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Spotlight on IT Strategists

PCC June Conference Report (Maidstone, June 2nd and 3rd, 1988)

Dr Martin Wynn (Glaxo), PCC Steering Committee

The June PCC conference entitled 'Information Equals Power' provided an opportunity for delegates to hear firsthand experience from those offering their services as IT consultants, and also from those in the pharmaceutical industry who have been actively involved in developing their own IT strategies. In a final panel presentation to conference delegates, IT consultants agreed that:

- The shortfall in relevant IT skills is, in general, painfully obvious, even within MIS departments.
- The tools for eliciting and evolving an IT strategy are still relatively immature.
- The timing of technology implementation is critical.
- An IT strategy must be subordinate to the total company business strategy, but is an integral part of it.

OASIS set the Scene!

Dr Robb Wilmot, Chairman of OASIS, outlined his analysis of the business and technological challenges facing industry today, in his lead paper 'Organisational Change through IT'. Increased processing power, optical storage, and transmission advances will mean that by 1992, industry will be delivering more computer power annually than is currently in total use (if we're capable of absorbing it all), and by the end of the century, telecommunications will largely have been superseded by data communications.

Nevertheless, Dr Wilmot stressed that it is organisations that win competitive battles, rather than products or IT. 'Wilmot's 80/20 rule' (based on empirical findings) suggests that only 20% of the average manager's time is spent on high value work and 80% on relatively low value work: How can this situation be tolerated? Managers must become change agents that bring about a *status quo* in which the value of the organisation is greater than the value of the sum of its parts. The contribution of managers to achieving this end, rather than their status, must be the marker that will help companies exploit the pivotal role of middle management in bringing about change.

Innovation and information must start to have a greater impact outside the factory environment. Whilst output per hour has increased 3-4% per annum over the past decade in the manufacturing environment, it has remained fairly stable in the non-manufacturing parts of business, in which 80% of the workforce are employed. At present, however, many companies lack the necessary tools and skills to manage such change (witness the massive synchronised organisational change demanded by electronic

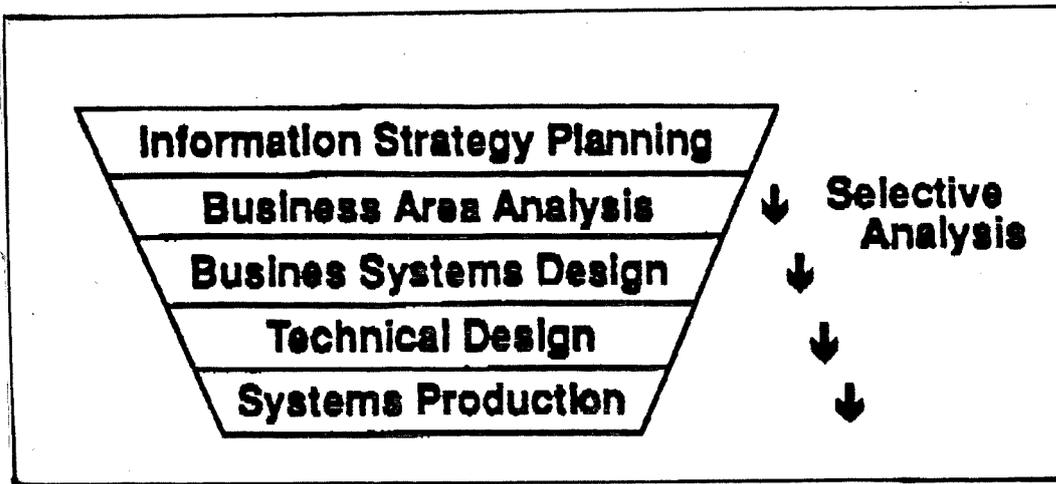


Figure 1. Information strategy implementation model (James Martin Associates)

