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**Principal Learning**

# **Information Technology**

**Level 3**

**Unit 7: Making Projects Successful**

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Paper Reference

**IT307/01**

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## **Pre-release Material Oaking College**

Oaking College is located in the north-west of Scotland. Over the years, several large organisations have opened offices and business premises in the vicinity of the college. This growth in the local business market has led to increased business opportunities for the college.

Oaking College has identified that there is an expanding market in the Adult Education Sector, in particular professional IT qualifications. To meet the market need, Oaking College has decided to extend its training provision to include technical IT courses and professional qualifications covering topics such as programming, networking and IT systems support, and server management.

In order to accommodate the changes to the curriculum it is proposed that three existing classrooms will be converted into computer suites.

The computer suites will need to be fitted with the necessary computing and networking equipment, including audio/visual teaching equipment such as an interactive white board and speakers. Additional hardware will need to be purchased, including PCs that will be permanently in situ and connected to the network and PCs that will be used for Maintenance and Support classes on a standalone basis. Additional equipment will also be purchased so that there is a reserve of equipment, if needed, when teaching commences. Oaking College's existing network is able to support the increase in networked machines.

As well as being able to connect to the Oaking College network it is proposed that there will be a separate server in each computer suite. This will be used in isolation within each of the computer suites for Server Management and Configuration training.

The Oaking College IT team will be responsible for all the IT installation and network configurations. This means that four experienced technicians will be seconded from their normal roles to work on the project.

Site services at Oaking College will be responsible for moving furniture and any required building maintenance. Painting of the computer suites will be carried out by a contractor, Paint Services UK. All hardware must be sourced from the college's approved supplier, Central Computers Ltd.

The IT Manager at Oaking College is an experienced project manager and has been tasked by the senior management team with managing the project. The briefing took place on 7th June.

Funding is being provided from several sources. Mancomp, a local business, has invested £15,000, government grants have provided £10,000, and £5,000 has been provided from the Oaking College IT development fund.

The classrooms will be unoccupied from 21st June and the project must be completed before the start of the first course on 1st August. The IT technicians will be seconded to the project for the month of July. It is important that the project does not affect the day-to-day running of the college with limited disturbances to any timetabled classes in the vicinity.

