

# **BSBADM504**

# **Plan and implement administrative systems**

Release 1

**Learner guide**

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Aspire Version 1.1

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BSBADM504 Plan and implement administrative systems Release 1

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# Before you begin

This learner guide is based on the unit of competency *BSBADM504 Plan and implement administrative systems*, Release 1. Your trainer or training organisation must give you information about this unit of competency as part of your training program. You can access the unit of competency and assessment requirements at: [www.training.gov.au](http://www.training.gov.au).

## How to work through this learner guide

This learner guide contains a number of features that will assist you in your learning. Your trainer will advise which parts of the learner guide you need to read, and which practice tasks and learning checkpoints you need to complete. The features of this learner guide are detailed in the following table.

Feature of the learner guide	How you can use each feature
Learning content	Read each topic in this learner guide. If you come across content that is confusing, make a note and discuss it with your trainer. Your trainer is in the best position to offer assistance. It is very important that you take on some of the responsibility for the learning you will undertake.
Examples and case studies	Examples of completed documents that may be used in a workplace are included in this learner guide. You can use these examples as models to help you complete practice tasks and learning checkpoints. Case studies highlight learning points and provide realistic examples of workplace situations.
Practice tasks	Practice tasks give you the opportunity to put your skills and knowledge into action. Your trainer will tell you which practice tasks to complete.
Video clips	Where QR codes appear, learners can use smartphones and other devices to access video clips relating to the content. For information about how to download a QR reader app or accessing video on your device, please visit our website: <a href="http://www.aspirelr.com.au/help">www.aspirelr.com.au/help</a>
Summary	Key learning points are provided at the end of each topic.
Learning checkpoints	There is a learning checkpoint at the end of each topic. Your trainer will tell you which learning checkpoints to complete. These checkpoints give you an opportunity to check your progress and apply the skills and knowledge you have learnt.



## Foundation skills

As you complete learning using this guide, you will be developing the foundation skills relevant for this unit. Foundation skills are the language, literacy and numeracy (LLN) skills and the employability skills required for participation in modern workplaces and contemporary life.

The following table outlines specific foundation skills noted for your learning in this learner guide.

Foundation skill area	Foundation skill description
Learning	<ul style="list-style-type: none"> <li>Actively reinforces own knowledge and skills by training or mentoring others</li> </ul>
Reading	<ul style="list-style-type: none"> <li>Extracts, analyses and evaluates information from complex texts, including organisational policies and procedures</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Gathers and utilises information and ideas from a range of sources to create texts to meet organisational requirements</li> <li>Creates instructional texts using grammatical structures and vocabulary appropriate to audience and context</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Participates in verbal exchanges using appropriate style, tone and vocabulary for audience, context and purpose</li> <li>Uses listening and questioning techniques to elicit key information and confirm understanding</li> <li>Presents complex information adjusting presentation style and vocabulary to suit the audience</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Recognises and interprets numerical information related to budgets</li> </ul>
Navigate the world of work	<ul style="list-style-type: none"> <li>Develops systems to meet organisational and legislative requirements</li> </ul>
Interact with others	<ul style="list-style-type: none"> <li>Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role</li> <li>Collaborates with others to achieve joint outcomes, providing guidance to others, where necessary</li> </ul>
Get the work done	<ul style="list-style-type: none"> <li>Applies formal processes when planning complex tasks, producing plans with logically sequenced steps, reflecting an awareness of time constraints</li> <li>Monitors progress of plans and changes them to meet new demands or priorities</li> <li>Systematically gathers and analyses all relevant information and evaluates options to make informed decisions</li> <li>Anticipates potential problems and implements contingency plans as soon as warning signs are recognised</li> <li>Uses and investigates new digital technologies and applications to manage and manipulate data</li> <li>Demonstrates awareness of the importance of data security in a digital environment</li> </ul>

## What do you already know?

Use the following table to identify what you may already know. This may assist you to work out what to focus on in your learning.

Topic	Key outcome	Rate your confidence in each section
Topic 1 Plan for the new or modified administrative system	1A Identify the requirements of the administrative system	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1B Obtain quotations from the suppliers/developers of systems	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1C Select a system supplier or developer	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 2 Implement the new or modified administrative system	2A Identify and develop implementation strategies	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2B Encourage staff to participate in the implementation process	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2C Implement the system	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2D Define and communicate procedures for using the system	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2E Provide training and support on the use of the system	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2F Deal with contingencies to ensure minimal impact on users	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident

<b>Topic</b>	<b>Key outcome</b>	<b>Rate your confidence in each section</b>
Topic 3 Monitor the administrative system	3A Monitor the system's use, security and output	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3B Modify the system to meet changing needs	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3C Identify further modifications and notify users	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3D Monitor staff training needs	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident

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# Topic 1

## Plan for the new or modified administrative system

Administration systems include all those processes, procedures and technologies that enable an organisation to efficiently manage its finances, products, suppliers, clients and staff. Systems vary considerably depending on the size and nature of the organisation; they can be simple paper-based formats or highly integrated and complex computer-based systems, or a combination of both.

It is crucial that you understand what your organisation requires in terms of administrative systems; for example, existing systems in your organisation may suit current needs, but fall short of the future requirements of the organisation. These may include product or service expansion, cost savings, profitability or performance monitoring. You will need to consult and collaborate with key staff, managers, suppliers and system developers to help you make any enhancements, modifications or replacements to the existing system.

In this topic you will learn how to:

- 1A Identify the requirements of the administrative system
- 1B Obtain quotations from the suppliers/developers of systems
- 1C Select a system supplier or developer

# 1A

## Identify the requirements of the administrative system

Administration involves the management and performance of business affairs. This requires managers to plan, make decisions and recommendations, prepare detailed documents and communicate regularly at a variety of levels. Facilitation of these tasks is enhanced by an effective system that provides the backbone to all other business systems, processes and procedures. Without an efficient and effective administrative system, the financial viability and productivity of the organisation would be at risk. Objectives around the identification of the requirements need to be a part of any administrative improvement. Stakeholders and budgetary concerns are major parts of the consultation process.



### An administrative system

A typical administrative system consists of interdependent parts or elements that interact with each other and with other systems. It generally includes systems relating to filing, mail, accounting, distribution, client management, stock monitoring, payroll and banking, e-commerce, data and processing, and communication – all the functions that enable the organisation to operate efficiently. Such a complex system needs to be continually monitored and reviewed to ensure it functions smoothly and continues to meet the organisation's and customers' requirements.

Identifying which requirements or modifications are needed requires a systematic approach. Often, management will conduct a feasibility study to identify the organisation's current work practices and tasks as well as its future objectives, to see how the organisation could benefit by having a new or improved system; for example, there may be a need to process information faster, improve customer service or reduce unnecessary costs. An effective administrative system needs to be accurate, reliable and relevant, and enable the organisation to meet its time frames, engender confidence and maintain quality standards.

### Organisational administration

The need for more complex and integrated administrative procedures has developed exponentially as businesses have grown larger. Significant leaps in demand have been experienced during the global shifts in economic power, production economies, political alignment and industrial and technological booms over the past 200 years. Steel production supply chains, spice and grain supply and military logistical demands were responsible for significant improvements in operational administrative systems in the eighteenth century. As early as 1759, Portuguese scholars were learning the intricacies of commerce administration at the Aula do Comércio in Lisbon, to support their commercial trade routes.



The first 'business school' was founded 122 years later by Joseph Wharton in Pennsylvania, USA, as a by-product of the fortune he gained through nickel and steel production. This led to a number of prominent universities offering similar qualifications until Harvard Business School developed the first Master of Business Administration (MBA) program in 1910. The success of this approach to administration has led to the proliferation of MBA programs throughout the world, with many employers now considering the qualification to be the entry standard for mid-level executives.

Globalisation is the most recent driver for competitive, efficient and effective administration. Small enhancements in supply, reporting, forecasting and other business administration functions can result in massive competitive advantages when global scales are considered. Information technology has therefore played a key role in the evolution of administration.

## Build effective administrative systems

From a skills and knowledge perspective, managers generally have a role in the planning and ongoing use of administrative systems. These managers can be in a variety of appointed roles.

When planning an administrative system, managers could be involved in:

- operations management
- project management
- business management
- office management
- systems administration.

## Knowledge of administrative systems

Effective administration is not only a foundation for ongoing business success, but a day-to-day necessity for operational performance. Managers empowered to plan, implement and manage a business's administrative systems take on the responsibility of being subject matter experts in the legal, ethical and safe workplace standards expected by the industry. This includes knowledge of anti-discrimination legislation, ethical principles, codes of practice, privacy laws and work health and safety. The competencies required for such roles often overlap with those required to effectively manage an administrative system.

An effective manager of an administrative system will use:

- communication and interpersonal skills
- operational knowledge
- information systems knowledge
- literacy skills
- planning and organising skills
- knowledge of compliance requirements
- problem-solving skills
- research skills.

