Professional Level – Essentials Module

Business Analysis

Wednesday 10 December 2008

Time allowed

Reading and planning: 15 minutes Writing: 3 hours

This paper is divided into two sections:

Section A – This ONE question is compulsory and MUST be attempted

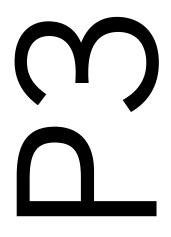
Section B - TWO questions ONLY to be attempted

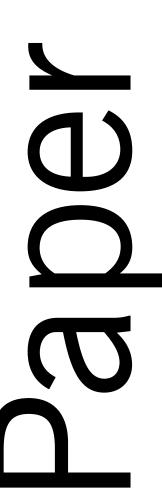
Do NOT open this paper until instructed by the supervisor.

During reading and planning time only the question paper may be annotated. You must NOT write in your answer booklet until instructed by the supervisor.

This question paper must not be removed from the examination hall.

The Association of Chartered Certified Accountants







Section A - This ONE question is compulsory and MUST be attempted

The following information should be used when answering question 1.

1 Introduction

The National Museum (NM) was established in 1857 to house collections of art, textiles and metalware for the nation. It remains in its original building which is itself of architectural importance. Unfortunately, the passage of time has meant that the condition of the building has deteriorated and so it requires continual repair and maintenance. Alterations have also been made to ensure that the building complies with the disability access and health and safety laws of the country. However, these alterations have been criticised as being unsympathetic and out of character with the rest of the building. The building is in a previously affluent area of the capital city. However, what were once large middle-class family houses have now become multi-occupied apartments and the socio-economic structure of the area has radically changed. The area also suffers from an increasing crime rate. A visitor to the museum was recently assaulted whilst waiting for a bus to take her home. The assault was reported in both local and national newspapers.

Thirty years ago, the government identified museums that held significant Heritage Collections. These are collections that are deemed to be very significant to the country. Three Heritage Collections were identified at the NM, a figure that has risen to seven in the intervening years as the museum has acquired new items.

Funding and structure

The NM is currently 90% funded by direct grants from government. The rest of its income comes from a nominal admission charge and from private sponsorship of exhibitions. The direct funding from the government is based on a number of factors, but the number of Heritage Collections held by the museum is a significant funding influence. The Board of Trustees of the NM divide the museum's income between departments roughly on the basis of the previous year's budget plus an inflation percentage. The division of money between departments is heavily influenced by the Heritage Collections. Departments with Heritage Collections tend to be allocated a larger budget. The budgets for 2008 and 2009 are shown in Figure 1.

Collection Sections	Number of Heritage Collections	Budget (\$000s) – 2008	Budget (\$000s) - 2009
Architecture	2	120.00	125.00
Art	2	135.00	140.00
Metalwork	1	37.50	39.00
Glass		23.00	24.00
Textiles	1	45.00	47.50
Ceramics		35.00	36.00
Furniture		30.00	31.50
Print & Books		35.00	36.50
Photography		15.00	15.50
Fashion		10.00	10.50
Jewellery	1	50.00	52.50
Sculpture		25.00	26.00
Administration		60.50	63.00
Total		621.00	647.00

Figure 1: Section budgets; 2008 and 2009

The head of each collection section is an important position and enjoys many privileges, including a large office, a special section heads' dining room and a dedicated personal assistant (PA). The heads of sections which have 'Heritage Collections' also hold the title of professor from the National University.

The departmental structure of the NM (see Figure 2) is largely built around the twelve main sections of the collection. These sections are grouped into three departments, each of which has a Director. The Board of Directors is made up of the three directors of these departments, together with the Director of Administration and the Director General. The museum is a charity run by a Board of Trustees. There are currently eight trustees, two of whom have been recently appointed by the government. The other six trustees are people well-known and respected in academic fields relevant to the museum's collections.

