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Preliminary Fraud Risk Assessment of a Pharmaceutical Distributor

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ABSTRACT

According to the CPA-Journal Fraud Aware report, small businesses (classified as those with less than 100 employees) suffer from fraud more frequently than large organizations and are hit by higher average losses. The purpose of this research was to initially assess the fraud level of a pharmaceutical distributor in Mandaue City. The participating business in this study was a pharmaceutical distributor of medicines. Descriptive design and simple statistics were used in this research. The organization had 11 to 50 employees. The assessment was only a guiding tool to assess the level of fraud, not the existence of fraud in the subject of the study. The fraud risk level was 66.88%. This fraud level meant that the level of fraud of business was moderate. This analysis was based on Williams and Kollar (2013). The controls needed improvement. In the analysis of the second-problem statement, the fraud risk level was moderate. Indeed, moderate risk meant improvement on the internal controls because only the majority of the controls were adhered by the management of the business leaving the rest substantially unattended. Thus, emphasis on certain accounting controls can lower the fraud risk of the business. In general, the recommendations aimed either to correct existing business practices or to enforce the implementation of business controls embodied in the tool used in the study.

Keywords – Accounting and Business Management, fraud, risk, internal controls, cash disbursements, sales and cash receipts, accounting reports, pharmaceutical, descriptive design, Cebu City, Philippines

INTRODUCTION

The study describes the level of risk of a pharmaceutical firm with less than a hundred employees using the tool developed by Williams and Kollar (2013). The pharmaceutical business is a distributor of medicines. The business, if it fails, will affect the public who depend on the medicines that this business provides. As an accountant, it is of my interest to take the robe of the role of a vanguard of financial information. As a guardian of financial information, the researcher finds it a social responsibility to uphold the public interest. To flag the public interest, the researcher exercised the police man theory of the accountant through assessing the fraud risk level of the business.

Fraud assessment, in any organization, is indispensable because prevention is better than cure. Fraud exposes an organization to a threat, whether internal or external. Both Profit and Nonprofit organizations are exposed to the risk of fraud. Greenlee et al. (2007) states that fraud related losses reduce the nonprofit firm's utility of their resources and affect the contributions and grants. Thus, fraud prevention is better than fraud detection. It cannot be over-emphasized that fraud assessment is a governance prerogative in a very dynamic economic environment.

Fraud is universal. In the presence of valuable property (cash, goods, information or services), fraud can be endeavored. Anybody can commit fraud.

A pharmaceutical distributor is a seller of medicines like antihypertensives, antianginals, beta blockers, ACE inhibitors, antacids, antihyperlipidemics, antidiabetics and antihistamines. The organization has 11 to 50 employees. Fraud assessment aids the business by focusing on organizational functions as follows: a) human resource functions; b) sales and cash receipts; c) purchases and cash disbursements; d) employee expense reimbursement; e) miscellaneous functions; and f) the reporting and monitoring. These functions are to be investigated in relation to the presence or absence of internal control procedure aiming for the deterrence of control manipulations.

FRAMEWORK

International Standard on Auditing 240 the Auditor's Responsibilities Relating to Fraud in An Audit of Financial Statements defines fraud as "an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage". As expressed by James Hall (2012) author in Accounting Information Systems, a *fraud is intentional*. The circumstances that prompt the fraudster can be explained by the unique circumstances such as the pressures sourced from personal pride, office work, family tradition, societal stereotyping and national dignity. In addition, the factor of rationalization and incentives were also taken into account. This idea was the concept of the fraud triangle which was created by Dr. Donald R. Cressly. The Professional Accountants in Malaysia (Gomes, 2010) said that a fraud may occur in different ways and cause another person to suffer financial losses. In the book of Louwers & Ramsay (2014), rationalization is an argument to make the action seem like moral and ethical. As Louwers simply puts it, *the motive is a pressure to commit fraud*. As defined by Louwers, an opportunity is an open door for solving the unchangeable problem by violating a trust. Risk assessment aids management in reshaping audit operations. The definition of attributes of fraud are discussed by Dorminey et al. (2010) wherein it was stated that the triangle was not enough to prevent fraud because rationalization and opportunity were unobservable, unlike motivations. International Standard on Auditing 240 even requires the auditor to communicate his findings relating to fraud on a timely basis whether fraud has only an immaterial effect or if there is a significant error or fraud.

In a project paper spearheaded by Bishop et al. (2007), all organizations are subject to certain levels of fraud risks. Therefore, governance initiative must include a periodic fraud assessment. Gomes (2010) also reported that organizations who practice creative accounting rationalize that they are not doing any fraud. The practice of creative accounting necessitates the mandate of a periodic fraud assessment in order to deter fraud. Birch et al. (2008) asserted that fraud persists worldwide, and they have found out that losses occur due to fraud, corruption affects the global economy, greediness makes a person a fraudster, fraudsters are conscious of the finance function of the business, and fraud is a universal phenomenon.

