Paper Reference

I T 3 0 7 / 0 1

Signature

IT307/01

Edexcel

Principal Learning

Information Technology

Level 3

Unit 7: Making Projects Successful

Thursday 11 June 2009 – Morning

Time: 1 hour 30 minutes

Examiner's use only

Team Leader's use only

Question Number	Leave Blank
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	

Materials required for examination
Nil

Items included with question papers
Pre-release material

Instructions to Candidates

In the boxes above, write your centre number, candidate number, your surname, initial(s) and signature.
Check that you have the correct question paper.
Answer ALL the questions. Write your answers in the spaces provided in this question paper.
Do not use pencil. Use blue or black ink.

Information for Candidates

The marks for individual questions and the parts of questions are shown in round brackets: e.g. **(2)**.
There are 10 questions in this question paper. There are two sections in this question paper. Section A has 7 questions and Section B has 3 questions. The total mark for this paper is 90.
There are 24 pages in this question paper. Any blank pages are indicated.

Advice to Candidates

You are reminded of the importance of clear English and careful presentation in your answers.
You are advised to read the questions carefully.

Turn over

edexcel
advancing learning, changing lives

Web Masters

Web Masters is a website design and creation company run by two directors, Chris Parry and Robin Coulter. The company has grown from strength to strength and currently employs 40 people.

Web Masters recently won a new long term contract with a major national company. This has meant that it will have to increase its workforce from 40 to 50 employees to cope with the extra work.

The company leases the first floor of an office building located on a business park in west Wales. The space can comfortably accommodate the increase in personnel but there will need to be some minor changes to the current layout of office furniture and consequently the network cabling. The directors have decided to use this office reorganisation as an opportunity to upgrade the Cat 5 cable currently being used to Cat 5e cable. During this upgrade, it is also planned to install additional network points to facilitate any future expansion to the workforce.

The directors have already purchased the additional office furniture required and have had plans drawn up of the new office layout and cabling requirements. To avoid disruptions to the business it has been decided that work will be carried out in phases over two weekends; the current layout of the existing cabling means that this is a feasible solution. Each phase will take two days to complete. (An extract from the Gantt chart for the Web Masters' project is provided on page 3.)

A project manager will manage the project. An external contractor, PF Cabling, will be responsible for the recabling of the office space. During each phase, Web Masters' four IT technicians will be on site, along with two members of the facilities team.

The project must be carried out and completed during the month of June.

ID	Task Name	Duration	Start	Finish	Predecessors
17	**Phase 2 Installation**	**7 days**	**Tue 09/06/09**	**Mon 15/06/09**	
18	Prepare for next phase	32 hrs	Tue 09/06/09	Fri 12/06/09	16
19	Remove furniture & PCs	2 hrs	Sat 13/06/09	Sat 13/06/09	18
20	Remove existing cabling	3 hrs	Sat 13/06/09	Sat 13/06/09	19
21	Install & test new cabling, floor boxes & trunking	8 hrs	Sat 13/06/09	Sun 14/06/09	19
22	Reposition furniture	2 hrs	Sun 14/06/09	Sun 14/06/09	20,21
23	Re-assemble PCs as required	3 hrs	Sun 14/06/09	Sun 14/06/09	22
24	Test PCs & server connections	4 hrs	Sun 14/06/09	Sun 14/06/09	22
25	Review Meeting	8 hrs	Mon 15/06/09	Mon 15/06/09	23,24
26	End of Phase 2 Installation	0 hrs	Mon 15/06/09	Mon 15/06/09	25
27	**Phase 3 Installation**	**6 days**	**Tue 16/06/09**	**Sun 21/06/09**	
28	Prepare for next phase	32 hrs	Tue 16/06/09	Fri 19/06/09	26
29	Remove furniture & PCs	2 hrs	Sat 20/06/09	Sat 20/06/09	28
30	Remove existing cabling	3 hrs	Sat 20/06/09	Sat 20/06/09	29
31	Install & test new cabling, floor boxes & trunking	8 hrs	Sat 20/06/09	Sun 21/06/09	29
32	Reposition furniture	2 hrs	Sun 21/06/09	Sun 21/06/09	30,31
33	Re-assemble PCs as required	3 hrs	Sun 21/06/09	Sun 21/06/09	32
34	Test PCs & server connections	4 hrs	Sun 21/06/09	Sun 21/06/09	32
35	End of Phase 3 Installation	0 hrs	Sun 21/06/09	Sun 21/06/09	33,34
36	**Handover**	**2 days**	**Mon 22/06/09**	**Tue 23/06/09**	
37	Final project review	8 hrs	Mon 22/06/09	Mon 22/06/09	35
38	Deliver new system to management	8 hrs	Tue 23/06/09	Tue 23/06/09	37
39	**Project closedown**	**0 days**	**Tue 23/06/09**	**Tue 23/06/09**	
40	End of project	0 days	Tue 23/06/09	Tue 23/06/09	38

Extract from the Gantt chart for Web Masters' Project
(Phase 2 to end of project)

Environment Agency's 'Fishing Rod Licence' project.