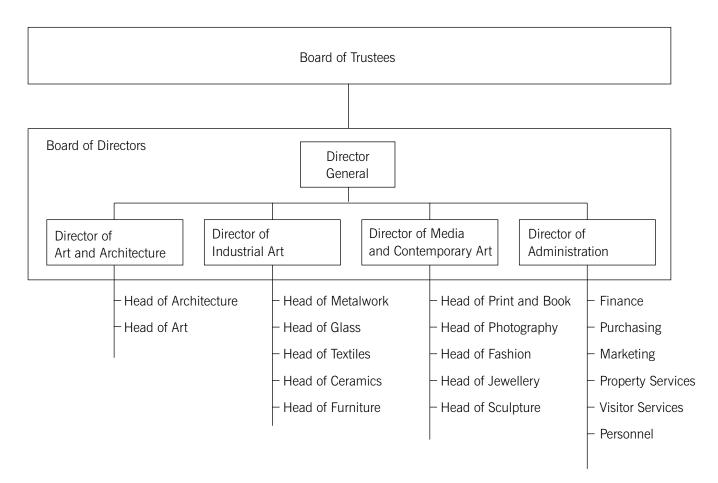


Figure 2: Current Organisational Structure

Government change

One year ago, a new national government was elected. The newly appointed Minister for Culture implemented the government's election manifesto commitment to make museums more self-funding. The minister has declared that in five year's time the museum must cover 60% of its own costs and only 40% will be directly funded by government. This change in funding will gradually be phased in over the next five years. The 40% government grant will be linked to the museum achieving specified targets for disability access, social inclusion and electronic commerce and access. The government is committed to increasing museum attendance by lower socio-economic classes and younger people so that they are more aware of their heritage. Furthermore, it also wishes to give increasing access to museum exhibits to disabled people who cannot physically visit the museum site. The government have asked all museums to produce a strategy document showing how they intend to meet these financial, accessibility and technological objectives. The government's opposition has, since the election, also agreed that the reliance of museums on government funding should be reduced.

Traditionally, the NM has provided administrative support for sections and departments, grouped together beneath a Director of Administration. The role of the Director General has been a part-time post. However, the funding changes introduced by the government and the need to produce a strategy document, has spurred the Board of Trustees to appoint a full-time Director General from the private sector. The trustees felt they needed private industry expertise to develop and implement a strategy to achieve the government's objectives. The new Director General was previously the CEO of a major chain of supermarkets.

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Director General's proposal

The new Director General has produced a strategic planning document showing how the NM intends to meet the government's objectives. Proposals in this document include:

(1) Allocating budgets (from 2010) to sections based on visitor popularity. The most visited collections will receive the most money. The idea is to stimulate sections to come up with innovative ideas that will attract more visitors to the museum. Visitor numbers have been declining (see Figure 3) since 2004.

Visitor Numbers (000s)	2007	2006	2005	2004
Age 17 or less	10	12	15	15
Age 18–22	5	8	12	10
Age 23–30	10	15	20	20
Age 31–45	20	20	18	25
Age 46–59	35	35	30	30
Age 60 or more	40	35	35	30
Total	120	125	130	130

Figure 3: Visitor numbers 2004-2007

- (2) Increasing entrance charges to increase income, but to make entry free to pensioners, students, children and people receiving government benefit payments.
- (3) Removing the head of sections' dining room and turning this into a restaurant for visitors. An increase in income from catering is also proposed in the document.
- (4) Removing the head of sections' personal assistants and introducing a support staff pool to reduce administrative costs.
- (5) Increasing the display of exhibits. Only 10% of the museum's collection is open to the public. The rest is held in storage.
- (6) Increasing commercial income from selling posters, postcards and other souvenirs.

The Director General has also suggested a major re-structuring of the organisation as shown in Figure 4.

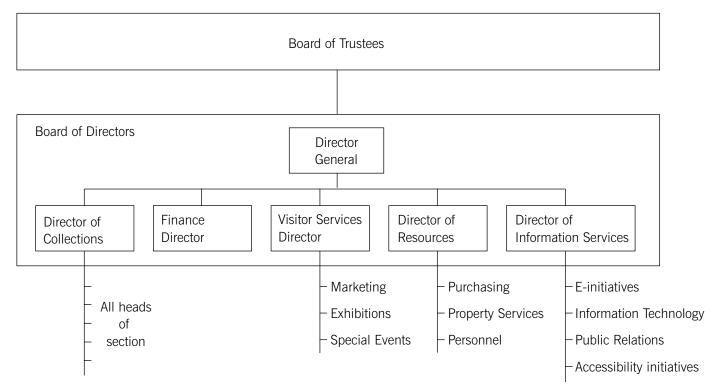


Figure 4: Proposed Organisational Structure

Reaction to the proposals

Employees have reacted furiously to the Director General's suggestions. The idea of linking budgets to visitor numbers has been greeted with dismay by the Director of Art and Architecture. 'This is a dreadful idea and confuses popularity with historical significance. As previous governments have realised, what is important is the value of the collection. Heritage Collections recognise this significance by putting the nation's interests before those of an undiscerning public. As far as I am concerned, if they want to see fashion, they can look in the high street shops. Unlike fashion, great art and architecture remains.' The Director of Art and Architecture and the two professors who hold the Head of Architecture and Head of Art posts have also lobbied individual members of the Board of Trustees with their concerns about the Director General's proposals.

