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The development and delivery of an industry led project management professional development programme: A case study in project management education and success management

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Abstract

Global changes influence the project environment, client relationships and the behaviour of suppliers. The people managing projects (the project management community of practice) are increasingly important, requiring professional development and training. Project management education is time and resource intensive.

Historically conventional return on investment criteria have not been applied to investment in the areas of education and training. This paper reviews a case study modular distance learning programme: The Project Management Professional Development Programme; providing education in generic project management for a consortium of four international companies across aerospace, infrastructure, oil and gas, nuclear design, construction and information technology sectors. The programme started in May 2000 and has currently circa 200 delegates having graduated 100. It is an academic-industrial collaboration between The University of Manchester (UoM) and Rolls-Royce, AMEC, Goodrich and EDS with some guest organisations participating also. The literature on educational issues, professional development, competence and Benefit Metrics (return on training investment) are reviewed. Particular attention is paid to the management and development of the programme and the project management of project management education. The drivers, development and implementation of a managed learning environment, and blended learning are discussed. This includes issues related to expectation management and the interesting benefits of educating different members of the supply chain represented by the industrial partners.

The linkages between Benefit Metrics, project management competencies and learning outcomes in the context of an industrial-academic partnership are specifically explored. Discussions and conclusions focus on lessons learnt and suggestions on the development and delivery of the programme and its effectiveness.

Keywords: Competence; Project management; Professional development; Benefit metrics; Management development

1. Introduction

This paper concerns a modular distance-delivered generic project management professional development programme for cross-sector industrial partners. It is run as a project and the ongoing research reported here arises from a maturing academic-industrial educational partnership which has been running for nearly eight years. Over that

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time 100 students (delegates) have graduated with a masters degree in Project Management as well as others with postgraduate modules, certificates and diplomas.

This paper begins with a brief introduction to the discussion on the drivers and criteria for project success. The authors then move on to explain the concepts of Benefit Metrics and Return on Investment in relation to professional development education and training. Anecdotal evidence from industrialists suggests that companies fail to take project management education seriously because of the difficulties in demonstrating its effects on profitability and competitiveness. Companies are unaware of the variables that influence such programmes and as a result are unable to measure a return on their investment.

The paper briefly describes the case study course: The Project Management Professional Development Programme (a modular distance learning course) and then reports on the interim findings from three surveys, forming the initial phase of an industry led action research initiative to investigate Benefits Metrics. Conclusions are drawn relating to programme effectiveness and lessons learned to date from the industry-academic partnership.

2. Using project management for achieving project success

In a changing and uncertain world project management is becoming increasingly important for the delivery of successful projects and is acknowledged as more effective than traditional functional management [1,2] in doing this. The Project Management Institute Project Management Body of Knowledge (PMBoK) Guide [3] defines a project as "a temporary endeavour undertaken to create a unique product or service", and states that although projects vary considerably in type and scale they are a tool employed by the organisation to achieve the strategic plan. Project Management on the other hand is "the application of knowledge, skills, tools and techniques to project activities to meet project requirements" [3]. Processes used in Project Management include initiating, planning, executing, controlling and closing. The Association for Project Management Body of Knowledge [4] takes a slightly different view, stating that Project Management is the "most effective way of introducing unique change" and constitutes the successful management of projects.

These definitions are both heavily oriented to achieve project success [2]. There is a considerable volume of literature in the field of project management dealing with project success, and this tends to fall into three major categories: dealing with project success criteria; project success factors and those that confuse the two [5]. The Iron Triangle [6] comprises three well recognised criteria (cost, time and quality) against which project success is measured (Fig. 1).

In addition, many studies have expanded project success criteria to include such things as organisational objectives, stakeholder satisfaction, customer benefits and future potential for the organisation. Researchers do not reach a consensus on project success criteria. Morris and Hough [7] use project function, project management and the contractor's business performance to measure project success. Lim and Mohamed [8] define micro and macro criteria to measure project success. Their micro criteria comprise time, cost, quality, performance and safety, whilst macro criteria include the micro criteria plus the project outcome benefit. On the other hand some consider project efficiency, customer benefits, organisational success and the future potential to an organisation as critical when measuring project success [9]. However, the majority of research practitioners [10–13] consider project success as an important project management issue [5]. For instance, the PMBoK guide published by the PMI suggests that project success criteria should include the "*Iron Triangle*" and key project stakeholder satisfaction [14].

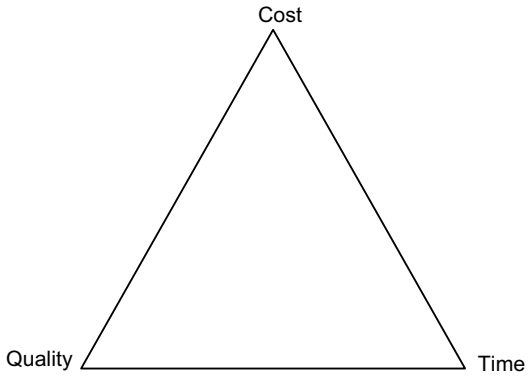

Fig. 1. The Iron Triangle [6].

Considering the emerging body of research on project success, Crawford [5] identifies twenty four success factors as primary for successful projects. The majority of these factors are directly related to project management competence and demonstrates that the competence, knowledge, skills and attributes of project managers, are critical to project success [5]. The competence of project managers is in itself a factor in the successful delivery of projects. Project managers need to have competence in those areas that have the most impact on successful outcomes.

From an industry perspective, it would be useful to be able to say that if an outstanding project manager is responsible for a project, it guarantees that the project will be a success, but this is not always true and whilst a poor project manager may doom the project to failure an outstanding project manager may not necessarily guarantee success. Thus, it appears that the direct causal relationship between an outstanding individual and project success is, at best, tenuous. This may be due, for instance, to the complexity of the project environment. Contributing factors include:

(a) the quality of the project team over which, in a matrix organisation, the project manager has little selection control;
(b) the project management maturity of the organisation;
(c) the level of stakeholder convergence;