CASE STUDY

Digital Future Technologies (DFT)[1]

(70 minutes)

revised by Sylvie Deslauriers

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1 The DFT case study is subject to an extensive analysis in the following volume: Deslauriers Sylvie, *Accounting for Success The Guide to Case Resolution*, AB + Publications, 2019. (www.ABplusPublications.com)

CASE STUDY (70 minutes)

Digital Future Technologies (DFT) is a public technology company. It has a September 30th year-end, and last year it adopted International Financial Reporting Standards (IFRS). Kin Lo is a partner with Hi & Lo, the accounting firm that was newly appointed as DFT's auditor in July for the year ending September 30, 2018. DFT's previous auditor retired. Kin met with the CFO, Anna Rather, to gather information on the business, and has completed the client acceptance procedures and initial audit planning.

It is now September 12, 2018. You, CPA, work for Hi & Lo. Last week, Kin provided you with the notes that he took in his initial meeting with Anna (Exhibit I). You met with Anna a couple of days ago to find out what has happened at DFT since Kin's meeting, and have summarized your discussion in Exhibit II. Anna gave you updated projected results for September 30, 2018 (Exhibit III).

Kin asks you to prepare a memo summarizing the accounting issues of significance, and to discuss their impact on the year-end audit planning and the procedures to be performed. He is particularly concerned about issues that affect earnings because management is anticipating a more profitable year than previous years. Management is now part of a new bonus program that is based on earnings before interest, income taxes, depreciation, and amortization (EBITDA). The bonus begins to accumulate once EBITDA exceeds $14 million.

CASE STUDY (continued)

EXHIBIT I

NOTES FROM KIN'S INITIAL MEETING WITH ANNA — JULY 8, 2018

Knowledge of the Business

DFT manufactures electronic components for telephone and cable in both the wired and wireless markets. While quarterly sales can be quite variable due to inconsistent demand, the company has grown significantly over the past few years. It must constantly reinvest in research and development to ensure that its products remain relevant and can integrate with the latest technology.

A new growth market in the industry is the development of equipment that can convert transmissions from analog to digital signals. The equipment allows companies to maximize their transmissions through the bandwidth of existing infrastructure. DFT is anticipating completion of Zeus, a new product that is targeted to this growth market and is expected to be the first of its kind on the market, by mid-August.

A new bonus program was instituted at the beginning of fiscal 2018 with the objective of motivating management to contribute to profitability by being innovative and developing new products.

Planning

Materiality is currently estimated to be $406,550, based on 5% of preliminary net income before tax of $8,131,000.

Revenue Recognition

Product: Most revenue relates to product sales. Revenue is recognized once the products are shipped, assuming collection is reasonably assured. DFT targets an average margin of 40%.

Service: DFT also has non-recurring engineering (NRE) revenue, which it expects to be $1.5 million by year-end. Customers pay DFT to research and develop add-on components for existing DFT products. In most cases, DFT is not required to do anything beyond the initial engineering phase, NRE revenue is therefore recognized as soon as the work for the specific component is complete. DFT targets a margin of 60%.

CASE STUDY (continued)

EXHIBIT II

NOTES FROM CPA'S MEETING WITH ANNA — SEPTEMBER 10, 2018

A number of events have occurred since July that gave rise to revisions to the projected results for the year ending September 30, 2018.

Non-Recurring Engineering (NRE) Contract

DFT has booked a total of $2.5 million in NRE revenue. The amount exceeds expectations because DFT had additional NRE revenue in July that was worth $1 million.

The customer only accepted our normal price on the NRE portion because DFT agreed to provide a discount in fiscal 2019 of $225,000 on product sales with a usual selling price of $750,000. Of the total contract, the $1 million NRE revenue portion was recorded in the current year's projection as the work was completed before the September 15, 2018 deadline.

Indo-Tech

DFT had been negotiating since early in 2018 with Indo-Tech (Indo), a major customer based in India. The deal described below was signed.

DFT and Indo have contracted with Safe Storage, an unrelated third-party warehouse in India. Indo provided DFT with its forecasted production needs by component and the dates the components are required to be at the warehouse. DFT must ensure that the components arrive at the warehouse in time. Inventory stored at the warehouse is owned by DFT. Safe Storage must notify DFT when Indo takes components from the warehouse, and ownership of the inventory transfers to Indo once it is taken. At no time shall inventory remain in the warehouse for more than 60 days. Any inventory not taken within 60 days of arrival is considered sold to Indo and shall be segregated for removal by Indo as soon as possible.

A minimum of $1.5 million in components inventory had to be at the warehouse by June 30, but nothing was taken by Indo from the warehouse until August 2. DFT could only recognize the $1.5 million in revenue at that time. Because DFT had not included the sale in the projection done on July 8, the sale was picked up in the revised projection. Since August 2, DFT has sold another $1.85 million in components and shipped them to the warehouse. Based on Indo's forecasted needs, DFT will not be shipping any more components prior to year-end. Indo has not taken out any of the $1.85 million in inventory that is in the warehouse, but DFT is confident it will do so and has recorded the revenue.