The Director of Industrial Arts and the Director of Media and Contemporary Art have contacted powerful figures in both television and the press and as a result a number of articles and letters critical of the Director General's proposals have appeared. A recent television programme called 'Strife at the NM' also featured interviews with various heads of collections criticising the proposed changes. They were particularly critical of the lack of consultation; 'these proposals have been produced with no input from museum staff. They have been handed down from on high by an ex-grocer', said one anonymous contributor.

Eventually, the criticism of staff and their lack of cooperation prompted the Director General to ask the Board of Trustees to publicly back him. However, only the two trustees appointed by the government were prepared to do so. Consequently, the Director General resigned. This has prompted an angry response from the government which has now threatened to cut the museum's funding dramatically next year and to change the composition of the Board of Trustees so that the majority of trustees are appointed directly by the government. The Minister of Culture has asked the museum to develop and recommend a new strategy within one month.

Required:

(a) Analyse the macro-environment of the National Museum using a PESTEL analysis. (20 marks)

(b) The failure of the Director General's strategy has been explained by one of the trustees as 'a failure to understand our organisational culture; the way we do things around here'.

Assess the underlying organisational cultural issues that would explain the failure of the Director General's strategy at the National Museum.

Note: requirement (b) includes 2 professional marks. (20 marks)

(c) Johnson, Scholes and Whittington identify three strategy lenses; design, experience and ideas.

Examine the different insights each of these lenses gives to understanding the process of strategy development at the National Museum.

Note: requirement (c) includes 2 professional marks. (10 marks)

(50 marks)

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Section B - TWO questions ONLY to be attempted

2 In 2002 the board of MMI met to discuss the strategic direction of the company. Established in 1952, MMI specialised in mineral quarrying and opencast mining and in 2002 it owned fifteen quarries and mines throughout the country. However, three of these quarries were closed and two others were nearing exhaustion. Increased costs and falling reserves meant that there was little chance of finding new sites in the country which were economically viable. Furthermore, there was significant security costs associated with keeping the closed quarries safe and secure.

Consequently the Chief Executive Officer (CEO) of MMI suggested that the company should pursue a corporate-level strategy of diversification, building up a portfolio of acquisitions that would 'maintain returns to shareholders over the next fifty years'. In October 2002 MMI, using cash generated from their quarrying operations, acquired First Leisure, a company that owned five leisure parks throughout the country. These leisure parks provided a range of accommodation where guests could stay while they enjoyed sports and leisure activities. The parks were all in relatively isolated country areas and provided a safe, car-free environment for guests.

The acquisition was initially criticised by certain financial analysts who questioned what a quarrying company could possibly contribute to a profitable leisure group. For two years MMI left First Leisure managers alone, letting them get on with running the company. However, in 2004 a First Leisure manager commented on the difficulty of developing new leisure parks due to increasingly restrictive government planning legislation. This gave the CEO of MMI an inspired idea and over the next three years the five quarries which were either closed or near exhaustion were transferred to First Leisure and developed as new leisure parks. Because these were developments of 'brown field' sites they were exempted from the government's planning legislation. The development of these new parks has helped First Leisure to expand considerably (see table 1). The company is still run by the managers who were in place when MMI acquired the company in 2002 and MMI plays very little role in the day-to-day running of the company.

In 2004 MMI acquired two of its smaller mining and quarrying competitors, bringing a further five mines or quarries into the group. MMI introduced its own managers into these companies resulting in a spectacular rise in revenues and profits that caused the CEO of MMI to claim that *corporate management capabilities* were now an important asset of MMI.

In 2006 MMI acquired Boatland, a specialist boat maker constructing river and canal boats. The primary rationale behind the acquisition was the potential synergies with First Leisure. First Leisure had experienced difficulties in obtaining and maintaining boats for its leisure parks and it was expected that Boatland would take on construction and maintenance of these boats. Cost savings for First Leisure were also expected and it was felt that income from the First Leisure contract would also allow Boatland to expand its production of boats for other customers. MMI perceived that Boatland was underperforming and it replaced the current management team with its own managers. However, by 2008 Boatland was reporting poorer results (see table 1). The work force had been used to producing expensive, high quality boats to discerning customers who looked after their valued boats. In contrast, the boats required by First Leisure were for the casual use of holiday makers who often ill-treated them and certainly had no long-term investment in their ownership. Managers at First Leisure complained that the new boats were 'too delicate' for their intended purpose and unreliability had led to high maintenance costs. This increase in maintenance also put Boatland under strain and its other customers complained about poor quality workmanship and delays in completing work. These delays were compounded by managers at Boatland declaring First Leisure as a preferred customer, requiring that work for First Leisure should take precedence over that for established customers. Since the company was acquired almost half of the skilled boat builders employed by the company have left to take up jobs elsewhere in the industry.

