

BCS ITQ Level 2

Improving Productivity using IT

**Using
Microsoft® Office**

Release BCS012v4

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Skill Set 2

Review and Adapt

By the end of this Skill Set you should be able to:

- Review use of IT tools and techniques
- Decide whether selected IT tools were appropriate
- Assess the strengths and weaknesses of final work
- Describe ways to make further improvements
- Review the outcomes of your solution

Exercise 10 - Review Tools and Techniques

Knowledge:

When the task has been completed, you should review the effectiveness of the choices you've made. You'll need to gather information to help you make judgments – perhaps from colleagues who have been using or testing your solution. You can then analyse the information to decide if the IT tools and techniques chosen have been appropriate to the task and its intended outcome.

There are many factors to consider when deciding whether the choice of tools and techniques were appropriate:

- **Time.** Has the time taken to complete the task been in line with the original plan? Would it have been quicker to use any alternative methods?
- **Convenience.** Has the choice of IT tools for the task resulted in a more convenient, easy-to-use solution? Would it have been easier to use any alternative methods?
- **Quality/accuracy.** Do the chosen IT tools provide sufficient quality and accuracy in the solution?
- **Versatility.** Has the choice of IT tools for the task resulted in a versatile solution? Could it be easily adapted to other, related tasks? Could the information in the solution be easily presented in a different format, perhaps for another purpose?
- **Information access.** Are there any issues related to accessing information necessary to use the solution? For example, does it require a network connection and/or a security password, or does it involve downloading data from the Internet? Downloading large amounts of data from the Internet can be a problem, particularly if only a slow speed Internet connection is available.
- **Legality.** Does the solution meet all legal requirements – have you considered issues such as copyright, the Data Protection Act, etc? And is the solution accessible to everyone?

If any of the above factors indicate that the solution is not as efficient as it could be, you should be prepared to make any changes necessary (and appropriate).

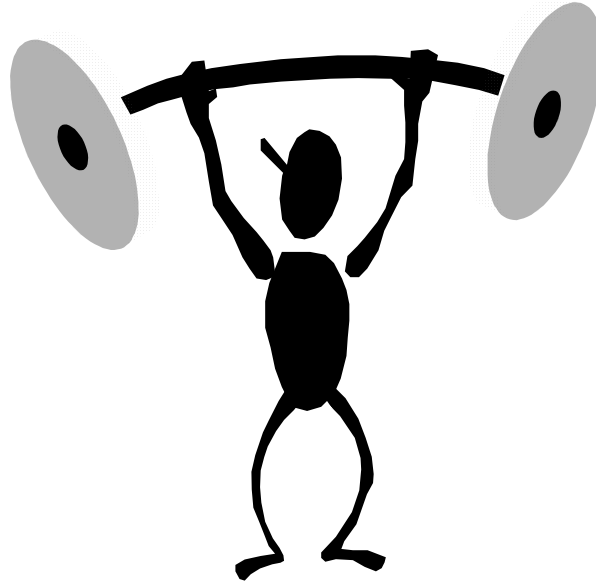
Scenarios:

- ❖ For all the example scenarios, information should be collected on how well the solution matches the requirements and how easily it was achieved. Pay particular attention to whether the tools and techniques turned out to be appropriate. For example, do you think using *Outlook* to set up efficient communications and diaries was the best choice of application for the task? Could it have been done better or quicker using any other techniques?

Exercise 11 - Assess Strengths and Weaknesses

Knowledge:

After analysing the effectiveness of the tools and techniques you have chosen, you next have to assess the strengths and weaknesses of your solution as a whole.



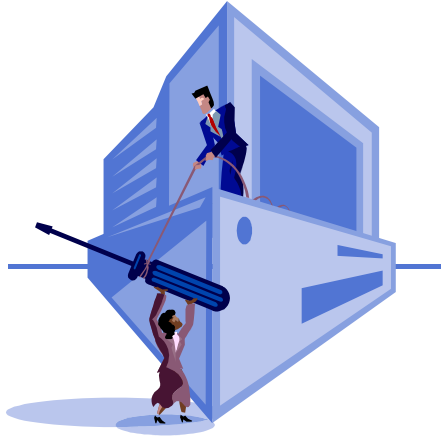
There are a number of important areas that you should consider, some examples of which are provided below.

