Competence Development in IT Projects through Education and Training Programmes

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Abstract

The paper refers to the quality of training and education on IT project management. A survey was made and the main results are presented. 81 % of the responses came from China. The rest were professionals of different EU nationalities. The percentage of Project Managers who answered the questions is rather low – 8%. In the "Others" category, we have software developers, financial managers and professors, who are involved in both training on project management, but also as team members or team managers in IT and research projects, thus ensuring a balanced overview of both theory and practical issues.

Keywords: *quality, IT Project management, training and education, project manager, competence*

JEL classification: D83, M15, M53

Introduction

Worldwide, project management has become widely known and utilized in almost any domain which could be project-based. And IT is a very good example. IT project management isn't about quick fixes - the key to success here, as everywhere else, lies in preparation (Bodea, 2009). Sometimes it's better to throw out the manuals and checklists and start a fresh, focusing on the basics that have stood the test of time. Everyone looks for a quick fix, an easy to-do guide, a no-brainer shortcut to getting the job done. And where does that leave IT project managers?

A good IT project manager knows the project management principles, methods and techniques and applies them, always looking for the best outcome of a situation. Some don't even need training to do that, it's in their blood to "get by". Some, on the other hand, need tons of training and never really quite figure out what's the deal about this project management thing.

While training is important for developing a number of competences, the practice makes perfect in all fields, not necessarily in project management alone (Turner 2004). However, in IT project management, every little thing we do, or don't do, has an effect, which cannot always be measured and quantified, if the person is only acting on instinct. IT project managers make decisions which affect not only a project, but a carefully built network of contacts and a carefully promoted image. There is also a great responsibility in terms of managing people and connections, communicating, and sometimes manipulating situations so that the project benefits from their outcomes (Gareis, 2007).

Which leads us to the following questions: Where does the quality of IT project management education and training lie? How can we define IT project management training and education quality? Where should we establish boundaries so as to achieve effective and efficient and fit-for-purpose project management training? What should we teach, in order to get a ready-to-go IT project manager?.

The Quality of Education and Training on IT Project Management

The main issue addressed by this paper refers to the quality of training and education on IT project management – is it different than the perception of quality of training and education in other fields, if so, where, in what aspects, who should be responsible for it, should it only be addressed as input based – provider, trainer, curriculum, or also output based – trainee, etc (Bodea&Coman&Ciobotar&Lu, 2008a), (Bodea&Coman&Ciobotar&Lu, 2008b).

Training the IT Project Manager - The Roles of Training Providers and Trainers

A training session could aim at developing or improving one of the IT project manager competences. By developing, we mean that the competence is at its basics or is not there at all. By improving, we mean that from the documentation received from a candidate, we can assume that some competence exists and we can build on that.

A training session could refer to one topic, to any number of them combined, or to all of them, thus leading us to a corresponding duration of the training. Although it may seem that we are only approaching technical competences, a balanced percentage of theoretical and practical training, backed up by modern teaching methods, could lead to the improvement of behavioural competences, as well.

The Questionnaire Development

The methodology for the development of the questionnaire was based on the following aims:

1. Development of a questionnaire for assessing the general and specific traits of quality in training on IT project management
2. A focus on the practical aspects of organization and logistics, as part of the training organization
3. Stress on candidate accession / enrolment in a training course / programme
4. Inputs and resources ensured by the training providers
5. Trainers' profiles
6. Minimum requirements of curriculum
7. The training result

While starting backwards sometimes has advantages, such as establishing ground rules on accession to training and setting up a common language, it is quite disadvantageous to the training provider, as the selection process takes time, huma

The final aim of the questionnaire is to show whether there is any way to establish a combination of traditional and modern teaching for the IT project managers-to-be, who do not have the physical time to attend project management traditional courses / programmes, that will be practical enough to offer them a ready-to-go information and that will enable them to provide quality project management to their Clients and that, in the end, will provide them with a certification or a diploma, which is mutually accepted and valuable.

The questionnaire is structured into 2 main parts, split into questions about general aspects of education and training and particular questions related to IT project management education and training.