When the issue is about fraud, everyone is a stakeholder. If the issue is about fraud, the public interest is aroused. If the issue is about fraud, it always begins with prevention. Assessment is the fuel for prevention.

OBJECTIVES OF THE STUDY

The prime objective of this investigation was to conduct an initial assessment as to the fraud level of a Pharmaceutical Distributor in Mandaue City. Specifically, it sought to determine: 1) the weaknesses of the business related to human resource functions, miscellaneous functions, sales and cash receipt, purchasing and cash disbursements, employee expense reimbursement and reporting and monitoring; and 2) the level of fraud as to theft and misappropriation of cash, segregation of duties and supervision, and employee collusion.

METHODOLOGY

The participating business was a pharmaceutical distributor located in Maguikay, Mandaue City, Philippines. This study used the quantitative and qualitative methodologies of the study. For the quantitative part, the researcher used the ready-made tool of Williams and Kollar. For the qualitative part, the researcher conducted interview with the operations manager who was the wife of the owner of the business and as well as to the other administrative officers in the business. The respondents of the study were the owner, operations manager and the office employees. Take note that the respondents were related to the function being assessed. For instance, in assessing the human resource function, the operations manager was interviewed since there was no human resource manager. The names of the business officials were unnamed for confidentiality.

The adopted tool served as a guide with a corresponding score for each factor in fraud assessment. The factors related to Human Resources and other miscellaneous functions such as sales and cash receipts, purchasing and cash disbursements, employee expense reimbursement, and reporting and monitoring. The research tool has provisions on an itemized basis regarding each internal control on all six (6) business functions enumerated in the research instrument. Each addition of points meant that the control attribute was strength. The opposite was also true. Each subtraction of points meant that the control attribute was a threat to the business. If the score was less than nine or negative, fraud risk was high. Inventory and cash could be at risk of theft. If the score were between 49 and 10, controls could be improved. If the score was 50 or greater than 50, the business had strong controls and fraud risk was reduced. The researcher performed an item analysis to assess the fraud level. The item analysis meant that the researcher scrutinized each control so that it was matched to the different fraudulent activities. The operations manager, who was the wife of the President of the business, shared her judgments through her responses in the investigation. The judgments of the operations manager were subject to human errors so that the researcher made reasonable adjustments by giving follow up questions to clarify and simplify matters.

The researchers analyzed the responses from the operations manager. The more controls which addressed the fraud activities, the lower was the fraud level of the business. Generally, control risk was being assessed in relation to internal controls that were not complied. To estimate the fraud level, the researcher used the following tool to measure the fraud level:

Range	Description
90%-100%	Low risk
60%-89%	Moderate risk
0%-59%	High risk

To comply with research ethics protocol, the researchers obtained informed consent from everyone who was interviewed on given questions to answer.

RESULTS AND DISCUSSION

The researchers examined the following functions: Human Resource Functions and Miscellaneous Functions, Sales and Cash Receipts, Purchasing and Cash Disbursements, Employee Expense Reimbursement, and Reporting and Monitoring. The researcher adopted the tool developed by Williams and Kollar.

Table 1. The Fraud Score Determination

#	Description	Score
1	Human Resource Functions	3
2	Miscellaneous	0
3	Sales and Cash Receipts	-1
4	Purchasing and Cash Disbursements	16
5	Employee Expense Reimbursement	5
6	Reporting and Monitoring	22
Score		45

The business scored 45. The fraud risk level was *moderate*. The Pharmaceutical Distributor had to improve her control activities. Cash and inventory were not at a high risk of theft. Williams and Kollar provided these interpretations in the tool. Williams and Kollar, through their profound experience in the Accountancy profession, developed the scoring in the tool. Moderate risk meant improvement on the internal controls because the management of the business only complied most of the controls. The weaknesses in the internal control of the business were deductions from the score.

The researchers matched the existing controls to the fraud risk categories identified in the second problem statement. The different fraud risk categories were the following: a) the risks of theft and misappropriation of cash and other assets; b) practice of segregation of duties, independent verification and proper supervision; and c) the possibility of employees' collusion.

