CPA IRELAND | CERTIFIED PUBLIC ACCOUNTANTS

STRATEGIC PERFORMANCE MANAGEMENT

PROFESSIONAL 2 EXAMINATION - APRIL 2015

NOTES:
You are required to answer **ALL** Questions.

PRESENT VALUE TABLES ARE PROVIDED

Time Allowed
3.5 hours plus **20 minutes** to read the paper.

Examination Format
This is an open book examination. Hard copy material may be consulted during this examination subject to the limitations advised on the Institute's website.

Reading Time
During the reading time you may write notes on the examination paper, but you may not commence writing in your answer booklet.

Marks
Marks for each question are shown. A mark of 50 or more is required to achieve a pass in this paper.

Answers
Start your answer to each question on a new page.

You are reminded to pay particular attention to your communication skills, and care must be taken regarding the format and literacy of your solutions. The marking system will take into account the content of your answers and the extent to which answers are supported with relevant legislation, case law or examples, where appropriate.

Answer Booklets
List on the cover of each answer booklet, in the space provided, the number of each question attempted. Additional instructions are shown on the front cover of each answer booklet.

THE INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS IN IRELAND

STRATEGIC PERFORMANCE MANAGEMENT

PROFESSIONAL 2 EXAMINATION - APRIL 2015

Time Allowed: 3.5 hours, plus **20 minutes** to read the paper.
You are required to answer **ALL** Questions.

Instructions to candidates:
Read the following case study
and answer the questions which follow.

Case study: "Interactive plc"

Interactive plc consists of several autonomous business units. The company's strategic preference is to invest in aspects of the communications industry (defined in a broad sense) and the activities of the autonomous business units reflect this. Examples of areas in which the business units are involved are electronic communications, telephony, and transport & logistics.

When you qualified recently as a CPA, Mary Ross (the company's Chief Executive) recruited you on a fixed-term basis to provide what she referred to as *"an outsider's fresh insight into the company's situation"*. Mary has explained that each business unit regularly reports significant profits, and that business unit managers seem happy to work within the communications industry in general and to maximise the returns from their specific operations. However, Mary has explained to you: *"I'm concerned that we may be getting almost too comfortable. It seems that all business units are achieving medium-term success but I'm not convinced that there is adequate attention being paid to the prospects for long-term success. As a general principle, we all know that business models and revenue streams which are reliable now may not be commercially viable forever, but I'm not sure what specific lessons we as a company are drawing from that for our own business".*

To illustrate this point, Mary has given the example of an autonomous business unit which was set up approximately 15 years ago and achieved a significant share of the telephone landline business in a mainland European country. *"This was profitable for a number of years"*, explained Mary, *"but of course very significant market shrinkage soon became a problem – there just aren't that many landline calls made any more, so it isn't a particularly worthwhile business to be in. Luckily, we avoided serious losses by selling off that business unit in good time before the market really began to shrink, but I'm left wondering how many of my other business unit managers have given serious thought to the possibility of similar decline in their existing markets and what they might do to offset the effects".*

Mary describes herself as "reasonably open-minded" as to how the group should develop in the future. She favours the company staying within the broad field of communications, reflecting a desire to leverage the expertise and strategic strengths which the company has built up in this area. She is happy to acknowledge that "communications" encompasses significant diversity as to both geography and specific lines of business, and that this diversity poses substantial control challenges for top management in trying to achieve shareholder value.

"Every cent of equity capital which I have at my disposal is provided by the shareholders and ultimately belongs to them", says Mary. *"My job is to make a financial success of all parts of the business; that's the only way for me to justify my using that equity capital on shareholders' behalf. If there's a business unit which can't deliver shareholder value then it needs to have its business model and operations redesigned so that it can provide an adequate rate of return; otherwise the business unit needs to be shut down and the capital returned to the shareholders so that they can invest it more profitably elsewhere".*

Following your appointment by Mary, you have made site visits to several business units and she expects to hear useful recommendations from you. Further details are provided in the questions which follow.

1. Danube is a business unit of Interactive plc which has operated a mobile phone network in a central European country for a number of years. The manager of Danube acknowledges that there have been significant technological and market changes during that time, but believes that the business unit has adapted successfully to changing conditions and will continue to do so.