## System requirements

There is no single list of components that belong in every administrative system. The interrelationships, layouts and access types are highly reliant on organisational needs and options. Initially, you will need to identify the purpose or nature of the administrative system in your organisation: what it aims to provide or achieve. Is the system part of a larger knowledge management system (KMS) or the overarching system within which several information systems exist, such as a customer relationship management or e-commerce system? You need to know what the organisation requires of its administrative system in terms of the aspects listed here.

**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?

**Access speeds/types**

- What restrictions and classifications might there be?

**Type of system**

- Is the system web-based, document-based, paper-based, server- or file-based or a combination?
- Will systems integrate?
- What peripherals or consumables need to be considered?
- What is the cost for the system to operate efficiently?

**Compliance requirements**

- What legislative benchmarks, industry standards, WHS reporting and governance requirements must be complied with?
- In what ways?

**Legislative considerations**

- What are the legalities of purchasing and/or licensing usage of the system?
- Can the system be used across multiple sites and multiple users?
- If data is stored on a cloud server, what laws govern the data ownership?
- What laws govern the privacy protection for the use and distribution of personal data?
- What are the legal requirements for data retention?

**Procurement requirements**

- Are there procurement policies and procedures that govern purchasing decisions?
- How is value for money evaluated on a purchase decision?

**Policies/procedures****Organisational policies and procedures for the use of the system**

- Does the procedural manual need to be updated?
- How effective is it in helping staff use the system?
- Do guidelines cover quality assurance issues, security, privacy, back-up procedures, legal requirements, licence registrations?
- What risks does the system pose to the organisation; for example, the impact of failure of the system?

## 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'.

Unit	Symbol (bits)	Bytes
Kilobit per second	kbit/s = 1,000 bit/s	125 B/s
Megabit per second	Mbit/s = 1,000 kbit/s	125 kB/s
Gigabit per second	Gbit/s = 1,000 Mbit/s	125 MB/s
Terabit per second	Tbit/s = 1,000 Gbit/s	125 GB/s
Petabit per second	Pbit/s = 1,000 Tbit/s	125 TB/s

## 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.



## Process approach

A process approach would evaluate a process from start to finish, such as the sales cycle, marketing cycle, product life cycle or project life cycle. A process may also be audited in this fashion, though this would typically involve several different functional groups such as production, marketing, sales and customer service. Auditing might therefore rely more heavily on system outputs and inputs for comparison and evaluation for the sake of efficiency.

## Feedback approach

Using internal or external client feedback for the purposes of administrative system monitoring and review is essential. Many organisations supplement formal processes, such as audits, with intricate client feedback systems in order to balance the subjective and objective information used in decision-making.

Internal system users include directors, senior executives, colleagues, subordinates, liaison representatives, cross-functional staff members and casual personnel. Identify the users you need to interview and obtain feedback from; in some cases it may be users from all of these levels.

External client feedback is commonly (and incorrectly) limited to customer satisfaction surveys. External customers include all external stakeholders such as suppliers, contractors, shareholder representatives, end users and potential users of the organisation's products and services. Limiting feedback to one area will limit the effectiveness of the information you gather. Seek to gather information from all relevant sources. Relevant sources are those who use, affect or are affected by your administrative system. Consider the administrative system users with respect to the following areas.

### Purpose and nature of organisation

Local councils, charities and commercial enterprises will have very different administrative systems based on their purposes and nature. The types of clients that feedback will be gathered from will therefore be weighted differently for each.

### Skills of existing staff

High-end or regular users will offer different insights than occasional users.

### Staff training needs

The inputs and outputs of an effective administrative system can help to determine skills gaps and staff training needs. Additional reports and feedback from workgroups can also identify training opportunities.

### Work practices

Feedback from workgroups applies in this instance. However, informal feedback regarding work practices should also be captured for analysis.

## Heuristic evaluation

The heuristic evaluation method of system analysis requires a systematic inspection of the system interface with the objective of discovering usability problems. This can be carried out individually or as part of the process or functional area approach. Once a suitable approach is chosen, data can be gathered and used within a context of consultation and collaboration with relevant stakeholders. This input is vital for any organisational change, whether small or large. Buy-in from key groups and individuals will benefit any implementation strategy by reducing the risk of resistance to change.

For more information on heuristic evaluation, visit: [www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation](http://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation). This article illustrates the importance of collaboration when reviewing and making any changes to an administrative system.

### Example: using feedback to improve a KMS

A large engineering company decided to overhaul its knowledge management system. This involved integrating its sales administration system into the overarching system. There was widespread speculation that they would lose client information, no-one would know where to find anything and the system would be poorly maintained.

To identify what was needed in order to integrate the system, the company gathered feedback from internal clients about what information they wanted the system to be able to do for them and how they would like the system organised. They applied measurements of the various outputs to known industry benchmarks. This analysis was both qualitative and quantitative and provided the administrator with ample information. She then collaborated with the sales team and IT manager to ensure any implementation of the upgrades would be seamless. The modifications required were minimal, from a user's point of view, as most of the programming and integration requirements occurred in the back-end. Those using the system therefore required very little training.

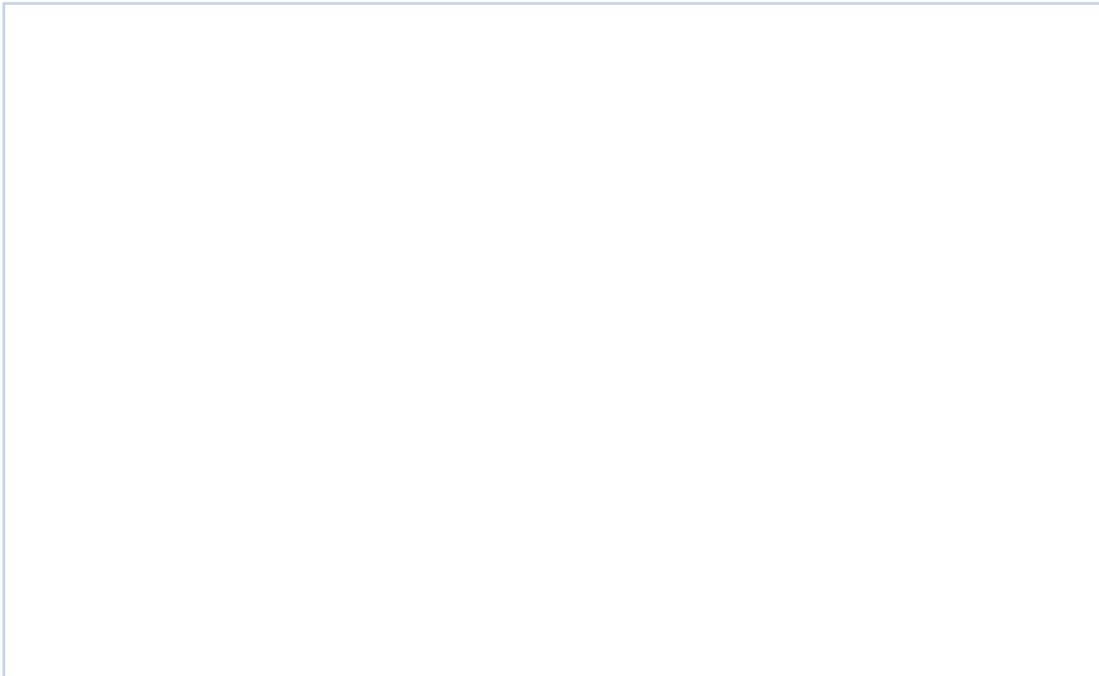
## Practice task 1

Consider the administrative system used at your organisation. Identify the following features of the system:

- System purpose
- Main components (functional areas, users, etc.)

Outline any constraints on:

- the number and types of users
- geographical coverage
- access speeds and types (restrictions and classifications)
- the type of system; for example, web-based, document-based, paper-based, server- or file-based
- compliance requirements, such as legislative benchmarks or industry standards, that apply to the system
- organisational policies and procedures for use of the system.



## 1B

Obtain quotations from the suppliers/  
developers of systems

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.

