Professional Level – Essentials Module

# **Business Analysis**

Monday 8 June 2015



## 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

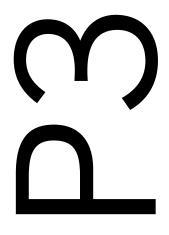
Section B - TWO questions ONLY to be attempted

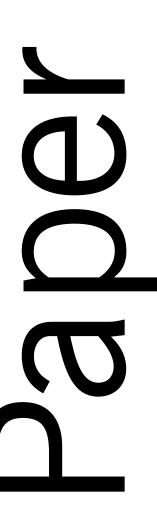
Do NOT open this paper until instructed by the supervisor.

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

#### 1 Introduction

2Tel is one of the largest mobile network operators in the world. It has grown mainly through significant acquisitions and it has extensive experience in buying companies and integrating them into the group. 2Tel continually invests substantial funds in research into network technologies. Like all global mobile network operators, it is constantly looking for technical opportunities for making its networks quicker, more reliable and, if possible, cheaper to install and maintain.

A business opportunity has arisen in The Federated States (TFS) where network operator licences are about to be renewed. 2Tel is currently evaluating this opportunity and is considering either bidding directly for a licence (as 2Tel) or acquiring a current licensee and bidding through this company. 2Tel is interested in entering the highly regulated mobile network market in TFS, even though most of its acquisitions to date have been in countries where there is little or no government regulation of the mobile network operators.

## The Federated States (TFS)

The Federated States is a densely populated country with a population of 70 million people. The country has experienced five years of economic decline, characterised by high unemployment, falling incomes, and rising personal and government debt. Crime rates are also increasing. A year ago, a new government was elected with a mandate to tackle the economic problems of the country. Its priority has been to reduce the national debt and to help achieve this aim, it has introduced higher taxes and cut welfare benefits. The removal of these welfare benefits provoked civil disturbance and rioting, where shops were looted and burnt and mass demonstrations, usually ending in violence, were held in the streets of major cities.

TFS is an increasingly socially fragmented country with vocal minority groups representing a wide range of pressure groups and communities. It has a comprehensive and complex legal system, presided over by senior judges who were largely appointed by the previous government. The current government has suggested that many recent judgements made by these judges are politically-motivated and are designed to hold back the government's reforms. The employment laws of TFS make it relatively expensive to employ people (there are minimum wages laws) and also difficult to dismiss them (employment protection laws). Legal proceedings are often time-consuming and expensive.

A report into the riots and demonstrations highlighted the role mobile phones and social networks played in co-ordinating attacks on shops and people. The report acknowledged that such communication devices had long been a widely used tool in organised crime in TFS, but that it had now also become a significant factor in organising mass disobedience. In an effort to prosecute offenders, the government asked mobile phone network operators to give it information about text messages and the timing and duration of phone calls which possible offenders had sent and received during the period of the riots. The information provided was used as supporting evidence in court, and helped convict a number of people.

The releasing of this information to the government has proved controversial. The network operators have been criticised by civil liberties organisations which believe that this is personal, confidential information and, under the terms of the Data Protection Act of TFS, should not have been released without the person's consent. On the other hand, the government has praised the network operators for their good citizenship and believes that the data provided is exempt from the Act as the Act allows data to be exempt if it is used 'for the detection and prevention of crime'. An influential newspaper, whilst recognising the contribution of the networks to the successful prosecution of offenders, felt that 'instead of helping catch offenders, the networks, by making their services unavailable might have prevented the offences in the first place'. One of the current network licensees, Z-Tel, is being sued for damages by people who claim that their confidential information has been illegally released to the government. The case has yet to be presented to a court, but lawyers for both sides are confident of success.

#### Licensing arrangements in TFS

Communication network licences are granted to mobile network operators for an eight-year period. Licences are allocated to bidding companies on the basis that the companies meet a certain number of criteria. This includes financial criteria, such as liquidity and gearing, and environmental criteria. Successive governments of TFS have enacted environmental regulations and set environmental targets (such as carbon emissions and recycling rates) which all companies operating in TFS have to achieve.

Beyond these minimum criteria, the licences are allocated to the highest bidders, the companies which offer the most money for a licence. There are four current licensees and these were the four highest bidders in 2009, the last time that the licences were granted. During the licence period, no new network operators can enter the market. All four licensees are of a similar size, although their profitability varies (see Table one). The government is keen to ensure that no one network provider dominates the market.