Each new customer's contract begins when the customer buys a smartphone from Danube which is locked to the company's network for the duration of the contract. Customers then purchase the combination of voice, text, and data services which they require, and are billed monthly in arrears for these services. Because of competitive pressures, Danube has had to shorten the duration of its customer contracts but the manager asserts that this has not significantly damaged the profitability of operations, for two reasons. First, he points out that each customer reaching the end of contract (with any network operator) is a potential new customer for Danube. Second, available figures show that customers are purchasing greater volumes of all services (voice, text, and data) than previously. The following information is provided for the most recent year (2014) and for Danube's first year of operations (2011):

	2014	**2011**
Smartphone handset:		
- Price charged to customer	€100	€200
- Cost price to Danube	€80	€170
Contract duration for each new customer	1 year	3 years
Average customer usage, per month:		
- Voice call minutes	150	80
- Texts	120	60
- Data (gigabytes GB)	5	0.1
Prices charged by Danube for services:		
- Voice calls, per minute	€0.25	€0.25
- Texts (each)	€0.10	€0.15
- Data (per GB)	€1.00	€2.00

REQUIREMENT:

(a) Prepare a report for Mary Ross in which you assess critically the manager's assertion that the shortening of contract durations has not significantly damaged the profitability of operations. Your report should include a comparison of the contribution for Danube from each customer based on the 2014 and 2011 contracts, insofar as is possible from the information provided.

(14 marks)

(b) In assessing Danube's prospects for the future, the manager has noticed two trends. One is for some customers to purchase 'unlock codes' on the internet for their Danube phones. This means customers can cut short their contracts with Danube and switch to using their smartphones on other operators' networks. The second trend is for customers to purchase unlocked phones for use with Danube (or other operators') SIM cards. Many of these unlocked phones have dual SIM capability so that their users can insert two different SIM cards into the same smartphone.

The manager has stated that Danube should not feel threatened by these developments and that in any case it is beyond the capability of any network operator to prevent them. He states that since Danube's margin on handsets is small, he would be quite happy for the business unit to stop supplying handsets altogether. Furthermore, in order to build up as large a customer base as possible, he plans to reduce phone call and text message rates to below those charged by competitors. He also plans to increase prices for data usage significantly to fund these reductions in the prices of other services, on the basis that market research indicates that there is less public awareness of data charges than of the charges for the other services.

Evaluate critically the manager's positive assessment of the business unit's future prospects in the light of these developments. Calculations are not required in your answer to this part.

(8 marks)

[Total: 22 Marks]

2. The Elbe business unit operates a regional television station. Mary Ross and the manager of Elbe agree that the critical factors for success in this industry are attracting and retaining celebrity presenters (at relatively high salaries if necessary) and keeping the station's technology up to date. Mary states that she is satisfied with Elbe's financial performance, which is measured using Return on Investment (ROI). In the calculation of ROI assets are measured at their gross book value (GBV).

Elbe's existing assets were purchased two years ago for €500,000 and it is estimated that their remaining useful life is a further three years. Elbe's trading profits (after depreciation) from using these assets amount to €80,000 in each year of the assets' life. Mary is aware that the manager of Elbe is considering expanding its operations. This expansion would require an immediate additional investment of €210,000 in new assets which would give the business unit extra trading profits of €23,100 (after depreciation) in each of the three years of these new assets' life. The business unit's cost of capital is 10% per annum.

Despite her general satisfaction with Elbe's performance, Mary has asked you to consider whether changes to the performance measure are needed. In particular, she is wondering whether for performance management purposes, it would be appropriate to measure assets on the basis of net book value (NBV) rather than GBV and/or whether Residual Income should be used instead of ROI.

REQUIREMENT:

(a) Assess whether either or both of the changes proposed by Mary would be likely to result in more goal-congruent decision-making by the manager of Elbe. Support your answer by appropriate detailed calculations for each of the next three years.

(16 marks)

(b) Evaluate the following statement: "*Given the key success factors identified for this industry, it is not likely that a single financial performance measure (whether ROI or Residual Income) would be appropriate. A different approach to performance management is required*".

(6 marks)

[Total: 22 Marks]

3. The Tiber business unit is managed as an engineered cost centre. Tiber offers a secure parcel packing service to its customers. Mary Ross has explained to you: "We don't really seek to make significant profits from operating Tiber as such; we are generally satisfied if we can break even on its operations. Instead, we hope that having had their goods packed by Tiber, our customers will opt to have them physically transported by one of our business units in the haulage sector; that is where we can really make serous money".