Suppliers	What they offer	What to consider
<b>System consultants</b>	System consultants analyse the organisation's needs and suggest the most appropriate system that meets the required needs, quality and budget.	<ul style="list-style-type: none"> <li>• Make sure they clearly understand your organisation's requirements.</li> <li>• Use your network to seek a recommendation.</li> </ul>
<b>Efficiency consultants</b>	Efficiency consultants provide advice on what savings can be made on the system.	<ul style="list-style-type: none"> <li>• Consultants must be aware of the objectives of the system in order to measure for performance gaps and cost efficiencies.</li> </ul>
<b>Computer/software suppliers</b>	Technology suppliers provide software solutions to meet an organisation's needs.	<ul style="list-style-type: none"> <li>• Consider the type of operating system, cost, capacity, compatibility and training needed.</li> <li>• Visit websites to check benefits and cost comparisons.</li> <li>• Ensure the supplier understands your organisation.</li> <li>• Understand what they offer in terms of backup and maintenance.</li> </ul>
<b>Equipment suppliers</b>	Equipment suppliers provide the equipment needed such as computer hardware, networking hardware and wiring.	<ul style="list-style-type: none"> <li>• You may want to seek quotations from alternative suppliers even if you already have a preferred supplier.</li> <li>• Sometimes it is technically easier to integrate systems manufactured by the same designer.</li> <li>• Check the expertise and quality of backup service.</li> <li>• Make sure they can deliver on time.</li> </ul>
<b>Information technology technicians</b>	Technicians can offer technical expertise and help desk assistance.	<ul style="list-style-type: none"> <li>• Make sure the system suits your organisation's business needs.</li> <li>• Highly specialised services may be costly.</li> </ul>

Suppliers	What they offer	What to consider
<b>Information technology trainers</b>	IT experts train internal staff to manage and maintain the system.	<ul style="list-style-type: none"> <li>• Ensure all your project considerations are clearly outlined as trainers can be very costly.</li> <li>• Be sure to train additional staff for redundancy and contingencies.</li> </ul>
<b>Internal IT staff and clients</b>	Internal IT staff and clients can offer technical expertise, functional assistance and training.	<ul style="list-style-type: none"> <li>• This is a support resource for the company and is a consistent cost.</li> <li>• Training should be planned and regular to gain the most benefit.</li> </ul>
<b>Office equipment suppliers and support personnel</b>	Office suppliers provide equipment for paper-based systems such as filing cabinets, mailing equipment, files, labels, etc.	<ul style="list-style-type: none"> <li>• A preferred supplier may offer discounts.</li> </ul>

## Guidelines for obtaining quotes

Your organisation will probably have guidelines for obtaining quotes from suppliers. These guidelines may range from formal processes and policies to informal recommendations from supervisors and managers. In all cases, consult with these sources before contacting suppliers for quotes. Formal methods of requesting a quote can include the following.

Request for tender (RFT)	Request for quotation (RFQ)
Commonly used for larger projects where several highly qualified providers are expected to bid. Tenders are detailed and methodical documents that outline the organisation's specific requirements. A tender process can take months or years depending on the level of detail and work required.	These are more common in small-scale system changes or changes in small to medium enterprises. Documentation outlining all the project specifications, objectives and standards required for the work is usually faxed, emailed or posted to the organisation.

## Types of quotes

The type of quote is highly dependent on the type of organisation and the extent of the changes required to the system. Both government and non-government organisations usually require tenders for administrative system upgrades and substantial changes. Existing contract maintenance might provide modifications and smaller work without further quotes being required.

The types of quote recommended by your organisation may include:

- tenders and bids
- cash quotes
- bundled and unbundled quotes (overall costs versus a price breakdown)
- contract or project-based quotes.

## 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.

### Type of work required

Highly specialised work may limit your commercial options, but deliver the highest quality outcome.

### Time limitations

Who can deliver the result the fastest? What implications will this have?

### Commercial confidentiality

Can you trust the organisation with your information and assets? For government organisations, are there other security concerns you must consider?

### Objectives

Is the implementation to be staged, continuous or concurrent with other activities or work? How does this affect the way you source quotes?

## 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.

## Finalise and present quotes

This stage of the planning and review process should be carried out in accordance with your current procedures and policies. If you have a number of quotes to choose from, ensure the facts are presented so that comparison and evaluation are fair and consistent with normal procedures. Presentation of the quotes for decision-makers (including you) should avoid the perception of personal or institutional biases.



### Example: modify the presentation of a quote

A VHF/UHF radio repair company in Darwin required better automation within its current administrative systems. The staff told the owner that they continually had to print out service dockets for each part of the process and a separate docket for the customer when they picked up their radios. The owner wasn't exactly clear on what could be done, but agreed that the system seemed overly paper-based and unwieldy.

The head technician was asked to obtain quotes from IT consultants to modify the current system. He called local computer companies who recommended developers in Darwin and Adelaide that were familiar with the system they used. When the quotes were submitted for consideration the prices ranged from \$2,200 to \$81,000. The owner was in no position to make a decision as the range was too great and the work to be carried out was not clearly defined. This delayed any work on the administrative system indefinitely.

### Practice task 2

1. Research, identify and list individuals and/or organisations that are able to provide expert advice or technical support/developer for your administrative system.

2. Explain the methods you would use to contact them.

## 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.

**Anti-discrimination**

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.

**Business ethics**

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.

**Privacy laws**

Privacy requirements for individuals may apply to contract negotiations with an outsourcing partner. More often corporation law will apply concerning company property and secrets.

**Copyright and IP**

Consider the impact of the intellectual property rights for the software or system in use. Outsourcing can often require reliance on ongoing maintenance contracts based on strict ownership principles. Additionally, software cannot be copied or re-used without permission (usually in the form of a licence agreement).

**WHS legislation**

The health and safety of outsourced workers must be managed in the same way as existing workers. Clear guidelines for the safe operation of equipment or use of the workspace must be made clear to contractors.

## Comparison and evaluation

Comparison of quotes that have been submitted must be conducted without bias and in line with the project and organisational objectives. If quotes fall outside of these objectives, for reasons such as time, cost or specifications, discuss them with the supplier/developer before requesting they re-submit (in case your original quote specifications were unreasonable). Each quote must be treated consistently and compared to the objective criteria in the first instance. If there is still more than one suitable quote after the criteria have been assessed and met, then aspects of value must be interpreted.

## A basic approach

Value is the perception of fair pricing, performance attributes, quality and timing. Each of these criteria should be outlined in your company policy or the original quote requisition, that is, request for tender or request for quote documents. There are a number of methods you can use to make a decision. It doesn't matter which method you use, just as long as you consider the comparison option that best suits your needs. Qualities such as being flexible and willing to accommodate organisational requirements are important criteria when deciding on a supplier.

When making a quotation decision, the following things must be done.

- Define the objective
- Collect relevant information
- Generate feasible options
- Make a decision
- Implement and evaluate the decision

## 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?

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

## Summary

1. Administrative systems include all those processes, procedures and technologies that enable an organisation to efficiently manage its finances, products, suppliers, clients and staff.
2. You will need to know what the organisation requires of its administrative system in terms of the type of system, number and type of users, staff requirements, storage size, geographical coverage, access speeds and types, and any compliance requirements.
3. Identifying which requirements or modifications may be needed within an existing administrative system requires a systematic approach.
4. Methods of identifying requirements include functional area assessments, process audits and client feedback.
5. Heuristic evaluation requires a systematic inspection of the system interface with the objective of discovering usability problems.
6. Many of the complex administrative systems used today are administered by highly trained internal staff or outsourced to system suppliers, developers or IT professionals.
7. Quotes may be requested using a request for tender (RFT) or request for quote (RFQ).
8. Evaluation of quotes must comply with organisational policies and procedures.

## 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?

b) Explain the methods you used.

4. Discuss how anti-discrimination laws, business ethics, privacy laws, copyright and WHS legislation would affect an outsourcing decision.

## Part B

Read the scenario, then complete the tasks that follow.

### Scenario

You have just been given the responsibility to organise an upgrade to your current finance system. The current system no longer complies with tax and company laws, so the most likely requirement is a simple upgrade to a newer version of the same software. Upon consulting with accounts staff and several software suppliers, you confirm your original thoughts and seek out a suitable provider. The options are listed in the following table, along with the criteria your manager provided you with.

Selection criteria	Option 1: Internal IT staff	Option 2: Retailer	Option 3: Training organisation
Upgrade budget	\$1,500	Not provided	\$450
Time line	10 days	2 weeks	Immediate supply
System	QuickBooks Pro Accounting (QB Pro)	Upgraded tax tables provided and installed.	New software available now.

Selection criteria	Option 1: Internal IT staff	Option 2: Retailer	Option 3: Training organisation
Specifications	New tax tables to be installed and training for annual company reporting requirements.	Complete when available. Within quoted time frame. Training on company law not provided. May need to refer to other subject matter expert.	Self-install, no compliance training available.
Quality assurance	Heuristic evaluation by accounts staff.	Peer evaluation can provide feedback to IT department if needed.	N/A
Project manager	You	N/A	N/A
Other information		On call 24/7. Very familiar with the system and staff.	Software returns policy applies.