- **Format.** Has the final solution been created in the most appropriate format for the task (e.g. a word processed document, a presentation, a spreadsheet, a database, etc.)?
- **Layout.** Is the finished solution well laid out and arranged in a logical order that makes sense to the reader/viewer?
- **Accuracy.** Is all data that is used or produced by the solution accurate and is spelling and grammar in the final solution correct?
- **Structure.** Is the information presented in a logical, structured way that makes it easy to find information quickly and easily?
- **Style.** Are fonts and formatting used appropriately and do they make the solution easy to read and follow? If applicable, have house styles been used?
- **Quality.** Is the quality of the final work of a professional standard and will it impress its end-users?
- **Clarity for audience.** Are the layout, style and structure of the finished work easy to follow and understand? Is the information clear and concise?

Exercise 12 - Making Improvements

Knowledge:

After testing and reviewing the solution, it may become clear that there are a variety of ways in which the work could be improved. You may have discovered that there could be more efficient and effective ways of doing things.



- Correct any mistakes. If any errors are identified when in use, correcting these will obviously improve the quality of your solution.
- Respond to feedback. It may become obvious when the solution is in use that there is a better way to perform certain tasks and improve the solution. These may make the solution itself easier to use or less prone to errors.
- Give feedback to users on their own strengths and weaknesses, and advise how additional training could perhaps improve their ability to use the solution.
- Learn new techniques. This may mean that some features of the project could be improved using a different, better approach.
- Add automated IT features to the solution such as macros and shortcuts. This will improve its overall efficiency.
- Minimise the impact that the new system has on other peoples' work. A successful solution shouldn't increase other peoples' workloads.

When an IT solution is reviewed, it may become clear that changes could be made to improve it. Of course, any improvement in productivity would have to be balanced against potential costs of developing the solution further. Some reasons to justify those costs may include:

- You can achieve the same result in less time
- You can achieve the same result for less money
- You can achieve greater output in the same time
- You can achieve higher quality output
- You can free staff to perform other tasks

Exercise 12 - Continued

If appropriate, one way to achieve these aims is to reduce the manual parts of the solution and allow a computer to handle more of it (i.e. have more automated processes). For example, you could use conditional calculations to deal with different situations automatically without user intervention, e.g. calculate different discount rates depending on the total sales value for a record.

Furthermore, any features where data can be manipulated automatically rather than needing to be manually processed will make the solution quicker and easier to operate, less likely to produce errors, and therefore more efficient.

Other examples of automated features would be:

- Use a macro, so that one action by the user can run a series of processes in a fixed sequence
- Create shortcuts, so that commonly used features can be started quickly
- Customise menus and toolbars to include shortcuts and macros
- Create templates so that consistent results can be achieved more quickly if the task is required again.

Scenarios:

- A. The productivity of the mail shot task could be improved by creating a template for the solution before any content is added. Future mail shots could then be produced merely by opening the template and adding new content.
- B. Recurring appointments can be set up in *Outlook* so that information only needs be entered once.
- C. A template of the expenses spreadsheet would make it easy to produce new spreadsheets for each week. Formulas could be checked to make sure they are error free.
- D. Once all the required data is held within a database, a range of forms and reports are available. For instance, queries highlighting double-booking of staff or resources could be easily produced.

Exercise 13 - Review Outcomes of the Task

Knowledge:

A critical look back over your final solution is an important part of the review process. The first reason for doing this is that it allows you to compare the completed task with the aims and plans for the project, to ensure that the original requirements have been met. It may be easier to do this if you produce drafts of various parts of the task throughout the creation process. These can be shown to the end users and any potential problems picked up at an early stage. The second reason is to correct any errors or omissions that may exist within the completed solution.