EXHIBIT II (continued)

NOTES FROM CPA'S MEETING WITH ANNA — SEPTEMBER 10, 2018

Zeus

Due in part to the focus on the above NRE project, as well as unanticipated technical difficulties, development of the new product, Zeus, was delayed. DFT will likely only realize total sales of $300,000 for Zeus by year-end. It will also likely have $400,000 of units in inventory at year-end. However, production has just begun. Due to this delay, Anna is considering selling the product Zeus at a reduced price, fearing that a competitor might do so before DFT.

Research and Development

DFT defers and amortizes eligible development costs. Deferral ceases once a product is ready for market, and the costs are amortized over the estimated life of the product, generally three years or less. DFT successfully pursued government funding for research and development of Zeus. The funds received from the grants for Zeus, totalling $800,000, were not anticipated in the July projection, and have now been included in revenue. Approximately 75% of the related development costs remain in deferred development costs.

Other

DFT has incurred an impairment loss of $100,000 on production equipment that is becoming obsolete. The impairment loss has been included in amortization of capital assets.

Based on the revised projection for September, Anna believes that everyone in the program will receive a bonus. Therefore, she will accrue an estimate of $300,000 before year-end and needs to adjust the projection. However, Anna asked Kin to confirm the EBITDA that is used as the basis for bonus' calculation.

Memo from Kin for the file: Anna seems particularly concerned by the impact of the adjustments and errors regarding to the EBITDA on the management bonus program.

CASE STUDY (continued)

EXHIBIT III

PROJECTED NET INCOME FOR THE YEAR ENDING SEPTEMBER 30, 2018
(in thousands of Canadian dollars)

	Sept. 30, 2018 Original Projection (prepared on July 8, 2018)	Note	DFT Adjustments	Note	Sept. 30, 2018 Adjusted Projection (prepared on Sept. 10, 2018)
Revenue	$ 55,274	1	$ 3,950	5	$ 59,224
Cost of sales	31,942	2	1,930	5	33,872
Gross margin	23,332		2,020		25,352
Operating expenses:					
Research & development	4,441	3	–		4,441
Sales and marketing	2,622		–		2,622
General & administrative	7,824	4	100	6	7,924
Interest	314		–		314
Total operating expenses	15,201		100		15,301
Income before taxes	8,131		1,920		10,051
Income taxes (30%)	2,439		576	7	3,015
Net income	$ 5,692		$ 1,344		$ 7,036
EBITDA (for bonus calculation)			to be determined		

Notes *(also in thousands of Canadian dollars)*
Initial projection notes (as of July 8):

1) Revenue includes anticipated sales of $1,500 for the new Zeus product. The related costs are reflected in cost of sales.
2) Cost of sales includes cost of Zeus product and projected amortization of $430 for production-related assets.
3) Research and development expenses include projected amortization of $1,620 related to deferred development costs.
4) General and administrative expenses include projected amortization of $2,995 related to capital assets.

Revisions to projection (as of September 10):

5) Revenue and cost of sales
   - For new NRE revenue, sales have been increased by $1,000, and cost of sales has been increased by $400 (based on 60% gross margin). Nothing was booked for the product sales since they only occur in 2019. For Indo, sales have been increased by $3,350 ($1,500 + $1,850), and cost of sales has been increased by $2,010 ($900 + $1,110) (based on 40% gross margin).
   - Government grants of $800 were recorded in revenue.
   - For Zeus, sales have been decreased by $1,200 and cost of sales has been decreased by $480 (based on 40% gross margin) due to lower than projected sales.
6) Impairment loss related to production equipment is $100.
7) Tax provision has been adjusted by $576.

CASE STUDY

Digital Future Technologies (DFT)[1]

MARKING GUIDE

(70 minutes)

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MARKING GUIDE
CASE STUDY – DIGITAL FUTURE TECHNOLOGIES
ASSESSMENT OPPORTUNITIES

Readers are cautioned that the marking guides were developed for the entry-level candidate and that, therefore, all the complexities of a real-life situation may not be fully reflected in the content. The CFE report is not an authoritative source of GAAP.

In addition, the* Handbook *sections referenced in this suggested solution are intended for learning purposes only. While candidates are expected to apply the guidance in the* Handbook *when analyzing financial reporting and assurance issues, they are not expected to directly quote from the* Handbook. *Candidates who choose to quote* Handbook *sections are reminded that no credit is given unless the quotation is integrated into a meaningful analysis and applied to the relevant case facts.

To: Kin Lo, Partner
From: CPA
Subject: Memo regarding DFT

Attached is my memo describing the accounting issues relevant to Digital Future Technologies (DFT). I have also identified the impact of these issues on our audit and our planned procedures. You indicated that you were concerned about the impact of any accounting issues on income due to the new management compensation plan that is based on EBITDA. A number of the issues I have discussed have an impact on interest, taxes, depreciation and amortization, or elements included in earnings before tax. As a result, I have explained the impact of issues on EBITDA as applied in the bonus calculation.

