Contents

Before you begin vii

Topic 1: Plan for the new or modified administrative system 1
1A Identify the requirements of the administrative system 2
1B Obtain quotations from the suppliers/developers of systems 10
1C Select a system supplier or developer 14
Summary 17
Learning checkpoint 1: Plan for the new or modified administrative system 18

Topic 2: Implement the new or modified administrative system 23
2A Identify and develop implementation strategies 24
2B Encourage staff to participate in the implementation process 29
2C Implement the system 32
2D Define and communicate procedures for using the system 35
2E Provide training and support on the use of the system 38
2F Deal with contingencies to ensure minimal impact on users 42
Summary 46
Learning checkpoint 2: Implement the new or modified administrative system 47

Topic 3: Monitor the administrative system 51
3A Monitor the system’s use, security and output 52
3B Modify the system to meet changing needs 57
3C Identify further modifications and notify users 61
3D Monitor staff training needs 63
Summary 65
Learning checkpoint 3: Monitor the administrative system 66
### Organisation structure

**Purpose and nature of the organisation**
- What type of information do clients require?
- How does the structure of the organisation affect the system; for example, the degree of centralisation needed?
- How do outputs help the organisation achieve its business goals?

### Purpose and nature

**Purpose and nature of the system needed**
- What functional areas will the system include?
- Who will be using the system?
- What type of security arrangements will be needed?
- How will WHS policies affect the system?

### Users

**Number and type of users**
- Are users casual, internal and/or external?
- How many people will be involved in inputs and outputs?

### Staff requirements

- What procedures do staff need to follow?
- How are the procedures communicated to staff?
- Do staff need to be trained to use the system?
- Who will monitor staff involvement?

### Storage size

- What are the storage requirements for the equipment?
- How much software is needed?

### Coverage

**Geographical coverage**
- Does the system cover one office or multiple offices?
- Are offices spread locally, nationally or internationally?
Methods of identifying requirements

A systematic method for identifying which requirements or modifications are needed includes analysis of the functional area, processes used and feedback from stakeholders. Choosing a suitable approach requires an understanding of organisational structure and stakeholders, existing procedures for information management and control, and the budgetary constraints afforded to the ongoing maintenance of the system. Systems generally integrate several operational functions and therefore may include many components.

Operational functions can include:
- documents and reports
- server settings/user settings
- notifications and other communications processes
- project schedules.

Administrative access speeds

Broadband technologies supply considerably higher bit rates than dial-up, generally without disrupting regular telephone use. The US Federal Communications Commission defines broadband benchmark speeds as at least 25 Mbit/s for downloads and 3 Mbit/s for uploads. The thresholds for this definition tend to be raised as higher data rate services become available.

The following table illustrates what are known as ‘data rate units’.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Symbol (bits)</th>
<th>Bytes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilobit per second</td>
<td>kbit/s = 1,000 bit/s</td>
<td>125 B/s</td>
</tr>
<tr>
<td>Megabit per second</td>
<td>Mbit/s = 1,000 kbit/s</td>
<td>125 kB/s</td>
</tr>
<tr>
<td>Gigabit per second</td>
<td>Gbit/s = 1,000 Mbit/s</td>
<td>125 MB/s</td>
</tr>
<tr>
<td>Terabit per second</td>
<td>Tbit/s = 1,000 Gbit/s</td>
<td>125 GB/s</td>
</tr>
<tr>
<td>Petabit per second</td>
<td>Pbit/s = 1,000 Tbit/s</td>
<td>125 TB/s</td>
</tr>
</tbody>
</table>

Functional area approach

A functional area approach typically involves an audit of the system’s use within a given area to identify the standards required by the organisation or system developers/suppliers and a method for capturing the performance of the system. A functional area includes manufacturing, resource procurement, sales, customer service, personnel, policy, marketing and finance (accounts payable/receivable).

