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# Contents

<b>Before you begin</b>	<b>vii</b>
<b>Topic 1: Organise learning to use information or knowledge management system</b>	<b>1</b>
1A Identify knowledge management system learning needs	2
1B Identify resources required for the use of a knowledge management system	7
1C Organise and facilitate learning activities	10
1D Promote and support the use of the system throughout the organisation	14
1E Monitor and document the effectiveness of learning activities	18
Summary	21
Learning checkpoint 1: Organise learning to use information or knowledge management system	22
<b>Topic 2: Manage the use of information or knowledge management system</b>	<b>27</b>
2A Ensure knowledge management systems are compliant, effective and efficient	28
2B Address implementation issues and problems as they arise	33
2C Monitor integration and alignment with data and information systems	38
2D Collect information on achievement of performance measures	41
2E Manage contingencies by accessing technical specialist help	45
Summary	48
Learning checkpoint 2: Manage the use of information or knowledge management system	49
<b>Topic 3: Review use of the information or knowledge management system</b>	<b>55</b>
3A Analyse effectiveness of the management system	56
3B Review the business and operational plan and determine intended outcomes	59
3C Make recommendations for improvement to the system, policy or work practices	64
Summary	68
Learning checkpoint 3: Review use of the information or knowledge management system	69

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## Topic 1

# Organise learning to use information or knowledge management system

The information management system is the heart of any organisation. Information flows in and out in a continuous stream, and if there is any disruption or failure in the information it can have devastating consequences for your organisation. To ensure the system functions efficiently, make certain those using it have the ability to operate within its environment.

Information systems started well before the proliferation of computers. Managers and entrepreneurs understood that corporate success depended on easy access to knowledge in areas such as:

- marketing and production
- customer relations and process management
- internal and external environmental conditions
- competitor activity and behaviour
- technological developments
- research and development.

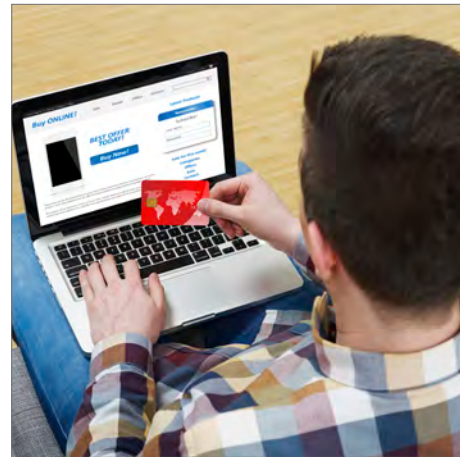
The introduction of technology has made it easier to collect, store, retrieve, analyse and present data in these areas.

In this topic you will learn how to:

- 1A Identify knowledge management system learning needs
- 1B Identify resources required for the use of a knowledge management system
- 1C Organise and facilitate learning activities
- 1D Promote and support the use of the system throughout the organisation
- 1E Monitor and document the effectiveness of learning activities

## Web-based learning needs

Web-based customer service is an area that has experienced considerable evolution and become a popular avenue for customers to conduct business. If a customer experiences difficulty in using the features of a system they will look for alternatives. For an organisation to maintain a competitive advantage it must identify what the client needs to know in order to effectively use the systems provided to them. Internet banking and online auction sites provide examples of this need.



Suppliers, contractors and those tendering to your organisation may require the use of your KMS to meet their obligations (contractual or otherwise). To protect proprietary knowledge, data supplied to these stakeholders should be secure and only to a level sufficient to complete transactions or other specific work.

## Stakeholder learning needs

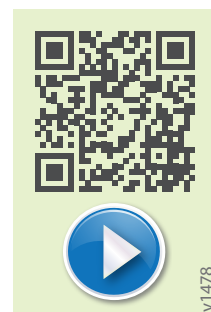
Sponsors and funding bodies often need access to organisational information to keep up to date with projects, programs or operations they are funding or supporting. The level of access may be governed by their involvement and legislative requirements for the type of funding involved. Freedom of information and privacy legislation in these cases relates only to the knowledge directly affecting the stakeholder. Other information does not have to be disclosed, particularly if the disclosure would compromise business integrity or fiscal health.

