Managing Procurement *and* Acquiring System Components

**Hardware and Software**

1. **Develop a Procurement Plan**

   A procurement plan outlines the process for identifying needs, establishing selection criteria, short-listing potential solutions, and selecting the preferred solution. Each step needs the approval of the appropriate stakeholders (i.e., success in these criteria relies on the groundwork of your stakeholder analysis).

   Many organisations have pre-established procedures for procurement. For example, some organisations have a sole supplier for some components. The organisation receives significant discounts for only using the one supplier. If you don’t check the procurement process you may place their on-going discounts at risk. Other organisations require 3 quotes from different suppliers before funding will be approved.

   *It is important to develop the procurement plan that meets the requirements of the organisation before you start selecting components.*

   Another issue that will need to be addressed is the acquisition method. Is it best for the organisation to purchase, lease or hire? Very short projects, for example a registration system for an exhibition, only need the hardware for a short period, and it would be cheaper to hire. Systems that have routine requirements and insufficient IT skills to maintain the system may find leasing the best option. In most cases it is useful to undertake a **cost benefit analysis**.

   To satisfactorily address this step develop a procurement plan that outlines the process that will be followed, which stakeholder(s) will approve the process, and points in the process where further approval will be required (e.g., When business needs have been identified, before software is purchased, before hardware is purchased).

2. **Receive Approval for Procurement Plan**

   Present your procurement plan to the appropriate stakeholders for approval. The stakeholders should have the expertise and the authority to assess and approve the feasibility of the plan.

   Feasibility generally falls into three categories:

   - **[a] Technical Feasibility** – Can it currently be done? I might save money by purchasing an inkjet printer for my organisation, but can it handle the workload of 50 heavy users? The answer is no.

   - **[b] Financial Feasibility** – Can we afford it? Normally someone from the Accounts department is able to fill this role.

   - **[c] Strategic Feasibility** – Does it help the company achieve its goals? Every member of staff may want the company to get a faster internet connection, but if they only want it to download mp3s and not to do their work, then providing the fast internet connection may slow productivity and make the company less profitable. In this type of situation the suggested change is not strategically feasible.

3. **Identify Business Needs**

   What does the organisation do? How do they get their income? How can they do business better? These types of questions form the basis of analysing business needs. When you suggest changes in the organisation’s information system, the changes need to relate to what the business actually does. These are often simpler than most students of IT assume, eg., produce letters, develop advertising material, manufacture products, keep business/accounting records, share information.

4. **List Software that Meets Business Needs**

   For most business needs it is quite easy to identify software that meets the business needs. For example an office suite (e.g., MS Office, StarOffice, OpenOffice) would meet the most of the document production needs. Accounting software such as MYOB or Quicken meet most of the financial record keeping. Other business
needs may need more specific software. Of course the Network Operating System is also an essential piece of software.

5. **Recommend Selected Software for Approval**

When you have identified the software required to meet the business needs short list 2 alternatives for each function (eg. Accounting: MYOB & Quicken). Discuss the advantages and disadvantages of each. Some points to consider are cost, support and the current IT skills of staff in the organisation. Recommend the software to be purchased and submit it to the appropriate stakeholder(s) for approval.

6. **Identify Hardware Requirements**

Most of the hardware requirements are determined by the software recommended in the previous step. Check the technical documentation of the software, remember that minimum hardware requirements often run software too slowly to be of use.

Other hardware requirements are generally determined by the input and output needs of the users and the organisation. Some users will need large monitors, others due to cramped conditions may need flat panel monitors. Graphical work requires scanners, digitisers, and larger colour printers. Document and data input generally only require a standard workstation.

7. **List Hardware that Meets Requirements**

Armed with the hardware requirements (derived in the previous step), short list 3 or 4 options that provide good warranties, good & support, and reputable components at a good price.

8. **Recommend Selected Hardware for Approval**

Analyse your hardware short list for the best combination of cost, reliability, performance, warranty, and support (location of support staff is important here). The aim is to find the right combination that meets the organisations needs.

Pass your recommendations on to the appropriate stakeholders for approval.

9. **Acquire Hardware and Software**

Following the company's procurement policy, purchase/hire/lease the approved hardware and software.