I believe you will need to speak with Anna as soon as she is available with respect to the bonus. In my conversation with her, she explained that she was confident management would be getting its bonus and planned to accrue an estimated amount. Anna seemed particularly concerned by the impact of the adjustments and errors regarding to the EBITDA on the management bonus program. Based on my revised projected income, management may not meet the threshold amount, and therefore would not obtain a bonus.

As a Canadian public company, DFT is subject to reporting under IFRS, which it adopted previously. I have identified a number of accounting issues, many of which will significantly affect the projected results for the year, which in turn will directly affect the bonus amount, and could also lead to material misstatement of the financial statements.

Assessment Opportunity #1
The candidate discusses the revenue recognition for the Non-Recurring Engineering (NRE) Contract.
The candidate demonstrates competence in Financial Reporting.

CPA	Competencies	Common Module
1.2.1	Develops or evaluates appropriate accounting policies and procedures.	A
1.2.3	Evaluates treatment for non-routine transactions.	B

Revenue Recognition

Non-recurring engineering (NRE) contract

NRE represents a significant revenue stream. DFT has booked a total of $2.5 million in NRE revenue. The first $1.5 million in NRE revenue, which appeared to have no further obligations beyond the initial engineering work, was appropriate to recognize under IFRS 15, *Revenue from Contracts with Customers*, as it had been fully earned.

However, the latest arrangement differs from previous NRE revenue. DFT obtained NRE work in July for $1 million. The difference is that the customer only agreed to the normal price on the NRE portion because DFT agreed to provide a $225,000 discount, on product that usually sells for $750,000, on sales in the 2019 fiscal year. The NRE revenue would not have occurred without this concession by DFT. Therefore, the NRE revenue is linked to the future sales of product. IFRS 15, paragraph 81, provides the following guidance regarding the allocation of a discount:

A customer receives a discount for purchasing a bundle of goods or services if the sum of the stand-alone selling prices of those promised goods or services in the contract exceeds the promised consideration in a contract. Except when an entity has observable evidence in accordance with paragraph 82 that the entire discount relates to only one or more, but not all, performance obligations in a contract, the entity ***shall allocate a discount proportionately to all performance obligations in the contract****. The proportionate allocation of the discount in those circumstances is a consequence of the entity allocating the transaction price to each performance obligation on the basis of the* ***relative stand-alone selling prices*** *of the underlying distinct goods or services.*

The NRE revenue should have a portion of the discount applied to it, since the amount being charged is determined in conjunction with the pricing of other elements (the product sales) of the transaction. The total gross sales value is $1.75 million ($1 million NRE plus $750,000 product). Since DFT provided a discount of $225,000 on the product sale in order to get the entire contract, a portion of the discount should be attributed to the NRE revenue. As a result, a portion of the $1 million NRE revenue that would otherwise be recognized must be deferred.

The percentage of the contract performed before year-end, based on revenues $1 million divided by $1.75 million, is 57%. DFT should therefore allocate 57% of the discount to the NRE part of the contract by deferring 57% of the discount amount of $225,000 ($128,571).

The reduction in revenue is significant, although not material on its own, in terms of the financial statements audit (see recalculation of materiality). The net reduction will have a direct impact on the bonus calculation (EBITDA).

(Certain candidates are not aware that the IFRS 15 outlines particular rules for the allocation of discounts, and have not understood that the multiple performance obligations for the contract must be taken into account to allocate the total price of a transaction. Because the discount was linked to future product sales, it should have been considered as part of the transaction that included the NRE $1 million revenue. Some candidates instead focused on the fact that the discount had not been recorded and that it should be reflected in the financial statements of the current year. Strong candidates recognized the underlying substance of the arrangement and understood that the two sales transactions should be looked at as a whole, and applied case facts to support their technical understanding. Those candidates properly allocated the discount over a rational basis between 2018 and 2019.)

For Assessment Opportunity #1, the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the revenue recognition for the non-recurring engineering contract.

Competent – The candidate provides a reasonable discussion of the revenue recognition for the non-recurring engineering contract.

Competent with distinction – The candidate provides an in-depth discussion of the revenue recognition for the non-recurring engineering contract.

Assessment Opportunity #2

The candidate discusses the revenue recognition for the components shipped to Indo-Tech.

The candidate demonstrates competence in Financial Reporting.

CPA	Competencies	Common Module
1.2.1	Develops or evaluates appropriate accounting policies and procedures.	A
1.2.2	Evaluates treatment for routine transactions.	A

Revenue recognition

Indo-Tech (Indo)

DFT manufactures electronic components for telephone and cable in both the wired and wireless markets. The company had been negotiating since early in 2018 with Indo-Tech (Indo), a major customer based in India. The deal was signed.

IFRS 15, *Revenue from Contracts with Customers*, provides guidance regarding the identification of performance obligations. According to paragraph 27:

A good or service that is promised to a customer is distinct if both of the following criteria are met:

- *(a) the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (ie the good or service is capable of being distinct); and*
- *(b) the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (ie the promise to transfer the good or service is distinct within the context of the contract).*

In the current situation, the components provided by DFT are interchangeable goods that do not seem to have been adapted or modified (standard components) to meet Indo's needs. There also does not seem to be any link between the two deliveries. The use of the first delivery's components is not linked to the use of the second delivery's components, and *vice-versa*. Also, nothing implies that DFT must offer additional services when selling these products. Each component delivery is thus a distinct performance obligation.

