

## Defining the need for an integrated business system

Introducing a new, integrated business system presents an opportunity to look at the way things are done now - and to do them better. Yet, there is also a significant impact on the business with a new system: the cost of the time to implement, the risk if things go wrong, the cost of putting things right, the failure to achieve the envisaged benefits. It is therefore important to do some work to establish whether there is a significant need for an integrated business system.

By identifying whether a real need exists provides the opportunity to explore and define the opportunity. By emphasising the need to understand and challenge your existing processes will involve people across the spectrum of your business. It's also important to consider that after software GoLive, a culture orientated towards continuous improvement will ensure you get the most from your investment long into the future. Where the application is linked to a strategy, the technology is an enabler for the realisation of the strategy.

### Costs

Establishing a budget for the likely costs is essential to avoid the open chequebook approach to a new business system. In identifying where the costs are likely to arise, consideration should be given to:

- Hardware
- Operating system
- Database license fee
- Core software license fee
- Additional module license fee
- Third party license fee
- Integration of third party software
- Software customisation
- Data conversion for GoLive
- Project management
- Consultancy
- Training
- Living and travel expenses
- Upgrades

Your supplier will provide much of the cost information. While it is likely that the supplier will provide a specific figure for each item, this may only be an estimate for items such as consultancy (especially when there remains a degree of uncertainty about what is involved).

While some of these costs will be one-off (e.g. hardware, training and consultancy), others will be on-going (e.g. maintenance). To get a better picture of the cost exposure, a long-term perspective should be taken. A meaningful time-horizon is five years. By the time that five years has passed it is quite possible that

the application has been reviewed and a new budget established for additional work, such as an upgrade or the bolt-on of additional functionality.

Not to be overlooked are the indirect costs, which are mainly internal costs. These can include:

- Time and consequent cost of employees involved in the project
- Cost of temporary personnel to replace those involved in the project
- Costs incurred due to other activities not being carried out
- Costs related to off-site travel and sustenance, e.g. off-site training
- Costs related to the internal resources, such as an IT department, who administer and maintain the system and provide internal technical support.

The annual maintenance fee may be surprising by how significant a proportion of the total budget it is. It is worth asking what is provided for this fee.

It should be possible to pin down most of the costs, especially the main costs, to a lower and upper value and also a most likely cost. However, the unexpected can disturb this picture. Some costs will not be readily apparent and can be overlooked. Alternatively, they can be underestimated. The danger arises when a budget is set , but costs during the project continue to escalate. Overspend on consultancy is often compensated for by a cut-back in training. This is not helped by the fact that training costs tend to be under-estimated in the first place. The dilemma faced is that having started the project, so much has been invested in it that it must finish. But at what cost? This raises the need for cost control throughout the project.

#### **Justification - cost-benefits**

Once the need has been defined and the costs are intelligently estimated, it is useful to determine what the benefits are and whether the benefits justify the cost.

A good starting point to evaluating whether a new system could be justified is to map out the existing business processes. This helps focus attention on key areas in a systematic manner. A hypothetical example is presented in Figure 1.