Nevertheless, Mary is concerned at very significant direct labour cost variances which arose in Tiber last month. A total of 150,000 customer parcels were packed, compared to a budgeted figure of 120,000. In the preparation of Tiber's budget it was assumed that the average packing time per parcel is 6 minutes. However, the parcels which Tiber was asked to pack during the month were significantly larger in size than what was assumed at the time of budget preparation, and it is believed that an average packing time of 7.5 minutes would have been a realistic estimate for this larger sized parcel. Labour records show the actual number of labour hours worked and paid for was 18,500.

A wage rate of €9 per hour was assumed in the budget, but higher-than-expected wage rate inflation in the economy generally meant that €9.20 per hour would have been a realistic figure. Furthermore, because Tiber needed substantially more labour than budgeted (due to the increased volume of business and the larger average parcel size) it had to pay an average wage rate of €9.50 per hour in order to obtain the necessary amount of labour.

REQUIREMENT:

(a) Analyse Tiber's labour variances in as much detail as possible from the information provided. (14 marks)

(b) Recommend options as to how Mary Ross might interpret the financial and strategic success (or otherwise) of Tiber for last month. Support your answer by reference to the results of your analysis in part (a) and advise Mary as to the principal additional information which she would require in order to interpret the outcome.

(6 marks)

[Total: 20 Marks]

4. For several years, the Tagus Business Unit (TBU) has operated a website which provides users with online access to professional training videos in areas such as law, accounting, and computer systems maintenance. The business unit does not make or provide any original content; instead the website simply contains links to videos which are publicly available free of charge elsewhere on the Internet. Until quite recently, the website has enjoyed very heavy site traffic as users have found it to be well organised and comprehensive. All areas of the site have been available to users for free. The benefits to Interactive plc have come in the form of (1) advertising revenues from the site and (2) the use of the site to promote Interactive's other business units and drive traffic to their websites.

There has been a reduction of about 10% in the number of visitors to the website in the past year, and this pattern of decline seems likely to continue. Mary Ross takes the view that while this reduction is disappointing, the existing business model is fundamentally sound and should be continued. By contrast, the manager of the Tagus business unit believes that the existing business model is coming to the end of its useful life and that Tagus should plan for its replacement. He proposes that within the next year, the existing website should be discontinued and replaced with a completely new one which would have the following characteristics:

- Users would pay a fixed monthly fee for use of the website.

- Unlike the previous website, the content would not consist of links to publicly available material. Instead, Tagus would purchase the rights to copyright-protected professional training videos and webinars. Tagus would also commission material if none is available for purchase. All of this content would be made available to users in return for their fixed monthly fee.

- No advertising or links to other websites outside of Tagus would be provided.

Mary Ross has stated that she does not see the need to replace the old website with the new one, and that the new website would require much more complex and comprehensive managerial controls than are necessary with the existing website.

REQUIREMENT:
The manager of TBU has asked you, the management accountant, for a report in which you:

(a) Critically assess Mary's view that there is no need to replace the website, referred to above. (8 marks)

(b) On the assumption that the decision is taken to replace the existing website with the new one, appraise the usefulness and feasibility of the following in implementing and managing the new website:

- Internal benchmarking
- Competitive benchmarking
- Functional benchmarking. (10 marks)

[Total: 18 Marks]

5. The Neva business unit manufactures a number of electronic accessories for mobile computing devices, such as headphones, SD cards, and OTG adapters. Neva does not put its own brand name on its products but instead sells them in bulk to large retailers or other manufacturers, with the purchaser's brand name added or other basic customisation if required.

Neva's manager characterises her business unit's strategy as "low cost as a first priority, and high quality insofar as that is consistent with the low cost priority". She explains that Neva's purchasers are very price sensitive, but would very quickly discontinue a supplier if they experienced significant numbers of complaints about product quality from Neva's own customers. She believes that the consistency between Neva's strategy and the requirements of purchasers is the most significant critical success factor which has enabled Neva to build market share.

REQUIREMENT:

(a) Evaluate critically for Mary Ross, the current low-cost manufacturing strategy implemented by the Neva business unit.