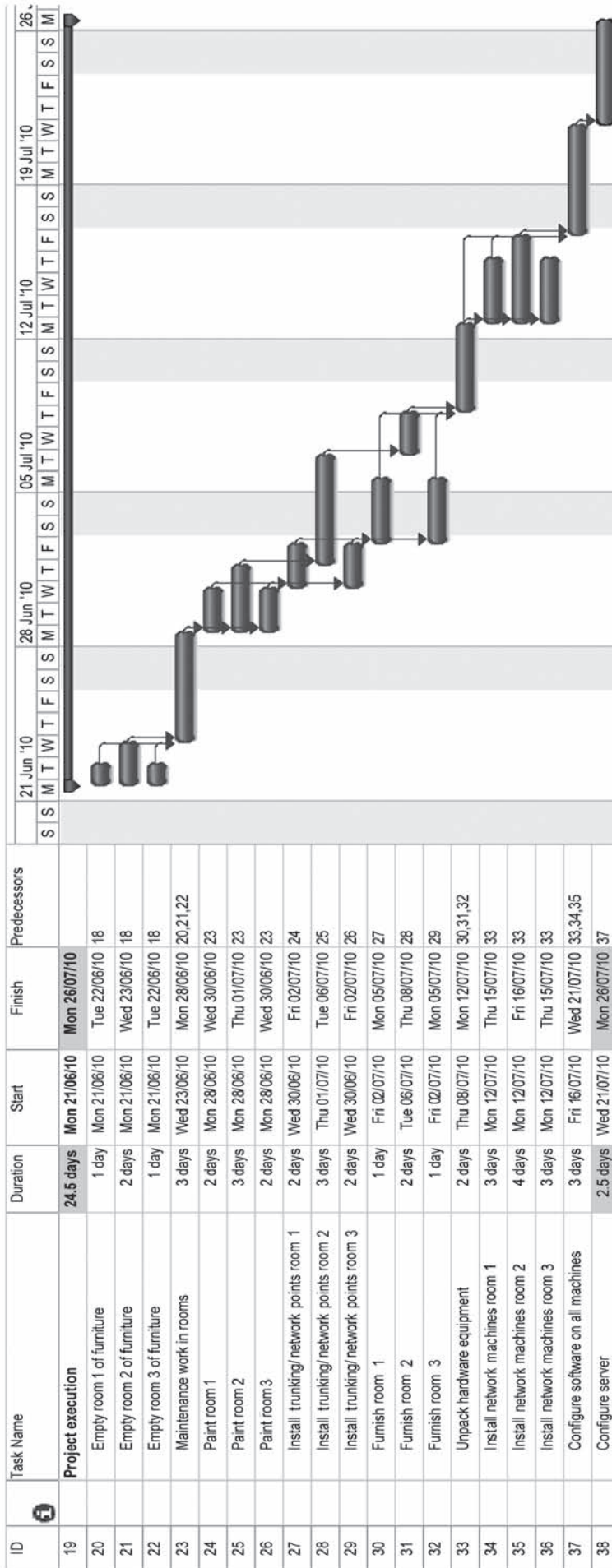


Figure 1 – Extract from the Gantt chart for Oaking College Project Plan



## SCOTTISH WATER

### "Promise to resolution" integrated customer management and field service programme

*Scottish Water was formed in April 2002 following the merger of the three former water authorities – East, West and North of Scotland. It is responsible for providing clean, safe drinking water and disposing of waste water from 2.2 million homes and 130,000 businesses across Scotland. The "Promise to resolution" integrated customer management and field service programme introduced a new customer service contact centre and work scheduling system to improve both efficiency and performance.*

*"'Promise to resolution' was one of the projects which helped Scottish Water outperform its efficiency target to reduce costs by more than 40 per cent over four years. In fact, Scottish Water achieved a 41 per cent reduction and is now running the water industry for £142 million less a year than the former authorities. Scottish Water's improved efficiency has meant that the organisation has been able to invest heavily in improvements to the infrastructure."*

*Scottish Water*

#### **Cost**

£14 million invested in the change programme by March 2006.

#### **Supplier**

Oracle – software; Celerant – business change.

#### **Timescale**

The programme was initiated in November 2002 and delivered the first phase of a nationwide rollout in December 2003.

#### **Current status**

The change programme has continued to evolve as part of a continuous improvement process.

#### **Key components of success**

- Testing a paper-based version of the proposed business process with front-line staff proved that the system would work, identified potential improvements and secured staff support for the proposed business change.
- Using off-the-shelf technology allowed Scottish Water to quickly implement a proven workable solution and to achieve a faster return on investment.
- The IT-enabled business change was led by business managers rather than IT personnel.

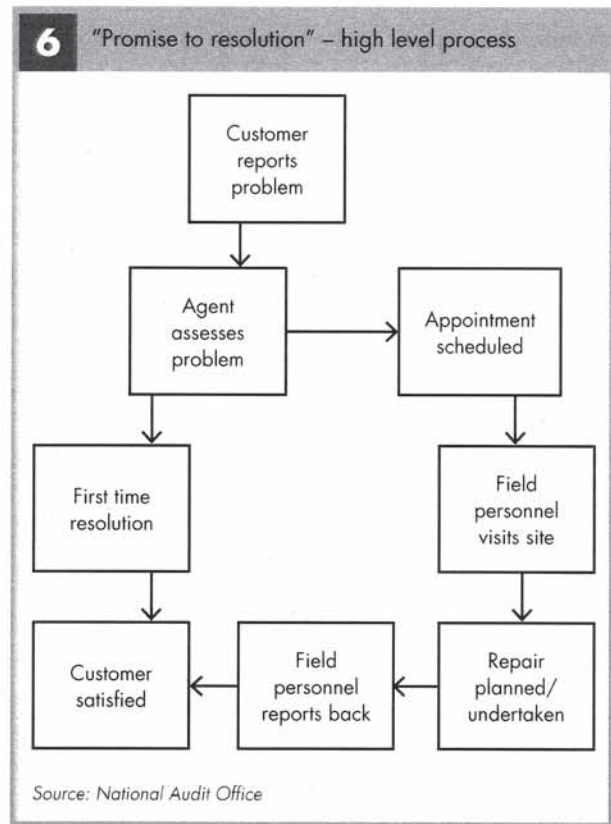
## Aim

1 Scottish Water was formed in April 2002 from the merger of three of Scotland's regional water authorities. The decision to merge followed a Government review that identified that a single unified authority would be better placed to create consistent service standards, deliver value to taxpayers and be better able to finance capital improvements. The new authority was set broad targets to improve water quality and the customer experience and, more specifically, a target to reduce operating costs by 40 per cent by March 2006.