1. Which option would you choose? Why?

2. With whom would you need to consult and why?

3. What was your decision methodology (include diagrams if used)?

4. What comparison technique did you use?

5. What ethical, organisational and legislative requirements did you need to consider?

6. What effect did the upgrade budget have on your final decision?



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## Topic 2

# Implement the new or modified administrative system

Choosing the right strategy for the implementation of a new or changed administrative system requires careful consideration of the situation, environment, key stakeholders and influences. If the analysis of the available evidence has led to the decision to implement a change, then confidence in that decision must remain strong. The difficulty with change management is that implementation problems are often associated with the quality of the communication. Sufficient and open communication plays a large role in the success of an implementation strategy. When the change is associated with the day-to-day work of individual staff members, this communication must be handled tactfully and in accordance with tested methods.

In this topic you will learn how to:

- 2A Identify and develop implementation strategies
- 2B Encourage staff to participate in the implementation process
- 2C Implement the system
- 2D Define and communicate procedures for using the system
- 2E Provide training and support on the use of the system
- 2F Deal with contingencies to ensure minimal impact on users

## 2A Identify and develop implementation strategies

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.

#### Establish the context

##### Establish the context in which the implementation will occur

- 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.
- Assess the time lines needed to ensure that the time allocated is reasonable in order to limit downtime but allow for training.
- Identify the training needed and whether people need time off for training.

#### Learning model

##### Create a learning model that suits the context

- 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.
- In change-averse situations, formal training sessions may be required and allowances for counselling and professional development sessions made.
- 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.
- Individual reflection, inquiry and encouragement to share ideas are recommended.

<b>Client details</b>	<p><b>Establish critical success factors</b></p> <ul style="list-style-type: none"> <li>• Critical success factors include performance metrics, schedule completion times and positive staff feedback.</li> <li>• Planning an implementation strategy with no measurement of success is not recommended.</li> <li>• Organisational and project objectives should have a strong influence over your planning decisions.</li> </ul>
<b>Procedural tools</b>	<p><b>Use procedural tools</b></p> <ul style="list-style-type: none"> <li>• Select from a range of tools to facilitate the implementation and monitor progress. These include a project plan, Gantt charts, workflow diagrams, deployment charts, cause and effect diagrams and any other tools used or required in your workplace.</li> </ul>
<b>Appropriate strategy</b>	<p><b>Choose the most appropriate strategy</b></p> <ul style="list-style-type: none"> <li>• Choose the approach that best suits your organisation based on the context, the organisational learning culture and the critical success factors that align with your organisation's objectives.</li> </ul>

## Approaches to implementation

The strategies available to you at this stage will be centred on both staff needs and organisational objectives or project goals. A single strategic approach must include both of these aspects to cover any likely contingencies or resistance to change.

### Staff needs

You can apply one or more of the following approaches to deal directly with staff needs. Staff skills may vary and new systems may create opportunities for changes in workgroup structure. Staff members should be invited to make suggestions that affect their work environment. This may also be an organisational necessity. Even if it is not, every effort should be made to include staff in the consultation processes.

To maintain or boost the confidence of staff members when implementing change:

- involve the use of influential members within workgroups to act as 'change agents' to support the project
- ensure clear and precise direction from all levels of management
- have open communication with change facilitators
- offer formal feedback and testing opportunities.

### Other needs

Whatever the staff needs are, it is imperative that other avenues are available to them to challenge and improve their current working environment. The following are a number of other options that an organisation might deploy to enhance opportunities for change.

**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.

**Use of external consultants**

The 'make versus buy' decision may result in the use of external consultants for various stages of the plan. Consider the effects on staff and customers when using external consultants. Well-chosen assistance can greatly enhance the likelihood of a positive outcome.

**Information flow to relevant stakeholders**

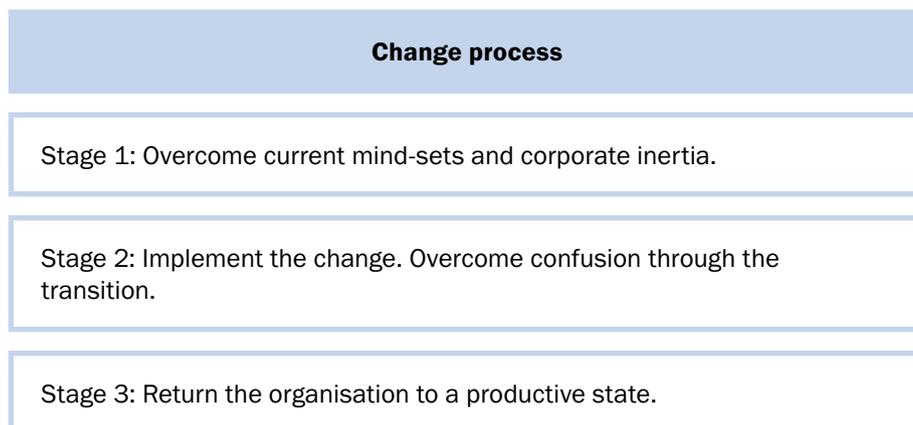
The strategy must include methods for information flow. Often referred to as the communication plan, this strategy is aimed at balancing the flow of information between stakeholders and throughout the organisation.

**System modification**

System modification is the end objective and therefore the main focus of the strategy. As it is an organisational goal, careful attention to the integration of staff needs is essential. This will reduce the risk of individual resistance to the change.

**Change management strategies**

A simple and regularly applied theory is psychologist Kurt Lewin's three stage process of change consisting of unfreeze-change-refreeze, referring to the state of the organisation during the implementation of a significant change. The three stages in the change process are outlined here.



**Strategic development**

Samples of information technology, policy and knowledge management systems and other implementation plans can be accessed online throughout the research process. Take the time to review samples of plans to see how different applications require different levels of planning. Once you have decided on the strategies you will use to implement the new system, use a team-based approach to develop an implementation plan.

Make sure that you understand:

- why the system is being introduced, including benefits to the organisation and staff
- how the new system will be introduced, monitored and reviewed
- each person's role and responsibilities.

### Example: implementing a new administrative system

A services charity receives regular donations from philanthropic organisations to fund its activities involving caring for aged war veterans. Administration of the funds involves time-consuming meetings, memos and fund transfers. Senior officials decide that a new system should be implemented to ensure funds are directed to the appropriate area in a timely manner and not used on unnecessary administrative processes.

The strategic approach to rolling out the new system includes:

- a consolidation of all banking providers to reduce time and costs associated with fund transfers
- meetings with area presidents to gain support for the move
- trial of the new system during the quarterly round of donations.

The approach of meeting stakeholder needs and organisational needs means that the implementation is supported throughout the process with little resistance at any level.

### Practice task 4

1. How could you ensure that risks associated with the implementation of a new or modified administrative system are reduced? Describe three strategies you would use and explain why.

2. What strategies might you use to prepare your implementation plan? Give reasons for your choice.

## 2B

### Encourage staff to participate in the implementation process

All authority levels within an organisation will be affected by changes to the administrative system. Directors, CEOs and senior managers rely on reports derived from the system to make decisions; mid-level managers require knowledge and information to direct teams to achieve organisational objectives; and line workers require knowledge of the system to input information regarding performance. Clients may also need to be informed of changes to systems, especially during the changeover period. It is crucial that the changes are handled effectively so all users know how to access and use the system correctly.

Here are some benefits of encouraging staff to participate in the implementation process.

- Reduce instances of resistance and conflict
- Better assimilation of the new changes
- Create better morale
- Provide higher value feedback
- Enhance efficient use of the system.

### Assimilation of changes

The assimilation of changes refers to the ability of users to extract the same or a better level of information from the new system than the old. This occurs faster when users are involved with integration, training, feedback and trialling of the new processes. Morale is improved when workers feel like they are contributing to personal and professional development. If members of the organisation are involved throughout the process, their level of system knowledge improves and therefore the value of their input (feedback) also improves.

Conflict and resistance to change are the two biggest causes of implementation delays. Some individuals or groups can halt change altogether if there has not been sufficient collaboration and communication; for example, unions, government agencies and industry bodies can enact swift actions to disturb the implementation of a new system if there is a hint of impropriety or non-compliance.

### Stages of implementation

Providing participative access to the stages of implementation should begin as planning starts. Typical elements of implementation and a sample of the opportunities for participation are as follows.

Elements of implementation	Opportunity for participation		
	Senior staff	Mid-level staff	Line workers
Procurement	Make decisions on budget and resource requirements	Make decisions regarding suppliers/ developers	Facilitate procurement and liaise with suppliers
Communication	Set communication lines and milestones	Direct communications and monitor usage	Gather and provide feedback; participate in meetings
Quality assurance	Define organisational quality standards	Control and monitor quality assurance measures	Contribute to quality assurance; conduct user testing
Integration	Set time lines and scope of integration	Oversee implementation in functional areas; provide training to line workers	Participate in the integration process and installation of hardware/ software
Testing and review	Monitor outcomes in accordance with set objectives	Arrange and conduct testing and trials; collect feedback from line workers	Participate in heuristic evaluation

## 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.

**Encouragement**

**Give encouragement and recognition**

Verbal encouragement and recognition serve as powerful motivators. Know how and when to correct the mental direction of the individual when they begin to wander off track. Supervisors and senior managers must ensure their staff receive rewards for input into the process.