This is why we should also establish, as a result of the above-mentioned analysis, the key requirements for candidates' admission for IT project management courses, as well as the curriculum for each level and the trainers' competence requirements for each course / group of candidates. These aspects need to be universally accepted and agreed upon, so as to ensure consistency of any project management course.

This selection should assure quality to the training delivery, as everybody speaks the same language and the information exchange will be more focused, although the disadvantages are quite obvious: a lengthy selection process, of both candidates and trainers and customized IT project management curriculum. However, if this process also includes information on the candidates' wish to become certified, then the selection process leads to an intermediate result – training admission and to a final result – certified candidate.

Bearing these in mind, developing a general IT project management curriculum, customized for each level of certification, covering achievement of competences from the list above, and applicable to all types of candidates, can be

developed and disseminated. It will them become the "minimal requirements" for training providers and trainers.

The respondent distribution (figure 1)**:** ***by nationality*** **-** 81 % of the responses came from China. The rest were received in Romania, from a number of professionals of different EU nationalities; ***by profession:*** The percentage of Project Managers who answered the questions is rather low – 8%. The most of the respondents are professors, who are involved in both training on IT project management, but also as team members or team managers in IT and research projects, thus ensuring a balanced overview of both theory and practical issues.

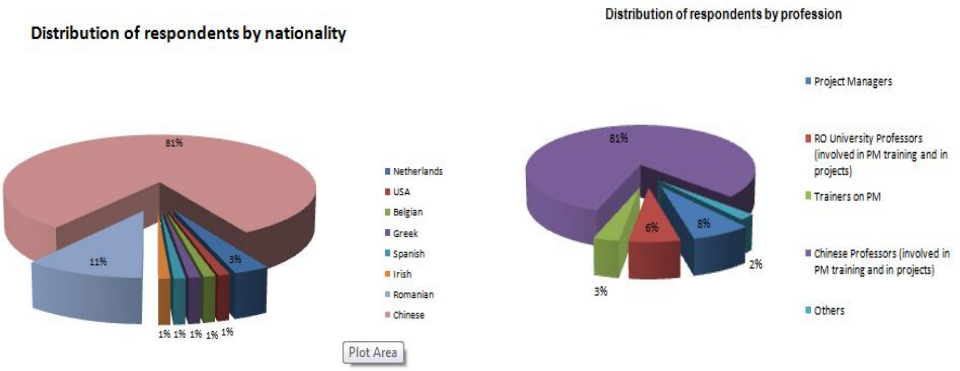

Figure 1

The Survey Results

The following figures present the main findings. As we can see in figure 2, the selected location for training is considered important by most respondents – 41 out of the 96. Only 11 say that location is very important, same goes for two who cannot decide. 13 people stated location is not very important, while 27 consider location is neither important, nor un-important.

55 respondents opt for the higher percentage of face-to-face, traditional training. At the extreme, only 14 people consider that modern online teaching is more useful than traditional methods (figure 3). 24 think an equal split of modern and traditional is useful.

Most respondents opt for the network video (52%) and e-platform – 28%. 7% recommend case studies, while only 1% opts for e-tutoring, during and after course delivery (figure 4).

