



**SC LIMITED
MARKING GUIDE**

To: Harjit Sandhu, Partner
 From: CPA
 Re: SC accounting issues and update to preliminary audit planning

I have provided my analysis of the accounting issues identified from my meeting with Raymond and have updated the preliminary audit planning, as per your request.

Assessment Opportunity #1

The candidate updates the preliminary audit planning memo.

The candidate is demonstrating competence in Assurance.

Competencies

- 4.3.4 Assesses materiality for the assurance engagement or project processes (Level A)
- 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 (Level A)
- 4.3.6 Develops appropriate procedures based on the identified risk of material misstatement (Level A)

Your preliminary risk assessment was based on the 10 months ended June 30, 2017. Since then, I have gathered more information about the client and have considered additional information.

OVERALL FINANCIAL STATEMENT RISK

There is a new controller, Raymond, who was hired in August 2017. He might not be familiar with SC's activities and accounting policies. Raymond may want to prove himself and is perhaps going above his reach to do so. For example, he made comments about keeping compensation expenses low, so we'll need to be cautious about potential bias as well as errors. This increases the risk of material misstatement because there is an increased likelihood of errors.

There are also new complex transactions this year, including the new stock-based compensation program. Raymond said he has no experience accounting for such plans. In addition, we know he has accounted for some of the transactions in fiscal 2017 incorrectly (see accounting issues identified below). This increases the inherent risk of the financial statements containing errors.

There is significant sensitivity surrounding the share adjustment clause. During preliminary planning, revenues were significantly less than \$13 million. However, now with the CellarTracker app sales, revenues (as shown in the following table) are significantly higher than the previous estimates, to the point where the share adjustment clause would be nullified.

	September 2016 – June 2017	July 2017	August 2017	Total
Custom software	\$5,648,555	\$ 702,345	\$ 641,098	\$ 6,991,998
Equipment sales	1,478,554	194,237	155,783	1,828,574
CellarTracker app	645,854	1,705,855	1,847,585	4,199,294
	<u>\$7,772,963</u>	<u>\$2,602,437</u>	<u>\$2,644,466</u>	<u>\$13,019,866</u>
CellarTracker app %	8.31%	65.55%	69.87%	32.25%



If revenue for this fiscal year is not at the \$13 million level, the co-CEO shareholding percentages will be diluted. With the co-CEOs currently at 51% with the senior manager, if the share adjustment clause was exercised and WI increased its ownership by 5%, the CEOs and senior manager would lose their effective control.

Based on the revised projected revenue, the share adjustment clause will not be triggered — by a narrow margin of \$19,866. The fact that it is so close raises questions about management's (some of whom also own shares) and the co-CEOs' bias to manipulate revenue because of the share adjustment clause. The fact that the CellarTracker programmer was surprised at the growth in sales might be an indication that the bias has been acted upon. There is a higher risk of management override because of the rapid growth of the company and the bias that is inherent in SC's desire to maximize revenue this fiscal year. The share adjustment clause will also dilute the ownership of the other shareholders and stock option holders. This increases the inherent risk of the financial statements containing misstatements.

We noted several internal control deficiencies (see internal control weaknesses memo that follows). The control environment is not strong during the year. This increases control risk.

I recommend an increase in the assessment of risk of material misstatement to high.

ASSERTION-LEVEL RISKS

My recent visit to the client revealed several additional risks related to specific financial statement line items that we need to consider as we plan the audit.

There is an increased risk of material misstatement in the revenue balance. The assertions most significantly affected are occurrence and accuracy of the CellarTracker app sales balance, due to the share adjustment clause. In addition, the lack of monitoring by Raymond over the CellarTracker sales and the lack of controls over the Lars contract and reporting contributes to the increased risk. Finally, the fixed-price contracts revenue may not be accurate due to the lack of formal accounting policy and estimation methodology.

There is also an increased risk of material misstatement regarding the existence and valuation of the accounts receivable balance, since Raymond was surprised to see a big receivables balance for the website sales, given that payment is made by credit card. Furthermore, internal control deficiencies were identified regarding Lars, and, therefore, the information provided by Lars may not be accurate, resulting in a higher risk of error in the accounts receivable balance.

In addition, there is increased risk of material misstatement in the stock-based compensation balance. As discussed previously, there is a risk that the balance is not accurately calculated due to Raymond's lack of knowledge for this type of transaction and his bias to keep compensation expenses low.

MATERIALITY

Per CAS 320.A7, "Determining a percentage to be applied to a chosen benchmark involves the exercise of professional judgment. [...] For example, the auditor may consider five percent of profit before tax from continuing operations to be appropriate for a profit-oriented entity in a manufacturing industry [...] Higher or lower percentages may be deemed appropriate in the circumstances."

The financial statement users have not changed since last year's audit (i.e., Jan and Deani Irvine, management, and Watman Investments (WI)). They would be interested in SC's ability to generate revenue and profit. Because SC is profitable for the first time this year, profit before tax could be used as a basis for materiality. However, this amount is likely not yet stable and, therefore, not representative of SC's size. In



addition, users are interested in SC's level of revenue because of the share adjustment clause. Therefore, it is still appropriate to use revenue as a basis for materiality.

However, the sensitivity of the users has changed. This is the year in which WI will determine if it can exercise its share adjustment clause. The investors will be less tolerant of misstatement in fiscal 2017 because it will directly affect their ability to exercise the share adjustment clause.