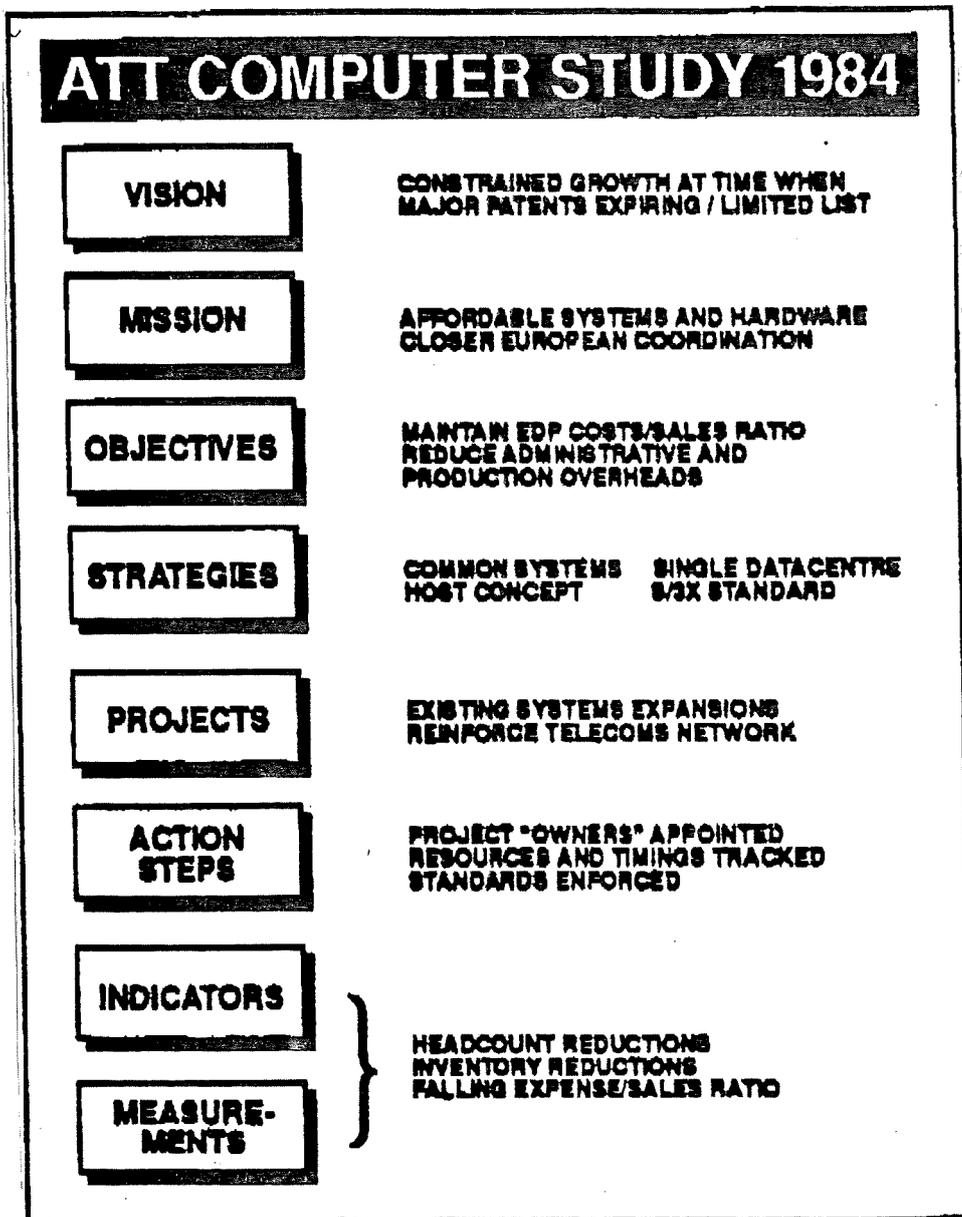


Figure 2. IS strategy development at Lilly (model developed by their Application Transfer Team—ATT)

mail). A key challenge for the 1990s will be to get high impact systems in place before the competition does. Again, Dr Wilmot stressed the role of middle management: whilst the Board should have commitment to IT, it should give middle management its head to initiate and drive through such change.

Consultant Perspectives

The afternoon session saw papers from several consultants addressing different aspects of IT strategy, Tim Parkin from Oracle outlined the main components of their systems development methodology, whilst Robin Roberts of OASIS focused on 'People and Organisational Issues', reiterating several of the points made by Robb Wilmot. Phil Baugh of the IT Institute at Salford University presented a paper on 'Departmental Perspectives', which highlighted the dilemma of marketing departments in the pharmaceutical industry: rather than a dearth of information, the marketing department has too many sources (sales force, commercial databases, doctors, pharmacies, hospitals, advertisers, managers, etc.) and produces a large number of reports. Phil asserted, however, that one cannot measure the productivity of the executive workforce in the number of reports produced: it must be their quality and usefulness rather than quantity. At the same time, there was a danger of not being able to share data between departments, because of dependence on what Phil termed 'the Lotus position,' i.e. micro-based standalone systems.