Access can be incorporated into charter documents such as the project plan and work contracts. To ensure that stakeholders have the ability to access the system, analysis of their requirements needs to be carried out and appropriate training designed to ensure they understand the procedures, policies and protocols.

### Example: KMS

A US importer is a major supplier to several organisations. As part of their performance review they send out a survey to all their customers in an effort to highlight any problems they may be experiencing. It is only after their customer survey feedback is analysed that the organisation is even aware they have a problem in their communication system (specifically, their telephone service).

Management had assumed communication was sufficient and the information provided to its clients was satisfactory. In reality, their customers feel frustrated when trying to get through as they are constantly being put on hold and then still have to go through the main switchboard before being connected to the area they need to liaise with.



## Financial resources

Financial resources are usually an initial consideration, particularly where training and training design is outsourced to external agencies. Human resources may appear self-evident; however, managers need to be aware of the hidden costs when it comes to human resources and training. Here is an example of some of the hidden costs of organisational training.

### Hidden costs of training

How is their workload going to be covered or is it going to be left for them to catch up once they have completed their training?

If the learning activity requires expert workers or supervisors to conduct training session activities, what implications does that have on their workload?

## Physical resources

The manager needs to plan for and document physical resources in order to develop a proposal or business case to secure sufficient funding. When submitting a request for finance it is often a requirement to show an estimated return on investment (ROI) and a benefit to the organisation. Here is an example of some of the considerations that may need to be looked at when undertaking training.

Considerations may include:

- Is there an appropriate learning environment in which to conduct the training?
- Are there sufficient computer terminals?
- Is there a training database, or do we have to conduct training on the live database?
- What consumables (pens, paper, whiteboard markers and so on) are required?

## Methods to secure necessary resources

Gaining the use of scarce resources is a part of every manager's role. Training on systems that are either essential for compliance purposes or for the purpose of competitive advantage (and therefore profitability) are usually given a high priority.

Senior managers who maintain a task focus (as opposed to client focus) may not accept this level of priority until the proposal summarises the negative effects of not implementing the training. This is important to keep in mind when drafting your proposal for resources.

Once the resources have been identified, the manager is able to plan for their acquisition. The method chosen depends on the requirements for the training. Here are three methods a manager may use to secure necessary resources.

### Operational priority

This approach to securing resources relies on the functional needs of the business. If the information system changes are significant and impact immediately on business profitability, then the priority of resource allocation is heightened.

## 1C

## Organise and facilitate learning activities

As a manager with the responsibility to organise and facilitate the learning activities for your organisation's knowledge management system (KMS), there are a number of issues you need to consider.

The approach you use depends on a number of factors, including:

- group-based or individual learning activities
- formal qualifications attached to the activities
- legislative requirements.

### Group-based or individual learning activities

The facilitation of learning may be different for a group of learners compared to one individual learner. Group-based activities are not a one-size-fits-all approach, as the individual learner's needs are used when developing the activity. However, they are only appropriate for explicit knowledge.

Group-based activities include:

- classroom-based training
- syndicate project work
- work group activities.

### Individual learning activities

These are focused on the learner's goals, learning style and the learning context, and can incorporate explicit and tacit knowledge. Demonstration and imitation are some of the methods for passing on tacit knowledge. Here are examples of individual learning activities.

- Coaching and tutoring – job-focused and performance-orientated, designed to direct the learner to an end result. Tutoring is usually subject-centred and focuses on improving a specific knowledge or skill; it is often distance-based.
- Mentoring – can be formal or informal. It focuses on the person and learning along a career path. This method provides support for individual growth and maturity.
- Shadowing – the technique of monitoring and correcting skills gained by the person: it can provide a powerful source of knowledge consolidation.
- Buddying – requires a skilled co-worker to train the candidate on the job. This is a very common and relatively effective way of training an individual on an organisation's knowledge and information system.



## Facilities

The selection of facilities to conduct a learning activity is a major contributor to the effectiveness of the activity. If the learning activity is a workplace-based activity, the best place to conduct it may be in the workplace. This is not always possible due to risk management and other work health and safety requirements. In this case, training facilities away from the workplace should be designed to replicate the workplace environment.

