

Chem Systems' Process Evaluation/Research Planning program has published a new report, ***Managing Technology Developments in the Chemical Industry (97/98S2)***.

Process technology is one of the prime sources of sustainable competitive advantage for companies in the chemical industry, whether in enabling processing costs to be reduced or – more fundamentally – in innovation of new products and new solutions for customers. The world of the chemical industry is changing in many ways: globalization, consolidation in core areas, extensive partnering, and business transformation, often supported by IT. There is relentless pressure to reduce costs, among which research spending is often seen as a soft target. Process technology development within chemical companies must meet new challenges.

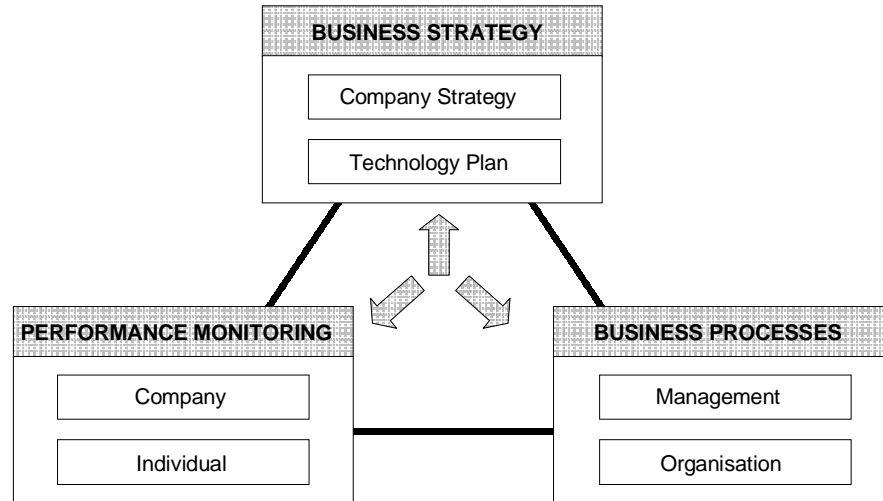
This new report by Chem Systems contains a review of the elements of managing technology development in the chemical industry, including how to align it to strategic objectives and maximize its effectiveness. Chem Systems has summarized aspects of good practice from its research, which includes interviews with selected companies and analysis of the literature.

Organizational structure is an important aspect of how technology development activities are managed. The trend has been very strongly to decentralization, placing the technology development firmly within the company's business units, with only small corporate R&D service, or none at all. This might leave no space for radically innovative diversification, and some companies consciously address this by providing a separate home for developments outside the business unit areas.

Business transformation in the chemical industry is shifting companies from the vertical split of work according to functional departments to a more integrated approach. Technology development activities are no exception, and the trend is to management by teams that incorporate all relevant parts of the business: marketing, production, financial, as well as the technology experts themselves. Knowledge Management techniques, often enabled by IT, are increasingly used to assist in the sharing of information and decisions.

The management functions of any company can be represented as the three components shown below. The Business Strategy element includes the identification of strategic objectives and the development of a plan to achieve them. The Business Processes element relates to management of the operational activities of the company, such as procurement, production, sales and marketing. The third element is Performance Monitoring, which provides feedback and control ranging from day-to-day operations right up to corporate direction.

TECHNOLOGY MANAGEMENT: PART OF COMPANY STRATEGY



2/99 PP:5956:Sec_II

Management of technology development is part of the total company management system and the same elements apply. The report is divided into corresponding parts:

- Technology Planning, which covers the Business Strategy components,
- Managing Technology Processes, which relates to the Business Processes of operational organization and management, and
- Performance Monitoring

Of course, there is considerable interaction and overlap between what is covered under these headings. The optimum approach will integrate all elements, and possible elements of good practice are provided in the report.