Table 2. The Analysis of Fraud Risk Level

		Fraud Risk					
#	**Description**	**A**		**B**		**C**	
		√	x	√	x	√	x
1	**Human Resource Functions**	4	4	2	2	4	4
2	**Miscellaneous**	1	1			1	1
3	**Sales and Cash Receipts**	9	6	15	3	8	6
4	**Purchasing and Cash Disbursements**	11	5	8	4	11	5
5	**Employee Expense Reimbursement**	6	2	5	2	6	2

6	**Reporting and Monitoring**	8	2	6	1	8	2
		f	%	f	%	f	%
The number of check marks		39	66.1	28	70	38	65.5
The number of x marks		20	33.9	12	30	20	34.5
The total number of marks		59	100	40	100	58	100

Legend: *For every √, fraud risk was reduced. For every x, fraud risk was increased.* Where f means frequency.

The researchers developed the table below for the assessment of fraud level. For 90%-100%, this meant that the controls in the tool were almost complied. The fraud level was low. For 60%-89%, the fraud risk was moderate. Moderate risk meant that the controls in the tool were majority complied. For 0%-59%, fraud risk was high. High risk meant that the controls were slightly complied. Based on the study of Ellul and Yerramilli (2013), if there are internal controls addressing the risks, the level of business risk is lowered. The more implemented internal controls; the lesser would be a risk.

Table 3. The Fraud Risk Level

Implemented Internal Control	Risk Description Level
90%-100%	Low risk
60%-89%	**Moderate risk**
0%-59%	High risk

The percentages were based on the number of checks √. The percentages indicated the fraud risk level of each item in the second problem statement. The risk of theft and misappropriation of cash and other assets was known to be at moderate. This was just a preliminary assessment. In the meantime, the researcher could not yet conclude the congruency of the result until we could get a result for the two items in the second problem statement.

It was determined that the risk in the establishment of the segregation of duties, independent verification and supervision was low. Furthermore, take note that the risk of collusion was moderate too. Please see the table below for a better view of the simple statistics:

<table>
<tr><td rowspan="2">Rate=</td><td>105</td><td rowspan="2">(100)</td></tr>
<tr><td>157</td></tr>
<tr><td colspan="3">where: 105 was the total checks, 157 was the total of checks and x.</td></tr>
</table>

Total marks =157; Total check marks =105; the strength was the quotient of 105 and 157. The fraud risk level was 66.88% (105/157). This meant that the level of fraud of the business was moderate. This analysis was congruent with the result of the tool of Williams and Kollar. In the analysis of the tool of Williams and Kollar, the controls needed improvement. In the analysis of the second problem statement, the fraud risk level was moderate. Indeed, moderate risk meant improvement on the internal controls.

In a related study, Hollis Ashbaugh-Skaife et al. (2009) provided that compliance with Sarbanes-Oxley (SOX) lowered the information risk of the business which was evidenced by lower cost of equity. Noncompliance with certain business control increased the business risk. This related study showed a similar outcome in this research. It is a requirement under SOX that management must spearhead in dealing with fraud risks.

Human resource function

The fraud risks were the following: employees who handle cash were not bonded; employees were not job-sharing or rotating; payroll was processed internally; some personnel were paid on commissions. The complied controls under Human Resource were the following: employment background checks were performed; employees were required to take vacations; the hiring process was separated from the payroll processing; employee hours worked was verified.

Miscellaneous function

The fraud risk was that company cars or vehicles were used after business hours. Employees had no access to the company's equipment after business hours. This control increased security to the assets of the business.

Sales and cash receipts

The fraud risks were the following: more than 10% increase in sales from the prior year; same person collected and recorded transactions; no cash register/ journal; no bank lockbox for processing customer payments; discounts or coupons were used; sales adjustments were greater than 10% of sales transactions; and customer complaints were filtered.

The strengths in the internal control for the Sales and Cash Receipts were the following: Daily deposit to the bank and use of a safe box for cash on hand; restrictive endorsement of incoming checks; preparation of monthly bank statement reviewed by owner; the monthly bank reconciliation was completed by an independent officer; a credit review was performed prior to granting credit; owner approved the credit; use of a standard price list; and approval of discounts or coupons used by the owner.

Purchasing and cash disbursement function

The following were the internal control strengths: restricted or secured warehouse; inventory counted on a periodic basis; inventory counts were reconciled to the stock cards; there was a perpetual inventory system was maintained; the owner approved material purchase orders; the owner approved new vendors; purchase orders were used for ordering; vendor invoices were reconciled against the receiving reports and purchase orders; discounts were taken; the owner signed checks; and blank or unused checks were kept secured.

For the purchasing and cash disbursement function, the following were the fraud risks: missing inventory; more than 20 vendors; no competitive bidding process; delivered inventory or supplies was unmatched with the purchase order; two signatures were not required on checks.

Employee expense reimbursement

The strengths were identified as follows: travel and business expense refund policy was in placed; actual, itemized proof of expenses was required for repayment; a formal expenditure report was examined; particulars of business activity or entertainment were required for refund; the owner approved the refund; assessment of expenses between employees to recognize infrequent expenditure patterns.