ENVIRONMENT AGENCY
Fishing Rod Licences

The Environment Agency employs 12,500 members of staff and has an annual budget of some £1 billion. The Agency's responsibilities include all aspects of fisheries management from fish husbandry and management of river banks to rod licence enforcement. The Fishing Rod Licences project transformed a fixed-hours Post Office based service to a self-service system, enabling customers to purchase fishing licences on-line at any time.

"This project met its objectives including delivery on time and within budget. The system has surpassed its target sales figures and continues to grow at an annual rate of 30–60 per cent. Recent on-line marketing initiatives have had a demonstrable effect on eliciting sales that can be measured in real time, a benefit that simply isn't available through conventional sales outlets. We are now in a strong position to be able to migrate the bulk of sales into an electronic system should we decide to do so."

The Environment Agency

Cost
Initial investment of £200,000.

Supplier
SciSys – software.

Timescale
Six months from project inception in July 2000 to delivery.

Current status
The number of customers buying fishing rod licences online continues to grow. In 2005-06, 106,000 licences were sold online, and by May 2006, sales were up by 59 per cent on the same period in 2005.

Key components of success

- The online service has improved service to customers by allowing them to purchase a licence anywhere at a time of day convenient for anglers who often fish at night and may want a licence with little forward planning.

- Understanding customers and their buying patterns has allowed the Environment Agency to target specific groups to increase licence sales.

- The Fishing Rod Licences project enabled the Agency to develop its capability to deliver e-commerce services and to transfer the lessons learned to other revenue-generating projects.

H35769A0424

Aim

1 The Environment Agency is responsible for sales of around 1.2 million fishing rod licences in England and Wales each year, primarily through Post Offices and a few bankside agents. To understand how it could improve service to customers, in 1998 the Agency's fisheries business function carried out a survey of anglers to improve its understanding of customers' needs. The survey identified that the ability to purchase a rod licence online would be a key service improvement, allowing customers to buy a licence at any time of the day in any part of the country.

2 The Agency considered there were potentially a number of services it could deliver online. The Chief Executive chose online rod licence sales as a flagship project to prove the Agency's capability to deliver an e-commerce service. The project was fast tracked for implementation in early 2001.

Understanding users' needs

3 To understand potential customer demand for the online service, in 2000 the Agency followed up its initial customer research with a telephone survey. This identified that the percentage of current rod licence holders that make use of the Internet had increased by 21 per cent between 1998 and 2000. In turn, the percentage interested in purchasing a licence online had increased from zero to seven per cent. Although the percentage was relatively small, the Agency considered there was sufficient market potential to justify investing in the online licence project.

Designing the business change and testing the viability of the IT solution

4 To bring about the change, the project team needed to modify the existing business process and develop an IT system to support online sales. Environment Agency staff first tested the system internally and then timed the external launch to coincide with the annual low sales period, to reduce potential demand on the system and minimise the risk of technology failure. With the live version running successfully, the project team began actively marketing the service to improve customer take up. From the launch of the system until 2005-06, promotion was restricted to listing the website address on all rod licences (Internet, telesales and counter sales) and to short articles in the annual magazine for rod licence holders *Reel Life*. From April 2006, more direct methods were used, including adverts on popular search engines and an e-mail reminder to previous online buyers. These achieved significant results and could be measured on a daily basis.

Realising the benefits

5 The project was delivered in 2001. While most licences are still bought over the counter at some 15,000 outlets, the sale of licences through the Internet has grown year-on-year, reaching 8 per cent of sales by the end of 2005-06 (**Figure 4**), overtaking both telephone sales and direct debit transactions (total sales for 2005-06 were 1,268,038, of which 106,636 were Internet sales).

6 The online service has provided an important added dimension to improving customer service. The service provides a means to purchase a licence at a time and place convenient to the customer and approximately five per cent of all fishing rod licences are now sold outside office hours when the alternative channels are closed. This has proven a particularly popular option with early morning and night anglers. Online purchasing of licences also provides almost instant access to a licence for occasional anglers.