Audits usually involve interviews with users, managers and system maintenance staff. These interviews capture tacit knowledge such as information gained through experiential learning, which often occurs when people use a particular system for a long period of time. It also encourages feedback that may not typically be given through the normal chain of authority. Such information can highlight significant opportunities for improvement to the system and its procedures.
Before making any changes to an administrative system, the organisation should conduct an analysis to identify costs for the type of system they need and whether these are in line with the budget. Cost factors you need to consider include the cost of peripherals, supplies, insurance, linking systems, software development and cabinets; future costs of maintenance; security equipment; training; and reconfiguration of workplace space. A cost analysis involves sourcing prices from a range of suppliers. Many of the complex administrative systems used today are administered by highly trained internal staff or outsourced to system suppliers, developers or IT professionals.

Here is a list of suppliers and their services.

<table>
<thead>
<tr>
<th>Suppliers</th>
<th>What they offer</th>
<th>What to consider</th>
</tr>
</thead>
</table>
| System consultants         | System consultants analyse the organisation’s needs and suggest the most appropriate system that meets the required needs, quality and budget. | • Make sure they clearly understand your organisation’s requirements.  
• Use your network to seek a recommendation. |
| Efficiency consultants     | Efficiency consultants provide advice on what savings can be made on the system. | • Consultants must be aware of the objectives of the system in order to measure for performance gaps and cost efficiencies. |
| Computer/software suppliers| Technology suppliers provide software solutions to meet an organisation’s needs. | • Consider the type of operating system, cost, capacity, compatibility and training needed.  
• Visit websites to check benefits and cost comparisons.  
• Ensure the supplier understands your organisation.  
• Understand what they offer in terms of backup and maintenance. |
| Equipment suppliers        | Equipment suppliers provide the equipment needed such as computer hardware, networking hardware and wiring. | • You may want to seek quotations from alternative suppliers even if you already have a preferred supplier.  
• Sometimes it is technically easier to integrate systems manufactured by the same designer.  
• Check the expertise and quality of backup service.  
• Make sure they can deliver on time. |
| Information technology technicians | Technicians can offer technical expertise and help desk assistance. | • Make sure the system suits your organisation’s business needs.  
• Highly specialised services may be costly. |
Meet quote requirements

The three-quote system is a common practice among commercial entities. Some organisations will choose the cheapest of three quotes, while others will use a set of criteria to establish the best value-for-money quote. Ensure the organisation you request the quote from has all the information they need to meet your requirements. Withholding important information will delay the project and may damage future negotiations with the supplier. Important considerations when reviewing quotations are provided here.

<table>
<thead>
<tr>
<th>Type of work required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly specialised work may limit your commercial options, but deliver the highest quality outcome.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who can deliver the result the fastest? What implications will this have?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commercial confidentiality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can you trust the organisation with your information and assets? For government organisations, are there other security concerns you must consider?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the implementation to be staged, continuous or concurrent with other activities or work? How does this affect the way you source quotes?</td>
</tr>
</tbody>
</table>

A negotiable quote

When gathering the information, look for references within the quote documentation that may imply negotiability. If you are clear about the objectives of your system changes, then you may be able to negotiate some project variables prior to acceptance to better suit your organisation’s needs.

Negotiation may involve:
- price
- performance milestones
- quality options
- time line options
- staffing options.
1C Select a system supplier or developer

Selection of a system supplier or developer is no different than for any significant purchase decision at the organisational level. Initially, you might decide to develop the system within the company. A decision to outsource might be governed by the fact there is not the technical expertise required in-house or your research has shown that the process will be more cost effective, it will be quicker and the standard of work will be of a higher quality.

Factors that may lead you to complete the work internally include:

- the desire to integrate operations
- control of lead time and costs
- better quality control
- cost considerations: it may be less expensive to make the changes with internal staff expertise
- a need to exert direct control over the process
- design secrecy: a requirement to protect proprietary technology
- productive use of internal knowledge and experience; that is, using existing idle capacity
- unreliable or incompetent external suppliers/developers
- quantity of work is too small to interest an external supplier
- greater assurance of continual work
- political, social or environmental reasons; for example, workplace relations issues, workplace culture and political nuances
- emotion; for example, esteem or pride in undertaking the work internally.

