Professional Level – Essentials Module

Business Analysis

Monday 12 December 2011

Paper P3

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.

ACCA

The Association of Chartered Certified Accountants

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

1 Introduction

Rudos is a densely populated, industrialised country with an extensive railway network developed in the nineteenth century. This railway network (totalling 6,000 kilometres), together with the trains that ran on it, was nationalised in 1968 and so became wholly owned by the government. By 2004, RudosRail, the government-owned rail company, was one of the ten largest employers in the country. However, in that year, the general election was won by the Party for National Reconstruction (PNR) with a manifesto that promised the privatisation of many of the large publicly-owned organisations, including RudosRail. The PNR argued that there had been a lack of investment in the railway under public ownership and that the absence of competition had meant that ticket prices and costs (particularly labour costs) were too high for the taxpayer to continue subsidising it. The combination of high ticket prices and large public subsidies was very unpopular. As a result the government split the railway network into eight sections (or franchises) and invited private sector bids for each of these eight franchises. Each franchise was for ten years and was for the trains, tracks and infrastructure of each section. Each franchise would be awarded to the highest bidder.

The East Rudos franchise, one of the eight franchises, was awarded to Great Eastern Trains (GET), a company specifically set up to bid for the franchise by former members of RudosRail's management. It was the only independent company to win a franchise. The other seven franchises were awarded to companies who were subsidiaries of global transport groups and, initially, were largely financed through investment from the parent companies. In contrast, GET was primarily financed through loans from the government-owned Bank of Rudos. The ten-year franchise started in 2006. GET is an unquoted company, owned by its management team.

GET – the early years

The first three years of the GET franchise were extremely successful, both in terms of profits and passenger satisfaction. This was partly due to government subsidies to help ease the transition of the network from public to private ownership. However, it was also due to the skill and knowledge of the management team. This team already had significant operating experience (gained with RudosRail) and they adapted quickly to the new private sector model. GET was the most profitable of the new franchises and it was held up as an example of successful privatisation. Its investment in new trains and excellent reliability record meant that it quickly built up a well-respected image and brand. GET uses a series of television advertisements to promote its services. These feature an old lady arriving at various stations and texting her family that she has 'arrived safe & on time!' In a recent consumer survey these advertisements were rated as both memorable and effective.

In the newly privatised rail system many passenger journeys crossed franchise boundaries, so that a journey often involved the use of two or more franchise operators. GET developed an innovative booking and payment system that also automatically reallocated revenue from fares between franchise holders. It also allowed Internet booking and gave discounts for early booking. This system was so successful that GET now uses the system to process the bookings of three of the other franchise operators. GET is paid on a transaction basis for the bookings that it processes on behalf of these other franchisees.

The fourth and fifth years of GET's operation were not as successful. No government subsidies were paid in those years and economic problems in the country led to a fall in passenger numbers. Financial information for GET for 2010 is provided in Figure 1. Figure 2 provides data for the rail industry as a whole in Rudos.

Figure 1: Selected information for GET in 2010

Extract from the statement of financial position: All financial figures in $m

ASSETS		
Non-current assets		$m
Property, plant, equipment		2,175
Intangible assets		100
	Total	2,275
Current assets		
Inventories		275
Trade receivables		10
Cash and cash equivalents		300
	Total	585
Total assets		2,860
EQUITY AND LIABILITIES		
Share capital		550
Retained earnings		110
Total equity		660
Non-current liabilities		
Long-term borrowings		2,000
Total non-current liabilities		2,000
Current liabilities		
Trade and other payables		199
Current tax payable		1
Total current liabilities		200
Total liabilities		2,200
Total equity and liabilities		2,860

Extract from the statement of comprehensive income
All financial figures in $m

Revenue	320
Cost of sales	(210)
Gross profit	110
Administrative expenses	(40)
Profit before tax and interest	70
Finance cost	(60)
Profit before tax	10
Tax expense	(1)
Profit for the year	9

