

Focal SCAN

Self-assessment of skills in line with professional requirements



PROJECT

aim

The Focal Scan project aims at developing a tool for self-assessment of skills in light of the requirements of a given profession. This innovation has a high level of added value insofar as the solution is not only more reliable than the existing systems, but it is also cheaper and easier to use. It has multiple applications. The business sector has already confirmed its clear interest.

Project and methodology

For several years already, a spin-off of the Luxembourg Institute of Science and Technology (LIST), OAT (Open Assessment Technology SA), has sold an e-testing open-source platform called TAO®. Developed by CRP Henri Tudor (today part of LIST), in collaboration with the University of Luxembourg, TAO® is a skills assessment tool which has, in particular, served as a basis for electronic testing in the framework of the PISA (Programme for International Student Assessment) study, which aims to evaluate the skills of students within the OECD. TAO® is currently used across the world.

The Focal Scan project is based on this platform to develop new applications, which are related to skills assessment, but this time for the business sector and labour market. This project is led by a multi-disciplinary team comprising IT experts and psychologists, and also benefiting from psychology research undertaken by Dr Alexandre Baudet, a researcher within the ITIS department (IT for Innovative Services) at LIST, and related to the approval of a computer-assisted self-assessment tool for skills.

The overall aim is to develop a tool which will allow each individual to assess their skills in line with professional requirements, in an autonomous manner, on the basis of a website. "Various assessment techniques already exist, such as personality tests, for instance. However, these are generic and do not fully cover technical and behavioural skills specific to professions. On the other hand, creation of bespoke tests is generally a costly process, all the more so since creating a valid questionnaire takes a great deal of time. One of the possible solutions consists of creating customised self-assessment questionnaires, which are less costly to produce. However, traditional self-assessments often have the weakness of not being very accurate, with the majority of us tending to overestimate ourselves (more rarely under-estimating ourselves) and our skills, which constitutes a serious bias for the results. Out of the objective of producing non generic tests, namely closer to the profession actually undertaken by employees, but in a less costly, quicker and more precise manner, we have developed and scientifically approved a new self-assessment system. Our system also has the interest of being precisely adaptable to realities of the position held since it is developed on the basis of a professional reference which may be inherent to the company. It enables assessment of knowledge, expertise and know-how or, more widely, technical and behavioural skills", indicates Thibaud Latour, manager of the "Decisional Knowledge Dynamics" unit coordinating this project within the ITIS department.

In practice, self-assessment takes an average of ten minutes. The first tests undertaken with engineers and soldiers in the Luxembourg Army showed that results are sometimes up to three times more accurate than with the existing self-assessment tools. Developed on the basis of specific adaptive algorithms (in other words, the system is adapted to user responses), the prototype is already in operation. Testing now needs to be stepped up across various professions, in order to reinforce scientific validation of results collected in previous projects.

Benefits

"Various companies have already expressed an interest. The tool will be able to be used in companies, at the time of recruitment, in the framework of annual assessments, or even in defining a personalised training plan. In another register, it may additionally be used by services providing guidance to job-seekers", explains Thibaud Latour. Concerning the potential sale of the tool, all options are, for the time being, possible, from sale of the licence to creation of a new spin-off by the LIST.

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