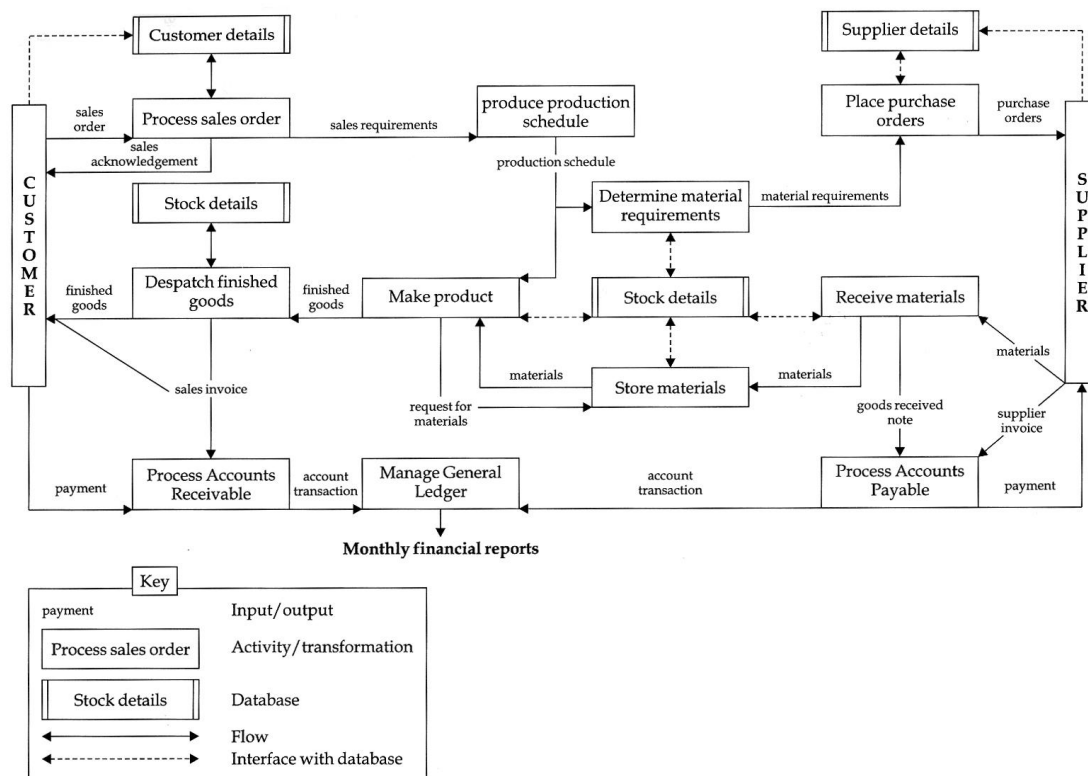


Figure 1 A simple process map of the main activities in a business

In this example, the assumption is that the business is a manufacturing operation with mainly manual paper-based systems. Examination of this map reveals a flow that begins with the customer at the point of placing a sales order. By progressing around the process, the following benefits could be deemed achievable.

**Customer relations:**

- Better response time for handling customer order queries.

**Production scheduling:**

- Ability to evaluate the effect of changing customer demand and optimise production schedule.
- Ability to manufacture to demand rather than to stock, thereby reducing finished goods inventory and the potential for stock obsolescence.

**Materials requirements:**

- Better visibility of requirements and potential problems, thereby reducing the likelihood of failing to detect a potential shortage.

**Supplier management:**

- Ability to move to blanket purchase orders and weekly delivery schedules, thereby enabling inventory reduction, which in turn has an associated reduction in the costs of financing and storing materials.

**Materials handling:**

- On-line matching of PO and delivery details, thereby improving control of deliveries.
- Improved tracking of materials, thereby reducing the likelihood of 'lost' materials.
- Real-time stock movement records adjustment, thereby facilitating up-to-date inventory analysis and the identification of slow/no-moving stock.

**Manufacturing:**

- WIP visibility enabling progress tracking and hence improving customer awareness about deliveries.
- Better and more timely production information resulting in fewer mistakes and shorter lead-times.

**Despatch:**

- More efficient documentation production enabling faster despatch of finished goods.

**Quality:**

- On-line data collection resulting in improved quality information leading to reduced quality problems; this in turn results in reduced customer returns and, hence, reduced repair costs and warranty charges.

**Accounts:**

- Integration with the sales, manufacturing and purchasing functions, thereby providing real-time information about operational performance.
- Ability to handle consolidated invoices or self-billing resulting in less document processing.

**General:**

- The adoption of workflow should lead to shorter process cycle-times.
- Real-time and on-line data access which results in less documentation.
- Data entry at point of origin, thereby eliminates duplicated data entry and reduces the likelihood of data entry error. This in turn reduces the time spent recovering from problems resulting from data error.

**Intangible:**

- Easier and more efficient problem solving.
- A more efficient and happier workforce.
- Better able to be more pro-active in improving the business.

It is to be expected that the resultant list does not reflect all the benefits. As well as those that are unobserved, there may well be unanticipated benefits, which emerge from the discovery of unnoticed functionality or innovative ways of using the new application. The benefits are those anticipated to occur as a result of moving to a vision of how things will be done. Often new technology is assumed to be associated with reductions in personnel. The reality is that this is unlikely to occur. Changes in the nature of the work may result in specific tasks being eliminated. On the other hand new tasks will emerge. One of the lessons from this

exercise is that the project is not about an IT system. It is about people and the management of change.

### **Quantifying benefits**

The quantification of the benefits provides a measure that can be evaluated with the context of the costs. The practicality of establishing numbers is prone to be difficult and imprecise. The only recourse is often speculation. However, the danger arises over being optimistic about the benefits. If they fail to materialise, this could be because the potential to achieve the benefits was simply not there. It is perhaps better to establish a best and worst case prediction, as well as a figure representing what should be expected. Where it is difficult to quantify the benefits, recognition that there are benefits to be achieved should not be ignored. It contributes to a better understanding of what can be achieved.

Assuming that the benefits outweigh the costs, this provides a justification for the decision to proceed. Further, the quantification provides a benchmark with which to assess the success of the implementation. However, this needs to be treated with caution since the numbers were generated with a limited vision about future conditions. The fact that this vision may be flawed and that the actual situation in the future may be far from the original conception, should be appreciated. If there is a fixation upon the numbers, then a negative deviation may result in the project being deemed a failure and finger pointing. Nevertheless, a positive aspect about establishing these benchmarks is that they set a target to aspire to. If a negative deviation from this target is examined, it may reveal opportunities for improvement. The review of a positive deviation may reveal that the original target was inappropriately set and result in the setting of a more realistic target.

From this review of the benefits, it should be appreciated that the value of the system is not in the technology itself but in the way that the technology is used. This important point reveals the opportunity presented for the technology to be viewed as a means to achieve a strategy. Moreover, competitive advantage can be gained through the innovative use of the technology, even if the competition has the same or 'better' technology. This it makes sense to consider the application within the context of a business strategy.