Extract from the annual report

Number of employees	3,010
Number of rail kilometres	920

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Figure 2: Financial information for the Rudos rail industry as a whole

Measure	National rail industry average
ROCE	4·50%
Operating profit margin	10·00%
Gross profit margin	22·00%
Current ratio	2·1
Acid test ratio	1·2
Gearing ratio	48%
Revenue/employee per year	$85,000
Number of employees per rail kilometre	4·1

Current position

Despite the apparent success of GET, there has been considerable criticism of the overall privatisation of the railway. Much of this criticism is concentrated in two of the geographical areas where the franchisees have struggled to provide an efficient and economic service. The government has appointed auditors who are reviewing the operation of these two franchises and a government minister has stated that 'terminating the franchise and opening it up to re-bidding has not been ruled out as an option'. A major rail accident in Rudos (with many fatalities) has also led to concerns about safety and led to new legislation being enacted. Further safety legislation is expected concerning the relaying of track and all franchisees will be expected to implement the requirements immediately.

In 2009, the PNR was returned to power, but with a reduced majority. The leader of the main opposition party originally suggested that the railways might be re-nationalised if he were to gain power. However, he has since moderated his view, although he suggests that 'they should return a significant percentage of their profits to the taxpayer'. Road transport has also suffered under the PNR government, with many of the roads in the country heavily congested. Fuel costs have increased to reflect increasing scarcity, causing many companies to face spiralling transport and storage costs. For the first time in the country's history, an ecology (green) party has won seats in government, capitalising on the growth of the 'green consumer', particularly in urban areas.

International rail developments

The pioneering privatisation initiatives in Rudos have been observed by other countries and many have adopted similar policies. Recently, the Republic of Raziackstan announced that it intended to privatise its railway network. Raziackstan is approximately five hours' flying time from Rudos and is part of the former eastern trading bloc. It is a country where there is currently very little health and safety legislation. Although there is also little employment legislation, public service jobs are traditionally viewed as safe, and employees perceive that a 'railway job is a job for life'. At present the railway network, which is 1,500 kilometres long, employs 8,000 employees generating revenues of $180,000,000. The country itself still has a limited technological and financial infrastructure, with only an estimated 20% of the population having access to the Internet. However, all political parties are united in their desire to privatise the railways so that money can be invested elsewhere in the country, for example, for providing better health care.

Because of the poor condition of the railway, the proposal is to retain and upgrade the rail tracks under public ownership. However, the trains and infrastructure, such as stations, will be privatised. The government is looking for letters of intent from private companies who are willing to take over the complete network (excluding the tracks).

A stipulation of the contract is that the bidder should have a significant industrial presence in the country. For some time GET has been interested in acquiring the company that undertakes most of the track and train maintenance in Raziackstan. This company SOFR (SOciety Fabrication de Raziackstan) was established in 1919 and has a long tradition of engineering. GET has used the company to refurbish some of its equipment and they have been delighted with the results.

The board of GET now senses a great opportunity. It would like to combine the speedy acquisition of SOFR with a bid to run the rail network in Raziackstan. In fact, early informal indications from the Raziackstan government suggest that the bid will be successful if SOFR has been acquired by GET as no other prospective bidders for the network have yet come forward.

Required:

(a) Using appropriate models and frameworks, analyse GET's current strategic position from both an internal and external perspective. (20 marks)

(b) GET's proposed strategy is firstly to acquire SOFR and then the franchise to run the rail network of Raziackstan. You have been asked to provide an independent assessment of this proposed strategy.

Write a report evaluating GET's proposed strategy. (16 marks)

Professional marks will be awarded in part (b) for appropriate structure, style and fluency of the report. (4 marks)

(c) Critical Success Factors (CSFs) and Key Performance Indicators (KPIs) are important business concepts in the context of franchising rail services.