As a result of these factors, I suggest we reduce materiality to a lower percentage, such as 1% of actual revenues, which is \$130,000 ($1\% \times \$13,019,866$), and set performance materiality at \$97,500 ($\$130,000 \times 75\%$).

Taking the analysis further, based on the level of revenue currently reported in the draft financial statements, even a small (\$20,000) overstatement of revenue will have an impact on the clause. Given the heightened sensitivity around revenue, we may want to use a judgmental materiality level, such as \$10,000, for this account. This will increase the audit work required and should be discussed with the client, to confirm if SC's management is willing to pay the higher audit fee that will result from the increased audit work.

APPROACH

The risk of material misstatement is higher than originally expected. Therefore, I recommend we revise the audit plan to include more substantive procedures, especially relating to the different revenue streams, as well as relating to stock-based compensation, to obtain additional audit evidence. In addition, it will take more time for audit staff to be able to perform substantive testing because they will need to find the source documents needed, which will take longer due to the lack of organization of documents at SC currently.

Internal controls at Lars are important to ensure that sales are reported accurately in accordance with the distribution agreement. As auditors, we must obtain comfort about the distributor's controls because a significant portion of revenue was and will continue to be earned through the distributor. We need to assess whether the controls at Lars are suitably designed to achieve the client's control objectives, and whether they have been in place since Lars and SC began their business relationship in June. I recommend asking if the distributor has obtained an audit of its internal controls in accordance with *CSAE 3416 Reporting on Controls at a Service Organization*. If this report is not available, then we will need to obtain permission to test controls at the distributor. It is unlikely that the distributor has this report because it is not a traditional service provider, which would be responsible for providing this report on a regular basis. There are other options available as well, such as a special report performed by an auditor (ourselves or another firm) on sales, to gain assurance on the sales amount from Lars.

You had originally planned on relying on internal controls over the employee time reporting system and the related revenue calculations for the hourly software contracts. This may still be appropriate, since the processes surrounding this revenue stream do not appear to have changed. However, it will likely reduce the amount of substantive testing less, as compared to previous years, given that the hourly software contracts make up a much smaller portion of total revenue this year, with the addition of the fixed-price contracts and the CellarTracker app sales.

With regards to the remaining financial statement items, a substantive approach will likely also have to be taken, given the overall lack of controls at SC.

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 changes required to the preliminary audit plan.

Competent – The candidate discusses the changes required to the preliminary audit plan.

Competent with distinction – The candidate thoroughly discusses the changes required to the preliminary audit plan.

Assessment Opportunity #2

The candidate discusses the accounting treatment for the Lars sales contract.

The candidate is demonstrating competence in Financial Reporting.

Competencies

1.2.3 Evaluates the treatment for non-routine transactions (Level A)

SC has entered into a new contract with Lars Distribution Inc. (Lars). There are several financial reporting issues related to the contract.

NON-MONETARY EXCHANGE

The company has entered into a non-monetary exchange with Lars. SC is receiving a non-monetary asset, the contractual right to receive future marketing services from Lars, instead of \$8 per customer download from the Lars website. Non-monetary transactions must be accounted for in accordance with ASPE 3831 *Non-monetary Transactions*.

Per ASPE 3831.06, “An entity shall measure an asset exchanged or transferred in a non-monetary transaction at the more reliably measurable of the fair value of the asset given up and the fair value of the asset received, unless:

- (a) *the transaction lacks commercial substance;*

ASPE 3831.11 provides further clarification: ‘A non-monetary transaction has commercial substance when the entity’s future cash flows are expected to change significantly as a result of the transaction. The entity’s future cash flows are expected to change significantly when:

- (a) *the configuration of the future cash flows of the asset received differs significantly from the configuration of the cash flows of the asset given up; or*
(b) *the entity-specific value of the asset received differs from the entity-specific value of the asset given up, and the difference is significant relative to the fair value of the assets exchanged.’*

In addition, ASPE 3831.12 states, ‘The configuration of future cash flows is composed of the risk, timing and amount of the cash flows. A change in any one of these considerations is a change in the configuration.’

The transaction has commercial substance. Although the amount of cash flows is the same (because SC exchanged \$8 worth of revenue from a download of the app with future

marketing services of the same value), the marketing service will be incurred later on and thus has different timing than the revenue received. The risk is also different because, once the app is downloaded, the \$8 is assured of being received, whereas SC may be unsure of whether it will use future marketing services. Therefore, the risk associated with the future cash flows is different. This criterion is not met.

- (b) *the transaction is an exchange of a product or property held for sale in the ordinary course of business for a product or property to be sold in the same line of business to facilitate sales to customers other than the parties to the exchange;*

No, marketing services are not a product in the same line of business as the sale of the app.

- (c) *neither the fair value of the asset received nor the fair value of the asset given up is reliably measurable; or*

Per ASPE 3831.05(a), fair value is *'the amount of the consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.'*

Regarding the fair value of the asset given up, is it \$11, as shown by what the product sells for on SC's website, or is it \$8, because that is the value of the consideration SC received as a result of the transaction?

Turning to the asset received, custom marketing services are not a clearly defined commodity, so it will be difficult to determine their value, especially since the services are in the future. There may even be a question of discounting for the time value of money, since the services will not be provided until a later time. However, per the agreement, Lars has a commitment to provide marketing services for the value "owed" to SC, which is determined by \$8 per unit sold.

After considering the different options for fair value, it appears that \$8 most closely meets the fair value of the transaction. There is certainly a fair value amount that can be attributed, and, therefore, the amount is reliably measurable.