Table one: Comparative data (2014) for the four licensees

All figures in \$m	Z-Tel	T-Me	Tello	Co-nekt
Revenue	750	700	725	740
Gross profit	350	300	325	325
Net profit	125	80	100	125

The licences are due for renewal in three years' time. At present, the rules for licence granting are exactly the same as for the previous licence allocation – four licences given to the four applicants who fulfil the minimum criteria and make the four highest bids. However, some government ministers are unhappy about this and are lobbying for a change which favours bids from current licensees. The government has already stated that any of the current licensees which fail to be reallocated a licence will be paid a \$100m exit fee to help the losing company adjust to the loss of its licence. This will be paid for by the company which is replacing them, and is in addition to the contract fee paid by the successful bidder to the government. Some government ministers feel this bias towards current licensees should go further. One government minister recently suggested that 'the help provided to us during the recent riots should be acknowledged in some way'. There has also been a suggestion that there should be more than four licensees. This would increase competition and would also raise more money for national debt repayments. However, except for introducing an exit fee, the government has not yet officially stated any changes to the rules on licence allocation.

The network operators are monitored by a regulator, Ofnet, appointed by the government. In general, Ofnet has been supportive of the four current mobile network operators and it has openly praised their attitude and service on a number of occasions. Ofnet's primary focus is on pricing, service availability and service transfer. All prices are agreed in a series of meetings between the regulator and the licensees. As a result, the prices set by the four operators are very similar and are slightly less than the operators would like them to be. The companies, therefore, have to compete on branding, service support and network quality. In many geographical locations, one of the networks often provides a better signal quality and network speed, and indeed poor signal coverage is the most often cited reason for customers changing service operators. It is already possible for subscribers to move to a different service provider, but Ofnet believes, that this should be made even easier, and so is bringing in regulations to enable this. Licensees who do not comply with these regulations will be fined. The licensees are unconvinced of the demand for moving provider. One commented 'most subscribers move due to poor network service, and they can already do this!'

#### Mobile devices in TFS

Despite the economic decline of the last five years, mobile devices are seen as essential to most people within TFS. The demand for mobile devices and the networks which support them has increased dramatically in the last five years. Furthermore, mobile devices are particularly prized by the young, who see having the latest up-to-date technology as an important status symbol. Consequently, the manufacturers of mobile devices continually update the features and functionality of their devices. This has had an important effect on the mobile networks. Demand for services has increased not only due to an increase in calls, messages and web browsing but also due to the increasing demand which improved services place on network availability, bandwidth and speed. Thus the network operators have to continually upgrade the technologies and configurations which support their service networks. Most people in TFS rent their phones as part of a contract with the network provider. The minimum contract period is for one year, although many people tie themselves in for longer periods to take advantage of lower prices. Most people upgrade their phones when they renew their contract, to ensure that they have the device with the latest features. Old phones are returned by customers to their network provider, who, in turn, sends them back to the original manufacturer. The environmentally-friendly disposal of these mobile phones is a continual problem for the mobile phone manufacturers.

## Research into the tendering process

2Tel has commissioned research from Professor Tan of Midshire University, an acknowledged expert in probabilistic decision making, into the TFS bidding process. Here are some of his conclusions. He has determined probabilities using a bid price of \$550m and the probabilities are based on four licences being available.

- (1) If the bidding rules are not changed before the next licence allocation, then every bidder has a 0·4 probability of being granted a licence if their bid is for \$550m.
- (2) If the bidding rules are changed before the next licence allocation to favour current licence holders, then a current licence holder has a 0·6 probability of being granted a licence if they bid \$550m for the licence. A new bidder has only a 0·2 chance of being allocated a licence if they bid \$550m for the licence. These probabilities are based on research in other countries where bidding is biased towards the current licence holders.
- (3) It will cost current licence holders \$10m to prepare a bid for a licence. New bidders, because of their unfamiliarity with the bid process, will incur a cost of \$20m to prepare their bid.

2Tel is particularly interested in acquiring T-Me, the smallest of the current licensees. Their research suggests that they can implement efficiency gains which will generate \$100m net profit per annum for the final two years of the current contract. This compares with T-Me's current net profit levels of \$80m per year. Further efficiency gains and increased usage will lead to \$120m net profit per year for the eight years of the contract, should the offer for T-Me be successful. An initial approach to T-Me has suggested that an offer of \$400m for T-Me would be accepted.

