales plan				

Tipo	Dimensione 4
K	Market and technology trends
K	Market and customer needs
K	Company's product and services portfolio and the match of it with customer's needs
K	Legal, financial, contractual rules and related company's policies
K	Current market imperatives (e.g. risks, business changes, innovation)
S	Coordinate the development and get company's approval of the Sales and Marketing Plan
S	Outline and control the application of a systematic sales process integrated with the bid management process
S	Define the sales and sales support organization
S	Define the company's sales budget and assign targets to sales organization
S	Define the incentive plan
S	Allocate sales resources and promotional costs
S	Monitor sales results and approve forecast
S	Keep abreast of market news (e.g. risks, business changes, innovations) and communicate to internal business units, to improve service and product portfolio
K	Impact on sales processes of different jurisdictions and tax systems, including specific laws on contracts, IT suppliers and labour regulations wherever applicable.
K	Basic marketing principles and methodologies
K	Product/service lifecycle models
S	Apply business-to-business marketing and sales strategies for IT products and services to different market sectors (e.g. construction industry, manufacturing financial services)
S	Promote collection of customer feedback using tools like social media, online surveys.
S	Promote the employing organisation, its IT products and services through a proactive collaboration with the marketing department
S	Contribute to development corporate image, public relation and communication
S	Contribute to market researches and product marketing
S	Contribute to identification of business drivers
S	Contribute to competitive positioning
S	Contribute to development of short and long term objectives
S	Play an active role in defining and deploying marketing campaigns
S	Play an active role in defining prices and discounts and standard quotations
S	Play an active role in defining classification and management of business opportunities
S	Play an active role in elaborating sales analysis, forecasting and resource planning
S	Analyse target markets, also using Business Intelligence tools to classify and evaluate potential targets
S	Analyse competitors, their offering and their strengths and weaknesses
S	Use SWOT analysis
S	Appreciate the value of customer data
S	Manage customers databases and quality specific potential customer relationships



**... 98
Item!**

Enriched Profile e-CFplus: Account Manager + (example)

e-CFplus System

Profile title	ACCOUNT MANAGER (1)		
Summary statement	Senior focal point for client sales and customer satisfaction.		
Mission	Builds business relationships with clients to facilitate the sale of hardware, software, telecommunications or ICT services. Identifies opportunities and manages sourcing and delivery of products to customers. Has responsibility for achieving sales targets and maintaining profitability.		
Deliverables	Accountable	Responsible	Contributor
	<ul style="list-style-type: none"> Sale 	<ul style="list-style-type: none"> Business Relationship 	<ul style="list-style-type: none"> Sales Forecast Technical proposal Production Forecast
Main task/s	<ul style="list-style-type: none"> Maintain overall customer satisfaction with products and/or services Identify opportunities to propose new products or services to client(s) Be the primary contact point for client executive management Deliver value added presentations related to products and services to customer executive management Lead negotiations to establish profitable contracts with client(s) Maintain and enhance business relationships 		
e-competences (from e-CF)	D.5. Sales Proposal Development		Level 4
	D.7. Sales Management		Level 5
	E.1. Forecast Development		Level 3
	E.4. Relationship Management		Level 4
	D.6. Channel Management		Level 4

Profile Title	ACCOUNT MANAGER (1)		
e-competences (from e-CS v.0)-	D.5. Sales Proposal Development	Level 3	Set 1, 2, 3
	D.7. Sales Management	Level 5	Set 1, 2, 5
	E.1. Forecast Development	Level 3	Set 1
	E.4. Relationship Management	Level 4	Set 1
	D.5. Channel Management	Level 4	Set 1, 2
	A.1. IS and Business Strategy Alignment	Level 4	Set 1, 3
	A.3. Business Plan Development	Level 3	Set 1
	E.7. Business Change Management	Level 3	Set 1, 2
	E.9. IS Governance	Level 4	Set 2
	A.7. Technology Trend Monitoring	Level 4	Set 1
	E.2. Project and Portfolio Management	Level 2	Set 1



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e-Cfplus: the tools

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System**

e-CFplus provides well known methods and web tools to manage the assets of individual and business skills in a simple and effective way, allowing you to adapt and customize the entire system to each specific organization.