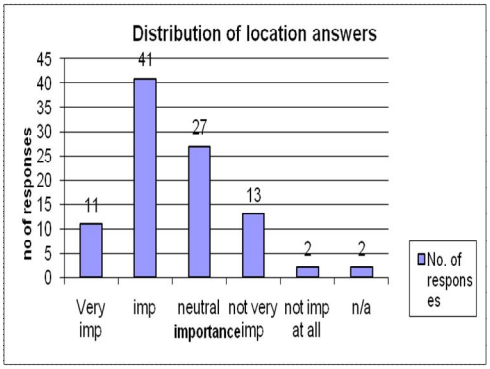

Figure 2

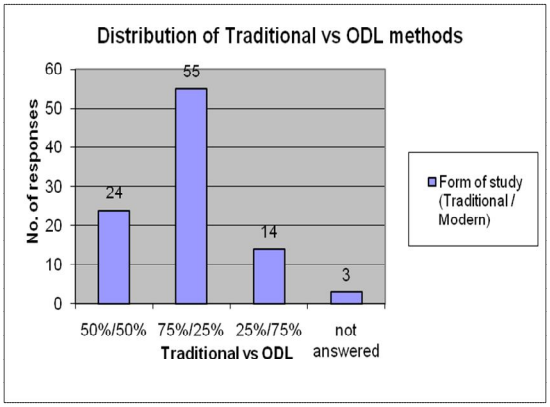

Figure 3

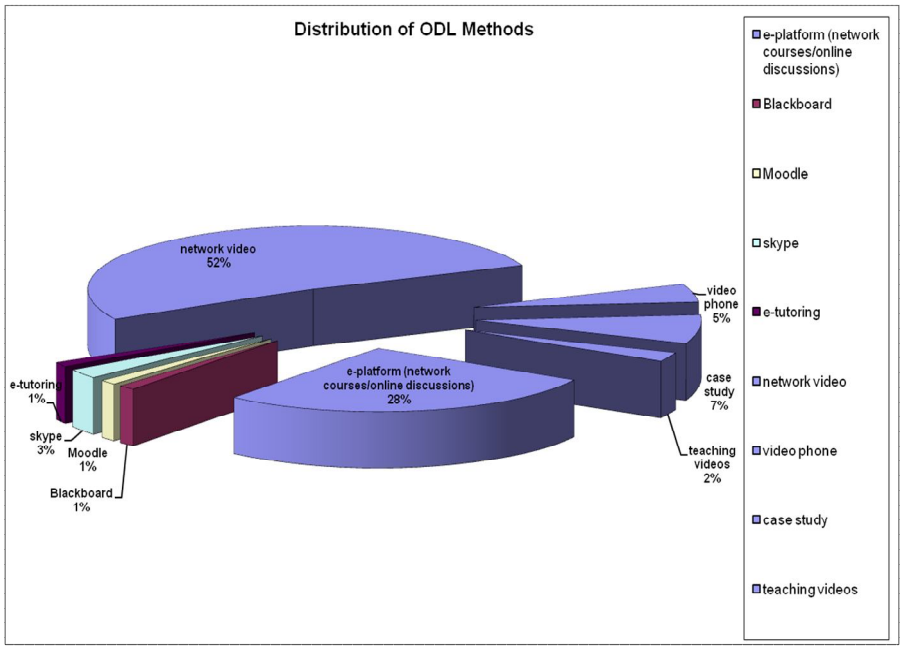

Figure 4

The majority of respondents opt for the outmost importance of accreditation of training providers (national or international). At the other end, 6 respondents do not care at all about this issue. National accreditation is seen as very important by 43 respondents, when compared to international – only 41 (figure 5).

The same trend as above is kept when talking about trainers' accreditation (figure 6). The analysis of the questionnaire shows that the importance of accreditation is mostly stressed for the institution, not for the person, but those who

opted for 1 in the above questions, also opted for 1 or 2, in the trainers' answers, as well.

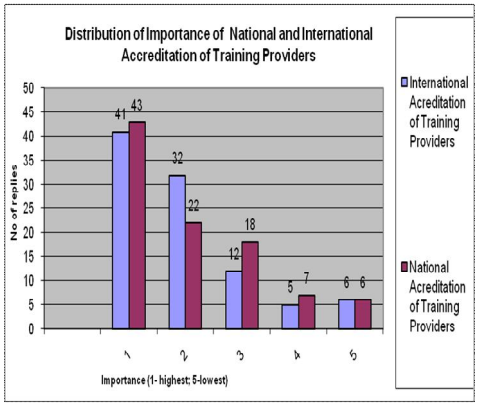

Figure 5

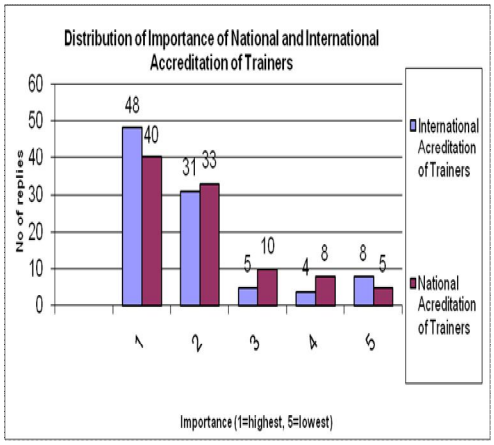

Figure 6

With regard to the characteristics of trainers, 1 person stated language skills, as being important, while 3 others stated pedagogical skills. 81 interviewees state that it is important for trainers to speak from experience, while 70 consider that the technical expertise is also required. 73 say that it would be important that the trainer is certified as Project Manager. PhD is considered important by 28 people.