The same net profitability for the contract (eight years at \$120m per annum) is also expected if 2Tel decides not to acquire T-Me and is successful in a direct bid for a licence.

Before entering any market (or industry), 2Tel commissions an independent briefing paper from a business analyst which considers both the external environment of that market or industry (the wider macro-environment which the market or industry works within) and the competitive environment of the market or industry itself (the market or industry the proposed company will work within). These briefing papers conclude with a brief summary of the opportunities and threats posed by the environment. These briefing papers are used by the board of 2Tel as part of its evaluation of whether a market is attractive to enter. In this case, whether it should attempt to enter the TFS mobile operator industry, and if it does attempt to enter, whether it should enter directly or through acquiring a current operator.

#### Required:

- (a) Write the briefing paper required by 2Tel. The briefing paper should:
  - (i) Analyse the macro-environmental factors affecting the TFS mobile operator industry; (14 marks)
  - (ii) Analyse competition within the TFS mobile operator industry; (8 marks)
  - (iii) Conclude with a summary of the opportunities and threats identified in the analysis. (4 marks)

Professional marks are available in part (a) for the structure, coherence, style and clarity of the briefing paper.

(4 marks)

**(b)** 2Tel also requires an evaluation of the relative advantages of bidding for a licence, either through acquiring T-Me, or through bidding directly. The evaluation should analyse four specific scenarios (acquire and not gain licence; acquire and gain licence; bid directly and gain licence). The analysis of each scenario should include the financial implications of each scenario. The evaluation should conclude with your recommendation on the preferred entry strategy.

## Required:

Produce the evaluation of each scenario as required by 2Tel.

Note: Construction of a decision tree is not required and ignore the time value of money in your evaluation.

(20 marks)

(50 marks)

This is a blank page. Section B begins on page 6.

## Section B - TWO questions ONLY to be attempted

2 Yvern is large region in the country of Gaulle. It is ethnically and culturally distinct from the rest of the country and it has aspirations for independence. The desire for this independence is reflected by consumers in Yvern preferring to buy products which have been produced in the region.

Yvern Trinkets Regional (YTR) is a manufacturer of giftware products aimed at the Yvern market. Its products are bought primarily by residents of Yvern and visitors to the Yvern region. It is the third largest company of its type in the region, and the 50th largest producer of giftware in Gaulle. Its marketing message stresses the regional identity of the company and its employment of local skills and labour. It currently manufactures four products, designated here as products A, B, C and D. The company does not sub-contract or outsource any element of production and it has never done so. Data concerning products A, B, C and D are given in Table one.

	Α	В	С	D
Monthly production (in units)	2,000	5,500	4,000	3,000
Direct materials cost (\$ per unit)	3	5	2	4
Direct labour cost (\$ per unit)	9	6	9	6
Variable production overheads (\$ per unit)	2	3	1	2

## Table one: Production and marginal cost data for the YTR product range

YTR recently appointed a new managing director, born outside the region. He has been tasked with improving the profitability of the company.

After a short period of consultation, the new managing director produced a proposal for the board. Here is an extract of his proposal.

'First of all, we need to be clear about our generic strategy. Strategists have suggested that we have four alternatives. I have reproduced them in this slide (shown here as Table two).

Cost Leadership	Differentiation
Cost Focus	Differentiation Focus

## Table two: Generic strategies

My vision for YTR is that we should pursue a **cost leadership** strategy. I have already established that our products can be produced by an established company in the distant country of Tinglia at the following prices (see Table three). These costs include the delivery of products to our warehouse here in Yvern.

	Α	В	С	D
Buy-in price (\$ per unit)	11.5	16.5	12.5	13.5

## Table three: Contract prices per unit from the external supplier in Tinglia

Our financial director of YTR has also estimated that we have company-wide fixed overheads of \$75,000 per month. He assures me that \$16,000 per month of these is directly attributable to the production of products A, B, C and D, evenly split across the four products, each having \$4,000 of fixed overheads. So, we could save overheads of \$16,000 per month by outsourcing all of our products to the Tinglia supplier.

I realise that this leaves us with \$59,000 per month fixed overheads, but I will be looking for savings there also. The information technology of YTR is outdated and inefficient. Productivity benefits will follow from harnessing the power of modern technology.

However, returning to my main concern: production costs. My view is that increased profitability can only be achieved if we take advantage of the cheaper production costs now available to us. All four products can be produced more cheaply by the supplier in Tinglia. So, this strategy of outsourcing is the one we should pursue to achieve our cost leadership strategy.'