The main web tools provided to professionals and companies are the **e-Competence Benchmark** and **e-Competence Management**.

e-Competence Benchmark allows individual specialists to assess the level of their e-CF (v.2.0) skills and their position compared to 23 European ICT professional profiles defined by CEN.

It is a simple and free system that provides a synthetic, indicative and standardized vision of individual skills.

www.cepis.org/ecompetencebenchmark

e-Competence Management is a system designed for enterprise use that provides a vision that is analytical and concise, accurate and customizable of the individual and organization skills; in particular it provides:

- standard individual reports;
- customized reports for individuals, departments, organizations, professional families,...;
- integration with leading systems of human resources management;
- analysis of individual and organizational gaps related to the 23 CEN profiles, the 21 EUCIP profiles, and the profiles and functions defined by the organization;
- personalization of the standard model skills (elimination of irrelevant skills, adding specific business/sector expertise, ...)
- methodological and operational support.



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**e-CFplus
System**

6 e-CFplus profiles families to be managed in the ICT professional system proposed by AICA

**e-CFplus profiles are e-CF compliant
(generation 3) based on same
competencies, but enriched with 157
set of 2.200 knowledge and skills
upon AICA experience**

□MANAGE-business management

- Business information manager +
- Chief Information Officer +
- ICT operation manager +

□PLAN-design

- Business analyst +
- Systema analyst +
- Enterprise architect +
- System architect +

□RUN-service&operations

- Data Base administrator +
- Service desk agent +
- System administrator +
- Network specialist +
- Technical specialist +

□MANAGE-technical management

- Quality assurance manager +
- ICT Security manager +
- ICT Project manager +
- Service manager +

□BUILD-development

- Developer +
- Digital media specialist +
- Test specialist +

□ENABLE-support

- ICT Consultant +
- Account Manager +
- ICT Trainer +
- ICT Security specialist +



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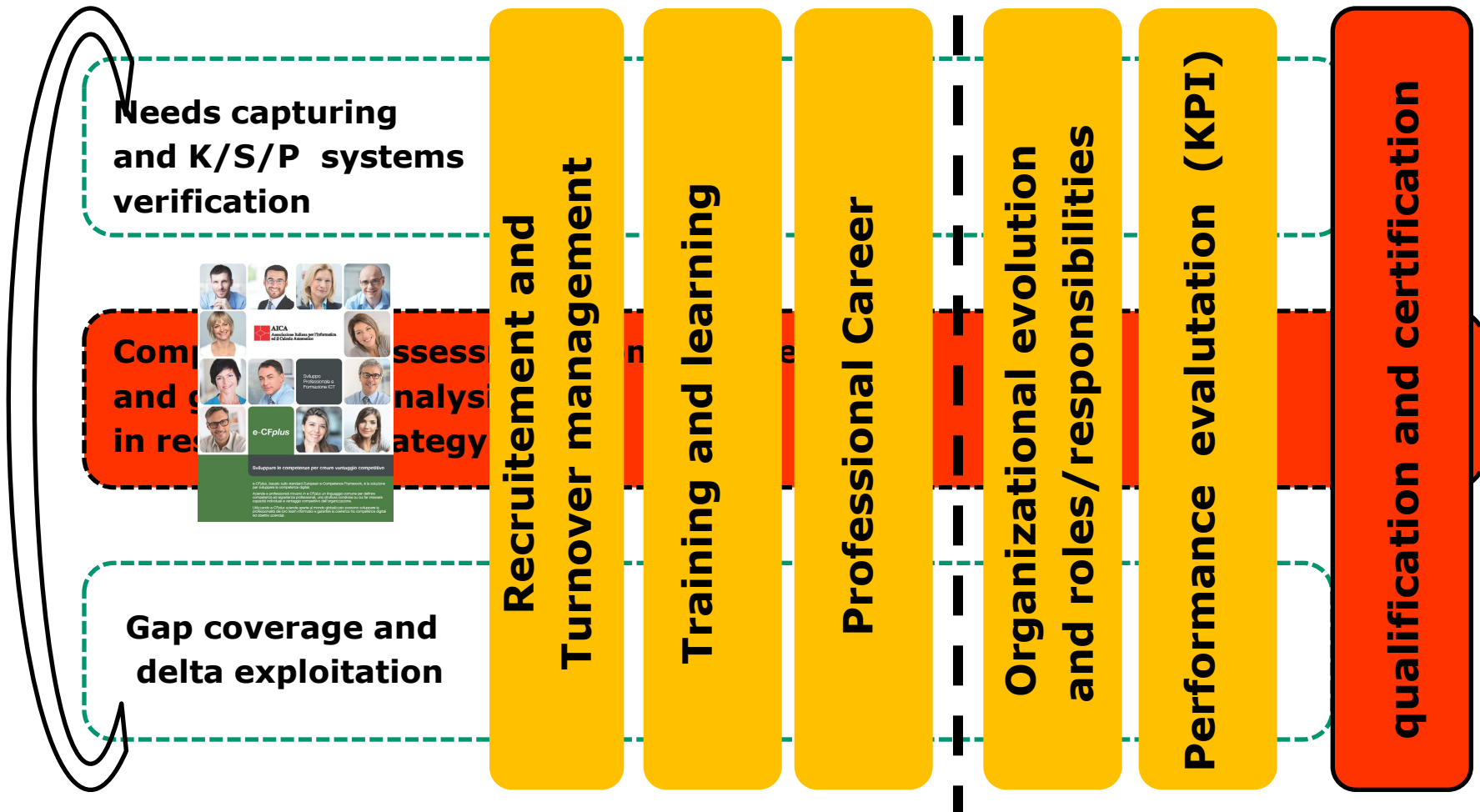
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The e-CF based reference model for ICT Human Resource Management