(6 marks)

(b) Assess the suitability of a Balanced Scorecard as a performance management model for the Neva business unit, assuming that Neva continues with its existing strategy. Your answer should include a detailed explanation and justification of one key performance indicator (KPI) from each section of a Balanced Scorecard, and an explanation of the linkages between the sections.

(12 marks)

[Total: 18 Marks]

[Total: 100 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

THE INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS IN IRELAND

STRATEGIC PERFORMANCE MANAGEMENT

PROFESSIONAL 2 EXAMINATION - APRIL 2015

SOLUTION 1

(a) **To: Mary Ross, CEO.**
From: Nu Lee, Management Accountant
Date: 12 May 20YY
Re: Assessment of Impact of Danube's Shortening of Customer Contracts

I have recently met with the manager of the Danube business unit and obtained information on the changes in contracts offered to customers. Using the 2011 and 2014 contracts, as provided, I have prepared an analysis of the contribution of the average customer. This is the basis for my assessment of the assertion by the business unit manager that the shortening of the contract offering has not significantly damaged profitability. Table 1 contains the analysis referred to above.

Table 1

	2011		**2014**	
		€		€
Handset	€200 - €170 =	30.00	€100 - €80	20.00
Voice Calls	80 minutes * 36 months * €0.25	720.00	150 minutes * 12 months * €0.25	450.00
Text Messages	60 messages * 36 months * 0.15	324.00	120 messages * 12 months * €0.10	144.00
Data	0.1 Gb * 36 months * €2	7.20	5Gb * 12 months * €1	60.00
Total (2011 contract)		1,0812.20	Total (2014 contract)	674.00

Note: *Assumption made here that the prices in 2011 applied to all three years of those customers' contracts.*

Assessment of manager's assertion:

- Provided that every customer renews at the end of the contract (or is replaced by a customer won from another operator) Danube seems to earn significantly more profit over a 3-year period than before (3 * €674 = €2,022).

- But there is no guarantee that market share can be retained in this way. It depends on achieving sufficiently high customer satisfaction. From Danube's point of view, the advantage of the old 3-year contract was that the customer was "locked in" to the arrangement whether the customer was satisfied or not.

- Although it is true that the volumes of all three services used per annum have significantly increased, the profitability of this increase in volume is uncertain. For example, there is no guarantee that the increase in the amount of usage can be maintained beyond one year when the initial contract ends since the customer may defect to another provider.

I will be pleased to discuss any of the contents of this report or undertake any further analysis that you may require.

Nu Lee, CPA.

(b)

- The manager is almost certainly correct in asserting that these developments are beyond Danube's power to resist. However, he may be naive in his belief that the proposed response will be effective.

- What is proposed is a price bundling strategy, whereby cheaper call and text rates will (in effect) be subsidised by higher data charges. The manager seems to be hoping that customers either "won't notice" the higher data charges or that (if they do) they will meekly accept them. Neither belief is plausible.

- Customers can avail of dual SIM phones to "opt out" of the bundling strategy. They can use one SIM to avail of Danube's cheap call and text rates, and use a different operator's SIM in the same phone to get better data rates than those available from Danube.

- There is little point in building up a large customer base if the pricing strategy discourages customers from buying data from Danube, especially since (as shown in part [a]) this is the fastest-growing product in the portfolio. A pricing strategy which delivers to customers good value on all three services is likely to be more profitable for Danube than one which merely emphasises maximising customer numbers.

- With the proposed price-bundling strategy, the only customers who are likely to continue to buy data services from Danube are those who use very little data. Danube will earn very little profit from selling data services to this type of customer because of the small volumes involved.

- As regards whether Danube should stop selling smartphones altogether, this hinges on whether the handset sales are of any strategic significance. The handsets themselves offer minimal margins to Danube, and lock customers in for only short contracts (1 year) which in practice are easy for customers to escape. However, they may be a way for Danube to get potential customers to at least "try out" Danube's services – and (if these are really good value as intended) customers may choose to stay. Given the importance of winning customers from competitors to maintain even a stable market share (see part [a]) it may be worth continuing to offer smartphones for this purpose of customer recruitment.

Tutorial notes

- *Purpose of question*: To test candidates on various aspects of advanced decision-making, especially customer profitability, services pricing, bundling, and strategic considerations) (Syllabus Topic 1).