- (d) *the transaction is a non-monetary non-reciprocal transfer to owners to which paragraph 3831.14 applies."*

No, this is not the case because it is not a transfer to owners.

Therefore, the non-monetary transaction should be recorded at the more reliably measurable of the fair value of the amount owed to SC and the marketing services to be received (i.e., at \$8 per unit, since that is the fair value that is the most reliable).

COLLECTION

The sales through Lars also raise an issue of revenue recognition. SC has an agreement with Lars whereby Lars is to provide certain future marketing services in exchange for the app downloads. The services are to be provided by June 2018, but there is no detail as to what the services are or when those services are to be rendered.



According to ASPE 3400.04 and .05, “Revenue from sales and service transactions shall be recognized when the requirements as to performance set out in paragraphs 3400.05-.06 are satisfied, provided that at the time of performance ultimate collection is reasonably assured.

“In a transaction involving the sale of goods, performance shall be regarded as having been achieved when the following conditions have been fulfilled:

- (a) the seller of the goods has transferred to the buyer the significant risks and rewards of ownership, in that all significant acts have been completed and the seller retains no continuing managerial involvement in, or effective control of, the goods transferred to a degree usually associated with ownership; and
- (b) reasonable assurance exists regarding the measurement of the consideration that will be derived from the sale of goods, and the extent to which goods may be returned.”

In addition, ASPE 3400.19 states, “Recognition of revenue requires that the revenue is measurable and that ultimate collection is reasonably assured. When there is a reasonable assurance of ultimate collection, revenue is recognized even though cash receipts are deferred. When there is uncertainty as to ultimate collection, it may be appropriate to recognize revenue only as cash is received.”

In this case, SC has transferred the goods to the buyer when the customer downloads it from the Lars website. In addition, reasonable assurance exists regarding measurement, as discussed previously. The main question is, therefore, whether ultimate collection is reasonably assured. As a result, if we determine that SC may not receive the future marketing services, this could indicate that the ultimate collection is not reasonably assured.

Unless we can determine that there is no uncertainty regarding the ultimate “collection” of the future services from Lars, SC will need to recognize the revenue from downloads as it receives the services from Lars. This will significantly decrease reported revenue and affect the share adjustment clause, likely resulting in diluted shareholdings of shareholders other than WI.

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 accounting treatment of the Lars sales contract.

Competent – The candidate discusses the accounting treatment of the Lars sales contract.

Competent with distinction – The candidate thoroughly discusses the accounting treatment of the Lars sales contract.

Assessment Opportunity #3

The candidate discusses the accounting for the fixed price contracts.

The candidate is demonstrating competence in Financial Reporting.

Competencies

1.2.2 Evaluates the treatment for routine transactions (Level A)

FIXED-PRICE CONTRACTS

Since October 2016, SC has entered into fixed-price contracts with its customers for the development and maintenance of software. I understand that the project coordinator's "feel" for the progress of the fixed-price projects is used as the basis to determine the amount of revenue to be recognized. This is not a "rational and consistent basis" for revenue recognition, which is required under ASPE.

We will take the example of the PAB Limited contract to illustrate the correct accounting treatment to use for fixed-price contracts, in accordance with ASPE 3400 *Revenue*.

Multiple Deliverables

Per ASPE 3400.11, *"The recognition criteria in this Section are usually applied separately to each transaction. However, in certain circumstances, it is necessary to apply the recognition criteria to the separately identifiable components of a single transaction in order to reflect the substance of the transaction. A single sales transaction may involve the delivery or performance of multiple products, services, or rights to use assets, and performance may occur at different points in time or over different periods of time. In some cases, the arrangements include initial installation, initiation, or activation services and involve consideration in the form of a fixed fee or a fixed fee coupled with a continuing payment stream. For example, when the selling price of a product includes an identifiable amount for subsequent servicing, that amount is deferred and recognized as revenue over the period during which the service is performed."*

The PAB Limited contract includes development and maintenance services for three years after the implementation, and PAB Limited could decide to purchase the maintenance services separately. Therefore, the contract includes the delivery of multiple services for which the performance will occur over different periods of times, and recognition criteria should be applied separately to the development and maintenance components. However, both transactions need to be considered together.

The total amount of \$60,210 should be split between the two components. Because the standalone value of the development component is hard to estimate, given the unique nature of each job, SC should use the residual method to allocate the transaction price, since the maintenance services have a standalone value. Because PAB Limited could decide to purchase the maintenance services for \$275 per month for 36 months, an amount of \$9,900 should be allocated to maintenance services and \$56,310 to development services.

Recognition

Per ASPE 3400.06, *"In the case of rendering of services and long-term contracts, performance shall be determined using either the percentage of completion method or the completed contract method, whichever relates the revenue to the work accomplished. Such performance shall be regarded as having been achieved when reasonable assurance exists regarding the measurement of the consideration that will be derived from rendering the service or performing the long-term contract."*

Per ASPE 3400.17, *"The percentage of completion method is used when performance consists of the execution of more than one act, and revenue would be recognized proportionately by reference to the*

performance of each act. Revenue recognized under this method would be determined on a rational and consistent basis such as on the basis of sales value, associated costs, extent of progress, or number of acts. For practical purposes, when services are provided by an indeterminate number of acts over a specific period of time, revenue would be recognized on a straight-line basis over the period unless there is evidence that some other method better reflects the pattern of performance. The amount of work accomplished would be assessed by reference to measures of performance that are reasonably determinable and relate as directly as possible to the activities critical to the completion of the contract. (Measures of performance include output measures, such as units produced and project milestones, or input measures, such as labour hours or machine use.) Amounts billed are not an appropriate basis of measurement unless they reflect the work accomplished.”