Focus on persons | Focus on IT org.



Assessment Tool – Personal identification

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e-Competence
Management



LOGIN

Insert your username and password

Enter

[Forgot your password?](#)

[► Download user manual](#)

Assessment Tool – Questionnaire on Competencies

Welcome riccardo squizzato [LOGOUT](#)

[► Change your password](#)

The questionnaire

To complete the questionnaire, please indicate if you currently have or not the competence, regardless of how you acquired the competence and without taking into account what is required by your current role or any job profile to which you aspire.

Evaluation Criteria:

- Yes = application of the competence through direct experience that is still relevant (i.e. time necessary to resume experience is less than 1 month)
- No = no application of the competence or its application is not relevant any more

Once you have answered all questions, click the "Save" button followed by "View personal results" button.

[Download user manual](#) [Modify personal information](#) [Export answers to PDF](#) [View personal results](#) [Save](#)

A-Plan

A.1. IS and Business Strategy Alignment Anticipates long term business requirements, influences improvement of organisational process efficiency and effectiveness. Determines the IS model and the enterprise architecture in line with the organisation's policy and ensures a secure environment. Makes strategic IS policy decisions for the enterprise, including sourcing strategies. ----- Business Analysis and Modelling, ICT Strategic Planning, ICT Strategic Choices	YES *	NO
A.2. Service Level Management Defines, validates and makes applicable service level agreements (SLAs) and underpinning contracts for services offered. Negotiates service performance levels taking into account the needs and capacity of stakeholders and business.	YES *	NO
A.3. Business Plan Development Addresses the design and structure of a business or product plan including the identification of alternative approaches as well as return on investment propositions. Considers the possible and applicable sourcing models. Presents cost benefit analysis and reasoned arguments in support of the selected strategy. Ensures compliance with business and technology strategies. Communicates and sells business plan to relevant stakeholders and addresses political, financial, and organisational interests. ----- Business Case Analysis, Business Plan Economics, Business Plan Communication	YES	NO *
A.4. Product / Service Planning Analyses and defines current and target status. Estimates cost effectiveness, points of risk, opportunities, strengths and weaknesses, with a critical approach. Creates structured plans; establishes time scales and milestones, ensuring optimisation of activities and resources. Manages change requests. Defines delivery quantity and provides an overview of additional documentation requirements. Specifies correct handling of products, including legal issues, in accordance with current regulations.	YES *	NO
A.5. Architecture Design Specifies, refines, updates and makes available a formal approach to implement solutions, necessary to develop and operate the IS architecture. Identifies change requirements and the components involved: hardware, software, applications, processes, information and technology platform. Takes into account interoperability, scalability, usability and security. Maintains alignment between business evolution and technology developments. ----- Systems Architecture Definition, Enterprise Applications Architecture, Industrial Automation Architecture, Distributed Computing Architecture	YES	NO *