In 'Implementation and Maintenance', Jeff Powell (James Martin Associates) outlined some of the key issues in IT strategy implementation. He depicted 'implementation' as part of a corporate process that starts with creative thinking and an understanding of the business environment, and then leads to the building, and use of, information systems. It requires an objective understanding of business realities that cut across departmental boundaries and organisational perspectives, and leads to a selective analysis (see Figure 1) that ends with systems production and implementation.

To close the opening day, Jayne Pearsall (Harwell Computer Power) examined the competitive benefits to be gained by adopting correct IT strategies in her paper entitled 'Competitive Strategies'. Jayne's views reflected her background as an information scientist and contrasted nicely with some of the more systems-orientated papers that had preceded her. The manual filing of information characteristically produces a 15% misfile and a 10% loss rate, figures that even the simplest computerised system should beat!

Lilly and Glaxo

Whilst the first day produced much that was of interest, it was not until day two that the conference really got down to exploring the key issues, and what they mean to individual companies and their staff. We had been given a flavour of this by two papers on the first day by Ray Rogers ('The MIS Information Strategy') and Gerry Crier ('How and Why Other Industries and Companies are tackling Information Strategy'), but the papers on Friday morning focused on IT in pharmaceutical companies — Lilly and Glaxo - and were thus of particular interest to most delegates.