Development services (30 weeks) and maintenance services (three years) are both long-term contracts. They both are the result of several activities and actions on SC’s part, so the percentage-of-completion method should be used because this will better reflect the work accomplished.

For development services, the only cost on the projects is labour, as there are rarely other costs. Furthermore, management is able to estimate the time to be spent for each week of the development phase. Therefore, labour hours spent compared to the total expected labour hours would be an adequate basis to determine the percentage of completion. This measure would be relatively easy to implement, since the actual hours are already tracked.

Because the labour hours are expected to be stable over the 30 weeks of work, it would also be appropriate to record revenue on a straight-line basis over the 30 weeks, since this would reflect the pattern of performance.

From June 8, 2017, to August 31, 2017, 12 weeks were spent on the project, from the total of 30 weeks of work expected. Therefore, SC should recognize \$22,524 of revenue in the financial statements ($\$56,310 \times 12/30$ weeks).

At each reporting period, management will need to ensure the expected time required to complete the project has not changed or else adjust the estimate.

Maintenance services have not yet started. The services are for the three-year period following the implementation of the software. Therefore, no revenue should be recognized as at August 31, 2017. Since the services SC provides will be an “*indeterminate number of acts over a specific period of time, revenue would be recognized on a straight-line basis,*” as stated in ASPE 3400.17. Therefore, SC will record an amount of \$275 per month as revenue starting after the software implementation.

Since it recorded \$30,000 as revenue, SC should record an adjustment of \$7,476 to reduce revenue. This will decrease reported revenue and affect the share adjustment clause, which could result in diluted shareholdings of shareholders other than WI.

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 accounting treatment for the fixed-price contracts.

Competent – The candidate discusses the accounting treatment for the fixed-price contracts.

Competent with distinction – The candidate thoroughly discusses the accounting treatment for the fixed-price contracts.

Assessment Opportunity #4

The candidate discusses the accounting treatment for the development costs and stock-based compensation.

The candidate is demonstrating competence in Financial Reporting.

Competencies

1.2.2 Evaluates treatment for routine transactions (Level A)

1.2.3 Evaluates treatment for non-routine transactions (Level A)

INVENTORY COUNT EQUIPMENT DEVELOPMENT COSTS

The company has deferred \$475,000 of costs associated with the development of mini-scanners and a related mobile device app for its most popular line of automated inventory count equipment.

Costs from the development of the mini-scanners can be capitalized as an intangible asset provided they meet criteria set out in ASPE 3064 *Goodwill and Intangible Assets*.

The recognition criteria that must be met for the cost to be capitalized include the following:

1. There are probably expected future economic benefits, which is supported by the fact that SC's sales staff discussed the concept with several customers and are confident they will be able to sell the mini-scanner as soon as it is ready.
2. The costs can be reliably measured, which has also been met because the company has been tracking the costs associated with the development project.

The next issue SC needs to consider is ensuring all the costs listed relate to the development phase of the project. Costs incurred for research or operations should be excluded from the intangible asset cost pool. Research costs should be expensed, and costs pertaining to operations should be dealt with according to their nature and either capitalized or expensed.

Per ASPE 3064.41, "*An intangible asset arising from development (or from the development phase of an internal project) shall be recognised if, and only if, an entity can demonstrate all of the following:*

- (a) *the technical feasibility of completing the intangible asset so that it will be available for use or sale;*

Met – This has been achieved, since the product is in the testing phase. Furthermore, the programmers are confident they will be able to address the speed issue rapidly.

- (b) *its intention to complete the intangible asset and use or sell it;*

Met – Management intends to pursue the project, since SC's sales department already started a marketing campaign to promote the mini-scanners.

- (c) *its ability to use or sell the intangible asset;*

Met – SC has the full ability to do this, since the updated version is addressing customers' requests and SC's sales staff are confident they will be able to sell the product as soon as it is ready.

- (d) *the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset;*

Met – SC appears to have the adequate technical resources, since it already developed three lines of automated inventory count equipment. Also, the project is almost complete and the programmers are confident they will be able to address the issue in the upcoming weeks. Therefore, SC should have the resources to complete the project.

- (e) *its ability to measure reliably the expenditure attributable to the intangible asset during its development; and*

Met – The company appears to have tracked the expenses incurred to date; therefore, this criterion does not seem to be an issue.

- (f) *how the intangible asset will generate probable future economic benefits. Among other things, the entity can demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset."*

Met – We are told that discussions have been held with customers, and SC's sales staff are confident they will be able to sell the product as soon as it is ready.