## Coaches and mentors

The selection of effective coaches and mentors is not as straightforward as you may think. Being a subject matter expert does not always translate into being a competent trainer. A coach or mentor needs to communicate well, not only through language but also by using concepts and ideas that may be more tacit. People skills are another consideration, as a coach or mentor is more effective if they can develop a rapport with the learner.

Mentors allow the learner to take responsibility for their own learning, act as a sounding board and give support to aid learning.

Coaches are focused on achieving a learning objective or a specific skill. A coach takes responsibility for directing the learner towards achieving a specific outcome by reinforcing or changing skills and behaviours.

## Equity and diversity

Equity and diversity is not just about making sure there is wheelchair access and that there is nothing offensive in the workplace; it is also about recognising and valuing individual differences in the workplace or training environment, and about inclusiveness, recognising the needs of the individual, and developing strategies to allow them to meet the learning objectives. Every person is different and therefore has different needs; not all of these differences affect your facilitation strategy. Here are examples of individual needs that may have an impact on learning activities.

Individual needs include:

- literacy and numeracy
- English as a second language
- cultural backgrounds
- physical impairment (permanent and temporary)
- visual or aural impairment
- religious beliefs and practices
- intellectual abilities.

### Example: changes to a CRM system

Brian runs the Australian-based training programs for a large multinational IT company. He operates within a budget but can request extra funding if the need arises. Such a need occurred during 2015 when the organisation implemented a significant change to its customer records management (CRM) system. The system was complex and integrated on several levels with the accounts, inventory and procurement systems. Training had to encompass all divisions of the company. The problems that faced Brian included severe time constraints, lack of available support from the IT department, the risk of financial loss resulting from poor implementation and training, and the availability of the 800+ staff to attend the training.





# 1D

## Promote and support the use of the system throughout the organisation

A common trait among Australian workers is resistance to change. But business is becoming more globalised due to the comparative ease of competing in foreign markets and the availability of cheaper labour and materials. From a marketing perspective, this is great news. It means managers have the ability to source from and sell to a wide variety of target markets. From a change-averse perspective, this is unsettling. It means change is more frequent and competitive advantages last for a shorter time than in previous generations.

The value of immediate, relevant data and knowledge is therefore higher now than in previous years. Keeping those within the organisation motivated to not only use the information provided, but add to the knowledge base, is an evolving and important area of management.



### Introduce the system

When a new system is introduced into your workplace it may be greeted with scepticism, with comments such as, 'Why is this going to be better than what we already use?' or 'I know what I'm doing with the current system. It works fine.'

Any significant change should not be announced without explaining the reason for the change. This has two benefits: it reduces the resistance to the change when it is announced, and it can generate ideas from the workforce that may not have been considered previously.

As a manager introducing a new system you need to promote it to the workforce and have mechanisms in place (such as training) to support the users initially through the implementation phase and then throughout the life of the system.

Methods of introduction could include:

- noticeboard advisory (manual or electronic)
- change management plan (for example, a letter to staff from a senior manager)
- media release to promote the company and gain loyalty
- collaborative action planning to gain buy-in from department heads and other staff
- specific meetings.

### Sell the system to the users

The conventional approach to introducing an information system is for managers to identify an 'off-the-shelf' system or engage system analysts to build a proprietary system. The system is then presented to the users through presentations, demonstrations and training. Unless the presentation is well designed and engages the users, this approach can enhance the negativity towards change, as some users may feel the new system is being forced upon them.

Involving the users in the process from the early stages gives them some ownership of the system and reduces resistance. Additionally, some organisations encourage ongoing feedback regarding the usability and effectiveness of the system, which helps acknowledge the important role staff play in the organisation's information management.

## Support the use of the system

A knowledge management system (KMS) is only of benefit if it is being used. To get the best possible return on investment it should ideally be utilised to its full potential. Difficult or inconvenient processes should be minimised or removed altogether, as users avoid tasks that they perceive as redundant or overly difficult. Language and terminology should be user-friendly and easy to follow. Monitoring the use and effectiveness of the system needs to be an ongoing task. The system manager needs to be aware of the issues as soon as possible to be able to investigate and recommend improvements for the development team. Users need to be able to provide feedback on their experiences.



