

# DELIVERING THE BENEFITS OF ENTERPRISE RESOURCE PLANNING WITHIN THE MANUFACTURING SECTOR

*James Lowe, MIOM*

For many organisations implementing ERP has failed to meet expectations. As organisations move forward to develop the solution or implement new technologies, what lessons should they have learnt, and what skills will unlock the real benefits for the manufacturing sector?

The operation of today's manufacturing and supply chain activities demands the application of information technology for reliable and efficient transaction processing. Enterprise Resource Planning (ERP) solutions were seen as a panacea to achieving business excellence, yet having made the investment, many organisations in the UK have subsequently been disappointed with the results.

Surveys continue to reveal that ERP solutions remain in vogue for today's decision makers, although worryingly they also reveal that up to 90% of organisations within the UK manufacturing sector were failing to maximise the potential benefits. It is unlikely that this scenario is unique to individual ERP products, and could equally apply to any of the ERP, if not all information technology, solutions.

There are two key reasons these expectations have not been realised. Firstly, the fulfilment of consumer demand has necessitated a significant change in the service provision and capabilities of an organisation's supply chain over the past few years. The implementation process required for an ERP or similar large scale information technology solution does not support the agility needed to respond to these changes until the implementation stage is complete. Secondly, and perhaps more significantly, the implementation has often focused on delivering a solution mapped against an existing business model and processes.

Realising the potential offered by these implementations is critical to organisations within the manufacturing sector. We are seeing a new wave of technology drivers within optimisation, decision support and collaborative planning solutions providing opportunities to integrate the business outside its own organisation and optimise the use of resources it has available. However, as we move forward ERP has a significant role to play in an organisations entire information technology portfolio. ERP is good at integrating the organisation, transactional execution and historical data management. More importantly it can enable and support the new technology initiatives.

So how can an organisation ensure that benefits are realised from the initial implementation and future enhancement of their investment?

## VISION FOR THE FUTURE

The greatest benefits of information technology have gone to those organisations who have managed their investment with imagination and have a clear understanding of the technology and organisational issues relating to its adoption.

Undertaking information technology based investment should provide immediate and longer-term benefits for the organisation. This cannot be achieved without clear objects and a vision of the future needs.

Technical skills alone are no longer sufficient, although vitally important, to deliver the real business benefits from many of

the business or customer focused solutions available today. Individuals, consultants or project teams must, in addition to providing technical expertise, add specialist knowledge within the business environment to provide the strategic vision of how the system can be applied, either in the short or long term to provide benefits and potentially competitive advantage. This can only be achieved with the understanding of the product, the business and the market place.

## THINK OUTSIDE THE BOX

Stepping back from the problem often allows the organisation and implementers to identify ways of working that utilises 'standard' functionality and maintains the business process advantages. Learning and recognising what the critical elements are to the business and acting upon those, not the software, is essential.

With all solutions there are 'set' ways of managing processes, be it purchase order generation, batch tracking or any of the other scenarios within the business. Although these are typically considered to be 'best of breed' all too often they do not map to the organisations current way of working or what is 'best of breed' for the specific industry sector. An ERP solution cannot be 'best of breed' in all aspects of its functionality. This usually presents two options:

- develop the software, incurring additional cost both for implementation and maintenance, or
- change the business processes, however that business process may be an area of key competitive advantage.

Achieving 100% fit to all existing business processes is an unrealistic expectation, however the business must gain overall. Effective change management and communication is essential to manage the expectations of the business and user communities.

## PROCESS DESIGN

Processes evolve with the individuals who undertake them on a day-to-day basis. Often they are accepted for what they are, even if it is recognised that they could be improved. Information technology will, not in itself, bring excellence to these processes; indeed it can simply reinforce errors that already exist. Having introduced technology to a poor process it is complex to rectify post implementation.

Within process design typical errors include:

- failure to recognise existing process weaknesses
- failure to analyse performance in sufficient detail
- over sophistication when tackling the problem
- technology rather than business driven processes
- inefficient use of available resources
- unnecessary reengineering.

Realising the benefits related to efficient and effective processes

in a live solution requires a different skill set to that of implementation. Implementation, against the existing business model requires a skill set capable of delivering an effective integrated solution and delivering further benefits demands specialist business knowledge, encompassing, practical and operational experience. However, introducing these skills for an initial implementation will increase the opportunities for earlier returns. Despite this, organisations all too often still focus on and demand the technical skills without necessarily considering the wider skill set and value that either the individual consultant or team can add.

## MANAGE AND COMMUNICATE CHANGE

Within change management people change as individuals and these individuals implement the change, not technology. Technology can however act as a facilitator. In creating change readiness the complete project team must be involved encompassing everyone from employee through to the most senior management. Effective communications and consistency of the message, however severe, helps reduce anxiety and enables the other change elements of training, education, risk management, and stakeholder management to be undertaken.

One of the biggest failings of information technology projects is that the change management starts with the actual implementation (or the final part of the project) and does not have sufficient resources. The project launch must be the start of the change management programme, part of which may be so significant to demand changes to the organisation's paradigm (or 'how we do things around here'). If from the outset the project does not initiate enthusiasm and momentum

it will have an arduous task to regain the initial ground, and mis-trust will develop.

## CONCLUSION

Of course, achieving business excellence demands much more than the successful implementation of an information technology solution. At the end of the day ERP is simply a management tool for the provision of information across the business.

Historically information technology has been a significant enabler within the manufacturing sector, however it has taken some time in many cases for the full benefits to be realised. The biggest risk is that the sector does not learn the lessons that have been taught through the implementation of ERP solutions, and the implementation of earlier technologies, as organisations deploy optimisation, decision support and collaborative planning solutions. As well as realising the potential that the ERP solutions promise we should ensure that future investments are able to provide significant and sustainable benefits much earlier in their life cycle.

## About the author

**James Lowe** MIOM MSc, MILT, is a Management Consultant specialising in Supply Chain Management.

James principle focus over ten years has been within manufacturing, supply chain and enterprise solutions arenas to develop and integrate effective and cost efficient business processes supported by appropriate solutions. He has previously been responsible for operational roles within logistics, supply chain and manufacturing management.

# A CHRISTMAS WELL SPENT

As announced in the December/January issue of Control, the Institute decided to make a donation to charity rather than send cards this Christmas.

Our donation was made to Myton Hamlet Hospice, Warwick which opened in 1982 and is currently the only hospice providing extensive in-patient care for the terminally ill in the whole of Warwickshire and the City of Coventry. Its primary goals are to provide relief from pain and other distressing symptoms, support for the patient both at home and in the Hospice, support for the family during illness and bereavement and respite care to assist the patient to continue to live in the community.

Myton Hamlet Hospice is a registered charity and depends on public donations for its survival. This year the Hospice needs to raise £1.75 million, just to cover its running costs. An appeal to build and run a second in-patient hospice was launched in September 2001.

Thanks to all members and colleagues of the Institute of Operations Management, whose support enabled us to make this donation.