2 Research by Scottish Water identified that customers were dissatisfied with the service it provided, operational efficiency was falling and costs were rising. It identified an opportunity to improve customer satisfaction and service delivery by standardising the customer contact and field engineer assignment processes across the predecessor bodies and implementing one system to run contact centres and dispatch service crews. The required business change was designed to deliver a new customer service initiative called "Promise to resolution" (Figure 6). This aimed to provide timed appointments for visits to customers and set guaranteed response times on key activities. The plan was to create initially three contact centres, to be later consolidated into one, to deal with customer calls and use the information so collected to efficiently allocate work to field staff.

## Testing the business process

3 To bring consistency into service delivery required significant redesign of the three existing business processes. Scottish Water, in recognition of the scale of the task, employed Celerant, a management consulting firm, to work with its business analyst team and front-line staff. This involved documenting the proposed new process in detail on paper and trialling it at designated field sites with operational staff to test that it would work in practice. Only when the process had been proven to work did the project team commit to purchasing software to support it.



4 A benefit from using a joint team was the transfer of process design skills from Celerant to the front-line staff. This led to proposals for process change from the front-line teams who knew what would and would not work. Furthermore, the fact that staff were given the opportunity to develop their own business process created a sense of ownership that helped to sell the business change to other parts of the organisation. As the process was rolled out, the front line staff that had been involved in the design became advocates themselves for the proposed business change.

## Off the shelf technology

5 In order to deliver the required 40 per cent savings in operating costs by 2006, Scottish Water made an early decision to adopt off-the-shelf technology supplied by Oracle, this being a less risky and more effective route to achieving the desired return on investment, allowing a fast track implementation of the software. The decision to opt for an off-the-shelf solution was taken by the business lead of the project despite significant pressure from the IT department that a bespoke system was required to meet all the process requirements. The off-the-shelf solution proved successful, with the first installation completed within 90 days.

6 The fact that the software had been proven for other customers with similar business needs gave Scottish Water confidence that the solution would be suitable for its needs. Important to the successful implementation was to resist the temptation to amend the off-the-shelf package except where absolutely necessary. In practice, the Oracle software proved to be an 80 per cent fit for the proposed business process. With hindsight, Scottish Water would have undertaken no customisation of the system at all. The benefit obtained from adapting the off-the-shelf software was minimal when compared with the added cost, technical problems and, importantly, the additional time taken to implement the customised software.

## Realising the benefits

7 The "Promise to resolution programme" has resulted in productivity improvements from both the customer call centres and field service operations. For example, the new IT system has brought together in one place information on previous contact with customers, past water service problems and current maintenance and repair projects.

8 This real-time data has increased the call centre capacity by enabling agents to answer more questions in one call and to better co-ordinate repair and maintenance activity. For example, a better understanding of the problems reported means that call centre staff can allocate field staff to jobs based on priority, rather than, as previously, treating all calls on a first come first served basis. Equally, hand held computers have allowed field staff to instantly update call centres about progress on jobs and improved the quality of data returned by field staff after each visit from 50 per cent complete to 89 per cent. This has allowed the customer to be better informed of incident progress, and once completed, allowed the field staff to be promptly re-allocated to new jobs. Improved scheduling has led to a reduction in overtime estimated to be in excess of £100,000 per annum. Improvements in scheduling have also improved customer service. Field staff can now attend 95 per cent of customer appointments within an agreed one hour window, an increase from 75 per cent in 2002.

9 Scottish Water has improved its overall customer service performance as measured by the overall performance assessment (OPA) framework of the Water Industry Commission for Scotland by 24 per cent between 2002-06, peaking in 2004-05 at 33 per cent, and narrowing the gap between its service and that of water companies in England and Wales.<sup>1</sup> Its current Water Industry Commission OPA target is to improve customer service performance by a further 40 per cent based on the 2004-05 baseline.

<sup>1</sup> Water Industry Commission for Scotland (2006) *Customer Service Report 2003-06*. Stirling: Water Industry Commission for Scotland. <http://www.watercommission.co.uk/Documents/Service%20Report.pdf>. Poorer performance in 2005-06 is due mainly to an increase in the reported number of properties experiencing sewer flooding.

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