## Monitor the system

Feedback provides a number of benefits. Firstly, it improves inter-departmental communication. Secondly, it creates a loop where feedback feeds into a continuous improvement model for the purposes of refining the knowledge system. Lastly, it gives users a level of support whereby issues are actually a part of the knowledge system, and therefore can be rectified by any number of other users or administrators.

Ways to obtain feedback include:

- user team meetings
- developer team meetings
- simple electronic or manually based feedback processes.

### Example: adapt training strategies

Joe is the maintenance officer at a logistics company. While most of his work is as a janitor, he sometimes needs to assist in other departments. He has completed year 10 and has had no formal education since leaving school. To ensure Joe understands the use of the company's knowledge system, his trainer has devised a system of training using colour-coded keyboard overlays and a number of practical tasks. The trainer has also made up a manual for Joe to use if he is unsure of any of the particular processes. The need for Joe to use the system is limited, but as a member of the staff, and an asset to the organisation, his manager understands that Joe's experience could add to the company's information system, and instructs the trainer to present the information with a focus on a competent outcome. This alters the trainer's approach and creates a better learning experience for Joe.



## Select the appropriate method of training

Consider the difference between an organisation installing a new system across all capital city offices and a minor upgrade to an existing system at a local office.

Knowledge required includes:

- extent of training required
- priority allocated to the training
- breadth and depth of organisational involvement in the training
- likelihood of future training (when, where, how often).

## Record keeping

All the information gathered needs to be collated and documented to ensure the learning activities achieve their required outcomes and any areas that are not performing to the desired standard can be identified and developed further.

Record keeping is therefore an integral part of the continuous improvement of the system and serves as the foundation for analysing trends and outcomes.

## Consistency

Having processes in place is of no use to an organisation if they are not implemented uniformly and correctly. It is difficult to measure training activities and training outcomes if there is little or no training consistency. This is especially true when there is more than one trainer or assessor working in the same learning environment with a number of learners at different skill levels.

Training policies, guidelines and procedural documents are useful tools to regulate training. Most large organisations employ the use of standard operating procedures (SOPs) across many operational facets of the business. An SOP is a procedural document that can be a contractually binding component of a job role, or in this case, a training process. Consistency requires discipline, and the reliance on contractual obligations is one effective method of achieving discipline.

## Review

The aim of the review process is to critically analyse the outcomes achieved by the learning activities and to make recommendations for improvement. The review process should be recorded to allow managers to benchmark current practices and monitor future improvements to the training. The designer of the learning activities together with other stakeholders can make recommended changes and analyse whether making changes would improve the program, and at what cost. The designer and review panel need to determine if the time and cost required to adjust the program is feasible. The person or persons developing the learner activities need to gain final approval for the learning program from the appropriate person. Here is a list of the people within an organisation who may be involved in the reviewing process.

Reviewers may include:

- |   |                           |
|---|---------------------------|
| • program manager                                 | • training coordinator    |
| • head of department                              | • human resources manager |
| • senior apprenticeship or traineeship supervisor | • senior manager.         |

## Comply with legislative requirements

Effective policies and procedures are essential to most business operations. Having effective policies and procedures in place reduces risk, improves morale and performance and ensures legal compliance.

Aside from Australian company obligations such as Australian Securities and Investments Commission (ASIC) regulations, the Corporations Act 2001 (Cth) and industry standards such as the Trade Practices Act 1974 (Cth), managers must be aware of other legislation and how it affects the operations of the business. Here are several typical legislative areas that need to be complied with.

### Typical legislative areas

- Privacy and confidentiality – dealing with employee and customer information within an information management system
- Defamation – ensuring personally sensitive information is secure and does not lead to improper use against the person
- Work health and safety – ensuring systems and policies are in place to provide a safe and healthy working environment
- Anti-discrimination – access and equity for all levels and abilities employed (or likely to be employed) within the organisation

## Ensure efficiency

Well-planned information systems rely on intuitive functionality. This means the navigation through menus and files makes sense to a reasonable person. An effective way of delivering this is to provide a content manual or guidelines page on an electronic system. Content guidelines usually include flow diagrams or mapping documents, which indicate the flow of information within the system and the various methods of retrieving the data.