Assessment Tool – Questionnaire on Proficiency levels

A.1. IS and Business Strategy Alignment

Anticipates long term business requirements, influences improvement of organisational process efficiency and effectiveness.
Determines the IS model and the enterprise architecture in line with the organisation's policy and ensures a secure environment.
Makes strategic IS policy decisions for the enterprise, including sourcing strategies.

YES ☒

NO ☐

Business Analysis and Modelling, ICT Strategic Planning, ICT Strategic Choices

Please select ALL still relevant proficiency levels (select one or more as required)

Level 4

Provides leadership for the construction and implementation of long term innovative IS solutions.



Level 5

Provides IS strategic leadership to reach consensus and commitment from the management team of the enterprise.



OK

A.2. Service Level Management

Defines, validates and makes applicable service level agreements (SLAs) and underpinning contracts for services offered.
Negotiates service performance levels taking into account the needs and capacity of stakeholders and business.

YES ☒

NO ☐

A.3. Business Plan Development

Addresses the design and structure of a business or product plan including the identification of alternative approaches as well as return on investment propositions. Considers the possible and applicable sourcing models. Presents cost benefit analysis and reasoned arguments in support of the selected strategy. Ensures compliance with business and technology strategies.
Communicates and sells business plan to relevant stakeholders and addresses political, financial, and organisational interests.

YES ☐

NO ☒

Business Case Analysis, Business Plan Economics, Business Plan Communication

Assessment Tool – Personal Results

Welcome riccardo squizzato

LOGOUT

[Back to questionnaire](#)

Personal results

[Export to PDF](#)

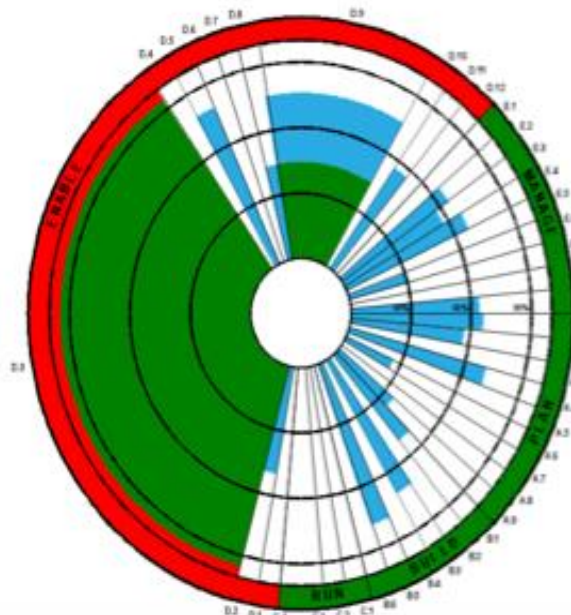
The "radar" below shows you the profile closest to your declared competences (i.e. your "proximity profile").

A list of related competences is presented below the radar, showing competences to be improved and competences you have in excess of the required level for this profile.

Report for the profile "ICT TRAINER" for riccardo squizzato

Each professional profile has different weights assigned to the technical competences needed by an ICT professional. The proximity index is calculated by considering the coverage of the declared competences with respect to the profile requirements; it does not consider competences that are held in excess of the required levels.

All the profile competences are clustered in line with the 5 main e-CF categories: PLAN, BUILD, RUN, ENABLE, MANAGE.



The list below shows how close your results are to a complete range of professional profiles. To view a detailed version of any of these results, click on the small radar icon beside the profile title.