7 The Environment Agency achieved its objective of testing its capability to deliver an e-commerce service. The transfer of knowledge and lessons learned from the Rod Licence project – for example, improved understanding of IT e-commerce solutions – have helped the Agency overcome problems such as the technological requirements of dealing with electronic payments. This has helped deliver further e-commerce services, such as registration for Hazardous Waste licences, as well as an online flood warning service.

4 | The percentage of fishing rod licences sold via the Internet is growing

Percentage

(Graph showing percentage of fishing rod licences sold via the Internet by year: 00-01 at 0, rising to approximately 8.5 by 05-06)

Year
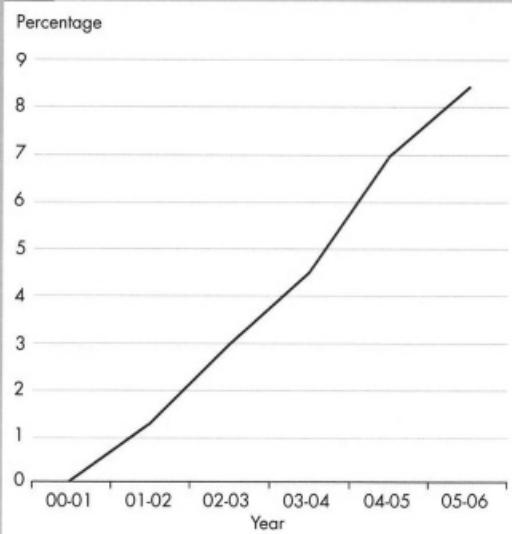
Source: Environment Agency

Optimising the benefits

8 The income from rod licence sales plays an essential part in funding the Environment Agency's fisheries business function. In order to maintain and grow this income, the Agency uses sales data to track sales patterns and identify which types of customers buy licences through the range of sales channels – counter sales, telephone sales, direct debit and online. The research highlights the increasing importance of online sales in meeting the Environment Agency's corporate target of achieving an annual 2 per cent increase in sales of fishing rod licences. It is the only sales channel that shows significant growth and the Agency sees it as a key means to encourage the increased take up of fishing generally, alongside other e-enabled services, including information about where to fish.

BLANK PAGE

H 3 5 7 6 9 A 0 7 2 4

Answer ALL the questions. Write your answers in the spaces provided.

Section A

This section relates to the Web Masters' scenario.

1. The project manager must produce a definition of scope for the project.

   (a) Identify **two** of the project objectives for Web Masters.

   1 ....

   ....

   2 ....

   ....

   (2)

   (b) Describe **two** resource requirements for the Web Masters' project.

   1 ....

   ....

   ....

   ....

   2 ....

   ....

   ....

   ....

   (4)

(c) Describe **two** benefits Web Masters will gain from this project if it is successful.

1 ....

....

....

....

2 ....

....

....

....

(4)

Q1

(Total 10 marks)

H 3 5 7 6 9 A 0 9 2 4

2. The project manager will need to undertake detailed planning before the project starts.

(a) Describe **two** factors that the project manager will need to consider **before** creating an industry standard project plan.

1 ....

....

....

....

2 ....

....

....

....

(4)

(b) Describe **three** features of project management software that will help the project manager to **create** the plan.

1 ....

....

....

2 ....

....

....

3 ....

....

....

(6)

(Total 10 marks)

Q2

3. An important role of the project manager is to assess risks associated with the project.

   (a) Identify **four** processes carried out during a risk assessment.

   1 ....

   ....

   2 ....

   ....

   3 ....

   ....

   4 ....

   ....

   (4)

   (b) Describe how the project manager can manage **two** of the risks associated with the Web Masters' project.

   1 ....

   ....

   ....

   ....

   2 ....

   ....

   ....

   ....

   (4) Q3

   (Total 8 marks)

4. The project manager produces a pert chart to illustrate task dependencies.

Fill in the data missing from Nodes (X) and (Y).