The arrangement with Indo is structured in such a way that revenue is earned either when Indo takes possession of the inventory or when 60 days have elapsed from receipt at the third-party warehouse. As a result of the agreement in place, all of the $1.50 million related to inventory shipped by June 30 could be recognized by September 30, even if Indo had not taken the inventory on August 2. Per paragraph 31 of IFRS 15, it is appropriate to recognize the revenue since control of the goods has been transferred to the third party Indo.

An entity shall recognise revenue when (or as) the entity satisfies a performance obligation by transferring a promised good or service (ie an asset) to a customer. ***An asset is transferred when (or as) the customer obtains control of that asset.***

According to IFRS 15, paragraph 38, it is safe to say that Indo gains control of components when the physical possession of the asset (subsection *(c)*) as well as the significant risks and rewards of ownership of the asset are transferred to them (subsection *(d)*). The client then acquires the ability to direct the use of, and obtain almost all of the remaining benefits from, the asset.

However, the remaining $1.85 million of revenue related to the inventory shipped to the third-party warehouse cannot be recognized as revenue unless Indo takes the inventory by September 30, since 60 days will not have passed since its arrival at the warehouse (we don't know the exact shipping and arrival dates, but if we assume it was shipped on August 3, it is about 57 days at September 30). The only revenue that should be recognized by September 30 is the sales value of the items taken by Indo by September 30. The remainder of the items should be recorded in inventory at cost until the 60 days in the warehouse have passed. In this situation, according to the guidance provided by IFRS 15, subsection 15.38 *(b)*, it is safe to say that the client holds the legal title of property even though physical possession has not yet actually been transferred.

The agreement with Indo is an unusual one in that it passes title to Indo after 60 days for goods sitting in a warehouse. It seems unlikely that Indo would pay for goods it hasn't taken from the warehouse. If the goods sit in the warehouse and are not paid for, there may be issues of collectability (see IFRS 15.09 *(e)*).

(Many candidates addressed this issue, and most were able to apply simulation facts to their discussions. However, some candidates failed to recognize the significance of the 60 days in inventory at Safe Storage, and considered only the transfer of risks and rewards in their discussions. As a result, they concluded that since Indo had not taken the inventory, the sale should not have been recorded.)

For Assessment Opportunity #2, the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the revenue recognition for the components shipped to Indo-Tech.

Competent – The candidate provides a reasonable discussion of the revenue recognition issue for the components shipped to Indo-Tech.

Competent with distinction – The candidate provides an in-depth discussion of the revenue recognition for the components shipped to Indo-Tech.

Assessment Opportunity #3
The candidate discusses the grant related to research and development costs.
The candidate demonstrates competence in Financial Reporting.

CPA	Competencies	Common Module
1.2.1	Develops or evaluates appropriate accounting policies and procedures.	A
1.2.2	Evaluates treatment for routine transactions.	A

Zeus

Grant

The government grant revenue has been inappropriately recognized in full upon receipt. Paragraph 17 of IAS 20, *Accounting for Government Grants and Disclosure of Government Assistance*, states:

In most cases the periods over which an entity recognises the costs or expenses related to a government grant are readily ascertainable. Thus grants in recognition of specific expenses are recognised in profit or loss in the same period as the relevant expenses. ***Similarly, grants related to depreciable assets are usually recognised in profit or loss over the periods and in the proportions in which depreciation expense on those assets is recognised.***

Therefore, DFT's government grant of $800,000 would be related to depreciable assets, and therefore should be recognized in income over the period, and in the same proportion in which the depreciation expense on those assets is recognized (or it could be used to reduce expenses). Since 75%, or $600,000, of the related costs remain in deferred development costs (in the information from Anna), only $200,000 of the grant revenue should be recognized in income. The remaining $600,000 should be deferred and recognized in income as the related costs are amortized.

Currently, DFT has recorded all the grant monies in revenue (note, therefore, that there is a classification error). Revenue needs to be reduced by the full $800,000. Since $600,000 should be deferred, the remaining $200,000 is reallocated to research and development (R&D).

According to IAS 20, paragraph 24:

Government grants related to assets, including non-monetary grants at fair value, shall be presented in the statement of financial position either by setting up the grant as deferred income or by deducting the grant in arriving at the carrying amount of the asset.

Whichever the selected presentation method, the effect on the net income and the EBITDA will be the same. The amortization expense will be adjusted based on the $600,000 applied against the deferred development costs. DFT's policy is to amortize over a period of up to three years; therefore, the adjustment would be to amortize the grant over the same period of three years, resulting in an estimated amortization of $200,000 per year (note that the yearly amount then needs to be pro-rated for the portion of the year that applies).

I recommend that the amount be recorded as a reduction in related expenses, since it is clearly attributable to these expenses.