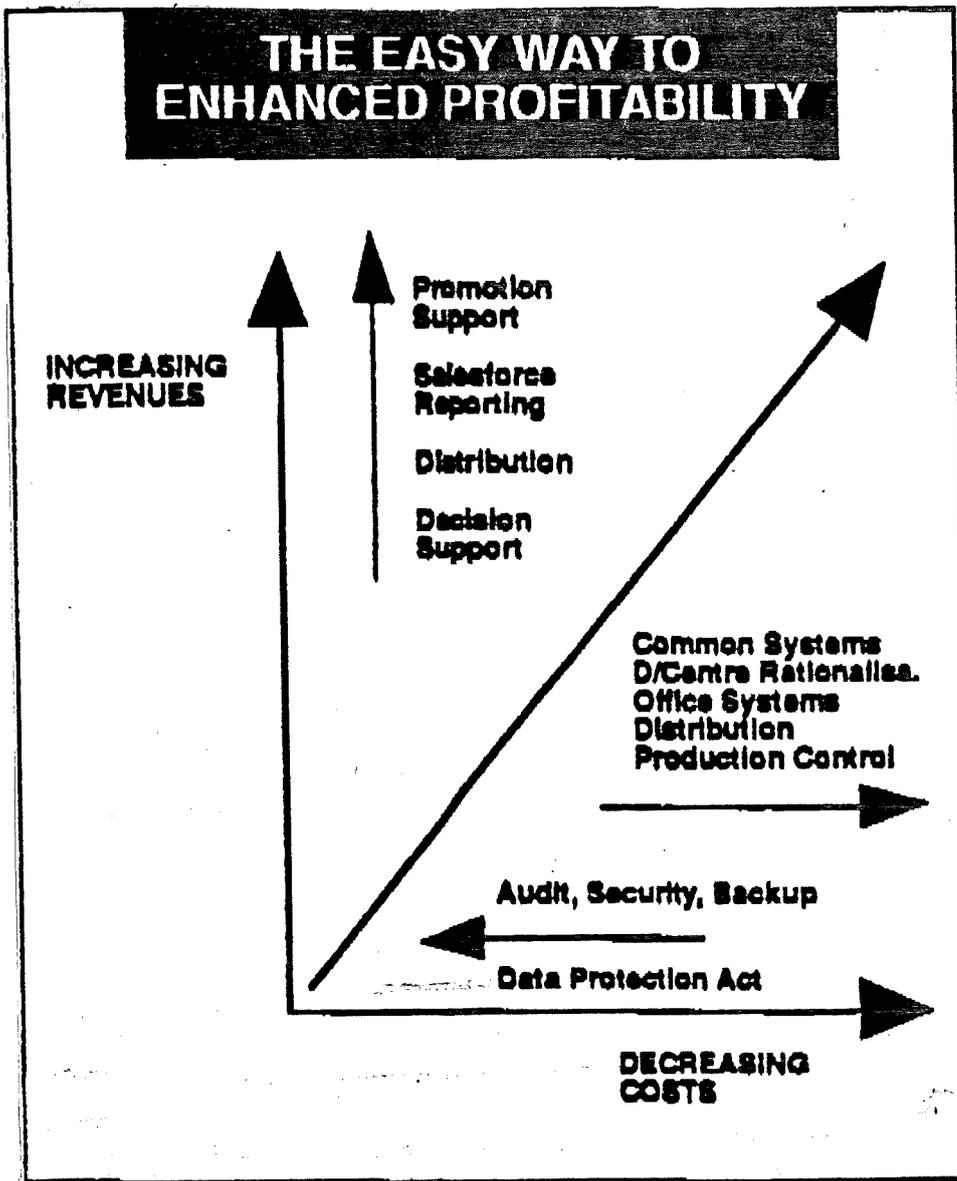


Figure 3. A business-oriented IT strategy (Lilly)

Martin Postle's presentation of 'The Lilly Case' charted the evolution of information and business strategies at Lilly over the past 5 years. Whilst the information systems strategy pursued one course, based on their application transfer team's computer study of 1984 (Figure 2), the company's business strategy was set in a more business oriented context which focused on increasing revenues and decreasing costs. Whilst the business strategy produced its own objectives and recommendations for IT, the information systems strategy remained in isolation, with any relationship between the two being purely accidental! Although the co-ordination of the two has now improved, Martin's sharp analysis highlighted the pitfalls of not establishing a business-orientated framework in which an IT strategy can be developed and implemented (Figure 3).

Iain Lee, Director of the Information Management Division (IMD) at Glaxo Pharmaceuticals, has led the company's IT Division since joining the company in the 1970s. In his paper 'Towards an Information Continuum', Iain provided a detailed description of the reasoning and actions that have brought about a transformation in the IT function over the past decade. From a number of disparate mainframe systems in the 1970s, Glaxo's IT function now encompasses a wide area network of minicomputers, linking four main sites in the UK, a private telecommunications network and advanced office and PC functions in the late 1980s. As OASIS have recently reported, 'the last ten years have seen tremendous advances in the adoption of Information Technology throughout all areas of Glaxo Pharmaceuticals. Indeed, without this widespread usage of technology, allied with the particular IT strategies adopted, the company would have been severely constrained in the achievement of many of its corporate business aims and objectives'.

The final sections of Iain's paper dealt with the recent use of OASIS consultants to help Glaxo shape the next step forward in the evolution of their IT strategy. The outline of the various components of the review undertaken by OASIS gave delegates some insight into what precisely was involved (Figure 4). At the same time, the Glaxo case showed how an IT Division could now start to play a more strategic, business-orientated role in determining company direction through tackling the task of information management (Figure 5), rather than purely data processing, which is still the main function of many MIS departments today.

Summary statements from the panel

Then to the workshops. After an hour and a half of intensive group debate, some 30 key concerns were put to the panel of consultants. The following summarises the points on which the panel agreed:

1. An IT strategy must, in the final analysis, be subordinate to a total company business strategy, but it is an integrated part of that corporate strategy.
2. The tools for eliciting and evolving an IT strategy are still relatively immature. They are mainly manual and draw on group dynamics as much as on systems analysis methodologies.