All the above criteria have been met. Therefore, there is adequate support for capitalizing the development costs. However, research expenses are required to be expensed as incurred. Per ASPE 3064.39 and .43, "Examples of research activities are:

- (a) *activities aimed at obtaining new knowledge;*
- (b) *the search for, evaluation and final selection of, applications of research findings or other knowledge;*
- (c) *the search for alternatives for materials, devices, products, processes, systems or services; and*
- (d) *the formulation, design, evaluation and final selection of possible alternatives for new or improved materials, devices, products, processes, systems or services.*

"Examples of development activities are:

- (a) *the design, construction and testing of pre-production or pre-use prototypes and models;*

- (b) *the design of tools, jigs, moulds and dies involving new technology;*
- (c) *the design, construction and operation of a pilot plant that is not of a scale economically feasible for commercial production; and*
- (d) *the design, construction and testing of a chosen alternative for new or improved materials, devices, products, processes, systems or services.”*

Therefore, the market study (performed to obtain new knowledge on the potential market of the mini-scanners) should not be capitalized. The \$20,000 should be reduced from the deferred development cost asset and expensed. In addition, it appears that approximately 20% of the programmers' time (2 out of the 10 months spent) related to research activities, as they were acquiring new knowledge. The remaining time the programmers spent appears to be development related given that they were designing and building the prototype. Therefore, \$49,000 ($\$245,000 \times 20\%$) should be expensed, while the remaining amount (\$196,000) can remain capitalized. Finally, the supplies and materials used for the prototypes are consistent with the examples of development activities, and can remain capitalized.

STOCK OPTION PLAN

On June 1, 2017, the company put in place a stock option plan for key employees. No expense has been recorded, since Raymond thinks it needs to be recorded at the time the options are exercised. This is incorrect. Stock options need to be accounted for in accordance with ASPE 3870 *Stock-Based Compensation and Other Stock-Based Payments*.

Per ASPE 3870.24, *“Equity instruments awarded to employees and the cost of the services received as consideration shall be measured and recognized based on the fair value of the equity instruments.”*

Furthermore, ASPE 3870.33 states, *“The fair value of a stock option (or its equivalent) is estimated using an option pricing model (for example, the Black-Scholes or a binomial model).”*

The total fair value of the grant is \$1,154,860, using the estimated value of \$1.022 per option using the Black-Scholes model (i.e., $\$1.022 \times 1,130,000$). This represents the total compensation cost related to this stock option plan in the current year.

Per ASPE 3870.48, *“The compensation cost for a stock-based award to employees shall be recognized over the period in which the related employee services are rendered, by a charge to compensation costs if the award is for future service. [...] If an award is for past services, the related compensation cost shall be recognized in the period in which it is granted. When the award consists of equity instruments, the offsetting entry is to shareholders' equity.”*

The options vest after three years of service and, therefore, appear to be a tool to retain employees and motivate them to increase value for the company. As a result, the total compensation cost should be recognized over this period. Because the award will be settled in equity instruments, the offsetting entry will affect shareholders' equity.

Furthermore, *“the total amount of compensation costs recognized for an award of stock-based employee compensation shall be based on the number of instruments that eventually vest. No compensation costs shall be recognized for awards that employees forfeit either because they fail to satisfy a service requirement for vesting...”* (ASPE 3870.43).

Per ASPE 3870.46, *“At the grant date, an enterprise may choose to base accruals of compensation costs on the best available estimate of the number of options or other equity instruments that are expected to*



vest and to revise that estimate if subsequent information indicates that actual forfeitures are likely to differ from initial estimates. Alternatively, an enterprise may begin accruing compensation costs as if all instruments granted that are subject only to a service requirement is expected to vest. The effect of actual forfeitures would then be recognized as they occur. The remainder of this Section refers to options or shares ‘expected to vest’ and for convenience does not again refer to both acceptable methods of accounting for forfeitures.”

Because management expects the forfeiture rate to be 10% and Raymond wants to keep expenses low, only 90% of the total compensation cost calculated above should be recorded. This percentage, per ASPE 3870.47, “shall be adjusted for subsequent changes in the expected or actual outcome of service and the effect of a change in the estimated number of shares or options expected to vest is a change in an estimate with the cumulative effect of the change on current and prior periods shall be recognized in the period of the change.”

An expense of \$86,615 is to be recorded in the August 31, 2017, financial statements ($\$1,154,860 \div 3 \text{ years} \times 3/12 \text{ months} \times 90\%$).

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 discuss the accounting treatment for the development costs and the stock-based compensation.

Competent – The candidate discusses the accounting treatment for the development costs and the stock-based compensation.

Competent with distinction – The candidate thoroughly discusses the accounting treatment for the development costs and the stock-based compensation.

Assessment Opportunity #5

The candidate provides specific procedures for the relevant accounting issues.

The candidate is demonstrating competence in Assurance.

LARS CONTRACT SALES

The proportion of CellarTracker app revenue compared to total revenue has increased significantly in the past two months since the audit planning was performed. The CellarTracker app sales have gone from 8% of total revenue for the first 10 months of the year to almost 70% in August. Recent results could, of course, be an anomaly, but the trend suggests otherwise. This large increase in revenue has audit implications. There must be more focus on this revenue stream, especially since at current revenue levels the share adjustment clause would be nullified. A large amount of substantive work will have to be done on the CellarTracker app revenue because it is a new revenue stream, apparently without appropriate controls, and the amount of revenue reported will affect the share adjustment clause.



There are two sources of sales for the CellarTracker app, the first being the Lars distributor. The company seems to have recorded revenue based on the amount in the Lars report, net of returns and promotional copies. However, it appears that SC does not properly understand the quarterly report provided by Lars, and, therefore, the correctness of this amount is uncertain. We need to find out who authorized Lars to provide promotional copies and whether Lars should still pay SC for those copies. Who receives the benefit of the promotion? What controls are in place regarding these items? How does SC even know that the copies were, in fact, promotional?

I recommend that the audit work concerning Lars include the following procedures:

- Send a confirmation letter to Lars to confirm sales and discuss the issues around the unknown promotional copies with the client.
- Review the client's assessment of the uncertainty regarding the ultimate collection of the future marketing services from Lars (with respect to the non-monetary transactions), and confirm the value used to record the sales.
- If any marketing services have been provided by Lars, obtain supporting documentation for the services performed.