## Monitor the data

Selecting, maintaining and disposing of knowledge in the system must be done on a regular basis. Out-of-date, inaccurate and irrelevant content should be removed. To do this, organisations can approach the task systematically by running end-of-period system checks that automatically remove data within a given set of parameters. These parameters may include date, subject, communication string and folder or data packet size.

## Share knowledge in the system

One of the key aims of any KMS is to provide information to the right person and the right time. The use of technology-based systems and the ever-improving security controls applied to wireless data allows for the potential access of data anywhere in the world at the speed of the local network.

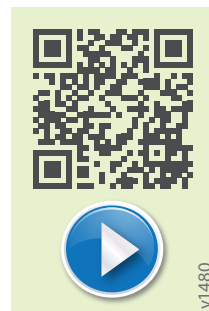
Examples of information systems adapted to this technology include mobile device banking that allows a bank's customers to access and control account information via a customised user interface specifically designed for easy use on a small portable device. Restricted and secret networks are not accessible via this method at this stage, as the risk of computer crime is too high. For example, bank staff cannot access the internal banking system in the same way customers can access their accounts.

Sharing of information can be organised through policy and procedure guidelines. These guidelines may segregate data based on authority levels using passwords or other security measures. Alternatively, access to sensitive corporate data may be restricted via separate internal servers or extranet facilities.



### Example: reveal weaknesses in a KMS

Tina works in the human resources department of a national sales company. She is contacted by another organisation's legal department requesting the employment records of one of her company's former employees. After consulting the policies and procedures handbook Tina discovers that due to the privacy laws regarding an individual's personal information she is unable to comply with the request. Upon informing the other organisation that she is unable to comply, Tina is told that they have a subpoena and that she is required to give them the file by law. Tina hands over the file after confirming the authenticity of the subpoena. As part of her recording and documenting process, Tina records the incident in the daily log. After reviewing the daily log, Tina's supervisor writes up a gap analysis for the incident, which highlights training on privacy laws and guidelines.



## 2B

## Address implementation issues and problems as they arise

When implementing and developing policies and procedures for monitoring the organisation's information or knowledge management system, there are several main questions that you as a manager need to ask:

- Where is monitoring required?
- What is most important to your organisation?
- What is happening and what should be happening?
- Is action necessary?
- What actions should you take?



### Where is monitoring required?

It is important to have a firm understanding of the following areas before you set up your policies and protocols for information or knowledge management systems. Look at which areas are most important to your organisation as a starting point. You must also ensure your procedures take into consideration the legislation that may impact on your organisation.

Questions to consider when monitoring include:

- What information needs to be monitored?
- What policies do you need to implement?
- Where do you need to put procedures in place?
- What failure would cause the most damage to the organisation if your procedures broke down?
- What are your organisation's objectives?

### What is most important to your organisation?

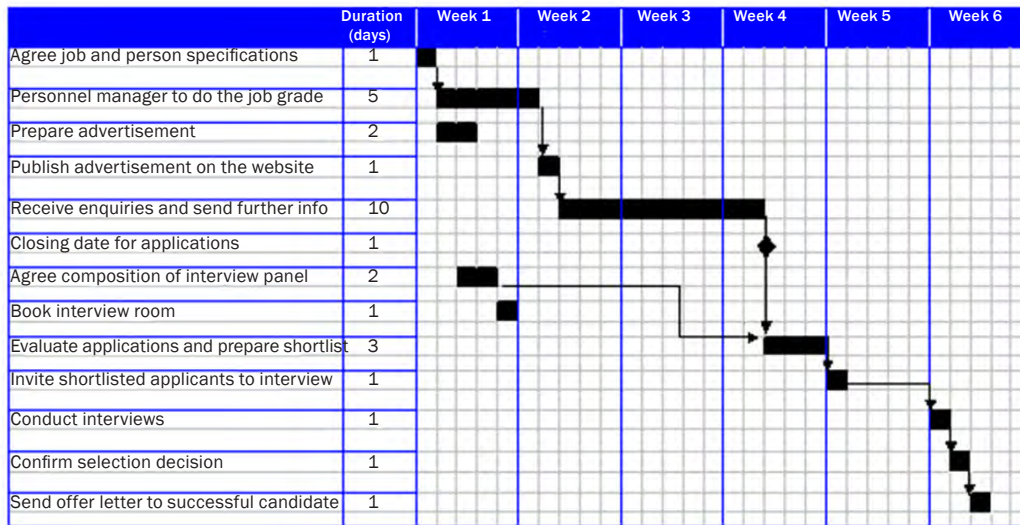
The areas that are most important to your organisation are the ones that need the most monitoring. As a manager you need to focus on them on an organisation-wide basis. Most departments set up procedures relevant to their own skill sets and it would be a waste of resources to duplicate the monitoring inter-departmentally. It is, however, advisable to ensure the procedures put in place cover all the information management areas relevant to that department. This could be achieved by working jointly with each department during the initial implementation of the information system.

