## Project management - challenges and opportunities

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**Biographical notes:** John Wang is a full Professor at Montclair State University (MSU), USA. Having received a scholarship award, he came to the USA and completed his PhD in Operations Research from Temple University. He has published more than 100 refereed papers and six books. He is the Editor-in-Chief of *Int. J. of Society Systems Science (IJSSS)* and *Int. J. of Information Technology Project Management*. Also, he is the Editor of Encyclopedia of Data Warehousing and Mining (4 volumes)-2nd ed., Data Warehousing and Mining: Concepts, Methodologies, Tools, and Applications (6 volumes). His long-term research goal is the synergy of social and natural sciences.

It is of paramount importance for a modern corporation to engage in a comprehensive management of employees, resources, analytics, customer relationship management and the supply chain in order to fulfil numerous and consecutive projects at different stages. From government to business to employee, from a huge global endeavour to a local issue to a small student assignment, projects have been encountered by every organisation and by everyone everywhere. Governments and organisations waste millions of dollars every year on failed projects.

There are various methods of project management, depending on the scope and the complexity of the project undertaken. These methods can differ since many new techniques have been developed. From agile project management to virtual project management, from distributed project management to management of a particular event or disaster, project management has penetrated every fibre of society. In the history of management methods, it would be difficult to find any other techniques which have received as much widespread attention as that of these network methods for planning, scheduling and controlling.

Traditionally, project management has been neglected by business schools and by default it has become the preserve of more specialised professional faculties such as engineering and architecture. By taking a broader organisational perspective and by covering a wider range of industries and professions, *IJPOM* will appeal to a wider readership which includes not only those with an interest in mainstream management topics but also practitioners engaged in an unlimited variety of projects.

There are seven articles in this issue. Tan et al. analysed the key factors affecting contractors' competition strategy with particular reference to the Hong Kong construction industry. The research findings provide valuable references to help contractors in formulating effective competition strategy when bidding for construction contracts. The authors also examined the typical competition strategies adopted in the local construction industry, including lower bid, joint venture, public relations, risk control, and claim. This examination has led to the investigation on the factors affecting the choice of various competition strategies. By adapting these factors, contractors can identify better competition strategy by considering collectively their own strength and client selection criteria. Whilst the data used in this study are collected from Hong Kong construction industry, the findings provide useful references for further studies in comparing the factors affecting contractors' competition strategy between different construction industries.

Nowadays, the evolution of computers has enabled scientists and practitioners to use the most sophisticated tools in project scheduling. Thus, the shifting from deterministic project duration estimation to stochastic processes, leading to a statistical distribution forecasting project duration, is quite common. However, the selection of the 'right' distribution that describes each activity's duration is of major importance. The paper 'PERT vs. Monte Carlo Simulation along with the suitable distribution effect' by Kirytopoulos et al. concludes through twenty case studies of small and medium-sized construction projects that the historical information in activity duration estimating is a key factor for providing a reliable forecast. Moreover, it practically illustrates that the outcome when historical information is used compared to the outcome when only project managers' experience is used, leads to statistically different results. In other words, the outcome is quite less reliable when there is not a company-wide knowledge base that captures past experience.

Olsson elaborates on two emerging trends in project management. One trend is related to governance of projects and the project owner perspective. The other trend relates to flexible or agile projects. A key message in the paper is that projects can be flexible in two dimensions; externally-related to what deliverables they shall produce, and internally-related to how the deliverables are produced. The research presented indicates that the two types of flexibility have different characteristics, implying that they should be managed in different ways. The paper draws on experiences from the Concept research program at NTNU in Norway. Concept focuses on front-end management of major investment projects, seen from a governance perspective.

'Constructing new working practices through project narratives', is an interesting exploration of the dynamics of New Public Management (NPM) in the daily life of project management. Veenswijk and Berendse concentrate on the ways NPM concepts work out in the realities of project actors. Based on three case studies within the Dutch infrastructure sector, they analyse alternative responses to perceived problems in the construction sector. The project illustrations offer a valuable contribution to our understanding of the challenges of cultural change and the management of (construction) projects. Using ideas on narratives and discourse analyses, the authors show how 'project narratives' provide organisational members with a space to make sense of and contest new managerial initiatives and value systems imposed upon them.

Ling and Tiong undertook an in-depth study of how foreign (non-Chinese) firms managed a large commercial project in China which had a very short construction period. The client compounded this by announcing the building's operation start date even before the start of construction. Their study found that this foreign-managed project faced time, cost and quality challenges. While these problems are also faced in Western developed countries, the solutions adopted in China were unique. These included reducing a significant portion of the works, and going all out to help the Chinese contractor by making *ex gratia* payment and changing materials to those that are easily available. For foreign firms to achieve better project performance in China, the authors found that they need to be more aggressive when advising clients, eschew state owned enterprises and instead engage private contractors to carry out the construction work.

In construction projects, it is vital to build good relationships with the stakeholders who are identified as being most crucial for the end results. One issue that is highlighted as particularly important for building good project-stakeholder relationships is trust. Karlsen *et al.* address the role of trust in the relationship between a construction project and its stakeholders. The authors present an empirical study based on in-depth interviews following a semi-structured approach. A Norwegian project, the New Opera House, is studied. The New Opera House is a major public construction project, with a great deal of attention from the media and the public in Norway. Their results clearly show that trust plays an important role for building well-functioning relationships in a construction project. The responses from the interviews emphasise that trust has a positive impact on interactions and communications in the relationship.

Along the lines of Koskinen, in a project work context competence transfer from one field of speciality to another is a hard and complicated behaviourally oriented task, where much depends on how well the project team members work together. In other words, a project's performance depends on the extent to which project team members can mobilise all of the knowledge resources they have and on the extent how well they turn these resources into project deliveries. The competence transfer in a project work context can be supported by a boundary broker, who networks fields of competencies and brokers contacts between experts in different fields. However, it is important to understand that boundary brokering is about caring, not controlling. That is, the success of managing competencies in a project work context will be supported by a boundary broker's sensitivity to people issues.

The aim of *IJPOM* is to attract contributions, and especially case studies, from a wide spectrum of academics and practitioners. As managers and business schools are increasingly placing increasing emphasis on strategy implementation issues, a project management approach will undoubtedly become more compelling and thus more acceptable in a wide range of fields.

*IJPOM*'s readership will come from professionals and managers dealing with project management on a daily basis. It also includes academics and researchers from various fields (business administration, economics and social sciences) concerned with the topic as well as policy makers and project planners in the field of business, commerce and industry.

*IJPOM* publishes original, theoretical, conceptual and empirical papers on a wide range of issues about project management. It also includes best practice examples as well as technical reports on the latest project management tools.

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