External impacts on the outsourcing decision

The following information outlines some common influences experienced by businesses wishing to outsource the supply and development of an administrative system.

<table>
<thead>
<tr>
<th>Anti-discrimination</th>
</tr>
</thead>
<tbody>
<tr>
<td>You must not wilfully discriminate against a supplier based on age, sex, race, physical ability or health. Anti-discrimination laws establish penalties for unjustified discrimination in the awarding of external contract business.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business ethics</th>
</tr>
</thead>
<tbody>
<tr>
<td>This covers the common and statutory laws of contracts and the moral compass applied to business dealings. It can include timely payment, carrying out work to an acceptable standard and awarding new business to suppliers without prejudice or bias.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Privacy laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy requirements for individuals may apply to contract negotiations with an outsourcing partner. More often corporation law will apply concerning company property and secrets.</td>
</tr>
</tbody>
</table>
Example: setting criteria to evaluate suppliers

After advertising in the industry newsletter and national papers, three tender bids were received by Jed's Engineering for the upgrade of its administrative system. The work was all encompassing. It included completely new software design, new hardware throughout the building, a training component and an ongoing maintenance contract. From a financial perspective, the three bids were all within 15 per cent of each other. The managers decided to evaluate the three options based on value and possible long-term synergy with the organisation.

The criteria they developed included:
• cultural alignment (the developer’s and Jed’s Engineering’s staff)
• schedule flexibility
• evidence of past performance.

CRM system developer Synch Design eventually won the contract due to its willingness to accommodate Jed’s Engineering’s new assessment criteria. All tender bids were of similar quality with respect to specifications, cost, time and resources, yet the tacit qualities of cultural cohesion and accommodation helped Jed’s Engineering make the final decision.

Practice task 3

You’ve just received three bids for work and matched the bids and criteria in this table. Based on this information, which bid would you choose? Why?

<table>
<thead>
<tr>
<th>Selection criteria</th>
<th>Bid 1</th>
<th>Bid 2</th>
<th>Bid 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>$8,000</td>
<td>$8,210</td>
<td>$7,790</td>
</tr>
<tr>
<td>Time line</td>
<td>2 months</td>
<td>2 months</td>
<td>8 weeks</td>
</tr>
<tr>
<td>System</td>
<td>Chapman Retail Management System (CRMS)</td>
<td>2 years CRMS experience and SME (subject matter expert) on staff</td>
<td>6 years on CRMS development team</td>
</tr>
<tr>
<td>Specifications</td>
<td>Alignment of sales data with warehousing weekly reports. Upgrade from two click to one click reporting for daily sales data.</td>
<td>Complete on-site in consultation with warehouse and sales staff. Complete after hours.</td>
<td>Complete all work outside of work hours.</td>
</tr>
<tr>
<td>Quality assurance</td>
<td>Heuristic evaluation</td>
<td>Quality is guaranteed by us</td>
<td>Quality systems include ISO 9004:2000</td>
</tr>
<tr>
<td>Project manager</td>
<td>Bidder to supply</td>
<td>Supplied</td>
<td>Supplied</td>
</tr>
</tbody>
</table>
Learning checkpoint 1
Plan for the new or modified administrative system

This learning checkpoint allows you to review your skills and knowledge in planning for the new or modified administrative system.

Part A

1. Identify one modification that could be implemented within your organisation’s administrative system. Provide evidence of the feedback you collected and describe how you concluded that the modification was necessary.

2. Describe an occasion when you were required to obtain a quote from a supplier/developer. Include the method you used to request the quote and the reason for the service or product supply.

3. Think of a time when you needed to make a crucial business decision.
   a) How did you approach the decision?
Choosing an appropriate strategy is critical to the implementation process. Starting on the right note can set the mood for the entire process. It can reduce disruption, help you anticipate problems or issues and develop a timely response, identify resource requirements and identify outcomes that you need to monitor. Consider the range of variables you might encounter when implementing a new or modified administrative system across a large organisation.