### What is happening and what should be happening?

When you have developed the policies and procedures, monitoring becomes a matter of comparing what should be occurring with the reality of what is occurring. If there is a wide variation between the two, it is usually an indicator that there is a breakdown within the system.

## Schedule controls

A Gantt chart is a type of bar graph that is used to represent task progress and scheduling in an easy-to-view format. Here is an example.



## Production controls

There are many tools available for monitoring production information. Information from these sources can inform the manager about the organisation's assets, customer bases, marketing demographic insights, waste and where money is spent.

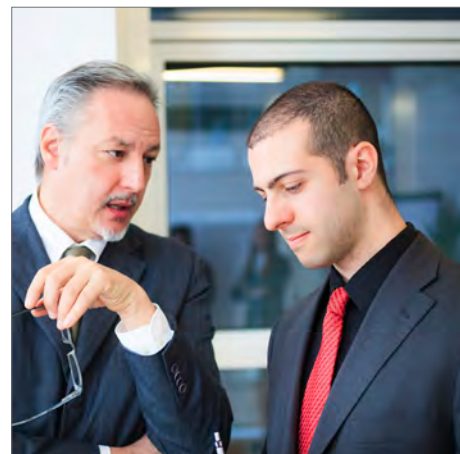
Production controls can include:

- inventory control
- Gantt charts
- PERT charts
- materials resources planning
- dispatch functions
- just-in-time schedules
- quality controls.

## Informal monitoring

Informal monitoring is a way of gathering information by talking to people and listening to their comments. While this is undocumented data, it is an important means of information monitoring.

Your diary and 'to do' list are can be efficient monitoring tools. It is also important that you monitor your own performance: one way of doing this is through feedback and asking others for their opinions.





## 2C

## Monitor integration and alignment with data and information systems

With information systems, it can be difficult to establish who owns and controls what information. The information used in organisations may be distributed to other organisations that disseminate it further. According to Wilhelm Hasselbring (2000), there are three information levels that can help distinguish ownership and content.

Here are three examples of information levels that may be used to integrate data and information systems

#### Three information levels

1. The business level describes the organisational structure and the progress or rate of progress of work done by a business or department (or for business rules and processes). It is a theoretical level expressed in terms meaningful to actual users of application systems.
2. The application level describes actual implementation of the business ideas in terms of project applications. The fundamental objective is to provide the 'glue' between the application scope described in the business architecture and the technical solutions described in the technology.
3. The technology level defines the information and communication infrastructure. At this level, information technology is challenged to achieve the business requirements.

## Information systems integration

While you need to understand information levels, the structural plans of an individual organisation cannot be dealt with in isolation: processes are highly interconnected and should be handled as such. Communication between computer systems often mimics conversation between people, and as with conversation between people it is very easy to misinterpret what is being said. It is important to consider this when integrating those systems. A horizontal integration of the layers may be necessary to maintain the business processes efficiently.

In integrating autonomy (independence): your information systems need to address three issues that need to be addressed within a management system.

#### Autonomy

Multifaceted 'systems of systems' are defined by a controlled and sometimes limited integration of individual autonomous systems. Often, there are conflicts between the necessities of integration and independence such as redundancies and the resulting inefficiencies.



## 2E

## Manage contingencies by accessing technical specialist help

While we all hope the flow of information is smooth and efficient, things can and will go wrong from time to time. Contingency planning for likely events is good business practice. There are several ways of coping with problems that occur.