25		
114	8	122
114	0	122

28		
122	32	154
122	0	154

29		
154	2	156
154	0	156

30		
156	3	159
161	5	164

33		
166	3	169
167	1	170

34		
166	4	170
166	0	170

37		
170	8	178
170	0	178

38		
178	8	186
178	0	186

186
186

Node X

Node Y
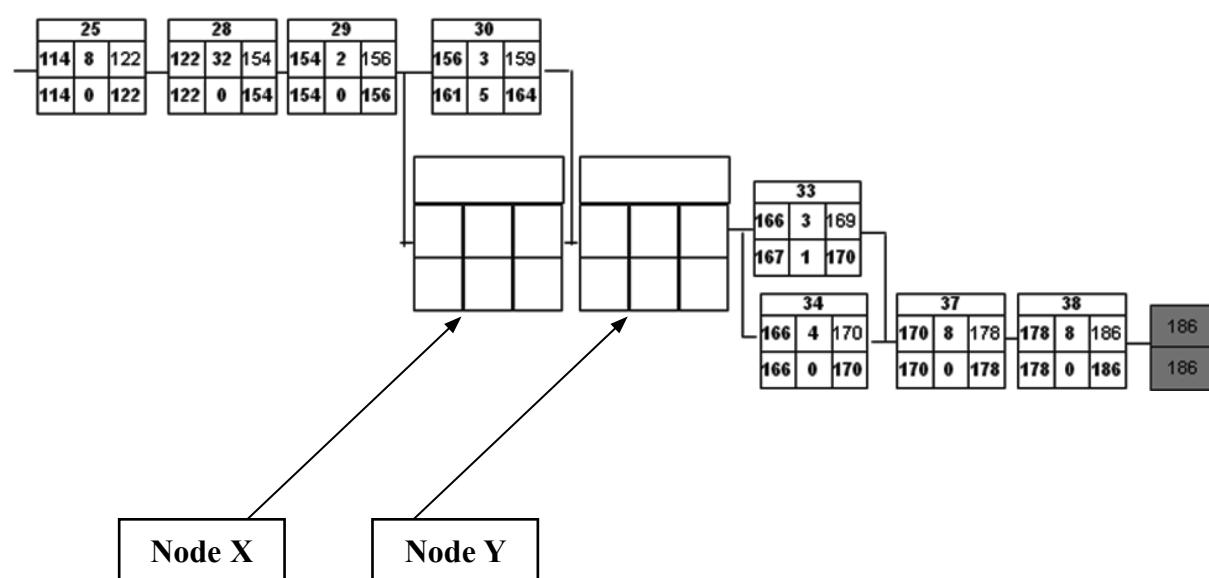
Extract of the pert analysis for Web Masters' project

(Total 14 marks)

BLANK PAGE

5. Changing external factors could have implications for the Web Masters' project.

(a) Whilst preparing for Phase 3 the project manager is informed of a planned shut-down of the electricity supply to Web Masters' offices.

Although the project manager has been assured that the power will be restored by 8.00am on Sunday 21st June, a decision is made to postpone Phase 3 of the project until the following weekend, Saturday 27th June.

Justify this decision, with reference to the project plan.

....

....

....

....

....

....

....

....

....

....

....

....

(6)

(b) Explain **two** other external factors that could affect the Web Masters' project **resources**.

1 ....

....

....

....

2 ....

....

....

....

(4)

Q5

(Total 10 marks)

6. Review meetings will be held throughout the Web Masters' project.

Describe **two** benefits of undertaking a review after each phase of the project has been carried out.

1 ....

....

....

....

2 ....

....

....

....

Q6

(Total 4 marks)

7. Once the Web Masters' project has been completed it will be closed down in a structured way. Part of this process is to determine if the success criteria, established at the beginning of the project, have been met.

Describe **two** suitable success criteria for the project.

1 ....

....

....

....

2 ....

....

....

....

Q7

(Total 4 marks)

TOTAL FOR SECTION A: 60 MARKS

BLANK PAGE

H35769A01724

Section B

This section relates to the investigations that you have carried out into the Environment Agency's 'Fishing Rod Licence' project.

8.   (a)   Identify **three** objectives of the Fishing Rod Licence project.

1 ....

....

2 ....

....

3 ....

....

(3)

(b) The Environment Agency, SciSys and Reel Life Magazine are all stakeholders in the 'Fishing Rod Licence' project.

Explain why each stakeholder has an interest in the success of the project.

The Environment Agency

....

....

....

....

SciSys

....

....

....

....

Reel Life Magazine

....

....

....

....

(6)

(Total 9 marks)

Q8

9. The Environment Agency split the 'Fishing Rod Licence' project into stages.

Summarise the activities that were carried out in each stage.

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

(Total 9 marks)

Q9

10. The success of the project has resulted in several benefits for the Environment Agency.

Identify the key factors in the success of the project and evaluate the benefits realised for this and future projects.

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

Q10

(Total 12 marks)

TOTAL FOR SECTION B: 30 MARKS
TOTAL FOR PAPER: 90 MARKS

END

BLANK PAGE

BLANK PAGE

BLANK PAGE