Steps that could be involved in this process include:

- Checking your solution against the original requirements. This is where written evidence of the aims and objectives of the task would be very useful.
- Consulting with the intended audience/users of the solution to see if it meets their requirements and expectations.
- Spell check and proof read all source and output text. Note that spell checking will only identify unrecognised words. It will not generally find words used incorrectly, e.g. *horse* instead of *house*, or *her* instead of *here*, so manual proof reading is always recommended.
- If the solution depends on numerical calculations, make sure they are checked and tested.
- Check all output for suitability so that it will not cause offence to any member of the target audience.
- Check all output for compliance with legal requirements such as copyright or data protection laws.
- Be aware of what effect any mistakes in your solution may have on others.
- Are there features that could be added to improve the efficiency of the users of the solution, or of the organisation as a whole?

Exercise 13 - Continued

Scenarios:

- A. In the mail shot scenario, you should check that the final solution meets the original requirements. Is all the included information on products and services relevant and presented in a clear and accurate way? Is it free from spelling and grammar mistakes? Is there a template available and will it be relevant to future mail shots? Does the format make the information easy to read and understand? Make sure that it does not contain any offensive, inappropriate or copyright protected content.
- B. In the communication scenario, is all information included? Are all users aware of what is required of them and do they understand how to update the diary system? Check with users that the system holds the desired information at a level that is accessible and easy to use.
- C. In the spreadsheet scenario, check that the solution meets the original requirements. Has all input data been checked for accuracy? Are all formulas checked and accurate? Do they result in the information that is required? Are users of the system happy that it supplies them with the information and calculations that they need?
- D. For the garage repairs database, is all the required data available on all forms and reports? Has the data been entered correctly? Is it easy to update? Is the report clear to understand?

Exercise 14 - Develop Your Skills

You will find a *Develop Your Skills* exercise at the end of each Skill Set. Work through it to ensure you've understood the previous exercises.

Revision Scenario

Recall the revision scenario in which you are employed by a small retail company to update its stock record system. The company wants to make it easier to be able to notify customers when a particular product that they have expressed an interest in becomes available. You decided to use Microsoft Access to store customer information and to create a list of those to inform of product updates.

1. Which two of the following statements best confirms that the chosen IT solution was appropriate for the task?
 - a) "Mrs Harper has placed a large order for item x."
 - b) "We will need a better printer for these reminders."
 - c) "There were no spelling errors in the database entries."
 - d) "This was the most effective update we have ever done."

2. From the following statements, pick one which best represents a strength of the solution and one which best represents a weakness.
 - a) The solution produces good quality print outs
 - b) The customer details in the database are difficult to keep up-to-date
 - c) It is easy to find customers who want specific products from the database
 - d) The system interface looks a little boring

3. Which of the following would best represent an improvement to your solution?
 - a) Spell and grammar is checked again
 - b) The interface is updated so that it is easier to update customer details
 - c) Cheaper paper is used for print outs
 - d) The interface is redesigned using bright colours.

Summary: Review and Adapt

In this Skill Set you have seen how to review your use of IT tools and techniques and learned how best to adapt and make changes to your solution to ensure a more successful end result.

You should be able to demonstrate your ability to:

- Review ongoing use of IT tools and techniques and change the approach as needed:
 - Gather information to help make judgements
 - Analyse information about whether the IT tools and techniques are appropriate to the task and intended outcome
- Describe whether the IT tools selected were appropriate for the task and purpose:
 - Time taken, convenience, cost, quality, accuracy
- Assess strengths and weaknesses of final work
 - Format, layout, accuracy
 - Structure, style, quality
 - Clarity for audience
- Describe ways to make further improvements to work
 - Correct mistakes
 - Avoid affecting other people's work
 - More efficient and effective ways of doing things
 - Learning new techniques
- Review outcomes to make sure they match requirements and are fit for purpose:
 - Evaluate the quality of the information used
 - Produce drafts, review against initial plans
 - Check with intended audience
 - Effect of own mistakes on others