### Helpdesk

A helpdesk is a clearing house for problems and, while they may not deal with your problem directly, one of their functions is to connect the problem with a possible solution.

The helpdesk is also used for tracking and monitoring common day-to-day issues that may arise within the organisation's information technology environment. The helpdesk typically manages its requests via helpdesk software, such as an incident tracking system, which allows them to track user requests. An example is a 'local bug tracker' (LBT). The helpdesk software can be an extremely beneficial tool when used to find, analyse, and eliminate common problems in an organisation's computing environment. There are many software applications available to support the helpdesk operation.

It is common to have a broad-based helpdesk set up that services the whole organisation.



### Helpdesk outsourcing

Some organisations are turning to rapidly developing economies (RDEs) to manage their helpdesks as the costs to the organisation are in some cases reduced by as much as 60 per cent. The use of overseas helpdesks is made possible by the advances in computer technology within recent years. In places such as India and Malaysia, where there is a large skills base of university graduates and limited positions available, there are organisations devoted to servicing other countries' information and knowledge management needs.

### Product training and backup service

When an organisation purchases tools for the maintenance of its information or knowledge management systems it is prudent to ensure the package includes adequate training and ongoing support of the tools. It has become common practice for developers to include staff training on an ongoing basis to ensure the tools are used correctly and for optimum performance.

# 3A

## Analyse effectiveness of the management system

Information, if properly analysed and appropriately implemented, can give an organisation a distinct competitive advantage.

Here are several points that should be considered when analysing the effectiveness of a management system.

1

How will system effectiveness be measured?

2

How will strengths and weaknesses be identified?

3

Does the system provide my organisation with the desired advantage?

4

Is the knowledge reaching the appropriate person at the appropriate time allowing for effective implementation?

5

Does the system have the ability to keep pace with changes in the market?

6

IT systems are generally considered to be a supplementary tool or a support mechanism, and not an all encapsulated solution to knowledge.

7

Different organisations have different knowledge requirements. You need to be careful you don't fall in to a one-size-fits-all mentality.

## 3B

### Review the business and operational plan and determine intended outcomes

Knowledge management can provide organisations with a competitive advantage if information is used effectively to create tangible and relevant knowledge. From an operational perspective, senior managers need to ascertain whether the use of the information and the knowledge applied is actually achieving the objectives set out during the planning phase. To do this, relevant organisational benchmarks must be set and then monitored, controlled and reviewed for effectiveness.



#### Review against intended outcomes

In the planning phase, at the strategic level or operational level, measurable objectives are usually defined with reasonable clarity; for example, the percentage of increase in sales for a particular product line during a marketing promotion; or the expected rate of return on a venture capital investment.

During the implementation of a KMS or information system, similar objectives relating to efficiency, performance and customer/user satisfaction are identified. These may be included in the strategic documents of the business or within a specific project plan. Measurement of the success or limitations of the system can be benchmarked against these criteria and a determination can be made as to the overall effectiveness of the system.

#### Review benchmarks

As with any audit or review, benchmarks must be clear. If, for instance, the objectives for the implementation of the system were a 10 per cent increase in sales, what performance indicators could be developed to substantiate such a target? In this case, the manager would have a difficult time correlating the use of an information system directly to an increase in sales. Instead, the objectives must relate to the use of the system.

Profitability should be avoided as an objective of a KMS unless the system is used as a profit centre, such as in call-centre management. In non-profit-generating systems (those designed purely to support the operation and growth of the business) assigning specific profit targets is problematic and often subjective.

Here are specific grouped measures that can assist when reviewing KMS benchmarks:

- Accessibility – Measures relating to the ease of access by authorised staff and security against unauthorised access; that is, the number of breaches
- Economy – Measures that indicate efficiency gains through the use of the system
- Environment – External and internal environmental benefits such as reduction in waste or paper usage
- Safety – Measures of health and safety improvements against policy benchmarks

## Example: effective and focused review sessions

'Paralysis by analysis' is a phrase used in business that describes a situation where too much time and money is being used to analyse data resulting in delays in implementation of any recommendations.