Explain and discuss these concepts in the context of GET and the rail industry. (10 marks)

(50 marks)

Section B – TWO questions ONLY to be attempted

2 iCompute was founded twenty years ago by the technology entrepreneur, Ron Yeates. It initially specialised in building bespoke computer software for the financial services industry. However, it has expanded into other specialised areas and it is currently the third largest software house in the country, employing 400 people. It still specialises in bespoke software, although 20% of its income now comes from the sales of a software package designed specifically for car insurance.

The company has grown based on a 'work hard, play hard work ethic' and this still remains. Employees are expected to work long hours and to take part in social activities after work. Revenues have continued to increase over the last few years, but the firm has had difficulty in recruiting and retaining staff. Approximately one-third of all employees leave within their first year of employment at the company. The company appears to experience particular difficulty in recruiting and retaining female staff, with 50% of female staff leaving within 12 months of joining the company. Only about 20% of the employees are female and they work mainly in marketing and human resources.

The company is currently in dispute with two of its customers who claim that its bespoke software did not fit the agreed requirements. iCompute currently outsources all its legal advice problems to a law firm that specialises in computer contracts and legislation. However, the importance of legal advice has led to iCompute considering the establishment of an internal legal team, responsible for advising on contracts, disputes and employment legislation.

The support of bespoke solutions and the car insurance software package was also outsourced a year ago to a third party. Although support had been traditionally handled in-house, it was unpopular with staff. One of the senior managers responsible for the outsourcing decision claimed that support calls were 'increasingly varied and complex, reflecting incompetent end users, too lazy to read user guides.' However, the outsourcing of support has not proved popular with iCompute's customers and a number of significant complaints have been made about the service given to end users. The company is currently reviewing whether the software support process should be brought back in-house.

The company is still regarded as a technology leader in the market place, although the presence of so many technically gifted employees within the company often creates uncertainty about the most appropriate technology to adopt for a solution. One manager commented that 'we have often adopted, or are about to adopt, a technology or solution when one of our software developers will ask if we have considered some newly released technology. We usually admit we haven't and so we re-open the adoption process. We seem to be in a state of constant technical paralysis.'

Although Ron Yeates retired five years ago, many of the software developers recruited by him are still with the company. Some of these have become operational managers, employed to manage teams of software developers on internal and external projects. Subba Kendo is one of the managers who originally joined the company as a trainee programmer. 'I moved into management because I needed to earn more money. There is a limit to what you can earn here as a software developer. However, I still keep up to date with programming though, and I am a goalkeeper for one of the company's five-a-side football teams. I am still one of the boys.'

However, many of the software developers are sceptical about their managers. One commented that 'they are technologically years out of date. Some will insist on writing programs and producing code, but we take it out again as soon as we can and replace it with something we have written. Not only are they poor programmers, they are poor managers and don't really know how to motivate us.' Although revenues have increased, profits have fallen. This is also blamed on the managers. 'There is always an element of ambiguity in specifying customers' requirements. In the past, Ron Yeates would debate responsibility for requirements changes with the customer. However, we now seem to do all amendments for free. The customer is right even when we know he isn't. No wonder margins are falling. The managers are not firm enough with customers.'

The software developers are also angry that an in-house project has been initiated to produce a system for recording time spent on tasks and projects. Some of the justification for this is that a few of the projects are on a 'time and materials' basis and a time recording system would permit accurate and prompt invoicing. However, the other justification for the project is that it will improve the estimation of 'fixed-price' contracts. It will provide statistical information derived from previous projects to assist account managers preparing estimates to produce quotes for bidding for new bespoke development contracts.

Vikram Soleski, one of the current software developers, commented that 'managers do not even have up-to-date mobile phones, probably because they don't know how to use them. We (software developers) always have the latest gadgets long before they are acquired by managers. But I like working here, we have a good social scene and after

working long hours we socialise together, often playing computer games well into the early hours of the morning. It's a great life if you don't weaken!'