View report	Your proximity to this profile	View profile
ICT TRAINER	91.26 %	
PROJECT MANAGER	75.88 %	
CHIEF INFORMATION OFFICER (CIO)	53.85 %	
ICT OPERATIONS MANAGER	50.85 %	
ICT CONSULTANT	46.38 %	
QUALITY ASSURANCE MANAGER	40.17 %	
BUSINESS ANALYST	38.85 %	
DEVELOPER	37.49 %	
TEST SPECIALIST	33.72 %	
BUSINESS INFORMATION MANAGER	31.74 %	
DIGITAL MEDIA SPECIALIST	27.69 %	
ACCOUNT MANAGER	24.81 %	
ENTERPRISE ARCHITECT	23.83 %	

Assessment Tool – Personal Results

The profile "**PROJECT MANAGER**" with a proximity index of **75.88%**.

The graphic shows, in the spaces between the internal and the external circles, the level of competence possessed for the represented professional profile.

Each sector width is proportional to the relevance of the related competence within the selected profile.

**GREEN
AREAS**

Competences required by the represented profile.

**RED
AREAS**

Competences required by the represented profile where you have a deficiency.

**BLUE
AREAS**

Competences that you have that exceed those required by the represented profile.

A red colour in the external ring indicates that significant competence deficiencies exist in that area for the represented profile.

Main competences and related proficiency levels to develop further to better match with the profile "**PROJECT MANAGER**" (only relevant deficiencies are listed):

A.4. Product / Service Planning

Set A.4a – Product/Service Planning

E.2. Project and Portfolio Management

Set E.2b – Project Integration Management

Set E.2c – Project Scope Management

Set E.2f – Project Quality Management

Set E.2i – Project Risk Management

Set E.2j – Project Procurement Management

Set E.2l – Project and Portfolio Management Tools

E.3. Risk Management

Set E.3b – Risk Assessment

Set E.3c – Risk Management and Monitoring

E.7. Business Change Management

Lev 3 – Evaluates change requirements and exploits specialist skills to identify possible methods and standards that can be deployed.

