European ICT Professional Role Profiles

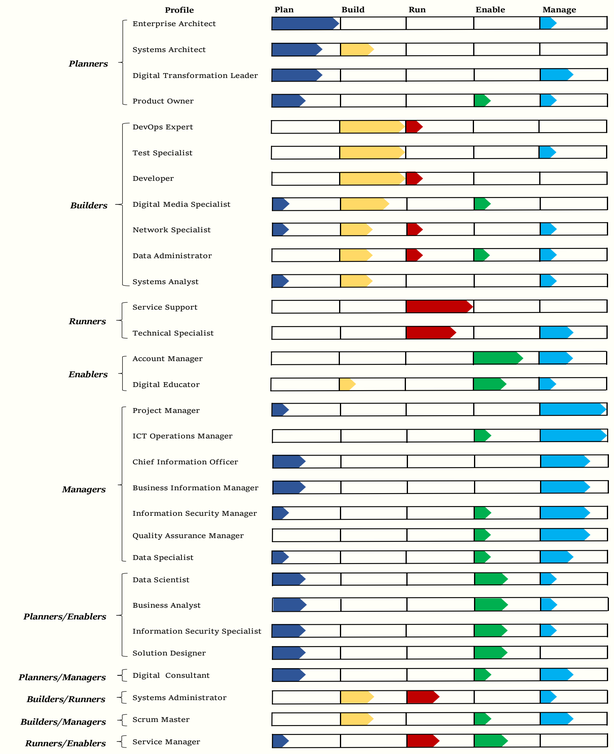
The European e-Competence Framework (e-CF) is a reference framework of Information and Communication Technology (ICT) competencies. It is meant to be used by ICT user and supply companies, ICT practitioners, managers and human resources departments, the public sector, and educational and social partners across Europe. The current version of e-CF (version 3.0) was published in 2013 and is structured in four dimensions: five e-competence areas, 40 reference e-Competencies, proficiency levels to classify e-Competencies, and samples of knowledge and skills related to the e-Competencies. In 2016, the e-CF became a European standard and was published officially as the European Norm EN 16234-1. The European ICT Professional Role Profiles is an additional resource to the e-CF, which characterizes 30 ICT professional role profiles according to the Framework. This poster provides an integrated view of those professional role profiles by comparing them according to three perspectives: proficiency level, process involvement, and competency affinity.

Proficiency Tree

The e-Competencies that make up each professional role profile have associated levels of required proficiency. There are five increasing proficiency levels in the e-CF (e1 to e5). In order to compare the role profiles, it was assumed that the same level of proficiency is equivalent among different e-Competencies. The comparison took into account the number of e-Competencies that make up each role profile. For each role profile p the proficiency index (pi_p) was computed: $pi_p = \sum \frac{ncl_i \times wl_i}{\max(ncp)} \times ncp_p$, where ncl_i is the number of e-Competencies at proficiency level i, wl_i is the weight of proficiency level i (e1 = 1 to e5 = 5), ncp is the number of e-Competencies composing each role profile, and ncp_p is the number of competencies that make up the role profile. The tree below shows the resulting ranking of proficiency (the horizontal positioning of role profiles has no meaning).

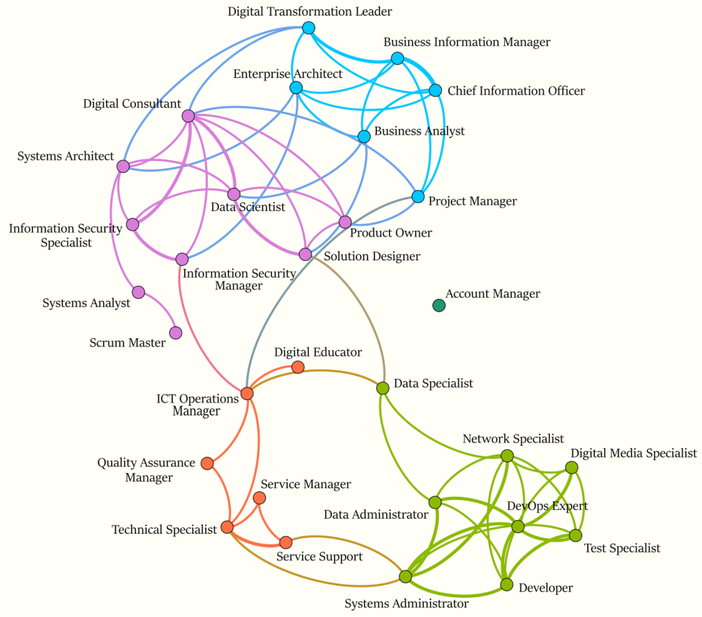
Process Matrix

The 40 reference e-Competencies are organized into five e-competence areas. These areas derive from the ICT business processes Plan, Build, Run, Enable, and Manage. The e-Competencies that feature each professional role profile spread across those five areas. Although there are no two role profiles with the same distribution, the role profiles may be grouped taking into account the relevance of each of the five e-competence areas in a scale from 0 (no involvement) to 4 (strong involvement). This allows a better understanding of the nature of each professional role profile in terms of involvement in those five processes. For each professional role profile the number of e-Competencies per area was counted. The matrix bellow shows the resulting clusters. There are five clusters of role profiles that display a focus on each of the five areas. There are also five clusters of role profiles whose work equally focuses on two main areas.



Affinity Graph

Each of the 30 ICT professional role profiles is characterized by its own summary statement, mission, deliverables, main tasks, KPI (Key Performance Indicator) area, and e-Competencies with associated proficiency levels. Focusing the attention on the e-Competencies that make up the role profiles, it is possible to conclude that some role profiles share certain e-Competencies. This suggests that, although each role profile has its own distinctive set of e-Competencies, there are role profiles that show a degree of affinity in what concerns the competencies that shape the role profiles. In order to get a better understanding of this proximity, each professional role profile was crossed with the rest, and the common competencies for each pair were noted. Then, all pairs of role profiles that shared more than one e-Competency (the average number of e-Competencies for the 30 role profiles is 4.8, with a standard deviation of 0.4, a minimum of 4, and a maximum of 5) were analyzed. The graph below shows the resulting relationships. The thickness of the edges reflects the level of affinity between pairs of professional role profiles. The graph conveys the existence of five communities of competency (indicated by nodes' colors – blue, magenta, orange, green, and olive), one with a singular member (Account Manager) and four composed of several role profiles.



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