Variables that might be encountered
- Staff may lose confidence or focus.
- Performance may be interrupted or hindered.
- Conflict may develop between colleagues, functional groups or organisational levels.

Establish the baseline for a strategic approach
A change may range from a simple modification to a totally new system and the context from a small business to a global corporation. Strategic planning will necessarily differ from one situation to the next. The information here highlights the process that underpins the selection of an appropriate strategy.

<table>
<thead>
<tr>
<th>Establish the context</th>
<th>Establish the context in which the implementation will occur</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Is the organisation large, small, new or established, and organised with deep reporting lines or in a flat structure? The size and depth of the organisation will contribute to the challenges of training, implementation speed and need for delegation or authority.</td>
</tr>
<tr>
<td></td>
<td>Assess the time lines needed to ensure that the time allocated is reasonable in order to limit downtime but allow for training.</td>
</tr>
<tr>
<td></td>
<td>Identify the training needed and whether people need time off for training.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning model</th>
<th>Create a learning model that suits the context</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For staff members who are less averse to change, training and adoption of the system may involve group meetings and trials. Feedback sessions may be scheduled for critical evaluation and assessment of the system changes.</td>
</tr>
<tr>
<td></td>
<td>In change-averse situations, formal training sessions may be required and allowances for counselling and professional development sessions made.</td>
</tr>
<tr>
<td></td>
<td>Communication during change processes must ensure that information about the change and its consequences is presented in such a way that people with different systems of understanding can access this information.</td>
</tr>
<tr>
<td></td>
<td>Individual reflection, inquiry and encouragement to share ideas are recommended.</td>
</tr>
</tbody>
</table>
Temporary reduction of workload

Where implementation will affect the ability of teams to perform, a strategy that caters for a continuous roll-out may be appropriate. Temporary reductions or increases in workload can be planned for and those involved given sufficient notice to adjust.

Re-defining staff roles and re-distributing tasks

A clear strategy is required if changes to job roles result from the new system implementation. Clarity with respect to the level of communication, the directives and reasons for the change, and the potential outcome for the individual must be considered.

Trialling or testing the new system

The implementation plan should include an opportunity for users (staff members) to trial or test the new changes. This strategy serves both staff and organisational needs. An appropriate approach will depend on the organisational context. Large-scale testing may be required for significant changes that affect multiple functional layers within the business.

Organisational objectives

To achieve the identified outcomes, managers need to remain focused on the original objectives while maintaining an open mind for necessary or opportunistic changes during the process. Here is a list of methods to use.

Maintenance or shift in organisational culture

Where significant changes are required, you may have to change the organisation’s or a team’s culture in order to be able to successfully implement the change. This is generally identified in the consultation process. Cultural change is a major topic of business research as it needs to be done carefully and with consideration for all staff. There are various philosophies on transformational leadership and change management.

Ensuring the system functions correctly

Heuristic evaluation and other quantitative and qualitative methods should be considered in the strategic planning to ensure the modifications to the system are compatible with existing components. If a new system is being installed or implemented, you may need to observe how the system functions over a period of time, oversee trials and organise for feedback to be collected and analysed.
<table>
<thead>
<tr>
<th>Elements of implementation</th>
<th>Opportunity for participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Senior staff</td>
</tr>
<tr>
<td>Procurement</td>
<td>Make decisions on budget and resource requirements</td>
</tr>
<tr>
<td>Communication</td>
<td>Set communication lines and milestones</td>
</tr>
<tr>
<td>Quality assurance</td>
<td>Define organisational quality standards</td>
</tr>
<tr>
<td>Integration</td>
<td>Set time lines and scope of integration</td>
</tr>
<tr>
<td>Testing and review</td>
<td>Monitor outcomes in accordance with set objectives</td>
</tr>
</tbody>
</table>

**Provide motivation**

During implementation, even a good plan can sometimes miss the mark. Some staff may feel excluded, sidelined by others or disinterested in the process. The manager’s role is to maintain the motivation of staff to willingly participate in the process at the level designed during the planning process. You must always include everyone in the implementation process to ensure its success.