- *Options:* Although part (a) must include a suitable calculation (see below) variations are acceptable, e.g., in assumptions, layout, and sequencing. There is also scope for acceptable variation in the points which could validly be made in the remainder of part (a) and in part (b).

- *Essential components:* Candidates must present a calculation of the type indicated in the question for part (a). They must also respond effectively to the narrative sections of parts (a) and (b), including assessing the serious limitations in the manager's analysis and proposed bundling strategy as outlined in the question.

SOLUTION 2

(a)

Option 1 (Existing performance measure): ROI; GBV

	Existing assets	**Proposed new assets**	**Combined**
ROI (each year)	€80K / €500K = 16%	€23,100 / €210K = 11%	€103,100 / €710K = 14.52%

Option 2: Residual Income; GBV

	Existing assets	**Proposed new assets**	**Combined**
Trading profit (each year)	€80K	€23,100	€103,100
Finance charge (each year)	10% * €500K = €50K	10% * €210K = €21K	€71K
Residual Income (each year)	€30K	€2,100	€32,100

Option 3: ROI; NBV

Net book value of assets	**Existing assets**	**Proposed new assets**	**Combined**
Year 1	€500K * (3/5) = €300K	€210K	€510K
Year 2	€500K * (2/5) = €200K	€210K * (2/3) = €140K	€340K
Year 3	€500K * (1/5) = €100K	€210K * (1/3) = €70K	€170K

ROI	**Existing assets**	**Proposed new assets**	**Combined**
Year 1	€80K / €300K = 26.7%	€23,100 / €210K = 11%	€103,100 / €510K = 20.2%
Year 2	€80K / €200K = 40%	€23,100 / €140K = 16.5%	€103,100 / €340K = 30.3%
Year 3	€80K / €100K = 80%	€23,100 / €70K = 33%	€103,100 / €170K = 60.6%

Option 4: Residual Income; NBV

Finance charge	**Existing assets**	**Proposed new assets**	**Combined**
Year 1	€300K * 10% = €30K	€210K * 10% = €21K	€51K
Year 2	€200K * 10% = €20K	€140K * 10% = €14K	€34K
Year 3	€100K * 10% = €10K	€70K * 10% = €7K	€17K

Residual income	**Existing assets**	**Proposed new assets**	**Combined**
Year 1	€80K - €30K = €50K	€23,100 - €21K = €2,100	€52,100
Year 2	€80K - €20K = €60K	€23,100 - €14K = €9,100	€69,100
Year 3	€80K - €10K = €70K	€23,100K - €7K = €16,100	€86,100

Assessment:

- The existing measure (Option 1) is not goal congruent. The proposed new investment offers a return more than the cost of capital (11% > 10%) but the manager would be unlikely to accept it because it would reduce the business unit's average ROI (14.5% < 16%).

- Switching to a NBV basis of ROI (Option 3) will not improve goal congruence; in fact it may make the problem even worse. In all three years the proposed new investment reduces the business unit's average ROI, and the amount of the reduction is greatest in the later years.

- Because Residual Income is an absolute measure rather than a percentage, it provides a more satisfactory solution. The proposed new investment has a positive residual income in all years on either basis, and the total residual income of the business unit is greater with the proposed new investment than without it (see Option 2 and Option 4 above). Therefore residual income (on either basis) achieves goal congruence because it motivates Elbe's manager to accept the proposed new investment.

- In summary the proposal to move to residual income improves goal congruence, but the proposal to move from GBV to NBV has no impact on goal congruence.

(b)

- One of the critical success factors mentioned involves investment in developing intangible assets, in the form of celebrity presenters. Such investments are costly but will not appear in the balance sheet or in an ROI or Residual Income calculation. In fact excessive emphasis on ROI or Residual Income performance measures would discourage this type of investment especially in the short run.

  The company should instead measure the performance of this type of investment using a combination of other performance measures. This could be financial and nonfinancial; strategic and operational; and would be likely to involve comparison of budget targets with actual. As a specific example, the success of the investment in an expensive celebrity presenter could be measured in terms of advertising revenue growth, market share growth, and the level of public awareness that the particular presenter worked at Elbe's channel.

