EXTENSION OF THE PROJECT METHOD OF WORK TO NEW AREAS

During the past decade, the project mode of working with complex problems has been applied to an increasing number of different tasks in various industries and sectors. With the experience from the traditional construction industry, military contracts and R&D, it became a matter of course to apply the project method of work to the introduction of computers, since many sections and departments were involved. The public sector has increasingly organized and run task forces as projects, and in industrial companies most major strategic changes are planned by means of concepts and methods developed for project management.

The spread of the project mode has, in turn, led to a shift in emphasis. In an effort to be able to deal effectively with political aspects and organizational change processes, the project mode today includes such organizational aspects as analysis of interested parties (stakeholders) and organizational learning processes, as well as behavioural aspects of resistance to change. As a result, the project mode of solving problems today encompasses a wide spectrum of concepts, methods and techniques, and offers effective ways of getting people from different parts of an organization and with different professional backgrounds to work together on a complex task.

An interesting development may be seen in industrial corporations in Denmark, and probably in other countries as well, with respect to extending the traditional application of the project mode from *ad hoc* tasks to the daily operations. Consider the following three examples.

In the first example, an industrial company had for several years used a large computer system for materials requirement planning (MRP). On the basis of a fixed master production plan, the MRP system would produce a proposed plan for the purchase of necessary raw material and components as well as for production of all parts. However, it was difficult to keep track of customer orders, especially when changes were made. In order to supplement the MRP system, a rather simple project management system run on a PC was installed to provide the production manager with the current status of the most essential customer orders. In this way, the project management system helped establish a more balanced production planning by adding an effective customer order perspective to the traditional concern for materials management. We are working with this idea in other industrial companies.

The second example concerns purchasing, which has traditionally been expected to look at costs. At the same time, product design has frequently made all important purchasing decisions by specifying a given make for all components. In addition, attempts have been made to include purchasing in production planning by defining a

logistics function. Several companies have experienced fierce battles between these three points of view: costs, product specification and production planning, as if it were a question of finding a winner. A Danish industrial company, realizing the need to consider all three aspects, adopted a project mode for solving the complex task of purchase planning, which among other things resulted in a scheme for the cooperation between several departments. One of the reasons for its success may be ascribed to the emphasis put on individual behaviour and corporate culture in the implementation phase.

In the final example, an order-producing company used to let an order pass through the various departments in a traditional sequence without any overall planning. Each order involved many routine operations and drew heavily on previous designs, process plans, routings, etc. This led the company to consider the order handling as being most efficiently carried out in designated sections. As a result, nobody knew what other departments did to the order or catered to the final date of delivery, leading to unpredictable and long throughput times. In view of the market's demand for substantial reductions in delivery times, a study was undertaken with the result that a cross departmental order-planning group was formed headed by a newly appointed planning manager. The idea of explicitly including conflicts of interests into the planning process was adopted from the project method of work.

We tend to believe that many industrial companies, in their daily operations, deal with tasks that require a high degree of coordination. As demonstrated by means of the three examples, the project mode offers, in different ways, methods for achieving this. The need to establish new forms of cooperation will significantly increase in the near future. Looking ahead, many industrial companies will be faced with the challenges of integrated manufacturing, made possible by means of new information technologies. This will require the development of completely new methods of work. The project mode is in my opinion a good starting point for seeking the necessary new ways of cooperation in industrial companies, because it focuses not only on design of a project organization and project management systems, but also on developing individual project behaviour and a project culture conducive to mutual cooperation. At the same time, the lessons to be learned from such an endeavour may give us valuable insights into getting people to work together with significant repercussions for traditional projects.

Jens O Riis
Institute of Industrial Engineering and Production Management,
Technical University of Denmark