Here are some key approaches to assist in motivating staff.

### Clear direction

**Provide clear direction**

People are more likely to feel confident and included when clear instructions are given. Make sure they understand the reasons for the implementation and know what their responsibilities are.

### Vision

**Provide a strong vision**

It is important to have continual reference at all levels to the end objectives of the process and the benefits it will provide to individual staff members and the organisation. Benefits might include improved skill levels, added responsibilities, improved work practices, work satisfaction and efficiencies.
Organisational guidelines and objectives should provide the basis for any administrative system implementation. Additional project objectives may be delegated to the manager responsible for the execution of the project to supplement these guidelines. You must ensure that the project and organisational objectives align prior to commencing the implementation.

Implementation can be conducted:
- via a trial period in which a section of the organisation participates
- by phasing in the new system a section at a time until the whole organisation is connected
- by changing to the new system while still using the old system for a set period (this might be used if major difficulties in the new system would have a negative impact on the organisation and severely disrupt work, but this option may be costly and prove unwieldy)
- by direct cutover, in which the new system begins operation throughout the organisation on a set day.

Use relevant project management tools

As implementation is often based around the methodologies of project management, it would help to understand the tools and techniques used by project managers during the implementation phase. Some project management tools are listed here.

**Work breakdown schedules**
A list of tasks required to complete the project. Each item is assigned a start/finish time, required resources, responsibility and preceding tasks (if applicable).

**PERT chart**
The Program Evaluation and Review Technique (PERT) uses a flow chart style of diagram to highlight the relationship between tasks.

**Gantt chart**
Lists tasks on a project time line and graphically displays interdependencies such as start-finish, start-start and finish-start relationships.

**Critical path method**
Establishes the flow of tasks from start to finish along the most favourable (or critical) time line.

Elements of the implementation process

The introduction of each element of the implementation process will vary depending on the project. Often these stages will overlap for the entire project. The following process is typical of most implementation plans.
Example: implementation problems with international users

A supply chain software solutions company is a regular provider to large companies. During a recent implementation for a major company, the project manager assigned to the task encountered a problem where international users were having difficulties understanding how to use the new system. The company’s engineers and communications specialists worked on modifying the instructions and training manuals to suit local divisions while maintaining the integrity of the overall implementation. The result provided a good case study for IT systems implementation teams who do not always have adequate resources allocated to contingency and risk management. The company’s experience with global organisations meant that it had a professional team of experienced consultants on hand to rectify the problem and complete the integration on time and within budget.

Practice task 6

Create an outline of an implementation plan using the sample template provided here. Ensure your plan covers the basic elements and any other typical or specific elements that relate to your organisation. Present the plan to your assessor or trainer for feedback.

Elements that should be included in your plan include:

- contingencies and risks
- objectives
- budgetary requirements
- time lines
- resources (human and physical).

<table>
<thead>
<tr>
<th>Implementation plan (template)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1:</td>
</tr>
<tr>
<td>Strategy</td>
</tr>
<tr>
<td>Short term:</td>
</tr>
<tr>
<td>Long term:</td>
</tr>
<tr>
<td>Action plan</td>
</tr>
<tr>
<td>Action plan</td>
</tr>
<tr>
<td>Milestones</td>
</tr>
</tbody>
</table>


Online tutorials

Online tutorials are becoming more popular, with programs such as Adobe Captivate, Camtasia Studio 5 and Moodle gaining widespread exposure. There are many advantages and some limitations of using online training delivery, as shown here.

<table>
<thead>
<tr>
<th>Advantages of online training</th>
<th>Limitations of online training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be created once and delivered countless times</td>
<td>There is a lack of tacit knowledge transfer (experience-based knowledge).</td>
</tr>
<tr>
<td>Can be accessed from any internet-ready computer</td>
<td>Users are unable to solicit discussion (except in a very limited capacity).</td>
</tr>
<tr>
<td>Delivers a consistent message</td>
<td>They don’t provide a good setting for experiential learning.</td>
</tr>
<tr>
<td>Can be relatively inexpensive</td>
<td></td>
</tr>
</tbody>
</table>

On-the-job trainers

On-the-job trainers may include outsourced software trainers, internal subject matter experts or registered training company facilitators. The aim is to provide the knowledge and skills required to effectively use the administrative system. Influencing factors include cost, time and available resources.