- The second critical success factor mentioned is the need to keep technology up to date. While both financial and nonfinancial performance measures could be used, ultimately this represents significant financial investment in physical fixed assets which are likely to be included in the balance sheet. Therefore, control through ROI or Residual Income will be important. One disadvantage of Mary's proposal to switch to a NBV approach (as opposed to GBV) is that with the former approach the performance measure "grows" the longer the asset is retained. One advantage of the existing GBV approach is that managers have an incentive to replace existing assets once their productivity decreases even slightly, and this incentive seems to be appropriate in Elbe.

Tutorial notes

- *Purpose of question:* To test candidates' ability to implement and critically evaluate alternative divisional performance measurement systems, especially using Return on Investment and Residual Income (Syllabus Topic 3).

- *Options:* There is scope for variation in the specific discussion points made in answer to part (b) in particular, and in the form of calculations in part (a).

- *Essential components:* In part (a) the calculations must be sufficiently detailed to facilitate the full appraisal of the proposed two changes to the performance measurement system. It is also essential in part (a) to present a full narrative assessment (drawing conclusions from the numbers) and in part (b) the critical response to the assessment must have specific regard to the two critical success factors identified (rather than being a "general textbook assessment" of the adequacy of ROI and Residual Income).

SOLUTION 3

(a)

Figures required for planning & operational variance calculations:

XASWR:	Ex ante standard wage rate	€9
XPSWR:	Ex post standard wage rate	€9.20
AWR:	Actual wage rate	€9.50
XASH:	Ex ante standard hours	(6 / 60) * 150,000 = 15,000
XPSH:	Ex post standard hours	(7.5 / 60) * 150,000 = 18,750
AH:	Actual hours	18,500

'Wage rate' element of labour planning variance:

XPSWR	XASWR	XPSH	Variance = (XPSWR – XASWR) * XPSH
€9.20	€9	18,750	€3,750 U

'Efficiency' element of labour planning variance:

XPSH	XASH	XASWR	Variance = (XPSH – XASH) * XASWR
18,750	15,000	€9	€33,750 U

'Wage rate' element of labour operational variance:

AWR	XPSWR	AH	Variance = (AWR – XPSWR) * AH
€9.50	€9.20	18,500	€5,550 U

'Efficiency' element of labour operational variance:

AH	XPSH	XPSWR	Variance = (AH – XPSH) * XPSWR
18,500	18,750	€9.20	€2,300 F

(b) Since Tiber is a cost centre (with no profit-making brief) in principle it is possible to assess this business unit in terms of the extent and nature of its departure from cost standards. The analysis in part (a) facilitates this. In particular:

- The planning part of the labour wage rate variance (€3,750 U) was due to macroeconomic factors (general labour market inflation) and therefore does not reflect unfavourably on the manager of Tiber. While the operational part of the labour wage rate variance (€5,550 U) might in principle be said to be controllable by the manager of Tiber, this came about because he made a conscious decision to operate the division at a higher level of activity (therefore necessitating more labour hours) because of the company's strategic brief for this business unit. Therefore the operational part does not reflect unfavourably on the Tiber manager either.

- It is less clear why the planning part of the labour efficiency variance (€33,750 U) came about. In one sense the reason is obvious (viz., bigger parcels) but the fundamental question arises as to why this occurred. For example, did Tiber operate a simple "flat" pricing strategy so that customers paid the same price for any sized parcel? If so, this may have helped to generate extra business or may have created an adverse selection problem (with customers bringing their large parcels in particular to Tiber). As for the operational part of the labour efficiency variance (€2,300 F) this indicates that staff at Tiber packed each parcel in less than the norm of 7.5 minutes which would be expected for the size of parcel actually presented.

Consequently, a proper interpretation of the financial and strategic success of Tiber requires additional information. As regards the financial outcome,, the most immediate question is whether Tiber's revenues kept pace with the cost increases. The type and volume of business had the effect of driving up both the hourly cost of labour and the labour time per unit output (planning variances) but if the company's pricing structure resulted in these cost increases being passed on to customers then there is no loss in Tiber even in the short run. As regards the strategic outcome, the main purpose of Tiber is to generate business for the haulage business units elsewhere in the company. Given that the number of parcels was 25% above budget, a key question is whether this resulted in a corresponding increase in business in the haulage business units. If it did then Tiber's month may well have been a successful one, whether or not its cost increases were recouped directly from Tiber's customers for the packaging service.