**Example: a company driven by excitement**

An American web-based retailer has a staff of 15 people. Its flat structure includes designers, developers, sales and procurement staff, directors/owners and administration staff. When they change from a basic web presence to new web-design software that allows for highly interactive transactions, all staff are consulted and brought in on the project. The excitement is driven by the company founder, who maintains a high level of personal motivation as he can visualise the end result and the potential this new look will give his company. Administration staff members are equally as engaged, as they are told that the pay system will be connected to online sales transactions, which will reduce their workload and increase their take-home pay.

The integration takes just two weeks. Developers and designers are trained first. They have to be familiar with the tools and limitations of the software so they can deliver the best looking and most functional result. Their input into the process is highlighted in inter-office emails that show snippets of the new software and its new features. Sales and procurement staff are shown screen dumps from the design company's site, highlighting the effects that the new system will have: speeding up the sales process while seamlessly integrating min/max buying prompts. They are trained in using the new system. At the end of the two weeks, the company's site has switched to the new system, with all members of the organisation excited about the future.



**Practice task 5**

How would you encourage the following members of your organisation, or one that you are familiar with, to participate in the implementation of a modification to the administrative system?

- 1. Your manager

- 2. A line worker

## 2C

## Implement the system

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.

### Implementation process

**Procurement:** Purchase the necessary resources on time and in accordance with the plan objectives.

**Communication:** Create a communication plan outlining chains of authority, methods of communication used during the implementation and a communication schedule.

**Quality assurance:** Apply methods and standards of quality assurance. This may include software version control, the relevant Australian Standards for quality control, testing and trialling processes, and data and record storage.

**Integration:** Begin the new system. All users move to the new processes. This may be a gradual, stepped or waterfall (instantaneous) approach.

**Testing and review:** The review process should be carried out over a period of time after the implementation.

### Steps of the process

There are no hard and fast steps to an administrative system implementation. However, IT system integration projects offer a close understanding of the sorts of levels that the plan may go through during the process. One suggestion from an IT project manager is to adhere to the steps described below.

#### Steps of the implementation process

- Prepare the infrastructure, including hardware, software, communications and facilities.
- Coordinate with the key stakeholders.
- Notify the organisation/s responsible for the supply and/or implementation of the system and schedule individual project tasks.
- Implement training for initial users and use their feedback to modify training for all users.
- Install the new system on the testing servers/desktops, etc.
- Ensure all machines 'talk' to one another and storage/retrieval methods work effectively during the data conversion test.
- Perform final verification against organisational and developer benchmarks.
- Implement the new processes and procedures.
- Roll out the training and access for all users.
- Monitor and report on the system.
- Make modifications as necessary and ensure organisational impact is minimised.

## 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).

Implementation plan (template)			
Goal 1:			
<b>Strategy</b>			
Short term:			
Long term:			
<b>Action plan</b>			
Action plan	Person/s responsible	Completion date	Status
<b>Initiative measurement</b>			
Milestones	Actual	Variance (+/-)	Month

## 2D

## Define and communicate procedures for using the system

Administration of business processes requires standardised communication procedures to remain effective and efficient. Electronic systems have provided a time-saving approach to communication, yet protocols must still be included to preserve system integrity. When implementing a new or modified system, these protocols should be defined and followed.

## Communication strategies

Your organisation's structure, culture and existing policies and procedures will influence the method of communication you choose. Each of the following methods of communicating the system's procedures has its benefits and limitations.

### Email messages

Email communications can be deleted, missed, dismissed or forwarded very easily. Using email as a method for communicating system procedures is quick, but less reliable than other methods. Consider keeping email messages short, concise and regular. If system users expect the email and know that it won't take too long to read and understand, then they are more likely to take action. Always use a back-up method such as hard-copy flyers.

### Intranet/web posts

Placing information on the organisation's intranet is a very successful method of communicating system procedures as the information can be accessed at any time, from any location and by those who need to know. Additionally, the information stays on the site and can be traced historically for the purposes of individual learning. Lastly, web posts can allow for feedback by users. This knowledge base is often very useful to system developers and managers.

### Facsimile messages

Faxing the information produces a hard copy of procedures for users within the area to access. Limitations are speed and cost.

### Internal newsletter

For large implementation projects, regular newsletters are a useful source of updated information. Newsletters should include sections for senior management comment and vision, implementation progress, user feedback, case studies from new users, and tips for using the new system (or modification).

## Meetings/presentations

Meetings are commonly used to keep specific groups of staff up-to-date with progress, procedures and system uses. Regular meetings also serve as an excellent forum for feedback and the consolidation of workgroup knowledge. You might arrange a specific meeting to make a presentation to inform staff of the changes and place the system in its business context.

There are several other ways of informing staff and keeping them up-to-date, as outlined here.

### Memoranda

Formal procedural documentation can be sent via memos, though this format is disappearing in favour of electronic posts and emails. Memos are often filed more rigorously than electronic communications. This may be a result of habit more than method of delivery.

### Printed instructions and manuals

Photocopies and printed manuals provide a good reference for training and ongoing user knowledge development. It is recommended that a full standard operating procedure relating to each administrative system process be created as a part of the integration. These manuals may be kept electronically.

### Training days

Unlike meetings, training days are facilitated for the express purpose of upgrading the skills and knowledge of system users. Feedback into the system's use is usually not requested from attendees. For this reason, training days are often used to establish a baseline of knowledge and skills across the organisation and as a method of induction for new users.

## Professional development

Time may also be scheduled for the professional development of individuals who use the system or manage people who do.

Professional development can include:

- Personal research time
- Training and study opportunities
- Practical experience
- Attendance at meetings, training days and development sessions

### Example: using face-to-face communication and conference calls

Alcott and Sons is a family company that manufactures hardwood furniture for distribution around Australia. In 1999, the company changed hands when its founder passed the business to his granddaughter, Rachael. The 30-year-old had worked in the business since she was 15 and had spent time in every level of the organisation. She had a rapport with truck drivers, accounts clerks, sales people and craftspeople and was respected as the chosen successor to the Alcott family business. In 2003, Rachael Alcott decided to upgrade the company's computer systems and the administrative system they'd been using for more than 12 years. Rachael chose the face-to-face approach to inform all locally based staff of the upcoming change, and used a conference-call telephone system to include interstate representatives and distributors into the meeting. This method of communication raised the perceived importance of the change and won the support of most of those who attended.

## Practice task 7

Create a one-page newsletter to support a process (or processes) used in your organisation's administrative system. Ensure you include reference to your organisation's policies, procedures and/or compliance requirements.



## 2E

## Provide training and support on the use of the system

Provision for training is usually included within the planning budget of a system implementation. Even for small modifications, there will need to be some level of training and support for users. Selecting the appropriate type of training and support to meet user needs and organisational limitations is important.

### Options for training

Training can set the baseline for organisational knowledge and skills. Selecting the right training approach for individual users can be logistically difficult in large organisations. Typically, a face-to-face approach is undertaken, but budgetary and geographic limitations often impede this approach. Some typical training options include coach, mentor and buddy systems; online tutorials; and on-the-job trainers.

Here is some information about coach, mentor and buddy systems.

#### Coaching

Coaching usually consists of a system expert spending time with users in a workplace to provide knowledge and experience on the system. Coaching is a highly effective method of delivery as focus and attention are given to the learner. This method allows for the passing of both explicit and tacit knowledge. The main limitation of coaching is the cost of providing this one-on-one training. It may not suit the organisation's requirements.

#### Mentoring

Mentoring can provide guidance with respect to the overall objectives of the system, rather than focusing on the specific steps or procedures to follow. An experienced practitioner providing their expertise, guidance and support can help the user overcome small issues and focus on the big picture instead.

#### Buddy systems

Buddy systems allocate peers or colleagues to assist in the training needs of the user. This is an effective approach where a gap between learning styles of employees leads to some learning faster than others. Pairing the faster learners with those who learn at a different pace can achieve positive results.

## 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.

Advantages of online training	Limitations of online training
<ul style="list-style-type: none"> <li>• Can be created once and delivered countless times</li> <li>• Can be accessed from any internet-ready computer</li> <li>• Delivers a consistent message</li> <li>• Can be relatively inexpensive</li> </ul>	<ul style="list-style-type: none"> <li>• There is a lack of tacit knowledge transfer (experience-based knowledge).</li> <li>• Users are unable to solicit discussion (except in a very limited capacity).</li> <li>• They don't provide a good setting for experiential learning.</li> </ul>

## 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.

**Skills assessment**

Annual or biannual skills assessments of users, to assist in identifying knowledge gaps for future training development.