## Required:

- (a) Evaluate the claim that 'all four products can be produced more cheaply by the supplier in Tinglia' and discuss the issues raised by outsourcing the production of YTR's products to Tinglia. (15 marks)
- (b) Examine the relevance of each of the four generic strategies shown in Table two to the competitive environment in which YTR operates and evaluate the choice of a cost leadership strategy by YTR's managing director.

  (10 marks)

(25 marks)

3 The town of Brighttown in Euraria has a mayor (elected every five years by the people in the town) who is responsible for, amongst other things, the transport policy of the town.

A year ago, the mayor (acting as project sponsor) instigated a 'traffic lite' project to reduce traffic congestion at traffic lights in the town. Rather than relying on fixed timings, he suggested that a system should be implemented which made the traffic lights sensitive to traffic flow. So, if a queue built up, then the lights would automatically change to green (go). The mayor suggested that this would have a number of benefits. Firstly, it would reduce harmful emissions at the areas near traffic lights and, secondly, it would improve the journey times for all vehicles, leading to drivers 'being less stressed'. He also cited evidence from cities overseas where predictable journey times had been attractive to flexible companies who could set themselves up anywhere in the country. He felt that the new system would attract such companies to the town.

The Eurarian government has a transport regulation agency called OfRoad. Part of OfRoad's responsibilities is to monitor transport investments and it was originally critical of the Brighttown 'traffic lite' project because the project's benefits were intangible and lacked credibility. The business case did not include a quantitative cost/benefit analysis. OfRoad has itself published a benefits management process which classifies benefits in the following way.

*Financial:* A financial benefit can be confidently allocated in advance of the project. Thus if the investment will save \$90,000 per year in staff costs then this is a financial benefit.

Quantifiable: A quantifiable benefit is a benefit where there is sufficient credible evidence to suggest, in advance, how much benefit will result from the project. This benefit may be financial or non-financial. For example, energy savings from a new building might be credibly predicted in advance. However, the exact amount of savings cannot be accurately forecast.

*Measurable benefit:* A measurable benefit is a benefit which can only be confidently assessed post-implementation, and so cannot be reliably predicted in advance. Increase in sales from a particular initiative is an example of a measurable benefit. Measurable benefits may either be financial or non-financial.

Observable benefit: An observable benefit is a benefit which a specific individual or group will decide, using agreed criteria, has been realised or not. Such benefits are usually non-financial. Improved staff morale might be an example of an observable benefit.

One month ago, the mayoral elections saw the election of a new mayor with a completely distinct transport policy with different objectives. She wishes to address traffic congestion by attracting commuters away from their cars and onto public transport. Part of her policy is a traffic light system which gives priority to buses. The town council owns the buses which operate in the town and they have invested heavily in buses which are comfortable and have significantly lower emissions than the conventional cars used by most people in the town. The new mayor wishes to improve the frequency, punctuality and convenience of these buses, so that they tempt people away from using their cars. This will require more buses and more bus crews, a requirement which the mayor presents as 'being good for the unemployment rate in this town'. It will also help the bus service meet the punctuality service level which it published three years ago, but has never yet met. 'A reduction in cars and an increase in buses will help us meet our target', the mayor claims.

The mayor has also suggested a number of initiatives to discourage people from taking their cars into the town. She intends to sell two car parks for housing land (raising \$325,000) and this will reduce car park capacity from 1,000 to 800 car spaces per day. She also intends to raise the daily parking fee from \$3 to \$4. Car park occupancy currently stands at 95% (it is difficult to achieve 100% for technical reasons) and the same occupancy rate is expected when the car park capacity is reduced.

The new mayor believes that her policy signals the fact that Brighttown is serious about its green credentials. 'This', she says, 'will attract green consumers to come and live in our town and green companies to set up here. These companies and consumers will bring great benefit to our community.' To emphasise this, she has set up a Go Green team to encourage green initiatives in the town.

The 'traffic lite' project to tackle congestion proposed by the former mayor is still in the development stage. The new mayor believes that this project can be modified to deliver her vision and still be ready on the date promised by her predecessor.

## Required:

- (a) A 'terms of reference' (project initiation document, project charter) was developed for the 'traffic lite' project to reduce traffic congestion.
  - Discuss what changes will have to be made to this 'terms of reference' (project initiation document, project charter) to reflect the new mayor's vision of the project. (5 marks)
- **(b)** The new mayor wishes to re-define the business case for the project, using the benefits categorisation suggested by OfRoad.
  - Identify costs and benefits for the revised project, classifying each benefit using the guidance provided by OfRoad. (14 marks)
- (c) Stakeholder management is the prime responsibility of the project manager.