Tutorial notes

- *Purpose of question:* To test candidates' ability to carry out advanced variance analysis (Syllabus Topic 2) and to draw conclusions as to to the financial and strategic success of a business unit.

- *Options:* There is scope for variation in the specific points which could validly be made in the answer to part (b), although certain key issues must be raised (see below).

- *Essential components:* A detailed planning and operational variance analysis is specifically required in answer to part (a). In part (b) candidates must identify the significance of each of the planning and operational variances in interpreting the performance of Tiber, and must also advise and carefully explain what additional information should be used in order to interpret the financial and strategic performance of Tiber.

SOLUTION 4
To: Mary Ross, CEO.
From: Nu Lee, Management Accountant
Date: 19 May 20YY
Re: Website Replacement

As requested I have undertaken a review of the Tagus Business Unit encompassing its business model and website. I am aware that you are of the opinion that the website should not be replaced. However, I have come to the conclusion that it should be replaced and discuss these reasons in a) below. Additionally, in part b) I appraise benchmarking options that have been suggested as possibly being appropriate if replacement of the website is approved.

(a) In this context, it is my opinion that it is not realistic to believe that there is "no need" to replace the old website. I have confirmed that the volume of website traffic has been declining, and this is expected to continue (to the point where the site is no longer viable, in the view of the manager of Tagus). This reduction in website traffic will impact adversely on the ability to generate advertising revenue and additional business or spin-off traffic for Interactive's other business units.

It is true that more complex and comprehensive controls will be required because the new business model is inherently more complex. With the old website there was only type of significant cost to be controlled (viz., website maintenance) and no subscription revenue. The only major control needed on the revenue side was to measure and maintain website traffic numbers and then use this information to negotiate advertising sales.

By contrast, with the new website, the following "new" control issues arise:

- The need to manage subscription revenues, including generating additional subscriber numbers and optimising prices.

- The need to monitor website usage by subscribers (e.g., since low users are likely not to renew their membership) and use this information to make decisions about what content to provide.

- The need to make capital investment decisions about the commissioning of new content, and operational cost/benefit about the purchase of rights.

- The need to invest in technologies to effectively control password protection and secure online payments.

The fact that new control challenges will arise is not a reason to decide not to pursue the idea of the new website. By responding effectively to the control challenges, Tagus has an excellent business opportunity to replace an existing website which seems to be coming to the end of its commercial life. It is my recommendation that the website is replaced.

(b) Internal benchmarking:
This involves comparison of one business unit with another unit of the same organisation, especially as part of "rolling out" of process improvements or of a highly structured business model. It is less about benchmarking in a true sense (which by definition involves "trying to improve") than about trying to replicate an existing process which is already perceived as optimal.

In this case, internal benchmarking would seem to be neither useful nor feasible. The business model underlying the new website is (by design) very different from the old one precisely because the old one is no longer perceived as commercially viable. Few (if any) lessons from the old website can be used in the roll-out of the new one.

Competitive benchmarking:
This involves benchmarking against a direct business competitor. Any other firm which provides users with access to corporate training resources would be a "competitor" in this sense, irrespective of whether the resources are provided online or in physical copy and whether they provided on a subscription or other basis.

This would be very useful to the extent that it would enable Tagus to learn from (and replicate) a competitor's success in one or more key processes. It is likely to require the competitor's explicit cooperation and therefore is most likely to be feasible if there is potential for mutual gain. For example, Tagus might simply pay a publisher of accountancy training manuals for access to their customer satisfaction survey instruments and research techniques. Furthermore, since Tagus will be buying in training materials from developers who will presumably be distributing them by other means (and in that sense will be “suppliers” as well as being “competitors”) in this case it is actually in the interest of these “competitors” to see Tagus’s new business model succeed.

Functional benchmarking:
This type of benchmarking is carried out with another business partner where there are common business processes but no competition between the firms involved because of the markets they serve.

In this case, functional benchmarking would be both useful and feasible because suitable benchmarking partners exist. An obvious example is Netflix, which provides consumers with access to mainly entertainment videos using a website very similar to that proposed for Tagus. There is no direct competition because of the very different types of content (corporate training versus entertainment). But many of the business processes and control issues are similar, including approaches to managing subscription revenues, monitoring of members’ usage, decisions about content to purchase and commission, and technologies for controlling access and securely processing online payments.