**Training handbooks**

Training handbooks for use within functional areas or by a central training provider (internal or external). Training handbooks provide a resource for the delivery of system training that is repeatable and reliable. Paper-based handbooks run the risk of becoming outdated as modifications occur. This must be considered when quality controls are established.

**Electronic media**

Instruction using electronic media is a very useful tool for isolated users who prefer face-to-face style instruction. A well-created video training tool can provide consistent, reliable and effective instruction over time. Limitations include cost of production (this must be weighed against the size of the training need) and redundancy (video training tools can become superseded quite quickly).

## Example: the importance of structured and consistent training

A national retail flooring specialist uses an established retail management system for all the facets of its business. The system is continually under review and always in the process of some sort of implementation. As such, training is an ongoing process. Unfortunately, as new modifications are installed, it is assumed that the supervisor in each section (merchandising, accounts, advertising, sales and warehousing) will instruct the users within their sections. Over time, this assumption has led to serious issues within some departments as key information is often withheld, passed over or misunderstood by the supervisors. This issue has not been rectified, posing a serious threat to the capabilities and competitiveness of this retailer. Users of the system are at various levels of knowledge throughout the organisation while changes are still occurring.



## Practice task 8

1. List and describe three training and support options offered at your organisation.

2. Discuss the limitations of these options and come up with four recommendations for improvement.

## 2F

## Deal with contingencies to ensure minimal impact on users

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.

**Project manager's validation estimate**

An important validation of the outcomes of the option study.

**Outline design cost estimate**

Design and implement performance-based standards for each area identified.

**Final sketch cost estimate**

For larger projects, this step is used to align costs to various functional areas and prepare for the next step.

**Pre-implementation cost estimate**

Agreed costs of contingencies for each process of the implementation.

**Estimations**

Assumptions made on the basis of experience and expert consultation.

## Typical contingencies

The following is a list of contingencies that may affect the system's users.

**Technical breakdowns**

Despite testing of the system before it is introduced, the new technology may prove problematic. If there is a technical hitch, make sure you have back-up plans in case the new system is out of action for a period of time.

**Loss of confidence**

Losing confidence in a system or the implementation process itself stems from a lack of communication or poor communication. Reinforce the benefits of the system to staff. Monitor staff morale and identify whether you need to provide additional support.

### Need for additional training

Staff may feel threatened by the changes because they feel they lack the appropriate skills or knowledge. Additional training may be required during the implementation if gaps in knowledge or skills are identified. If a proper baseline has been created by earlier training, this contingency risk is lower. Larger projects may take some time to implement, thus resulting in lost knowledge through the lack of application. If the roll-out takes too long, re-training will become a significant cost.

### Need to modify the system

System modifications will often occur during the implementation phase as unforeseen requirements arise or new opportunities are identified by users and supervisors. Time and costs should be allocated for iterative modifications. The scale of the project will dictate the amount, which is generally no more than 5–8 per cent of project costs during the implementation phase.

## Temporary reduction of work output

Workload reductions or, alternatively, increases in workload can often occur when large-scale system upgrades occur. The main reason for this is the difficulty in scheduling necessary work around day-to-day activities. Modifications should be carried out after work hours if possible. When workers return to their workstation the following day, they will be faced with a new system.

Despite training and preparation work, it can still take some time to get used to this change. The result is a reduction in work output, or an increase by other functional groups to take the share of the load. Possible emotional responses include stress, anxiety, frustration, anger and/or embarrassment. Each response requires a slightly different approach to resolving the situation. Typically, empathy, communication and support from supervisors and senior managers will overcome these responses; for example, ensure there is adequate back-up support and hire temporary staff if staff are absent due to training.



## Other approaches to contingency management

When issues arise, decision-makers need to be in a position to react quickly. Planning for contingencies should include a communication system for all problems and issues. A permanent feedback system should already be in place. These may be utilised, but the creation of a project-specific contingency management loop improves response times to project-specific occurrences, and increases staff confidence in the implementation team. The following sources of advice can help you to react quickly when making a decision.

Helpful sources of advice include:

- a technical helpline
- a project manager hotline
- a blog or online forum for all staff
- a professional community (set up by developers and experts to identify and solve issues as they arise).

### Example: identifying events that require contingency planning

During a risk analysis of the upcoming implementation of a new customer service software suite, James, the project manager, identifies two high-risk events that require contingency plans. The most significant is a cost blow-out due to a worldwide shortage of a specific component. James's plan involves pre-purchasing the component at a slightly higher rate in order to avoid the possibility of delay and even larger cost blow-out if the item is not available during the implementation.

As the project unfolds, James reviews the supplier's first invoice and notices the components aren't included. To deal with the situation, he immediately calls the supplier. When he discovers that the component is already on back-order (not due for two weeks) he realises his initial plan has not reduced the risk. He consults his manager and the supplier to look for an alternative and ends up choosing an alternate component that still meets the company's needs.

While James agrees to pay for the alternate component (which is not a perfect solution), it is agreed that the supplier will bear the cost of supplying and re-fitting the new component when it eventually arrives.

### Practice task 9

Read the case study, then complete the task that follows.

#### Case study

The last 12 years have been hectic for internet service provider GoNet. Its management systems have changed four times in that period in order to cope with the growth of the business. The most recent change was when new server software was introduced to improve customer access speeds and bandwidth demands. The server software affected the whole company's administrative system due to the level of integration between the systems.

During the implementation, the wholesale bandwidth provider (GoNet's major supplier) suffered a massive network outage affecting all its customers. GoNet's systems went down and the staff response was chaotic. There was no contingency plan for catastrophic failures like this, in which the company would suffer enormous financial losses if the outage lasted more than 24 hours.

Although the outage was repaired within 48 hours, the effect on GoNet's business was devastating. The 28 staff members were in disarray having to deal with thousands of customer complaints and legal action from business customers; the company's managers were trying to recoup losses from the supplier while maintaining the business; and the system's users had lost confidence in the company.

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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.

## Learning checkpoint 2 Implement the new or modified administrative system

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

### Part A

1. Explain how you would choose the appropriate implementation strategy for a system modification at your organisation. Where possible, use recent examples to demonstrate your involvement.

2. Describe how you have encouraged staff to participate in a change to your management systems. This may include filing or storage changes, large modifications, new system integration or a new procedure.

3. Describe at least one technique or project tool you have used to implement a new or modified administrative system. Explain how this tool or technique assisted you with the process.

4. Explain three types of communication methods that could be used to support the use of your administrative system. Explain how these methods might be improved or enhanced.

5. How have you provided training for users of your administrative system? Explain how this training was effective.

6. Describe a contingency you have had to deal with in regard to a system implementation. How did you ensure that the effect on your staff was minimised?

## Part B

Read the case study, then complete the tasks that follow.

### Case study

A tourist ferry operator needs to introduce a new customer check-in system. The current system requires the client service officer to manually enter the traveller's data into the system. The information is then stored on the server and a manifest can be printed by the staff at the dock. The new system will integrate new mandatory government-provided technology that uses the traveller's passport ID chip or new driver's licence bar code to immediately bring up the necessary personal information and any travel exclusions that may apply to them. The information is stored on an external web-server for national security access. Dock staff can still print manifests from this system, but it will need to be interfaced with the old terminals.

1. Identify the implementation strategies available to the ferry operator. Justify your choice(s).

2. Create a dot-point implementation plan ensuring that you cover:

- staff needs
- organisational needs
- compliance requirements
- communication of system processes
- methods of training and support
- a summary of contingencies.



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## Topic 3

# Monitor the administrative system

An administrative system implementation does not end with the finalisation report. Once all users in the organisation are accessing the system, there will be an ongoing need for training, support, modification and induction for new users. Organisational demands will require the system to be maintained, enhanced and kept secure throughout its life span. Provision of this control can be allocated to IT managers, systems managers, operations managers or even functional area managers depending on the organisational structure. Understanding how to meet these demands will improve the competitiveness and efficiency of the organisation.

In this topic you will learn how to:

- 3A Monitor the system's use, security and output
- 3B Modify the system to meet changing needs
- 3C Identify further modifications and notify users
- 3D Monitor staff training needs

# 3A

## Monitor the system's use, security and output

Complex administrative systems require sophisticated monitoring systems to ensure usage, security and output from the system are in accordance with the organisation's objectives, and that the system retains its integrity and is user-friendly. Monitoring involves checking that all systems are functioning efficiently; all users (of inputs and outputs) are satisfied with the level of ease of operation and the documented information obtained; and security is effectively maintained through anti-virus software, passwords and storage procedures.

Policy documents will provide strict guidelines for the use of the management systems and include the punitive actions for breaches of the policies. In many businesses, these actions can include formal counselling, financial penalties, privilege penalties, termination and even legal action against the offender. Make sure that staff members have access to these documents and understand their responsibilities, and that all procedures remain current.