Note: Some of the grant received is likely for research rather than development. There would be immediate recognition of the grant income when the research costs were recognized, and the amortization amount would be adjusted accordingly.

(Most candidates addressed this issue. When addressed, it was generally well done. Candidates applied case facts to their technical knowledge and concluded on an appropriate treatment that was consistent with their analysis. Nevertheless, certain candidates have examined the value of Zeus inventory extensively, as the simulation data did not allow them to perform an integrated analysis.)

For Assessment Opportunity #3, the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the grant related to research and development costs.

Competent – The candidate provides a reasonable discussion of the grant related to research and development costs.

Competent with distinction – The candidate provides an in-depth discussion of the grant related to research and development costs.

Assessment Opportunity #4

The candidate analyzes the management bonus issues.

The candidate demonstrates competence in Financial Reporting.

CPA	Competencies	Common Module
1.2.1	Develops or evaluates appropriate accounting policies and procedures.	A
1.2.3	Evaluates treatment for non-routine transactions.	B
1.3.1	Prepares financial statements.	A

Management Bonus

DFT has a new bonus plan this year. The $300,000 about to be accrued by Anna for the management bonuses cannot be booked until certain requirements are satisfied. It is contingent on achieving the set amount of EBITDA.

In this case, the issue is whether the entity has a present legal obligation or a constructive obligation. Based on IAS 19 paragraphs 17 to 20 and IAS 37, there does not appear to be a legal obligation yet because the terms of the bonus have not been met. The question is whether the bonus might be considered a constructive obligation. Because this bonus plan was not in place in the past, it does not look like there is a constructive obligation either. The bonus might be considered a provision. However, there is no guarantee that the minimum EBITDA will be met; therefore, no accrual should be made at this point. If the conditions are met at September 30, then a provision can be booked.

(Very few candidates considered whether the management bonus represented a legal obligation or a constructive obligation. More candidates concluded on whether the bonus threshold would be met, usually as a result of their recalculation of the adjusted net income and the EBITDA calculation.)

Adjusted Net Income for the Year Ended September 30, 2018 (in thousands)					
		DFT adjusted projection	Accounting adjustments	Note	Revised projection
Revenue		$ 59,224	(2,779)	A1, A3	$ 56,445
Cost of sales		33,872	(1,010)	A1, A4	$ 32,862
Gross margin		25,352	(1,769)		$ 23,583
Operating expenses					
Research and development		4,441	(200)	A2, A3	$ 4,241
Sales and marketing		2,622	–		$ 2,622
General and administrative		7,924	(100)	A4	$ 7,824
Interest		314	–		$ 314
Total operating expenses		15,301	(300)		15,001
Income before taxes		10,051	(1,469)		$ 8,582
Income taxes		3,015	(441)	A5	$ 2,574
Net income		7,036	(1,028)		**$ 6,008**

Notes:

Note A1

- Sales have been reduced by $129,000 for 57% of the NRE discount of $225,000.
- Sales have been reduced by $1.85 million not yet earned for the Indo shipment. Cost of sales has also been adjusted by $1.11 million based on the 40% product margin (assumed same margin).

Note A2

- Research and development expenses have been decreased by $200,000 for the grants reallocated from revenue.

Note A3

- Sales have been reduced by $800,000 for government grants since they cannot be accounted for as revenue. Along with the related deferred development costs, $600,000 should be deferred. The remaining balance of $200,000 has been moved to R&D expenses. (Amortization would need to be adjusted too — if amortized over three years, then there would be $200,000 ($600,000 ÷ 3) more in amortization, which would then also be pro-rated for the portion of the year.)

Note A4

- DFT recorded $100,000 for impairment of assets. According to IAS 2 *Inventories*, paragraph 12, this should be included in cost of sales (assets used in the production process), not general and administrative expenses, and should not be considered amortization. Therefore, move $100,000 from general and administrative to cost of sales.

Note A5

- Using an estimated tax rate of 30%, there should be a reduction of $440,700 for the accounting adjustments ($1,469,000 × 30%).

Earnings before interest, taxes, depreciation and amortization (EBITDA)				
based on revised projected net income				
	Per DFT July projection	**Adjusted DFT projection**	**After accounting adjustments**	**COMMENTS**
Income before taxes	$ 8,131	$ 10,051	$ 8,582	(as adjusted-- see previous worksheet)
Add back:				
Interest	314	314	314	
Amortization of production-related asserts	430	430	430	
Amortization of deferred development costs	1,620	1,620	1,620	
Adjustment to amort of def dev costs (Note 1)			(200)	related to deferral of government grant portion (600K/3yrs estimated)
Amortization of capital assets	2,995	2,995	2,995	
EBITDA for bonus calculation	$ 13,490	$ 15,410	$ 13,741	Min to get bonus is $14 millions
Gross margin of 40% on $1,850 Indo Shipment (if happens before Sept 30)			740	If Indo takes delivery before Sept 30, bonus could be achieved
			$ 14,481	Management would get bonus again
Note: Need EBITDA if $14 million for management to get bonus				
Further adjustments may be required – additional info could be necessary				
Zeus – Consideration if value of project (i.e., Is there any?).			Unknown	Need more information to determine
Note 1 – Development costs amortized over estimated life of product, generally 3 years or less.				