Support options

Knowing the specific knowledge and skills that need to be disseminated and the training options available provides an organisation with the ability to plan more effective support services. If the organisation knows that a certain level of training has already been provided, support services only need to cover the common issues, specific needs of function groups or individuals and contingency issues.

Some support services are outlined here.

**Guidelines**

Updated policy guidelines and procedural manuals to provide a ready reference to new procedures.

**PD opportunities**

Professional development opportunities, including ‘communities of practice’ in which people share information and help each other; irregular events; and personal research and study opportunities.
With any system implementation, problems will arise. These issues may be small and require no more than a discussion to rectify, or be large enough to put the entire project at risk.

It is important to spend time performing a risk analysis on the system implementation project during the planning phase. At that time, the project manager is usually more interested in the schedule, costs, resource procurement and so on, and therefore not much time is dedicated to identifying potential risks. While it is important not to dwell on these potential outcomes, it is good business practice to identify the main causes of implementation issues.

Confidence also plays a major part in preparing for workplace problems. Confidence is based on the users’:
- ability to use the system
- knowledge of the system processes (underpinning or background knowledge)
- individual training needs
- understanding of the organisation’s direction and vision.

**Identify contingencies**

Contingency is calculated using risk factors that reflect various unknowns and unanticipated expenses within the project. Risk factors include technical, cost and schedule risks. Major projects are usually budgeted to deal with contingencies in the order of 25–35 per cent.

Contingency analysis is not an exact science and is at best a subjective appraisal of the project. The best methods of identification are based on real examples generated by experienced people. It helps to have experienced reviewers to bring reality to the estimates. Estimates using risk analysis (ERA) is a construction industry tool that is adaptable to systems administration projects. It applies a number of rules and techniques to assist planners and managers in identifying contingencies.

Rules and techniques that can assist planners to identify contingencies are shown here.

**Rough order of cost**

Also referred to as ‘rough order of magnitude’. This is an estimate of total project costs, which gives the big picture visualisation for further development.

**Option study**

Brainstorming or other critical thinking techniques are used to establish likely contingencies.
List the possible contingency measures that could have been taken prior to the network outage and explain how each measure could have been applied to avoid the outcome.

Summary

1. When identifying an implementation strategy you should establish the context, create a learning model that fits your context, establish critical success factors and evaluate the strategy against those success factors.

2. The chosen implementation strategy should balance staff needs and project or organisational objectives.

3. Encouraging staff to participate in the implementation process results in reduced instances of resistance and conflict, better assimilation of the new changes, better morale and higher value feedback.

4. Maintaining staff motivation during the implementation process requires a clear direction, vision and personal encouragement and reward.

5. Systems implementation requires a project management approach when considering procurement, quality assurance, risk management, communication plan and integration methodologies.

6. Administration of business processes requires standardised communication procedures to remain effective and efficient. A well-defined systems training and communication plan is essential.

7. Minimising the impact of contingencies on users requires a sound knowledge of risk assessment and staff-management techniques.
**Personal logins and passwords**

Senior system administrators maintain the password logs to restrict unauthorised changes. More secure systems require quarterly, monthly or even daily password changes; for example, the Australian Defence Restricted Network uses multiple levels of security, one of which is the need for regular password changes and different passwords for access to different levels of secure information. Personal logins and passwords are a common method of ensuring that only authorised personal are entering the system and also enable the company to control and monitor how individuals use the system.

**Confidentiality and non-disclosure agreements**

Confidentiality and non-disclosure agreements are contracts between individuals or groups and the organisation. These agreements set down the strict usage of confidential corporate knowledge. Any element of the business that is considered sensitive to its commercial livelihood can be contained in these agreements. As they are formal contracts, a breach of the terms of the contract may lead to prosecution under contract law, criminal law (for fraud and criminal negligence) and tort law. This maintains the secrecy of corporate information.