Set E.7b – Business Change Deployment

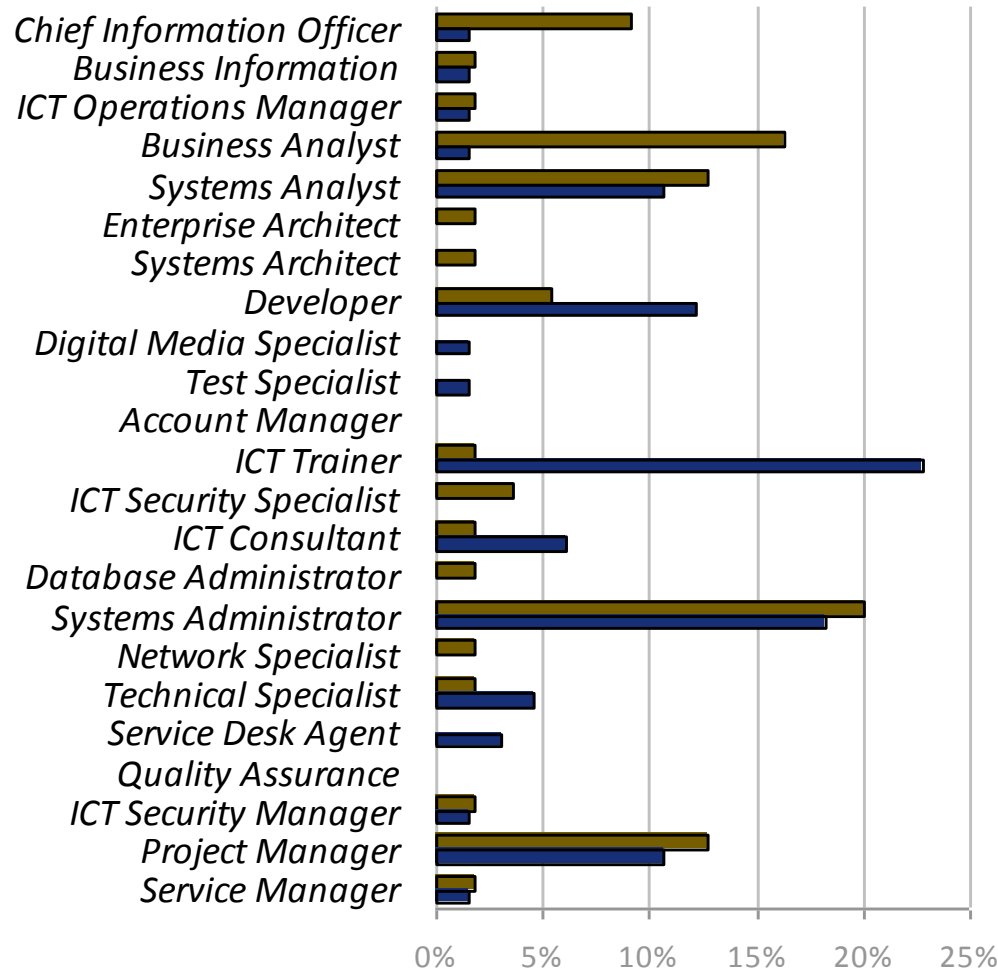


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Comparison among declared profiles and proximity profiles



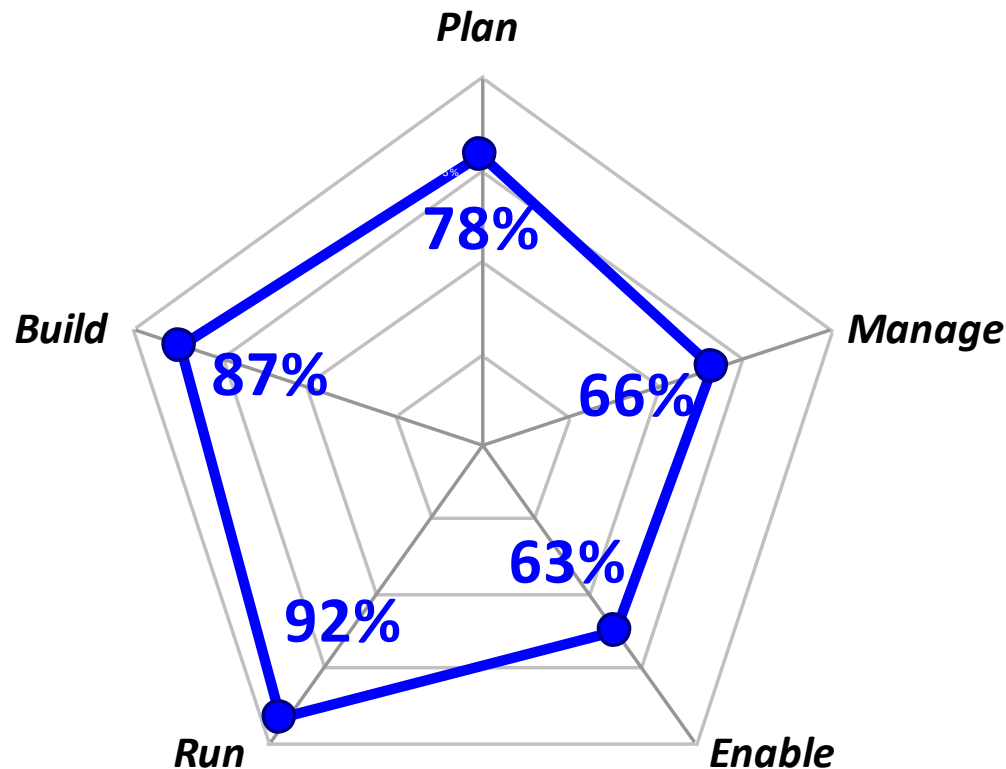


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Total Competence Proficiency Index of Professional Portfolio



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Competence gaps per single resocurce