A Victorian car dealer implemented a CRM system designed to reduce access time to customer records by sales and administration staff. After six months, the company held a review and invited all the users to have input. The meeting took an entire day and turned into an argument about small, seemingly insignificant, aspects of the system and the way it was implemented.

The result was lost sales and productivity for the day and little useful input that could be used to improve the system. Changes were instead applied autocratically and as a result, users felt even more disassociated from the process.



## Practice task 12

Five big companies have achieved success with their knowledge management systems. Do an internet search for: 'Five big companies that got knowledge management right' or go to the website: [www.cioinsight.com/c/a/Case-Studies/5-Big-Companies-That-Got-Knowledge-Management-Right](http://www.cioinsight.com/c/a/Case-Studies/5-Big-Companies-That-Got-Knowledge-Management-Right)

The site describes the process that each of the five companies followed in the introduction, and development of their systems.

Click on the '5 Case Studies' link, then select and read 'No. 3: Dow Jones makes headlines with content management'.

Conduct a review using the AAR model and report on your findings. Ensure you cover each step of the AAR process in your report. Use the following table.

Question	Response
What was supposed to happen?	
What happened?	
Why did it happen that way?	
What did we learn from this?	

## Effective data systems

The improvement of data systems reduces the risk of critical knowledge system failure and the loss of critical knowledge. These risks can reduce cost-effectiveness, increase the workload for staff and reduce the effectiveness of information and data analysis.

Improvements to the data systems may involve upgrading to new systems altogether. For example, moving from an Excel spreadsheet system for recording customer data, to a purpose-designed CRM system like Maximiser.

Here are several examples of critical data management.

External	Internal
The use of off-site data storage systems	Implementation of policies encouraging the use of low-technology solutions, such as the daily backup of work on USB flash drives, CDs or DVDs, ensuring critical data is not lost

## Interpersonal knowledge sharing

The encouragement of personal knowledge sharing is an important aspect of looking at improvement to systems. Here are some methods that can assist in encouraging people in a work group or team to share interpersonal knowledge.

Methods of encouraging sharing include:

- the development of work groups and other dynamic team exercises
- the use of formal and informal team meetings – these could be as informal as a team break and the discussion of essential elements over a cup of coffee.

## Involve staff in the design of usable systems

Follow the 'keep it simple' principle. The most effective systems are quite often not the fanciest or the ones that contain the greatest number of features. When designing the usability and functionality of any system you need to strive for functionality above all else.

Most designers will ensure that the delivery of the maximum amount of information is presented in the simplest form, using intuitive methods. If a system is too complex to use, staff may not use it; they may prefer the system they are comfortable with, even if it provides them with less knowledge and takes more time to access.

## Select a better system

A knowledge management system must be appropriate to the specific nature and size of the organisation. There is a wide variety of different knowledge management models available. Some systems are technology-centric, while others utilise more traditional people-centric systems.



## Example: review a knowledge management system

After a review, a paper distributor discovers that the helpdesk is receiving too many calls relating to company procedures rather than system errors or failures. To counter the problem the company sets up an intranet system for the sharing of in-house information, including a database of FAQs (frequently asked questions) and a list of policies and procedures for each department. While this addresses an existing problem, the company review process uses business analysis models that allow for more than just reactionary control measures.

During a SWOT analysis, they also identify an opportunity to share more information through the use of a blog site, which has the follow-on effect of more staff interaction and a friendlier workplace.



## Practice task 13

Five big companies have achieved success with their knowledge management systems. Do an internet search for: 'Five big companies that got knowledge management right' or go to the website: [www.cioinsight.com/c/a/Case-Studies/5-Big-Companies-That-Got-Knowledge-Management-Right](http://www.cioinsight.com/c/a/Case-Studies/5-Big-Companies-That-Got-Knowledge-Management-Right)

The site describes the process that each of the five companies followed in the introduction, and development of their systems.

Click on the '5 Case Studies' link, then select and read 'No. 4: Shuffle Master puts its money on a portal'.

Identify two aspects of the system that are supply- or demand-side knowledge management and offer recommendations for improving the system to senior managers. Your recommendations should consider how information is stored, retrieved and shared while 'keeping it simple'. Use this table.

Supply-side knowledge management		Demand-side knowledge management	
Activity	Recommendation	Activity	Recommendation