For Assessment Opportunity #4, the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to analyze the management bonus issues.

Competent – The candidate provides a reasonable discussion of the management bonus issues.

Competent with distinction – The candidate provides an in-depth discussion of the management bonus issues.

Assessment Opportunity #5

The candidate identifies the impact of the accounting issues on the planning of the audit.

The candidate demonstrates competence in Assurance.

CPA	Competencies	Common Module
4.3.1	Assesses issues related to the undertaking of the engagement or project.	B
4.3.4	Assesses materiality for the assurance engagement or project.	B
4.3.5	Assesses the risks of the project, or, for audit engagements, assesses the risks of material misstatement at the financial statement level and at the assertion level for classes of transactions, account balances, and disclosures.	B

We have been newly appointed as auditors (done in July 2018), and we are preparing for the year-end financial statement audit. Based on a review of the accounting, there are a number of issues related to DFT that must be taken into account in the planning and performance of our audit.

Materiality

First, we need to determine if our preliminary calculation of materiality of $406,550 is still appropriate. Based on the revised forecast that includes the accounting adjustments, I believe an adjustment will be necessary. Materiality was initially estimated in July to be $406,550 based on 5% of preliminary net income before tax of $8,131,000 (using CAS 320 A4 and A7). Per paragraph A14, "*[I]f during the audit it appears as though actual financial results are likely to be substantially different from the anticipated period-end financial results that were used initially to determine materiality for the financial statements as a whole, the auditor revises that materiality*." Consequently, my revised estimate, calculated on the same basis but taking into account the accounting adjustments noted (5% of $8,582,000) is $429,100. Based on these calculations, overall materiality should be slightly increased.

Preliminary materiality for the financial statements as a whole was calculated during our initial audit planning, but it is not clear whether we also calculated a performance materiality.

In addition, it may be well advised to set a separate materiality (at a lesser amount) on those areas affecting EBITDA directly, as well as considering a performance materiality for those areas of concern, due to the increased user reliance from management for purposes of the bonus calculation.

As the results become more definitive after year-end, and as we accumulate audit adjustments, we should revisit materiality to ensure we have done sufficient, appropriate audit work to support our opinion. As we encounter unadjusted errors like those noted earlier, we should request that management adjust them.

(Some candidates were able to integrate their analyses of the accounting issues with the impact of these issues on the initial audit planning that had been done, and recognized that materiality would have to be revised. Strong candidates performed calculations to determine a new materiality level, in light of the accounting changes recommended. Some of those candidates also considered the need for a performance materiality or a materiality for areas affecting EBITDA directly, or for both. Weak responses did not address this aspect of the initial audit planning at all, despite the information in the simulation from the July 2018 meeting stating that materiality was currently estimated to be $406,550.)

Risk Assessment

In addition to revisiting materiality, we should revisit our risk assessment. The auditor is required to document (Ref: CAS 315.32) an assessment of the risk of material misstatement at the financial statement level and at the assertion level (Ref: CAS 315 paragraphs 25, A122 & A126).

At the financial statement level, many events will have to be taken into account when we plan our procedures. Regarding the nature of the business, we know that DFT is a technology company who relies heavily on research and development to ensure its products remain relevant (product life is generally three years). DFT might have a tendency to add costs to the asset that do not meet the capitalization criteria, which will have a direct effect on bonus calculations.

DFT has had some changes occur over the year that resulted in new types of revenue contracts (Indo and the unique NRE contract). The company has contracted a new arrangement with a third-party warehouse located overseas, which entails a significant risk concerning revenue recognition, and in a collateral matter on the quantities and values of the Inventory item.

In 2018, DFT has received government grants for research and development. Again, due to the bonus program, DFT may wish to prematurely record the received funding as revenue. Furthermore, DFT has delayed production of its new product, Zeus, and Anna is considering reducing the sales price of manufactured components, which could undermine their value. Since 75% of deferred development costs are linked to the product Zeus, a potential change in DFT's plans could imply depreciation of these costs, and thus have a significant impact on financial statements.

We do not have much information on DFT's control environment and will need to spend some time documenting systems to gain a full understanding.

(Few candidates considered the impact on risk of the new information that was provided subsequent to the July 2018 initial meeting with Anna.)

Approach

Only once we have examined the control environment will we be able to determine if we can rely on the system and take a control-based approach to the audit. In addition, we may wish to perform additional procedures in areas that have been identified to be of concern in our previous accounting discussion (for example, revenue recognition relating to Indo transactions and NRE revenue).

I presume that the initial audit planning has already contemplated the work that will need to be done to gain assurance over the opening balances, since we did not do the audit of the prior year's financial statements (as per CAS 510).

(Candidates were directed to this assessment opportunity since the partner had requested a memo discussing the impact of the accounting issues of significance on the year-end audit planning. The simulation stated that the initial audit planning had been completed.)