Here is a list of items that are considered to be corporate knowledge and may be contained within a non-disclosure agreement.

<table>
<thead>
<tr>
<th>Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processes</td>
</tr>
<tr>
<td>Research and development</td>
</tr>
<tr>
<td>Product or service details</td>
</tr>
<tr>
<td>Personnel details</td>
</tr>
<tr>
<td>Client details</td>
</tr>
<tr>
<td>Other policies and procedures</td>
</tr>
</tbody>
</table>

**Safeguards**

Safeguards such as virus and spam protection, firewalls and other defences to outside hackers improve a system's security. However, given the value of information held in computer storage around the world, hackers are continually trying to invent new ways around the systems. Vigilance with respect to the currency of your system protection software and hardware is vital.
Example: reacting to the changing needs of your customers

In 2008, a local investment organisation recognised the proliferation of the smartphone in the market. It also singled out smartphone users as a key target market, as they generally had corporate affiliations or were in the higher end of salary earners. The company immediately invested in the development of a mobile device transaction application to allow these users to access its services in a more readable, easy-to-use format. The system integrated with the firm’s back-end financial system to allow users to access, view, invest, sell and pay accounts from their handheld device. In a stroke of marketing opportunism, they also advertised the service using the latest ‘must-have’ gadget, Apple’s iPhone. Modifications to the wireless financial systems were quite significant, considering the security risks that mobile devices were perceived to allow. Yet in doing so, the investment firm gained a loyal customer base of growing, high-value clients.

Practice task 11

Consider some of the changes that have affected your organisation or one that you are familiar with over the last five to ten years. Use the table to describe some of the changes or modifications made to the organisation’s administrative system in response to these changes. In the third column, comment on why/why not you believe these changes were effective and cost effective.

<table>
<thead>
<tr>
<th>Type of change</th>
<th>Response by your organisation</th>
<th>Your comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in the nature and purpose of the system or organisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in user requirements</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

continued ...
Feedback systems

Having an effective feedback system can provide managers with valuable staff knowledge. System users are the people who are most likely to pick up problems in the system initially. Even if their technical knowledge of the system is not as high as that of the managers or developers, their practical approach to the intuitive (or otherwise) use of the system can provide a myriad of opportunities for the organisation to make improvements or direct resources where they are needed. For monitoring and training purposes, feedback can also highlight areas of knowledge gaps. If a staff member admits that they don’t know how to do something, immediate action from supervisors or managers can instigate some form of training to overcome the shortfall.

Professional development opportunities

Identifying knowledge gaps may also provide opportunities for professional development over and above formal training in specific aspects of the system. Staff using the administrative system at one level may wish to gain access at a higher level in preparation for a move within the company. For this reason, system training can serve as a reward or incentive for promotion or role development.

Induction training development

Induction training usually covers everything from the physical layout of the office or worksite, to the signing of employment contracts, the organisation’s policies and procedures and role responsibilities. For this reason, the process can be quite overwhelming for new employees (including managers and senior staff). The induction training approach is also highly dependent on the task environment. Use the method that best achieves the organisation’s objectives. When structuring the induction training for the administrative system, consider the following options.

**Phased training**

Allow the user to gain a basic overview of the system so that they can initially handle day-to-day tasks. Once this is achieved, conduct peer-based, supervisor or formal training on the specific tasks they will need to perform in their job. In the final phase, conduct informal training to pass on any tacit knowledge of the system and its features.

**Formal training**

Conduct a specific, uninterrupted training session for the employee to gain the skills and knowledge required to use the system. This may involve the use of formative assessments to consolidate learning before moving to the next area of knowledge.

**Informal training**

Pair the new staff member with a buddy (usually an experienced peer) who will train them on-the-job. This is highly effective in business environments where system use is minimal, that is, use is confined to daily access rather than minute-by-minute access.