Required:

(a) Analyse the culture of iCompute, and assess the implications of your analysis for the company's future performance. (13 marks)

(b) iCompute is currently re-considering three high level processes:

(i) Advice on legal issues (currently outsourced)
(ii) Software support (currently outsourced)
(iii) Time recording (in-house, bespoke software development)

Evaluate, using an appropriate framework or model, the suitability of iCompute's current approach to EACH of these high level processes. (12 marks)

(25 marks)

3 HomeDeliver is a nationwide company that sells small household goods to consumers. It produces an attractive, comprehensive catalogue which it distributes to staff known as catalogue supervisors. There are 150 of these supervisors in the country. Each supervisor has approximately 30 part-time home-based agents, who then deliver the catalogue to consumers in their homes. Agents subsequently collect the catalogue and any completed order forms and forward these forms to their supervisor. Payment is also taken when the order is collected. Payment is by cash or cheque and these payments are also forwarded to the supervisor by the agent. At the end of the week the supervisor returns completed order forms (and payments) to HomeDeliver. Order details are then entered into a computer system by order entry administrators at HomeDeliver and this starts an order fulfilment process that ends with goods being delivered directly to the customer. The supervisors and the agents are all self-employed. HomeDeliver rewards supervisors on the basis of how many agents they manage. Agents' reward packages are based on how many catalogues they deliver and a commission based on orders received from the homes they have collected orders from.

In August 2010 HomeDeliver decided to replace the physical ordering system with a new electronic ordering system. Agents would be provided with software which would allow them to enter customer orders directly into the computer system using their home personal computer at the end of each day. Payments would also be paid directly into a HomeDeliver bank account by agents at the end of each day.

The software to support the new ordering system was developed in-house to requirements provided by the current order entry administrators at HomeDeliver and managers concerned with order fulfilment and invoicing. The software was tested internally by the order entry administrators. At first, both the specification of requirements and initial software testing progressed very slowly because order administrators were continuing with their normal operational duties. However, as project delays became more significant, selected order administrators were seconded to the project full-time. As a result the software was fully acceptance tested by the end of July 2011, two months behind schedule.

In August 2011 the software was rolled out to all supervisors and agents. The software was claimed to be easy to use, so no formal training was given. A large comprehensive manual with colour screenshots was attached as a PDF to an email sent to all supervisors and agents. This gave detailed instructions on how to set up and use the software.

Unfortunately, problems began to appear as soon as the agents tried to load and use the software. It was found to be incompatible with one particular popular browser, and agents whose computers used that browser were advised to use an alternative browser or computer. Agents also criticised the functionality of the software because it did not allow for the amendment of orders once they had been submitted. It emerged that customers often contacted agents and supervisors to amend their order prior to it being sent to HomeDeliver. This was no longer possible with the new system. Many agents also claimed that it was not possible to enter multiple orders for one household. However, HomeDeliver confirmed that entering multiple orders was possible; it was just not clear from the software, or from the instructions provided, how this could be achieved.

Most of the agents were reluctant to print off the manual (preferring to read it on screen) and a significant number claimed that they did not receive the email with the manual attachment. Agents also found quite a number of spelling and functionality errors in the manual. At certain points the software did not perform in the way the manual stated that it would.

Internal standards at HomeDeliver require both a post-project and a post-implementation review.

Required:

(a) Explain the purpose of each of the following: a post-project review, a post-implementation review and a benefits realisation review. (6 marks)

(b) Evaluate the problems and the lessons that should be learned from a post-project review and a post-implementation review of the electronic ordering system at HomeDeliver. (12 marks)

(c) HomeDeliver does not have a benefits management process and so a benefits realisation review is inappropriate. However, it does feel that it would be useful to retrospectively define the benefits to HomeDeliver of the new electronic ordering system.