Three months ago, InfoTech – an information technology solutions company approached MMI with a proposal for MMI to acquire them. The failure of certain contracts has led to falling revenues and profits and the company needs new investment. The Managing Director (MD) of InfoTech has proposed that MMI should acquire InfoTech for a nominal sum and then substantially invest in the company so that it can regain its previous profitability and revenue levels. However, after its experience with Boatland, the CEO of MMI is cautious about any further diversification of the group.

Table1: Financial and market data for selected companies (all figures in \$millions)

MMI Quarrying and Mining Revenue Gross Profit Net Profit	2008	2006	2004	2002
	1,680	1,675	1,250	1,275
	305	295	205	220
	110	105	40	45
*Estimated Market Revenue	6015	6050	6200	6300
First Leisure Revenue Gross Profit Net Profit	2008	2006	2004	2002
	200	160	110	100
	42	34	23	21
	21	17	10	9
*Estimated Market Revenue	950	850	770	750
Deathand	2000	2006	2004	2002
Boatland Revenue Gross Profit Net Profit	2008 2·10 0·30 0·09	2006 2·40 0·50 0·25	2004 2·40 0·50 0·30	2·30 0·60 0·30
Revenue	2·10	2·40	2·40	2·30
Gross Profit	0·30	0·50	0·50	0·60
Revenue	2·10	2·40	2·40	2·30
Gross Profit	0·30	0·50	0·50	0·60
Net Profit	0·09	0·25	0·30	0·30

^{*}The estimated size of the market (estimated market revenue) is taken from Slott's Economic Yearbooks, 2002–2008.

Required:

- (a) In the context of MMI's corporate-level strategy, explain the rationale for MMI acquiring *First Leisure* and *Boatland* and assess the subsequent performance of the two companies. (15 marks)
- (b) Assess the extent to which the proposed acquisition of *InfoTech* represents an appropriate addition to the MMI portfolio. (10 marks)

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(25 marks)

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ASW is a software house which specialises in producing software packages for insurance companies. ASW has a basic software package for the insurance industry that can be used immediately out of the box. However, most customers wish ASW to tailor the package to reflect their own products and requirements. In a typical ASW project, ASW's business analysts define the gap between the customer's requirements and the basic package. These business analysts then specify the complete software requirement in a system specification. This specification is used by its programmers to produce a customised version of the software. It is also used by the system testers at ASW to perform their system tests before releasing it to the customer for acceptance testing.

One of ASW's new customers is CaetInsure. Initially CaetInsure sent ASW a set of requirements for their proposed new system. Business analysts from ASW then worked with CaetInsure staff to produce a full system specification for CaetInsure's specific requirements. ASW do not begin any development until this system specification is signed off. After some delay (see below), the system specification was eventually signed off by CaetInsure.

Since sign-off, ASW developers have been working on tailoring the product to obtain an appropriate software solution. The project is currently at week 16 and the software is ready for system testing. The remaining activities in the project are shown in figure 1. This simple plan has been put together by the project manager. It also shows who has responsibility for undertaking the activities shown on the plan.

The problem that the project manager faces is that the plan now suggests that implementation (parallel running) cannot take place until part way through week 28. The original plan was for implementation in week 23. Three weeks of the delay were due to problems in signing off the system specification. Key CaetInsure employees were unavailable to make decisions about requirements, particularly in the re-insurance part of the system. Too many requirements in this module were either unclear or kept changing as users sought clarification from their managers. There have also been two further weeks of slippage since the sign-off of the system specification.

The CaetInsure contract had been won in the face of stiff competition. As part of securing the deal, the ASW sales account manager responsible for the CaetInsure contract agreed that penalty clauses could be inserted into the contract. The financial penalty for late delivery of the software increases with every week's delay. CaetInsure had insisted on these clauses as they have tied the delivery of the software in with the launch of a new product. Although the delay in signing off the system specification was due to CaetInsure, the penalty clauses still remain in the contract. When the delay was discussed with the customer and ASW's project manager, the sales account manager assured CaetInsure that the 'time could be made up in programming'.

The initial planned delivery date (week 23) is now only seven weeks away. The project manager is now under intense pressure to come up with solutions which address the project slippage.

Required:

- (a) The project plan shows a number of planned activities. Explain how each of the following three activities contribute to the testing and quality of the software for CaetInsure:
 - (i) System testing;
 - (ii) Acceptance testing;
 - (iii) Data migration.