As indicated above, we must obtain comfort about the distributor's controls and they likely will not have obtained a CSAE 3416 report. Therefore, we should request access to their records in order to perform our own testing.

CELLARTRACKER APP WEB SALES

The second source of CellarTracker sales is the company website. This is, again, a new stream of revenue that will require significant audit work.

In addition, the company needs to investigate why there is a \$301,548 receivable for web sales at year end. Given that the proceeds from app sales on the website should be deposited in SC's bank account two days after the sale, it would be expected that the receivable for web sales at year end is approximately two days' worth of sales. The amount, however, appears to be approximately 6.6 days' worth of sales, as calculated below:

August sales = \$1.85 million
August sales per day = \$1.85 million ÷ 31 days = approximately \$60,000 per day
Less average daily sales for Lars = \$1.15 million ÷ 80 days in the Lars report = \$14,375
Average sales per day on SC's site = \$60,000 – \$14,375 = \$45,625
Days sales in receivables = \$301,548 ÷ \$45,625 = 6.6 days

There may be something wrong with the web reporting system, similar to the HST issue noted. This will affect the amount of revenue reported, as well as the share adjustment clause.

We will have to look carefully at both opening and closing revenue cut-off. We will also have to review the adjustment to revenue from both the correction of the HST liability and the liability associated with credit cards charged when app downloads failed. I recommend the following audit procedures:

- Use computer-assisted audit techniques (CAATs) to verify web sales, with the involvement of an IT audit specialist from our firm.
- Reconcile total revenue to credit card cash receipts (and/or bank deposits) for web sales.
- Perform additional subsequent events review of credit notes, collections, and revenue reversals.
- Investigate why there are still receivable balances for web sales, given the deposits should have occurred two days after the sale.



- Obtain the detailed listing for the \$301,548 receivable for the web sales. Select a sample of transactions and trace the subsequent receipt of the cash via credit card cash receipts (and/or bank deposits).
- Obtain the detailed listing of the receivable still outstanding at the date of the audit. Select a sample of transactions and obtain the details of each transaction from the system (client name, date of download, credit card number, IP address). For each transaction confirm with the credit card company whether the credit card number used is real and whether the company received the relating transaction to process. Inquire why the transactions have not been processed.

FIXED-PRICE CONTRACTS

We cannot rely on internal controls in the fixed-price contracts area because they are limited and may be inappropriate.

Once the client determines an appropriate revenue recognition method for the fixed-price contracts, we need the client to provide the following information on each contract so that we can conduct proper sampling and perform substantive audit work.

1. Customer and project name
2. Project total value
3. Original and revisions to the project budgets
4. Value of the maintenance services, if applicable
5. Billings
6. Cash collections
7. Hours or costs to year end (if in progress at year end)
8. Total estimated hours or costs (if in progress at year end)
9. Revenue recognized calculation (if in progress at year end)
10. Calculation of any deferred revenue or unbilled revenue (if in progress at year end)
11. Customer correspondence

Because the size of each project is relatively small, the number of projects is high. It is likely not feasible to examine each project; instead, we should test a sample of the population, but we should increase the sample size to provide us with reasonable assurance that revenue is not materially misstated.

We will need to perform appropriate audit steps on this key information. The most judgmental of the numbers at year end is the total remaining estimated hours or costs. This amount is a significant management estimate. If the amount is understated, revenue recognition will be too high. We should review the project trends and customer correspondence. We should also discuss the projects with the project coordinator. Finally, we should look at evidence from subsequent events in order to further assess the budgets.

INVENTORY COUNT EQUIPMENT DEVELOPMENT COSTS

The company has deferred \$475,000 of costs associated with the development of the mini-scanners and the related mobile device app for its most popular line of automated inventory count equipment. Per our preliminary analysis earlier in this report, only \$406,000 costs should be capitalized. The following audit work should be performed:

- Obtain the invoice relating to the market study and trace the amount to be adjusted in the general ledger.
- Obtain the detailed listing of the costs incurred in the mini-scanners project for each category that can be capitalized (i.e., programmers, and supplies and materials for the prototypes). Select a sample of expenditures and obtain the related invoices. For each invoice
 - trace the amount included in the listing to the amount on the invoices;

- inspect the description of the expenses on the invoice to ensure it relates to development activities; and
- review the date of the invoice to ensure services were provided prior to year end.
- Obtain the minutes of the board of directors meeting in which the mini-scanners development project was approved, as evidence for the intention to pursue the project.
- Obtain the details of the marketing campaign to promote the mini-scanners as evidence for the intention to pursue the project.
- If available, obtain the latest progress report from the development team to assess the status of the project as evidence of technical feasibility, ability to sell the asset, and availability of adequate resources. If the information is not available in the report, we will inquire with management.

STOCK-BASED COMPENSATION

When auditing this area, we should be mindful of the controller's potential bias — he commented that he wants to minimize the compensation expense. In addition to obtaining a copy of the plan, we need to review the Black-Scholes calculation and assumptions used to determine the value. Specifically, we will need to do the following:

- Review the assumptions used in the Black-Scholes model (e.g., expected dividends, risk-free rate, stock volatility, staff turnover, etc.) and obtain documentation from management to support the estimates. Recalculate the value of the options issued under the Black-Scholes model.
- Obtain the minutes of the board of directors meeting in which the grant was approved, and trace the number of stock options that was approved.
- Obtain the agreement listing the terms and conditions of the grant and ensure the vesting period is three years.
- Discuss with management how the 10% forfeiture rate was estimated and agree to supporting documentation for any assumptions made (e.g., historical rate of employee departures).

