

PROJECT MANAGEMENT: THE 3 MAJOR PROJECT TYPES



By John Reynolds

1. Civil Engineering, Construction, Petrochemical, Mining, and Quarrying

Projects in this category are those which spring to mind most readily whenever industrial projects are mentioned. Once common feature is that the fulfillment phase must be conducted on a site that is exposed to the elements, and usually remote from the contractor's main office.

These projects incur special risks and problems of organisation. They often require massive capital investment, and they deserve (but do not always get) rigorous management of progress, finance, and quality.

For very large industrial projects the funding and resources needed are often too great for one contractor to risk or even find. The organisation and communications are therefore likely to be complicated by the participation of many different specialists and contractors, with the main players possibly acting together as a consortium or joint venture company.

2. Manufacturing Projects

Manufacturing projects aim to produce a piece of equipment or machinery, ship, aircraft, land vehicle or some other item of specially designed hardware. The finished product might be purpose-built for a single customer, or the project could be generated and funded from within a company for the design and development of a new product intended for subsequent manufacture and sale in quantity.

Manufacturing projects are usually conducted in a factory or other home-based environment, where the company should be able to exercise on-the-spot management and provide an optimum environment.

Of course, these ideal conditions do not always apply. Some manufacturing projects can involve work away from the home base, for example in installation, commissioning and start-up, initial customer training and subsequent service and maintenance. More difficult is the case of a complex product (such as an aircraft) that is developed and manufactured by a consortium of companies, very possibly overlapping international borders, with all the consequent problems of risk, contractual difficulties, communication, coordination, and control.

3. Management Projects

This class of projects proves the point that every company, whatever its size, can expect to need project management expertise at least once in its lifetime. These are the projects that arise when companies relocate their headquarters, develop and introduce a new computer system, launch a marketing campaign, prepare for a trade exhibition, produce feasibility or other study report, restructure the organisation, mount a stage show, or generally engage in any operation that involves the management and co-ordination of activities to produce an end result that is not identifiable principally as an item of hardware or construction.

Although management projects might not result in a visible, tangible creation, much often depends on their successful outcome. There are well-known cases, for instance, where failure to implement a new computer system correctly has caused serious operational breakdown and has exposed the managers responsible to public discredit. Effective project management is at least as important for these projects as it is for the largest construction or manufacturing project.