(Candidates performed below expectations on this assessment opportunity. Many candidates failed to consider the various aspects of the audit plan and instead focused solely on the materiality calculation, since the initial level of materiality had been provided in the simulation. What most candidates were missing was a discussion of how the audit risk might be affected by the events that had occurred since

the initial planning was performed.)

(Better candidate responses often contained stronger planning discussions, considering both the impact of the accounting issues as well as the impact of new developments within the client situation, subsequent to the July meeting, on the various components of the audit plan.)

For Assessment Opportunity #5, the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the impact of the accounting issues of significance on the year-end audit planning (materiality and risk assessment).

Competent – The candidate discusses reasonably the impact of the accounting issues on the year-end audit planning (materiality and risk assessment).

Competent with distinction – The candidate discusses in-depth the impact of the accounting issues on the year-end audit planning (materiality and risk assessment).

Assessment Opportunity #6
The candidate recommends audit procedures to be performed for the year-end audit.
The candidate demonstrates competence in Assurance.

CPA	Competencies	Common Module
4.3.6	*Develops appropriate procedures based on the identified risk of material misstatement.*	B

Procedures and Planning for Key Risk Areas Identified

Risk area	Assertion	Specific Risks	Procedures/Extent
NRE — revenue ($1,000,000 engineering and $750,000 product sales)	Occurrence, accuracy, cut-off, and classification	Risk that conditions for revenue recognition are not met.	Obtain a copy of the latest contract (the unique one) and review the conditions related to earning the revenue to gain an understanding of when and how much revenue can be recognized in 2018. Consider evidence that supports the need to defer any revenue (i.e., a link to product sales). Verify the completion date for the NRE portion (Sept. 15) while asking questions to the project manager or by agreeing to the final approbation document. Verify the margins achieved by the contract, and check that the financial statements reflect the substance of the transaction (defer a portion of discount of $225,000 on normal sales of $750,000). Review the calculations of the revenue to ensure they have been recorded in the proper period and at the right amount to ensure proper cut-off.
Indo-Tech — revenue	Cut-off, completeness, occurrence, and classification	Risk that inventory is recorded prematurely as being sold (since goods get shipped to a third-party warehouse) — consider management's bias to inflate earnings; contract has a 60-day clause that could affect recognition/cut-off.	Ensure that the proper amount of revenue is recorded related to Indo sales by reviewing compliance with contract terms (inventory not taken within 60 days). Assess the agreement signed with Indo-Tech to verify if other goods or services have been promised in addition to the delivered components. Agree the shipments from DFT to the third-

Risk area	Assertion	Specific Risks	Procedures/Extent
		Need to track shipment dates from DFT to know when to recognize revenue.	party warehouse to shipping documents/proof of shipment to Indo from warehouse.
Indo-Tech — inventory ($1,850,000 or $0 depending on circumstance)	Occurrence, completeness, accuracy, cut-off, and classification	As stated, risk that goods should be recorded as inventory, not a sale; risk that off-site inventory doesn't actually exist (falsified inventory).	We should attempt to confirm the existing inventory sitting at the third-party warehouse at year-end — we will need to communicate with Safe Storage as soon as possible to ensure the amount can be confirmed at Sept. 30. We should also confirm with Indo-Tech what it believes the amount in the warehouse is, if it has not all been taken by them. We may wish to visit the warehouse site ourselves to determine if there is inventory there (i.e., Indo does not take out any of the $1,850,000 in inventory that was shipped by DFT).
R&D (amount unknown) — Zeus (delays in bringing to market; selling Zeus at a reduced price)	Valuation and classification	Risk that future economic benefits are lower than anticipated and that costs can no longer be deferred.	Discuss with management the likelihood of bringing Zeus to market. DFT will likely only realize total sales of $300,000 by year-end, but has only just begun production. It is possible that DFT does not sell as much as planned. Also risk of lower margin since it may be needed to lower the sales price.
Government funding — Zeus (grant of $800,000 received for encouraging technical research and development)	Occurrence, completeness, accuracy, cut-off, and classification	Risk that terms and conditions of the grant are not met and funds should be returned to government; risk that split between deferred amount is not correct; risk of amount being deferred over an incorrect period of time.	We should check the documentation and agreements related to government funding to ensure the terms and conditions are met and that monies have been received prior to year-end (event occurred after July projection). Ensure grants are not recognized until the conditions of the grant are met. Verify the portion deferred (and being amortized) as part of development costs — DFT claims 75% of related development costs remain in deferred costs. Ensure any research monies received as part of grant were not deferred. In addition, obtain an understanding of the products to which the funding relates and trace these to the products in deferred development costs, to ensure the appropriate amount is deferred, and the appropriate classification - either expense or capital.

Risk area	Assertion	Specific Risks	Procedures/Extent
			Verify amortization calculations (policy is to defer development costs over a maximum of 3 years); ensure grant is being amortized over same period and is properly adjusted for a partial year.

(Candidates were asked to suggest procedures to be performed. To demonstrate competence, candidates were expected to discuss some of the audit procedures.)