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 discusses some valid audit procedures for the accounting issues identified.

Competent – The candidate discusses several valid audit procedures for the accounting issues identified.

Competent with distinction – The candidate discusses many valid audit procedures for the accounting issues identified.

To: SC Limited
From: CPA
Re: Internal control weaknesses noted and recommendations

Assessment Opportunity #6

The candidate discusses the internal control issues and provides recommendations to improve them.

The candidate is demonstrating competence in Assurance.

Competencies

4.1.1 Assesses the entity's risk assessment processes (Level A)

4.1.2 Evaluates the information system, including the related processes (Level A)

The company has gone through significant growth in the past year, which appears to have negatively affected its control environment. Because of its high growth, it is necessary for SC to improve internal controls. There are several objectives of internal controls, such as optimizing the use of resources within the organization, preventing and detecting fraud and error, safeguarding assets, providing maintainable and reliable control systems, and ensuring compliance with applicable laws and regulations.

I have noted several internal control weaknesses at SC. These are my key findings:

FIXED-PRICE CONTRACTS

Weakness

Management does not currently have the proper processes in place surrounding revenue recognition. There is currently no tracking of which contracts are fixed-price contracts, hourly contracts, or hybrid fixed/hourly contracts. Furthermore, there do not appear to be any controls surrounding revenue recognition on the fixed-price software contracts. There is no formal methodology to determine the percentage to recognize on a monthly basis.

Implication

The revenue recognition method is different for each type of contract. This could mean the amount of revenue recorded in the financial statements is not accurate. If a fixed-price contract was not identified as such, revenue could continue to be recorded on an hourly basis. This could lead to revenue being overstated if actual hours are higher than the hours to complete that were estimated when the fixed-price was negotiated, or understated in the opposite situation.

The estimated hours to complete the project is the key amount to determine; if it is too low, revenue will be overstated. For example, assume there is a fixed-price contract of \$100,000. If 50 hours have been completed in month 1 and the total estimated hours are 100, the amount of revenue recognized will be \$50,000 ($50 \div 100 \times 100,000$). If the estimated hours should be 200, the amount of revenue recognized will be \$25,000 ($50 \div 200 \times 100,000$).

Recommendation

Implement a process for tracking the distinct types of contracts (hourly, fixed-priced, hybrid), which will tie into the predetermined revenue recognition method to be chosen.

Decide on a reasonable and rational fixed-price revenue recognition methodology in accordance with ASPE. Implement procedures to verify the actual and estimated hours or costs to complete each fixed-price contract on a monthly basis, such as comparison to original budget and having the estimates approved by people with the appropriate level of authority.

CONTRACT APPROVAL

Weakness

There is no formal approval process for contracts.



For example, the vice-president of sales did not think he saw the final version of the largest fixed-price contract signed (with PAB Limited), and he was unable to find either print or electronic copies of the contract.

Also, Lars's relationship with SC seems to be managed by the developing programmer. The distribution deal was signed by the programmer and commenced the next day. Therefore, there was no time for management to review the agreement before it started. The report shows promotional copies deducted from the amount owed to SC, but Raymond is not sure what the promotional copies represent. He was not aware of any ongoing promotion that would require promotional copies.

Implication

If the contracts are not appropriately reviewed and approved, the terms and conditions could be detrimental to SC. For example, the fixed price negotiated in a fixed-price contract and the level of service to be rendered in exchange are key. If the fixed price is too low compared to the services to be rendered, it will likely result in a loss for SC. Furthermore, management needs to ensure they have the resources to fulfill their obligations in the contract. The nature, timing, and extent of the services to be rendered are also critical.

In the Lars contract, the developing programmer may not have the adequate knowledge to identify relevant issues. For example, the \$8 per unit price might not be satisfactory to ensure that management's earnings expectations are being met. It may not be a part of management's strategy to exchange sales with marketing services in lieu of cash payment. The programmer is probably not aware of SC's marketing needs, and SC may not need this kind of service. Furthermore, we don't know Lars's expertise in marketing, and it might not be satisfactory to SC's standards.

Recommendation

Implement procedures to ensure final approval of contracts, such as sign-offs by the controller (representing finance) and the vice-president of sales.

CELLARTRACKER APP SALES

Weakness

Adequate internal controls over sales of the new app do not appear to be in place. Sales seem to be monitored by the developing programmer rather than by management. In fact, Raymond had never looked at the monthly revenue figures before preparing the information for our meeting and was surprised by the level of sales presented by the programmer. Furthermore, the programmer determines the amount to be recorded as revenue.

Implication

The developing programmer may not have adequate knowledge to identify the relevant issues and determine the correct amount to record as revenue. Also, since CellarTracker is her idea and her project, she could have a bias to show better results or to continue with the app even if the level of earnings is not satisfactory.

Recommendation

There should be closer monitoring of CellarTracker sales and performance by Raymond. Management should set expectations in terms of sales and earnings for CellarTracker. CellarTracker sales and earnings should be analyzed monthly and compared to expectations. Raymond should review monthly reports and determine the amount to be recorded as revenue. Quarterly reports should be kept and filed as supporting documentation.

Weakness

There are no controls over the information that Lars provides quarterly.