Components of the Review

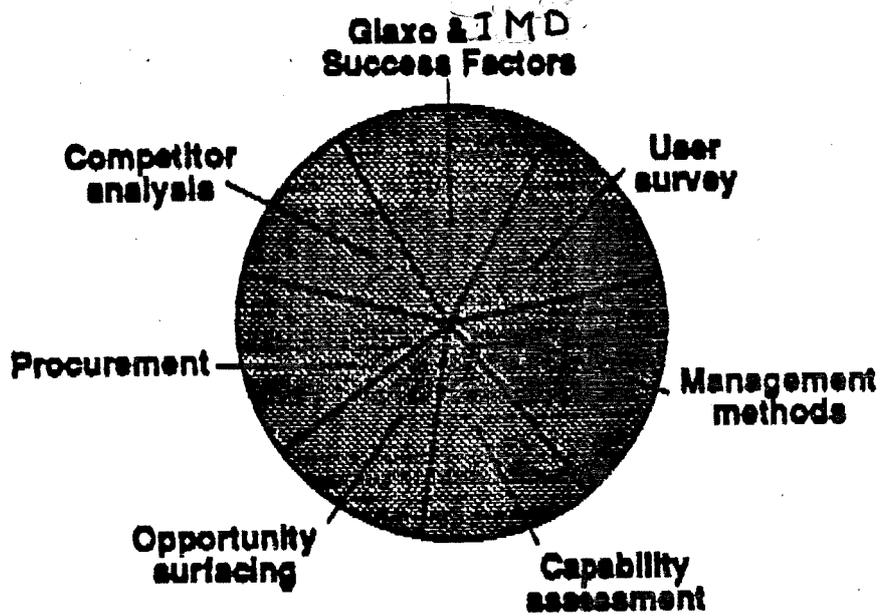


Figure 4. IT strategy development at Glaxo: components of the external review

INFORMATION MANAGEMENT

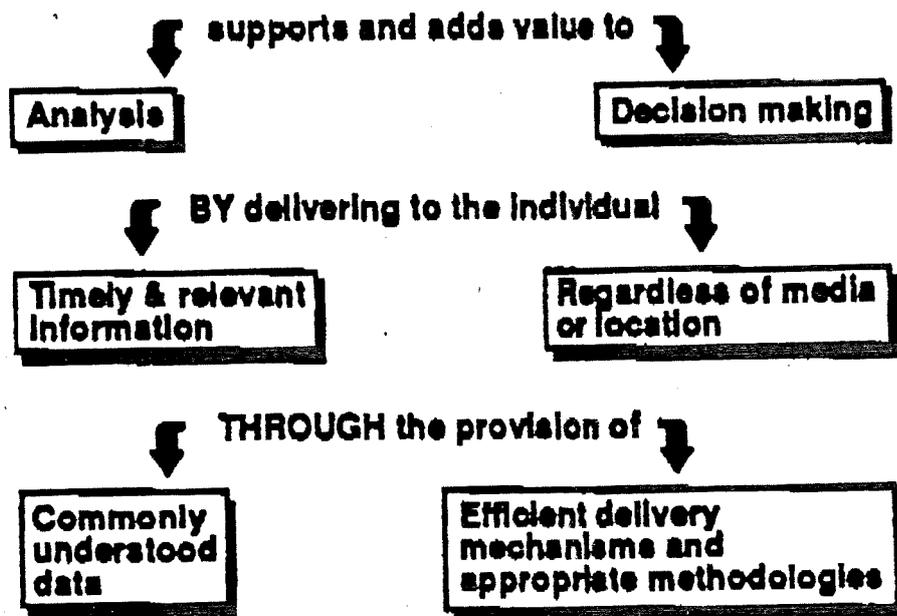


Figure 5. Information management model at Glaxo

3. The timing of technology implementation is critical. Determining the optimum timing is difficult.
4. There is a political component to all IT strategies.
5. In implementing IT change, people and personalities can seriously influence success or failure. Middle management may be the stimulus, or may contain the dead wood that needs stripping out. It is often a mixture of both.
6. The shortfall in relevant IT skills is, in general, painfully obvious, even within some MIS departments.
7. People with vision at the top can make all the difference in determining the success or failure of IT strategy formulation and implementation.
8. The need for total company commitment and training is paramount in any successful implementation of change in the IT sphere.

Buzzing after the heated exchanges of the final pre-lunch session, delegates and consultants moved off for a more relaxed jousting session in the hotel bar. If nothing else, the conference had shown what was needed, even if many knew it was unlikely to happen in their companies tomorrow. The disarming fact for some was that many consultants had been emphasizing just how important it was to get it right – not tomorrow – but now! The examples from the pharmaceutical industry had suggested they might well have a strong case.