Most organisations using computer-based systems have administrative policies covering:

- internet access and usage
- email, including restrictions on personal use, access by supervisors and storage of email transmissions
- mobile computer use, including storage, battery charging procedures, insurance requirements and standard operating environment (SOE) restrictions
- security, including password protection and anti-virus software.

### Monitoring methods

There are various approaches to monitoring administrative systems. In most cases, organisations should endeavour to utilise a mixture of these methods. These systems provide detailed reports, live monitoring capabilities and other useful data to managers and security personnel. Companies such as Hyperic and Uptime Software specialise in these types of sophisticated system monitoring tools. Integrated monitoring tools are resident on most common administrative systems. They will often fall under the headings of 'reports', 'usage' or 'administrator' functions. These tools can extract relevant information for controlling and monitoring the system. Output reports are also a function that will enable viewers to identify users through the use of logins and passwords.

Add-on software applications include:

- web application managers
- service level applications
- cloud monitoring tools (a monitoring plug-in for Google App Engine and other cloud-based applications).

### Administrative support and backup

Administrative support and backup includes policies and procedures, along with measures such as training systems and regular reporting requirements. Businesses that are particularly concerned with the usage and functionality of the system will ask for regular reports from functional areas or individual staff members.

Be careful when using administrative monitoring and control techniques. Workers can feel stymied by overbearing rules and regulations. Inefficiencies may also creep into the system procedures as internal compliance requirements introduce extra steps into the process.

## Feedback from internal and external clients

Feedback from internal and external clients should be formalised within the system policies. It is often the best method of collecting information on the effective uses of the system. It is the users and clients that see the outputs of the system and they are usually the first to notice irregularities, problems or opportunities for improvement. Determine who you want feedback from, what kind of feedback you want and the best way to obtain it.

Feedback may come from:

- questionnaires
- informal observation and discussion
- formal interviews
- complaints analysis
- end-user feedback forms.

## Observation by trained personnel

Observation by trained personnel such as IT professionals, developers or supplier representatives can serve as a positive post-implementation follow-up. The information can be fed back to relevant stakeholders to modify or improve the system to better suit the users' needs and create a more productive organisation.

When taking notes, don't forget to include:

- variations to processes
- limitations of the system
- frustrations highlighted by workplace users.

## System security

System security is paramount. Misuse of company information is usually dealt with during the recruitment and selection process for new staff. Policies and actions covering the misuse of information should be covered during this stage or at the beginning of the induction process.

Security may include confidentiality and non-disclosure agreements, the use of personal logins and passwords, and safeguards against computer viruses and network attacks. In medium to large organisations, these functions are monitored internally and are the ultimate responsibility of the IT department. However, line managers and every worker who uses the system must assume responsibility for the security of commercial and sensitive information. While security measures are commonplace in a computer-based environment, paper-based systems also require strict security and may involve locked cabinets, access by authorised personnel only and a procedure for staff to follow when requiring information contained in secure filing systems.



## 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.

- Systems
- Processes
- Research and development
- Product or service details
- Personnel details
- Client details
- Other policies and procedures

## 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: the risks of not developing adequate security

A global social networking site launched in 2004. The company quickly became one of the fastest growing social networks, and the 10th most highly trafficked website in the world. With 60 million members and 4.5 million unique visitors generating over 200 million page views per day, constant uptime and high performance were absolute musts for the company.

In early 2006, the site's popularity escalated. The IT infrastructure grew increasingly complicated as it scaled to support thousands of new users each day. The potential for problems such as downtime and performance issues increased alongside the complexity. The company had been using a combination of Big Brother and Nagios as their systems monitoring software, which helped them know when servers were down but lacked the historical information to tell them when server performance was starting to degrade. Without the ability to identify performance trends and use them as a baseline for an early warning system, the company couldn't keep up with their rapid growth rate and risked costly outages. They needed a new approach.



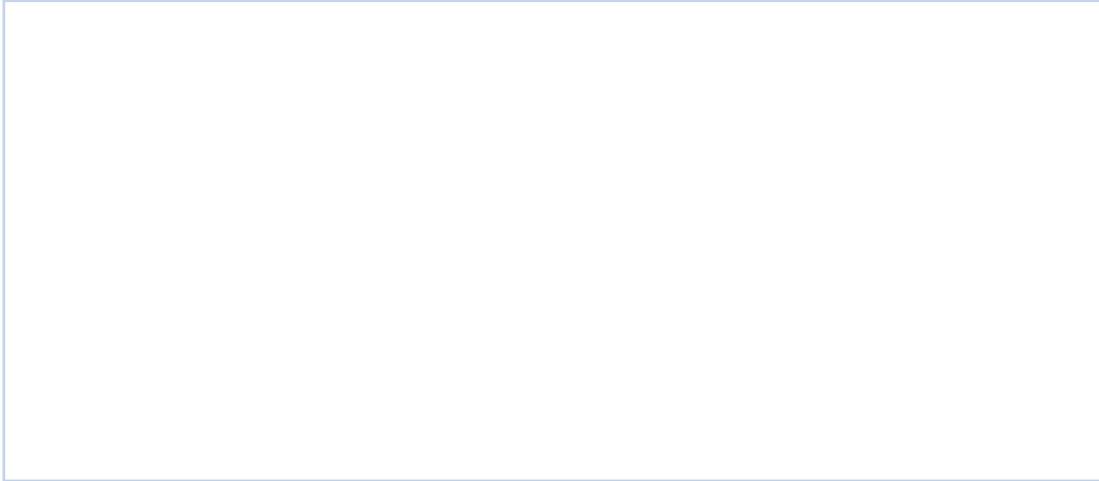
## Practice task 10

1. Investigate the current monitoring tools and techniques used by your organisation or one that you are familiar with. Briefly describe how they monitor usage, security and work output.

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2. Explain one recommendation that you would make to improve each of these areas of control. Consider legislative and other standards and codes when answering this question.



## 3B

### Modify the system to meet changing needs

There are many reasons for change within an organisation. External and internal influences such as market trends, technology changes, socio-political changes and environmental shifts can all have a lasting effect on your organisation. The system that provides the backbone of information flow within your organisation has to change as well. A system would also need to change if it was not meeting performance standards required in order to meet the organisation's objectives.

#### Identify triggers for change

As the organisation shifts, grows, shrinks and flows, a variety of triggers will cause the need for change to the administrative system. It is not always necessary to modify a system based on one user's suggestion. However, if that suggestion is analysed and shown to provide significant value to the organisation, then management may decide a change is necessary.

Triggers for change can include:

- change in the nature and purpose of the system or organisation
- change in user requirements
- growth or decline in system size
- technological advances in administration systems.

#### Understand the nature and purpose of the system

The nature and purpose of the system or organisation may evolve over time or change dramatically due to market forces, the political climate or environmental concerns. Organisational goals may shift from maximisation of profits, to maximisation of customer value; the system may evolve from a static, server-based system, to a cloud-based system where information is stored externally around the world. For example, when IBM changed its global objectives from being a PC maker to a solutions provider in the late 1990s and early 2000s, the corporation underwent massive changes. Modifications to its systems included shedding billion-dollar manufacturing facilities and purchasing billion-dollar software capabilities. Such a dramatic shift is rare, but illustrates the extent to which systems may need to change.

Smaller businesses may forward-integrate their systems to shift from wholesaling to retailing. In such a change, systems may only need to add certain functionality to perform the extra tasks of point-of-sale and outlet management. Competencies such as commission calculators, salary and wages, inventory and logistics functions may already be a feature of the system. In all cases, the approach to modifications is driven from the top down, based on a corporate decision to change.



## User requirements

User requirements may change from time to time through structural changes within the company or as a result of client or developer feedback. In such instances, changes are rarely carried out at an individual level. More likely, managers collect recommendations or feedback and pool the ideas together. By doing this, trends, consistencies and duplications are recognised. The modifications are then planned and scheduled for the least amount of interruption to business activities and for only the most efficient and effective changes to apply. If new software or equipment is introduced, users may need further training.



## Growth or decline in system size

Growth or decline in system size can be due to an organisational restructure or external environmental influences. For small changes, modifications to access and security may be necessary. For large changes, addition to or reduction in hardware, software licences and access may need to be included in the planning. Additionally, when size increases rapidly (for example, due to a large investment, joint venture, merger or sudden market growth), existing systems may not be capable of handling the input and output requirements or data integration needs. New systems may be required, that, due to the extensive organisational changes already occurring, may contribute to staff issues such as stress, frustration and anxiety. Managing a large change such as this may require the use of outsourced professionals. Downsizing (corporately or just within the system) may also trigger the need for a simpler, smaller administrative system.

## Technological advances

Technological advances in administrative systems may be the catalyst for change. Competitive desire may persuade the organisation to invest in a newly created system to keep up with the market or move ahead (depending on the reason and timing of the upgrade). Because of the plethora of new technology in web-based applications, database applications and mobile devices, it is crucial that system developers and managers have a sound understanding of what their organisation's system requires and have access to professional advice in order to take advantage of the most efficient and cost-effective technology currently available.