(9 marks)

- (b) Evaluate the alternative strategies available to ASW's project manager to address the slippage problem in the CaetInsure project. (10 marks)
- (c) As a result of your evaluation, recommend and justify your preferred solution to the slippage problem in the CaetInsure project. (6 marks)

(25 marks)

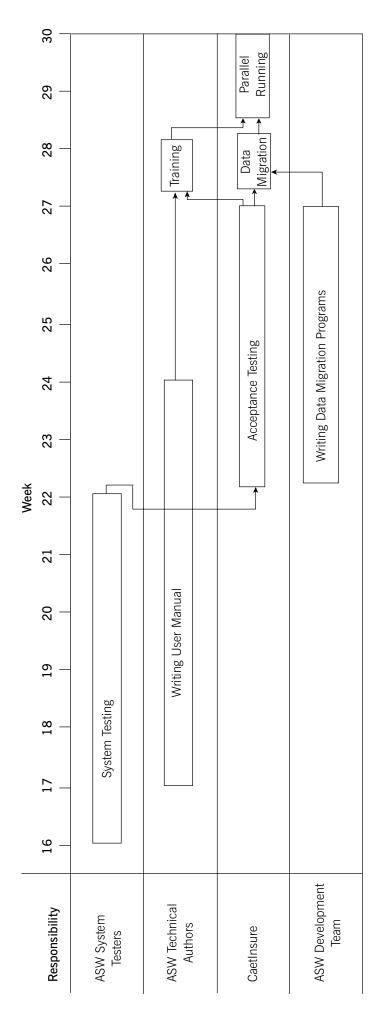


Figure 1: Project Plan – ASW: CaetInsure Contract

4 Equiguard offers warranties for electrical and electronic equipment to both business and household customers. For a fixed annual fee the company will provide a free fault diagnosis and repair service for equipment covered by the warranty. A warranty lasts for one year and customers are invited to renew their warranty one month before it expires. Equiguard employs 340 full-time engineers around the country to undertake these repairs. It costs about \$6,000 to train a newly recruited engineer.

When equipment breaks down the customer telephones a support help line number where their problem is dealt with by a customer support clerk. This clerk has access to the work schedules of the engineers and an appointment is made for a visit from an engineer at the earliest possible time convenient to the customer. When the engineer makes the visit, faults with equipment are diagnosed and are fixed free of charge under the terms of the warranty.

Equiguard is extremely concerned about the relatively high labour turnover of its engineers and has commissioned a report to investigate the situation. Some of the findings of the report are summarised in the following table (table 1). It compares Equiguard with two of its main competitors.

Table 1

Company	Labour Turnover*	Average salary (\$)	Profit Sharing Scheme	Average days holiday/year	Performance related pay	Average training spend per year per engineer (\$)
Equiguard	12%	24,000	No	20	No	1,000
Safequipe	8%	23,000	Yes	23	Yes	1,500
Guarantor	7%	22,500	Yes	25	Yes	1,250

^{*} Labour turnover is the number of engineers leaving in the last year as a percentage of the number of engineers employed at the beginning of the year

An exit survey of engineers leaving the company recorded the following comments:

- (1) 'There is no point in doing a good job, because you get paid no more than doing an ordinary one. Average work is tolerated here.'
- (2) 'This is the first place I have worked where learning new skills is not encouraged. There is no incentive to improve yourself. The company seems to believe that employees who gain new skills will inevitably leave, so they discourage learning.'
- (3) 'The real problem is that the pay structure does not differentiate between good, average and poor performers. This is really de-motivating.'

The HR director of Equiguard is anxious to address the high turnover issue and believes that quantitative measurement of employee performance is essential in a re-structured reward management scheme. He has suggested that the company should introduce two new performance related pay measures. The first is a team based bonus based on the average time it takes for the company to respond to a repair request. He proposes that this should be based on the time taken between the customer request for a repair being logged and the date of the engineer attending to fix the problem. He argues that customers value quick response times and so the shorter this time the greater the bonus should be for the whole team.

In addition, he proposes an individual bonus. This will be based on the average time taken for an engineer to fix a reported fault once they have arrived. This is the average time taken for the engineer to repair the fault from the start time of the job to its completion. He argues that the company values quick repair time as this increases business efficiency and so the quicker the fix the greater the bonus should be for the individual.

Required:

(a) Assess the deficiencies of Equiguard's current rewards management scheme. (15 marks)

(b) Analyse the limitations of the proposed performance measures suggested by the HR director. (10 marks)

(25 marks)

End of Question Paper