I will be pleased to discuss any of the contents of this report or undertake any further analysis that you may require.

Nu Lee, CPA.

Tutorial notes

- *Purpose of question*: To test candidates’ ability to apply their knowledge of current developments in strategic performance management, especially developments in information technology / e-commerce and benchmarking (Syllabus Topic 5) in the context of a business unit which is contemplating a fundamental redesign of its website and business model.

- *Options:* There is considerable scope for variation in the specific points which could validly be made in the answer to both parts.

- *Essential components:* In part (a) it is essential to assess the fundamental limitations of the existing website as a business model. In part (b) it is essential to appraise the extent of the usefulness and feasibility of the three approaches to benchmarking in the specific context of the new website.

SOLUTION 5

(a) Advantages of Neva's low-cost strategy:

- "Low cost" is a highly effective strategy when (as in this case) buyers are very price-sensitive.

- "Low cost" is highly effective when it is not obviously possible or desirable to achieve credible production differentiation. It is in the nature of many of these products that retail buyers expect them to "just work as they should"; apart from avoiding sub-par products buyers are likely to regard most products of any one type as largely generic and therefore price is likely to be the deciding factor in any purchase decision.

- Where (as in this case) the market consists of large and powerful buyers, "high cost" manufacturers cannot survive profitably, given the low prices these buyers will pay. The only way for a manufacturer to earn adequate profit is to keep its own costs low.

Disadvantages of Neva's low-cost strategy:

- "Low cost" is a difficult position to maintain over time. In any industry only one firm can be the cheapest, so it is necessary to consistently identify any cost savings which competitors may be achieving.

- Technological or market changes can make a cost leadership strategy ineffective. For example increased availability of cloud storage and falling charges for data services from Internet service providers may mean that buyers are less concerned with the internal storage capacity of their mobile computing devices and are therefore less interested in SD cards or OTG adapters.

(b) Since Neva has a very clearly defined low-cost strategy in its industry, it should be possible to derive a set of key performance indicators (KPIs) for the various sections of the balanced scorecard. These KPIs should be chosen so that their pursuance and achievement will be conducive to achievement of the strategic goals.

Financial perspective:
Example KPI = unit production cost for each device (e.g., per OTG adapter). Buyers are highly price-sensitive, so low production cost is key to being able to maintain high market share while maintaining profit margins. Of course low cost alone is not sufficient for success so this metric is complemented by metrics elsewhere in the balance scorecard (see below).

Customer perspective:
Example KPI = delivery cycle time. Neva is selling to other businesses who in turn need to be able to fulfil promptly the expectations of their own customers (i.e., consumers) when there is consumer demand. Otherwise Neva's customers' own market share would be threatened. If Neva failed to perform well in relation to delivery cycle times then its customers would likely begin to source products elsewhere.

Learning and growth perspective:
Example KPI = speed at modifying product designs. Neva's products are (by their nature) relatively basic in their technology. But the strategy as described by the Neva manager is one of "high relative quality" since Neva aspires to provide buyers with high quality insofar as this is consistent with the price. For example, market conditions dictate that (for a price) customers buying an SD card today should be able to obtain one with higher storage capacity and faster speed than would have been available for the same price 3 or 4 years ago. Neva needs to be able to keep pace with this need for technological evolution without raising costs significantly if it is to retain and expand its customer base.

Internal process perspective:
Example KPI = first pass yield. High quality of manufacturing processes is conducive to low unit product cost, ability to adhere to timely customer delivery schedules, and low external product failure rates.

Tutorial notes

- *Purpose of question:* To test candidates' ability to design a performance management model (using the balanced scorecard) around a company's low-cost, high relative quality strategy, and to identify the advantages and disadvantages of that strategy (Syllabus Topic 4).

- *Options:* There is scope for variation in the examples of KPIs which could be provided in the answer to part (b). Also, valid alternatives to the advantages and disadvantages given in the model solution to part (a) are acceptable.

- *Essential components:* In the answer to part (b) it is essential that the examples of KPI provided are measureable and are determined by reference to the strategy of the business unit, and that the linkages between the sections of the balanced scorecard are made explicit. In part (a) it is essential that the advantages and disadvantages of the low-cost strategy are explained in terms of the specific case of the Neva business unit (and not merely in a generic sense).