The following questions may be posed when looking for technological advances.

### Questions to ask

- Is there a more current version of software available?
- Is the current server functioning well?
- Is additional equipment needed?
- What are the costs involved in upgrading?
- Is further staff training necessary?

## 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.

Type of change	Response by your organisation	Your comment
Change in the nature and purpose of the system or organisation		
Change in user requirements		

*continued ...*

*... continued*

<b>Type of change</b>	<b>Response by your organisation</b>	<b>Your comment</b>
Growth or decline in system size		
Technological advances in administrative systems		

## 3C

### Identify further modifications and notify users

The approach to identifying and notifying users of further modifications varies according to the size of the organisation, its nature, purpose and culture. Organisations with large user groups, traditional business models and change-averse cultures will tend to follow formal methods of notification such as policy and procedure changes or corporate training sessions. Organisations on the opposite end of the scale will tend to incorporate communities of practice, user meetings and web-based notifications as the norm.



#### Manage modifications

Modifications to the administrative system need to be made in as efficient a manner as possible to lessen downtime and uncertainty. In many cases, additional training will need to be factored in and undertaken by staff before the modifications are implemented.

#### Redefine administrative roles and duties

When administrative roles and duties are redefined as a result of changes in the administrative system, those affected naturally have a vested interest in the outcomes. Their day-to-day work schedule may be affected or changed dramatically. Some jobs may have become obsolete and new ones created. Work task priorities may have changed. The introduction of new systems may have provided the opportunity for staff to gain more skills and thus increased their responsibilities and remuneration. Identify what needs to be done and delegate responsibility to appropriate personnel.

Notification of changes in roles and responsibilities can include:

- personal notification of major changes (usually from their supervisor)
- new position descriptions posted; depending on the system it can be online, email, hand-delivered or within the existing file system
- notification of retraining.

#### Additional equipment and training

Additional equipment and training may be required as an outcome of administrative systems changes. Additional equipment and training will often include the following:

- Computer hardware: generally, technology experts are used when new hardware is installed.
- Specialised equipment: new servers, point-of-sale terminals or portable devices can require significant operational training and assessment. This may be peer-based, or via a professional internal or external coach/trainer. Skilled use of a computer should be a work competency standard in most workplaces.
- Procedural changes: you may have to rewrite policies and procedures for the organisation's manual and ensure the information is disseminated to all staff members.

## Specialised software additions

Specialised software additions may result from extensive user feedback, formal and informal client meetings or developer upgrades. Security-based upgrades are of the highest priority and notification is generally via a group email or noticeboard, or personal notification; for example, via email, letter, memo and training. Functional or operation additions may include:

- group or functional area notification; for example, noticeboards, group emails, meetings, training days
- organisational notifications; for example, policy and procedure changes, emails, meetings and training.

## Implementation time frames

When it is confirmed that time frames will be altered, the project manager responsible for the implementation must act quickly to notify the areas and personnel affected. Notification will be through the communication system already put in place for the project, such as by email, noticeboard, staff meeting or project meeting. Implementation time frames may require re-negotiation with relevant personnel for a number of reasons, as outlined here.

### Reasons for re-negotiating time frames

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Delays in individual critical tasks that prolong system implementation</li> <li>• Lag and lead time miscalculations</li> </ul> | <ul style="list-style-type: none"> <li>• Poor or inaccurate initial estimations</li> <li>• Changes in operational priorities</li> <li>• Other contingencies</li> </ul> |
|---|--|

## Example: the importance of notifying all staff

TLT Accounting recently added upgrades to its specialised software systems as a result of tax changes and new features offered by the developer. The practice employs 15 staff members including eight accountants, six administration staff and one receptionist. The head partner of the firm sent an email to all accountants to inform them that a technician would be coming to the office to carry out a standard upgrade. The system changes would also affect the administration staff, but he assumed that the accountants would notify their respective assistants. The next day he received a knock at his door. The receptionist was furious that he was not notified that a technician would be coming and spending the day at everyone's computers.



## Practice task 12

Briefly describe any relevant legislation, policies and procedures that may affect the communication methods used in the previous example.

## 3D Monitor staff training needs

As a feature of good systems management, an organisation should periodically assess the skills of the staff people use the system. Users could come all levels of the organisation and even be external clients such as suppliers, contractors or clients. Additionally, there will be a need to develop induction training for new staff to use the system effectively.

### Ongoing staff assessment

To facilitate ongoing learning, follow these four steps.

#### 1. Articulate skill requirements

The organisation should have a clear description of the skill and knowledge requirements for staff using the administrative system. Key performance indicators (KPIs) should be included in the person's position description and be mapped across to specific tasks within the administrative system. If these criteria do not exist, the position supervisor or functional area manager must create a task list based on the role in order to fulfil this requirement. Not having a detailed job or position description for every role in the organisation can result in poor role assessments, promotion opportunities, task allocation and team morale.

#### 2. Audit current skills

A skills audit requires a trained assessor or experienced manager to create a method of measuring the employee's ability to perform each task against the job's criteria. The skills can be assessed through a combination of direct observation, staff questionnaire and a third-party report provided by the supervisor.

#### 3. Analyse training needs

Skills and knowledge gaps are analysed to provide direct evidence of what additional training is required. Training should be organised as soon as possible so the administrative system continues to function efficiently. This might be one-on-one if the training applies to only one person, in-house group training or training provided by external consultants.

#### 4. Monitor effectiveness of training

Monitor the effectiveness of the training by comparing skills prior to and after the training. You can measure staff performance in areas such as quality and productivity. Another useful indicator of the effectiveness of training is to analyse employee satisfaction through staff turnover, absenteeism and complaints.

## 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.

## Example: a successful training strategy

Recycling organisation Ready2Go uses a simple administrative system for creating customer records, administering the finances and personnel requirements and maintaining compliance standards. The system has undergone small modifications over the last eight years and staff members are generally trained on the day by the supplier's trainer. For inductions, new employees are shown how to use the system for their role; for example, compliance, accounting, sales, procurement and plant work. A colleague is then assigned to assist the new staff member if difficulties arise. This approach to training has met the needs of the organisation for years with little requirement for retraining or gap analysis.

## Practice task 13

Explain why small organisations such as Ready2Go are able to use seemingly informal and haphazard approaches to training, yet still meet the organisational objectives.

## Summary

1. An administrative approach to system usage and security includes the creation of policies for areas such as internet usage, email, mobile communications and information security policies.
2. To monitor an administrative system effectively you need at least one of the following: electronic monitoring tools and processes, additional administrative support and backup, feedback from customers and observation by trained technicians.
3. System security can be maintained through the use of confidentiality and non-disclosure agreements, use of personal logins and passwords, and the provision of safeguards against computer viruses and network attacks.
4. System modifications may be necessary if there are changes in the nature and purpose of the system or organisation, user requirements, system size or technology.
5. Keeping staff informed of changes is vital when the change affects their role, performance or job function.
6. Ongoing staff assessment is facilitated by determining skills requirements, carrying out a skills audit and creating training to meet the needs.
7. System induction training may be phased and may be formal and/or informal.

## Learning checkpoint 3

### Monitor the administrative system

This learning checkpoint allows you to review your skills and knowledge in monitoring the administrative system.

#### Part A

1. Identify three policies in your organisation that are used to monitor the use and security of the information/administrative system. Briefly describe how each policy achieves its purpose.

2. Describe an example of an improvement that resulted in a process change or modification to your administrative system. Describe how the improvement addressed the changing needs of the organisation or the user/s involved.

3. How have you identified and notified users of changes to your organisation's administrative systems? Explain the method/s you used to communicate the changes and the effectiveness of your approach.

4. Explain how you would conduct a skills audit for the administrative system in your workplace. What training solutions might you recommend after analysis of the results?

5. Conduct a brief audit of your workplace induction process. Describe how this process meets, or doesn't meet, the needs of your organisation and the needs of new employees, with respect to administrative system training and organisational time constraints.

## Part B

Read the case study, then complete the tasks that follow.

### Case study

Parcel Pac Deliveries Pty Ltd installed an upgrade to its scheduling system over the last two weeks. The upgrade is designed to improve the efficiency of parcel deliveries by wirelessly sending route changes, traffic conditions and new bookings to delivery drivers via their in-car navigation and administration systems. Drivers used to use a paper manifest with all deliveries for the day and would return to the depot before any additional deliveries would be allocated. Communication of issues back to base was by mobile phone.

1. Explain what methods Parcel Pac could use to monitor the usage, security and effectiveness of the new addition to its system.

2. What methods of communication and training would you use to satisfactorily inform drivers of the upgrade? Consider how drivers would react to the changes and consider methods of overcoming any resistance to change.