Implication

SC would not be able to detect whether the information provided in Lars's report is complete and accurate. Lars could report fewer sales than actual to reduce the amount payable to SC.

Recommendation

SC should obtain Lars's audited financial statement on a periodic basis. Management should ensure the financial statements provide sufficient information on revenue generated from SC's product. If the level of information contained in the financial statement is not detailed enough, management should consider hiring Lars's auditors to perform a special audit on the sales related to the CellarTracker app.

Management should find out if the distributor has obtained an audit of its internal controls in accordance with CSAE 3416 *Reporting on Controls at a Service Organization*. If it is available, the report should be reviewed to ensure that controls are well designed, implemented, and effective.

Weakness

There was a website failure that resulted in at least 63 customers being charged twice. No formal monitoring was performed to ensure there were no other cases. The controller just assumed this situation only happened for those 63 customers; otherwise, he presumed they would have contacted SC.

Implication

The possibility of similar problems in prior months exists, and it is possible there are additional customers who were charged twice due to the website failure and whom SC would have to reimburse.

Recommendation

Further investigation will need to be performed to ensure no additional liabilities exist. SC should implement a monthly exception report that would list all the customers that paid twice for a download on the same device. The site should be updated to measure successful downloads, not download attempts, for billing and revenue recognition. SC should inquire if its website can be certified for web sales security by a recognized body. Such certification would provide assurance over online security, availability, processing integrity, confidentiality, and privacy.

In addition, SC should implement a policy whereby any website failures are reported to management, so that the appropriate level of authority is involved in determining whether any subsequent action needs to be taken.

PROGRAMMING CHANGES

Weakness

There are no controls over programming changes. The in-house webmaster is responsible for all website programming. Upgrades to the company website do not appear to be tested or reviewed before being implemented.

Implication

There could be errors due to programming changes that would not be detected. For example, an upgrade to the company website led to HST billed being incorrectly posted by the system to the "CellarTracker website revenue" account during the month of July, which resulted in the HST return being filed late and penalties and interest to be paid.



Recommendation

All programming changes to SC's system should be tested in a testing environment before being implemented in the production environment. All website changes should be reviewed and approved by a manager prior to implementation.

DATA BACKUPS

Weakness

There has not been proper backup for the past two months. It is not acceptable that the system indicated it was backing up daily when it was not, and that no one was monitoring it.

Implication

In the event of an emergency at SC, such as a fire, flood, or virus that wipes out the information systems, the company could lose all its data. A crash resulting in complete data loss would cause difficulties in financial reporting, a lack of support for the share adjustment clause calculation, and, more importantly, potential difficulties in knowing and following up on amounts owed by customers or to suppliers. The company would also not be able to fulfill its income tax reporting obligations. The risk is increased by the poor documentation controls, as discussed below, since it would be difficult to retrieve the invoices and other documents needed to support financial reporting amounts. Loss of data could also result in a qualified audit opinion, with all its resulting implications for investor confidence.

Recommendation

Perform a backup of data immediately, and implement daily (or more frequently for critical programming activities) data backups. Implement procedures for checking to ensure such backups are successful.

DISASTER RECOVERY PLAN

Weakness

The company's disaster recovery plan has not been reviewed since early fiscal 2015, nearly three years ago.

Implication

Without a proper disaster recovery plan, SC's management will not know which steps to perform to retrieve the necessary information and infrastructure to be operational. The process will not be efficient, and it will take SC more time to get back to a normal operational level. The lack of a current disaster recovery plan could greatly affect SC's ability to continue as a going concern.

Recommendation

Review and update the disaster recovery plan for both the website and internal IT infrastructure to ensure that it will provide for rapid recovery from any sort of system-related crashes.

FIREWALL

Weakness

The company website is developed in-house by the webmaster, and the firewall currently protecting the website has not been updated to the latest version.

Implication

The rapid growth SC has experienced may impose unexpected stress on its IT infrastructure and website. If these systems are compromised, online sales will be negatively affected. In addition, the firewall currently protecting the website might not protect against all threats because the latest version is not being used. If



the website were compromised, it would take considerable time to re-engineer the time-keeping and billings for all the contracts in progress.

Recommendation

Have a senior programmer or external party review the website's reliability, integrity, and accuracy, since the site is largely programmed in-house.

The website security also needs to be improved. Confirm whether the website has an adequate firewall, and if it does not, implement one. The web app sales module must have upgraded and adequate firewall protection installed immediately, not later this year. This is especially important given the rapid increase in, and significance of, the CellarTracker app sales.

Confirm whether the website has an adequate anti-virus protection system, and if it does not, implement one.

SOURCE DOCUMENTATION

Weakness

SC's documentation procedures have been neglected. The boxes of unfiled source documents are evidence of SC not having sufficient resources to manage the expansion it is experiencing. It is likely that staff members are too busy to do the required filing.

Implication

The lack of attention to documentation procedures, such as regular filing of source documents, increases the risk of documents being lost or misfiled, which increases the risk of fraud and error. For example, we asked for the invoices for the PAB Limited contract (SC's largest contract), and the documents could not be found.

Recommendation

I recommend that SC get the unfiled documents filed immediately (perhaps by hiring temporary staff to work through the backlog) and ensure that source documents are filed on a timely basis going forward.

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 discusses some of the internal control weaknesses present at SC and provides recommendations to improve them.

Competent – The candidate discusses several of the internal control weaknesses present at SC and provides recommendations to improve them.

Competent with distinction – The candidate discusses many of the internal control weaknesses present at SC and provides recommendations to improve them.