Profilo: Chief Information Officer		Livello Competenze Richieste	Livello Competenze Disponibili								Gap							
			Adele	Enrico	Giovanna	Mario	Paola	Roberto	Teresa	Vito	Adele	Enrico	Giovanna	Mario	Paola	Roberto	Teresa	Vito
PLAN	A01 Allineamento strategie SI e di business	5	1	0	4	0	0	5	3	4	4	5	1	5	5	0	2	1
	A03 Sviluppo del business plan	5	1	0	0	4	0	1	3	4	4	5	5	1	5	4	2	1
MANAGE	E02 Gestione del progetto e del portfolio	5	5	5	0	2	0	0	0	0	0	0	5	3	5	5	5	5
	E04 Gestione delle relazioni	4	0	3	2	2	0	4	0	4	4	1	2	2	4	0	4	0
	E09 IS governance	5	0	4	4	0	5	0	0	0	5	1	1	5	0	5	5	5

Legenda

- x Numero di livelli posseduti eccedenti quello richiesto [con x=1,2,...]
- 0 Coincidenza fra livello richiesto e posseduto
- 1 Gap di un livello rispetto a quello richiesto
- x Gap di x livelli rispetto a quello richiesto [con x=2,3,...]

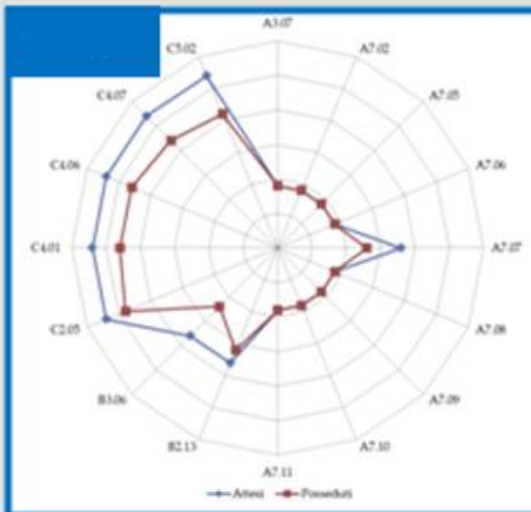


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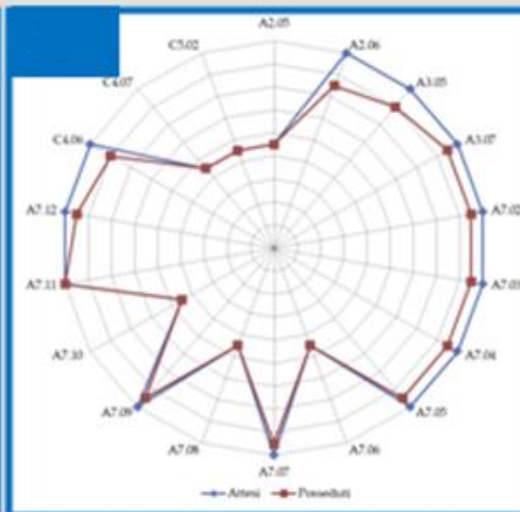
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Results examples for management (CIO & CHRM)



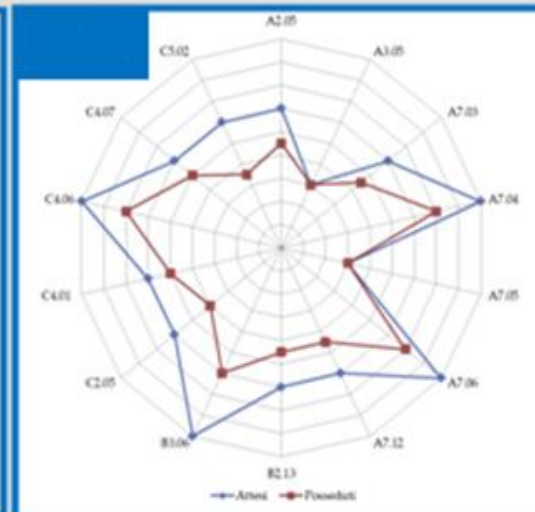
Resources requesting low training coverage or project experience:

A7.07 Risk analysis and management
B2.13 Database Security
B3.06 Secure programming
C2.05 Operating Systems Security
C4.01 Network Security
C4.06 Network Attack Prevention
C4.07 Web Application Security
C5.02 Wireless Security



Resources requesting more in deep training :

A2.06 Key IT Process Control
A3.05 IT Security Economics and
Business Strategies
C4.06 Network Attack Prevention



Two resources needs a complete training path:

A2.05 Business Continuity Planning
C2.05 Operating Systems Security
C5.02 Wireless Security



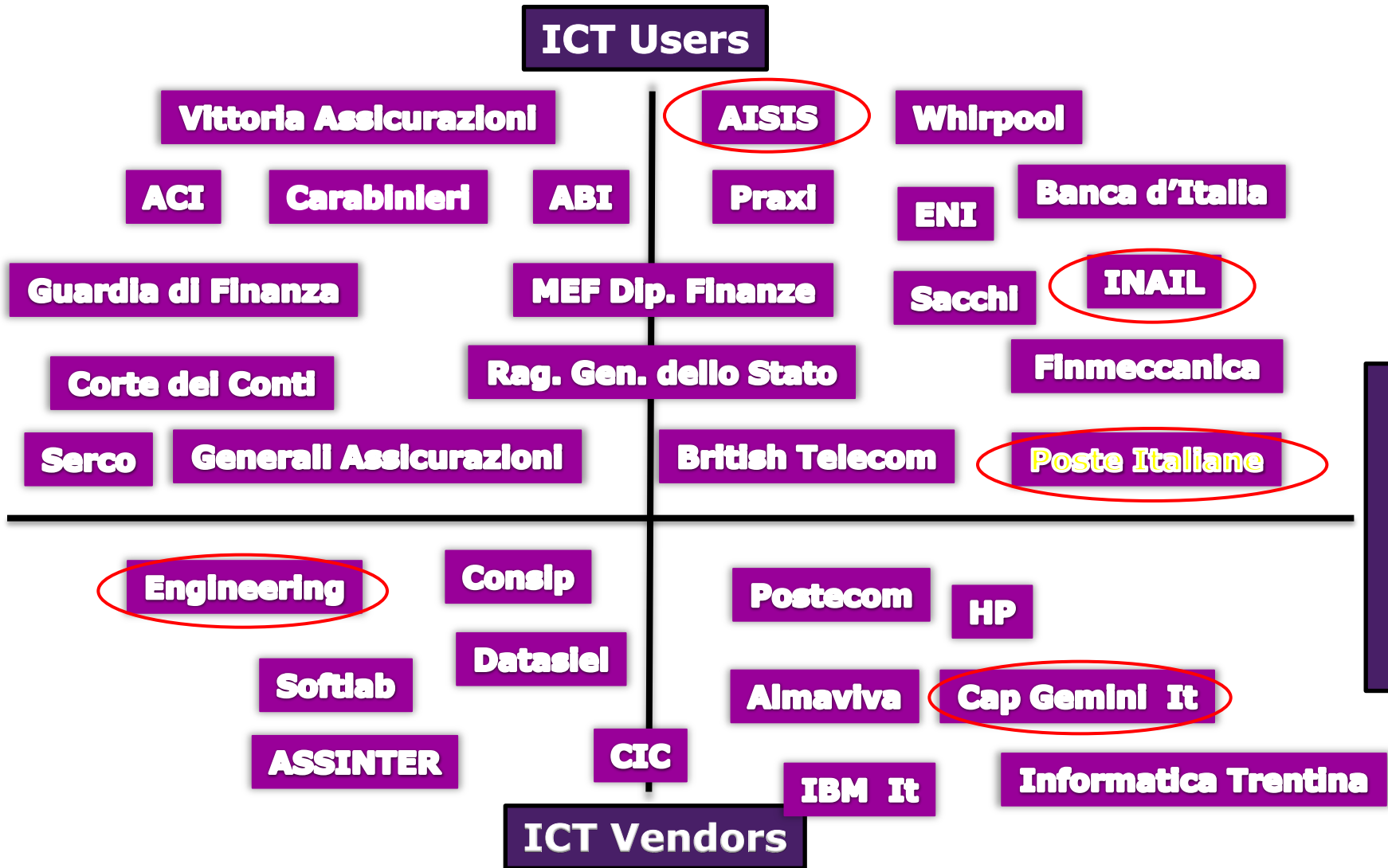
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EUCIP and e-CFplus Italian best practices

**e-CFplus
System**

Competence Development

governance





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Thanks for your attention

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