Discuss the appropriate management of each of the following three stakeholders identified in the revised (modified) project.

- (i) The new mayor;
- (ii) OfRoad;
- (iii) A private motorist in Brighttown who uses his vehicle to commute to his job in the town. (6 marks)

(25 marks)

4 TMZ is a music company based in the developed country of Artazia. It was founded in 1963 when it started to sign emerging rock and roll artists to its record label. TMZ offers a contract in which the artists receive royalties based on the sales of their music. As part of this contract, TMZ record the music, distribute it and promote it. Most of the contracts are for a defined number of songs or records. For example, in 1980, TMZ contracted the heavy metal band, Vortex31, to produce ten albums, to be delivered over seven years. Extracted financial data for the period 1965–2000 is given in Table one. During these years TMZ successfully signed bands offering different and emerging types of music (pop, punk, garage, grunge, patio) and also successfully altered the physical media of distribution, from vinyl records to tape cassette and subsequently to compact disc (CD).

All figures in \$million	1965	1970	1980	1990	2000
Revenue	10	70	120	150	170
Gross profit	4	30	45	50	50
Net profit	3	22	30	30	25

Table one: Revenue and profit information: TMZ (1965–2000)

The company remained profitable in this period, despite musicians taking longer to produce albums and senior management adopting a relaxed and indulgent approach to their creative artists.

In 1999, the first file sharing company was formed in Artazia, allowing people to easily share their music files with each other. During the next decade, numerous file sharing and digital downloading companies were launched. As early as 2003, the possible implications of this growth in file sharing and digital downloading were highlighted by a number of employees in TMZ. However, senior management at TMZ were dismissive of this threat, suggesting that the contracts with their artists were 'watertight'. Table two shows revenue and profit information for 2003–2007.

All figures in \$million	2003	2004	2005	2006	2007
Revenue	165	150	130	100	80
Gross profit	45	30	10	0	(10)
Net profit	20	5	(15)	(20)	(30)

Table two: revenue and profit information: TMZ (2003–2007)

Senior management at TMZ believed that this decline in performance was due to them providing the 'wrong music, promoted to the wrong people at the wrong price'. During this period the company signed new artists, increased advertising and cut prices. However, this did not halt its decline.

Losses were also made in 2008 and 2009 and the company was only kept afloat by fresh injections of shareholder capital. During these years, the company took legal action against what they considered illegal downloading and file sharing. It won a number of small cases but its actions angered many music fans, who felt that music labels had been greedy in the past. It also upset some of its artists who now benefited from the opportunity the internet gave them to sell music directly to their fans.

In 2009, a new CEO was appointed from outside the music industry. In 2010 he announced a new strategy. TMZ was no longer interested in contracting new artists to the label. Instead it would focus on deriving profit from its established artists and music catalogue. He came to licensing agreements with some large digital downloading operators and stores, allowing them to access or sell the music of established artists. However, he continued litigation against others. He also began to generate revenue from licensing the music for use in computer games, television advertisements and personalised ringtones.

In 2011 the company reported a gross profit for the first time since 2005. In 2013 and 2014 it recorded a small net profit. The CEO stated that TMZ was now a 'slimmer, fitter company. We are a learning organisation, developing the resilience needed to trade successfully in the ever-changing digital music age'. However, he warned that TMZ, like others in the industry, would continue to pursue actions against the illegal downloading of music. 'There is a generation where many people consider music and all creative content should be free. However, we see signs that this assumption is becoming less widely held. The next generation is questioning it. Like many others, we continue to seek ways of distributing music which is fair to both the consumer and the artist. We are constantly monitoring trends and patterns in consumer behaviour. We will not get caught out like we were ten years ago. We won't be fooled again!'

## Required:

- (a) Analyse the performance of TMZ from 1965 to the present. Include in your analysis reference to the principles and any evidence of strategic drift. (15 marks)
- (b) The current CEO claims that TMZ is a learning organisation. Discuss the principles of a learning organisation and its implications for TMZ. (5 marks)
- (c) Knowledge management is closely related to the concept of the learning organisation. Explain knowledge management and its relevance to TMZ. (5 marks)

(25 marks)

**End of Question Paper**