Identify and discuss the potential benefits to HomeDeliver of the new electronic ordering system. (7 marks)

(25 marks)

4 The Institute of Solution Developers (ISD) offers three basic certificates in Information Technology; Software Engineering; and Solutions Architecture. ATL is one of many training companies certified by the ISD to offer training courses to prepare candidates for these three certificates. ATL has, traditionally, taught these courses over five days culminating in a multiple choice examination. It has differentiated itself in the marketplace by offering high quality training in well-equipped training centres. Its prices are slightly higher than its competitors, but it is well regarded by both candidates and employers. ATL also provides training courses through sales intermediaries known as training brokers. These brokers negotiate a reduced fee with ATL and then add a profit margin to determine the price that they charge the end customer. All ATL courses are run in Eothen, an established industrial nation with a high standard of living.

In the last six months, ATL has developed an e-learning course for the certificate in Information Technology. There are three main reasons for this development. The first reason is to allow candidates to prepare for the examination in a flexible way, studying 'at their own pace in their own place'. Currently, courses are only run in Eothen and each certified course takes five days. In contrast the e-learning product will be delivered over the Internet. The second reason is to provide a cheaper route to the qualification. Course places currently cost $950 per person. Finally, ATL wishes to exploit a global market. It believes that there is a 'very large market' for e-learning for this qualification, particularly in countries where disposable income is less than in Eothen. It feels that overseas customers will be sensitive to price, but they have no estimate of this sensitivity.

Eothen, itself, is in a period of economic decline and the top 500 companies, which are specifically targeted by ATL, are reducing their training budgets. Figure 1 shows the results of research from MidShire University into the relationship between average training spend per employee and companies' gross profit. Data given below is from 10 of the top 500 companies targeted by ATL. Statistics produced by the Eothen government suggest that the average gross profit of the top 500 companies in Eothen will fall to $50m next year. In this analysis, the independent variable (gross profit) is x, which is being used to estimate a dependent variable y (average annual training spend per employee).

Company	Gross profit ($m) (x)	Average annual training spend per employee ($) (y)	Analysis
A	50	900	The regression line for the two variables is defined by
B	100	1,050	$y = 616{\cdot}23 + 3{\cdot}939x$
C	120	1,500	
D	30	750	And correlation by
E	15	600	
F	130	1,500	$r = 0{\cdot}801$
G	55	850	
H	20	400	
I	40	500	
J	300	1,500	

Figure 1: Training spend analysed against gross profit

The e-learning product has been specified by an experienced lecturer and developed by a business analyst. The latter will also be responsible for supporting students once the product has been released. ATL is the first company to produce an e-learning product for the ISD market. It wishes to quickly build on its success and to offer e-learning for the other two certificates – Software Engineering and Solutions Architecture.

Each certificate examination costs $125 and is available on demand in test centres all over the world. This makes it very accessible to the countries that ATL are targeting. The managing director of ATL has also discovered the following analysis of nationwide e-learning sales published by Training Trends, a respected Eothen-based publication. Here the independent variable is time (x) and e-learning sales is the dependent variable (y).

Year	Quarter	Period (x)	e-learning sales ($m) (y)	Analysis
2008	3	1	2.65	The regression line for the two variables is defined by
	4	2	2.66	
2009	1	3	2.74	$y = 2{\cdot}38 + 0{\cdot}12x$
	2	4	2.84	
	3	5	2.86	And correlation by
	4	6	2.97	
2010	1	7	3.15	$r = 0{\cdot}958$
	2	8	3.25	
	3	9	3.55	
	4	10	3.75	

Figure 2: E-learning sales in Eothen analysed by quarter (source: Training Trends).

The period column has been inserted to facilitate the regression analysis.

Required:

ATL needs to determine the price (or prices) of its e-learning product:

(a) Identify and discuss the factors that need to be taken into consideration when pricing the e-learning product. (15 marks)

(b) Figures 1 and 2 provide important, independent, statistical data:

Evaluate the potential of each set of statistical data for use in the pricing decision for the e-learning product, particularly highlighting any limitations in using such data. (10 marks)

(25 marks)

End of Question Paper