(Candidates were generally able to provide clear and valid procedures to address the risks. To a lesser extent, some were also able to explain why the procedures were required. While the quantity of procedures addressed amongst candidates was comparable, strong responses included a more thorough discussion of the procedures and a concise explanation as to why they would be required. Many weak responses included vague or incomplete procedures or procedures that failed to address the problem identified (for example, vouching to journal entries, or inquiring of management but with no specifics as to what to inquire about).)

For Assessment Opportunity #6, the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to provide audit procedures.

Competent – The candidate provides a reasonable number of audit procedures.

Competent with distinction – The candidate provides several audit procedures.

Assessment Opportunity #7
The candidate analyzes the impact of the adjustments and errors regarding to the EBITDA on the management bonus program.
The candidate demonstrates competence in Strategy and Governance.

CPA	Competencies	Common Module
1.4.5	*Analyzed and predicts the impact of strategic and operational decisions on financial results.*	B
2.3.1	*Evaluates the entity's strategic objectives and related performance measures.*	B
3.7.1	*Analyzed the implications of management incentive schemes and employee compensation methods.*	B
4.3.1	*Assesses issues related to the undertaking of the engagement or the project.*	B

I had calculated the EBITDA based on an updated forecast from management, adjusted for accounting changes related to the transactions that occurred between July and September.

The projected results showed an EBITDA of close to $15.5 million. As a result, management is likely expecting to be well above the threshold of $14 million required for the bonus, and that appears to be why Anna has indicated she will accrue a $300,000 bonus.

However, based on the recommended accounting adjustments, adjusted EBITDA would be approximately $13,741,000, which is under the $14-million threshold. As a result, management will be very sensitive to any adjustments that are proposed since the bonus threshold is no longer met. We should make them aware of these adjustments as soon as possible.

Since management has the potential to earn additional compensation based on EBITDA, the members may have been biased to make decisions that increase EBITDA. In particular, they may have had a bias to recognize revenue sooner, buy versus rent equipment, capitalize expense items, and classify expenses into categories that get added back to the calculation, such as interest, taxes, or amortization. A number of the errors I have identified for adjustment have this impact.

Examples include the following:

Recognizing revenue sooner — Recognizing the Indo shipment even though Indo has not taken out the inventory yet, recognizing NRE margin that is partially connected to future product sales, and recognizing government grants when received although related to products still in development.

Capitalizing expenses — Continuing to defer development costs related to a specific product for which the commercial success might be less than expected.

Classifying expenses into categories added back for EBITDA — Including impairment related to production equipment in capital assets amortization expense.

All of the above accounting decisions worked in management's favour, and it seems that management has done whatever it can to manipulate the financial statements (in other words, it has used its bias in the selection of accounting policies when there were choices amongst alternatives or when decisions had to be made). This has been done in order to meet the EBITDA threshold and therefore obtain the bonus. We should question management's integrity and bring this to the attention of the board of directors.

Ironically, it may not be the decisions of management that result in a bonus being paid or not. It may well be the decision of Indo to take out inventory prior to September 30 that determines if management gets a bonus. If Indo takes the entire inventory shipment worth $1.85 million prior to year-end, DFT will be able to record $1.85 million of sales and $1.11 million of cost of sales (based on 40% gross margin), resulting in an increase of $740,000 to EBITDA, which will put it over the $14-million threshold. This type of item affecting the bonus may not have been anticipated when the plan was set up.

(Candidates were asked to discuss the impact of the adjustments and errors in EBITDA on the management bonus. To achieve competence, candidates were expected to discuss the potential for management bias towards a higher EBITDA due to the bonus. Candidates were not clearly directed to this assessment opportunity, although the partner did indicate his particular concern with issues that affect earnings because of the expectation of a more profitable year and the new management bonus program based on EBITDA.)

(Candidates performed as expected on this assessment opportunity. Many recognized that the bonus caused a bias on the part of management, and that the way transactions had been recorded was favourable to management. They were able to identify some of the inappropriate issues, such as revenue being recognized too early, and most were able to sufficiently explain the impact on the bonus calculation (early revenue recognition skews earnings in management's favour; therefore, earnings meet the bonus threshold and management receives a larger bonus). However, some candidates focused their discussions purely on the impact of management's bias on the extent of the audit work rather than linking that bias to the bonus.)

(Strong candidates were able to explain why management's accounting decisions were a concern (often after their discussion of the individual accounting issue) and then recognized the potential impact on DFT as a whole. These responses were clear, concise, and often summarized in one succinct section of the responses. Weak candidate responses merely repeated case facts without additional comments or recognition of the bias or the impact of the accounting choices on EBITDA or the bonus. Most did not recognize the potential for management manipulation at all.)

For Assessment Opportunity #7, the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate recognizes the potential for management bias towards a higher EBITDA due to the bonus.

Competent – The candidate discusses the potential for management bias towards a higher EBITDA due to the bonus.

Competent with distinction – The candidate discusses the potential for management bias towards a higher EBITDA due to the bonus, and comments on the elements that are driving the bonus (Indo-Tech transaction).