Under employee expense reimbursement, the fraud risks were only two: the company reimbursed employees for business travel; travel per diems was permitted.

Reporting and monitoring function

The following reduced the level of fraud of the business: an external financial statement audit was done; surprise audits were done; employees were encouraged to report activities to the owner; the owner was at the company on a regular basis; existence of a code of ethics and conflicts of interest policy; financial statements were prepared monthly and quarterly; owner reviewed financial statements; a cash flow statement was prepared; incentive programs were used to report alarms.

The two were the fraud risks under the reporting and monitoring function: there was no fraud hotline; and accounts (accounts receivable to the general ledger, accounts payable to the general ledger) were not reconciled each month and reviewed by the owner.

Take note that this was just a preliminary assessment. This assessment could change. The responses were taken from the operations manager, purchasing officer, inventory clerk and the president. There was use of judgment among the respondents during the investigation. The preliminary assessment was based solely on a tool developed by Williams and Kollar.

CONCLUSIONS

Grounded from the findings of the study, the Sales and Cash Receipts Function attained the high risk profile among the other business functions. The Reporting and Monitoring Function served as a major compensatory control to mitigate the risk of the business. The general level of business risk is moderate as to theft and misappropriation of cash, segregation of duties and supervision, and employee collusion.

The fraud triangle of Dr. Donald R. Cressly showed that in the presence of rationalization, opportunity and motivation, risk occurred. In this study, the tool checked for the controls to mitigate the elements of the fraud triangle. The fraud triangle was mitigated prominently through the internal controls in the reporting and monitoring function. The reporting and monitoring function was a key in reducing the level of fraud risk at moderate level because any employees could commit fraud and could made the business suffer financial losses as stated by Gomez (2010). As theorized by Dorminey et al. (2010), the identification of the fraud triangle could help the business deter economic crimes. In connection with Dorminey, the fraud triangle was identified and certain controls were put in place and monitored as embodied in the tool of Williams and Kollar (2012). The theory of James Hall was supported because there were existing controls that were unenforced. This situation affirmed the presence of intention of committing fraud.

RECOMMENDATIONS

Thus, it was suggested that there should be continued close monitoring; Independent verification and job sharing and job rotation. The owner had cameras in the business premises. The researcher recommended that the cameras must be kept secured at all times to prevent theft of cash and inventory and other valuables. The owner reviewed reconciliation of accounts receivable and payable must be done seriously by the owner. This procedure could be delegated to an in-house auditor; however, the owner was conscious of additional expenses on payroll. The job rotation or sharing was for the purpose of preventing fraud concealment. For this reason, the management was advised to train employees for the facets of ministerial functions in the office and business administration. The owner was reminded to adhere to the mandatory vacation leaves, thus necessitating the job sharing and rotation.

There should be maintenance of a company vehicle record. Since it was an accepted risk that company vehicles were used after business hours, a record of vehicle history would assist the owner in maintaining the well-being of the company car.

There must be strict practice of the segregation duties. The custody, authorization, recording, and execution functions of incompatible duties must be strictly watched. For instance, the cashier must not record the collection in the books of account. The recording function must be done by the receivable clerk. In the same light, the receivable clerk must not have any custodial functions over cash and cash equivalents. The authority to write off an account receivable must not be given to the receivable clerk. The write off authority must be from the treasurer or its equivalent. The duty to receive collections and deposit the collections must be under the cashiering function.

Complaints must be directed to the owner without screening. Considering the size of the business, all complaints would be of utility if these were fed to the owner directly. This was in congruent to the close monitoring activity. All employees must have a cell phone number of the owner.

Vendor master list must be reviewed. Thus, the owner was informed that the master list for vendors must be updated. Dormant vendors must be blotted out from the list.

Warehouse must be locked at all times. The inventory clerk must be vigilant in handling the key to this room because inventory might be at risk of theft. There must be two signers in the check to increase the strength of independent verification.

Matching of goods received with purchase orders must always be done. It was suggested that a receiving report must always be prepared by the inventory clerk each time there was a delivery. The receiving report must be blind as to the quantity of goods so that the inventory clerk will do the actual counting of the goods received. After doing this procedure, the inventory clerk will match the quantities found in the purchase order to the actual count to ascertain the legitimacy of the received goods.

Examination of the expense receipts on the business travel must be strictly done. The date of the expense receipt must be checked in case there are receipts that are only used as dummies to cover up for the unnecessary expenditures.

The owner was reminded that good governance and fraud assessment initiative went hand in hand. Farber (2005) stated that fraud firms had poor governance.

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