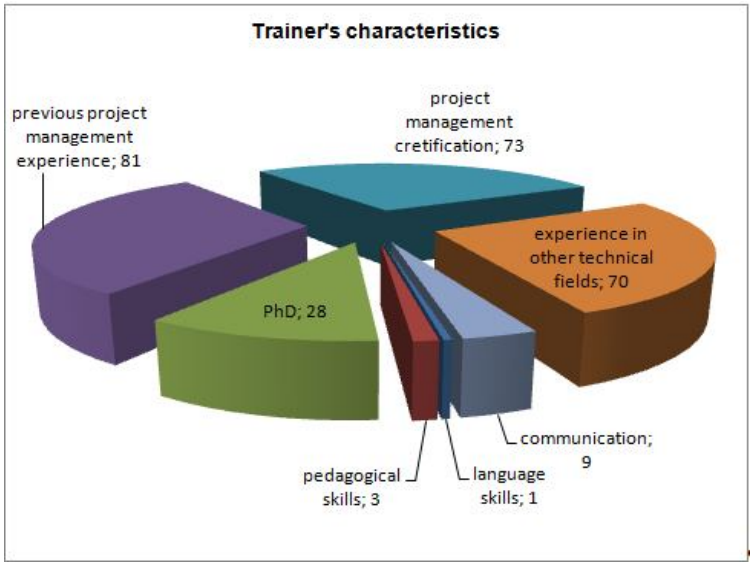

Figure 7

Candidate selection is very important for 18 people, and important for 45. This leads to a majority of 63 respondents who think that selection of candidates is an aspect of quality assurance. 25 are neutral about this aspect, while 5 feel that candidate selection is not important for training quality (figure 8).

Most of the respondents declare themselves in favour of candidate selection. Most important documents required in the candidate file are: CV (very important for 66 respondents), Diplomas, and Employer's references (very important for 39, but completely unimportant for 48), as well as an Application Form (figure 9).

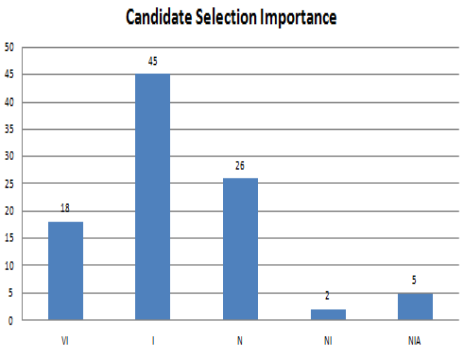

Figure 8

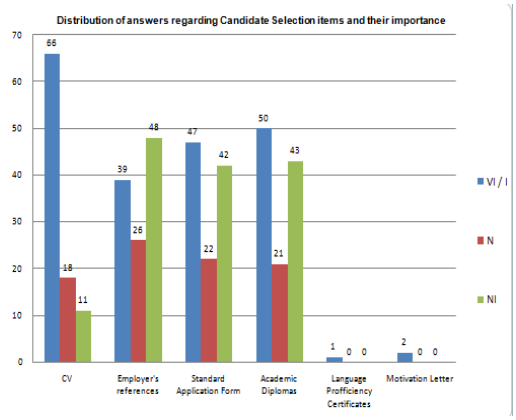

Figure 9

Conclusions

Quality in IT project management education and training depends on:

- Organization and logistics – a good organization and combination of teaching methods adds value to training (assessed through Session Feedback Forms)
- The training need addressed – practical solutions, exercises, case studies (assessed through Session Feedback Forms)
- Trainer's skills – pedagogy, languages, knowledge of the field, experience in the field
- Trainee's commitment and motivation

Training providers should promote a coaching service for a limited period after the training sessions. Alumni's databases and forums are desirable solutions. Training providers are not responsible for the performance of the graduate at the work place. Training impact should be assessed through feedback forms, after a reasonable period from session graduation.

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