



Awareness among accounting professionals regarding the forensic accounting to detect and prevent frauds with reference to Gujarat

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Abstract

Indian Markets have been expanded through joint venture, amalgamation and consolidation. With the increase in the business trade white collar scams and financial scams questioned the credibility of the financial structure of the business organization. Whether it is a fraud related to bank, digital, securities exchange which creates need to use effective instrument which gives more insight to prevent and detect fraud. From various study it is shown that forensic accounting is more effective to investigate fraud in brief compared to auditing. From this research it was studied that there is much more effort needed to create awareness regarding forensic accounting and to implement in the system.

Keywords: forensic accounting, fraud

Introduction

What Is Forensic Accounting?

In current scenario forensic accounting is going to be divided in to two major area which are legal support and inspecting accounting. These two areas are the main areas which supports other services. In traditional approach it is limited up to inspecting services and rotate around corporate intelligence and fraud identification services. It doesn't even clarify what is legal support and inspecting accounting.

Legal Support – is providing assistance for accounting matters which is keep going or pending. It is mainly focused on problems related to the quantity of economic damages which means it gives legal support in calculating economic loss getting from infringement of agreement. Further it is expanded to the areas like finding of assets, recovery of income, reconversion of accounting and monetary analysis. Legal support working closely with lawyer who are part of the following matters. This is not limited up to conflicts regarding agreements, bankruptcy, insurance claims, royalty, conflicts of shareholders and claims of intellectual property. Inspecting Accounting – on a contrary related with the accounting inspection which of criminal nature. Ordinary type of inspecting accounting is concerned with fraud in which employee, security, insurance, kickback, advance fees etc. are involved.

There are certain of work in which both legal support and inspecting accounting is required at the same time. There are many works in which both these services are not enough unless it will have sound fraud risk management and control. Prevention and reduction of fraud is only possible if top level management implement and promote anti-fraud policy.

What Is Fraud?

Fraud is an act of intentional cheating either by deletion or commission and because of that victim suffer loss and culprit gain the benefit.

Types of Fraud

There are three basic categories of frauds. Which are as follows:

1. Corruption
 2. Assets Misappropriation
 3. Financial Statement frauds.
- **Corruption:** Corruption frauds has been categorized into three different types:
 1. **Disagreement of Interest:** In which culprit try to manipulate to get personal benefit that will negatively affects the organization. Culprit will not be benefitted financially but get benefit which is unrevealed for the particular situation.
 2. **Bribery:** is the situation where financial or any valuable thing will be offered to get the work done.
 3. **Extortion:** is the situation where money is demanded by the culprit to do particular work.

- **Asset Misappropriation:** There are many different types of frauds which are the part of Asset Misappropriation.
 1. **Cash Theft:** Cash theft means to steal cash from the organization.
 2. **Fraudulent Disbursement:** The fund of the organization will be used to do payment in fraudulent activity. The example of the same is sometimes payment will be issued to some fake suppliers, payments made to the employees who are not a part of the organization who is generally known as ghost employee.
 3. **Inventory Fraud:** If any inventory stolen from the organization than it is called inventory fraud.
 4. **Misuse of Assets:** When employee use the assets of the organization for their personal interest called misuse of the assets.

- **Financial Statement Fraud:** Financial statement fraud include misstatement of material, malfunctioning of accounting records and balances, no record of transaction, misapplication of financial reporting standards. This thing will be done to hide all the liabilities to improve liquidity of the organization.

Forensic Accounting Techniques for Prevention of Frauds:

Benford's Law

Deal with the spined words as you need It is a numerical instrument, and is one of the momentous systems to figure out assuming that variable being scrutinized is an event of coincidental mistakes (stagers) or pressure. On particular any such wonder, the variable being scrutinized is presented to a careful test. The rule conveys that created figures (as marker of compulsion) have a substitute model from uncommon figures. The method of Benford's regulation are particularly fundamental. whenever the variable or subject of monetary centrality is picked, the left most noteworthy digit of variable being scrutinized disconnected and compacted for entire people. The outline is finished with the aid of assortment the rule digit field and finding its watched really take a look at rate. By then Benford's set is associated. A parametric test known as the Z-test is done to gauge the centrality of instability between the two masses, for instance Benford's rate numbers for first digit and watched speed of first digit for a specific period of the real world. Assuming the information confirms to the expense of Benford's rule, it proposes that the records is Benford's set, for instance there is 68% (genuine around 2/3rd) probability of no mess up or shakedown. The huge digit may not be the fundamental suitable request.

Theory of Relative Size Factor (RSF)

It includes each surprising contrast, which might be asked from bending or approved messes up. RSF is assessed as the degree of the fundamental number to the second greatest extent of the given set. nearly talking there exist specific end centers (for instance monetary) for everything about, a model, seller, client, specialist, and so forth these motivations behind suppression is probably depicted or investigated from the available information in the event that not, now portrayed. assuming there's any vagabond event of that is course past the standard sum, by then there may be a need to look at further into it. It enables in better disclosure of outliers. In information that fall outside the stimulated sum are connected with bumbles or pressure. these real factors or fields need to connect with specific factors or fragments to track down the affiliation, in this way setting up truth.

Computer Assisted Auditing Tools (CAATs)

CAATs are PC programs that the analyst uses as a significant part of the survey strategies to process data of audit centrality contained in a client's information structures, without depending upon him. CAAT assists analysts with performing different assessing procedure, for instance, (a) Testing focal points of trades and changes, (b) recognizing inconsistencies or enormous changes, (c) Testing general and application control of PC systems. (d) Sampling ventures to focus data for audit testing, and (e) Redoing figuring performed by accounting structures.

Data mining techniques

It is a plan of aided techniques expected to subsequently mine significant volumes of data for new, concealed or unanticipated information or models. Data mining strategies are organized in three ways: Disclosure, Predictive showing and Deviation and Link assessment. It views as the average learning or models in data, without a predefined thought or hypothesis about what the model may be, for example with no previous data of misrepresentation. It explains various affinities, connection, examples and assortments as contingent reasoning. In insightful showing, plans found from the data set are used to predict the outcome and to figure data for new regard things. In Deviation assessment the standard is found at first, and after that those things are perceived that go out of order from the average inside an offered edge (to find irregularities by eliminated models). Join exposure has ascended actually to distinguish a dubious model. It generally utilizes deterministic graphical procedures, Bayesian probabilistic accommodating frameworks. This strategy incorporates "plan organizing" computation to "concentrate" any phenomenal or dubious cases.

Ratio Analysis

Another accommodating extortion acknowledgment methodology is the figuring of data examination extents for key numeric fields. Like cash related extents that offer hints of the financial sufficiency of an association, data

examination extents report on the coercion prosperity by recognizing possible symptoms of misrepresentation. As indicated by the points of view by Albrecht, et. Al (2009) three for the most part used extents are:

1. The extent of the most imperative quality to the least regard (max/min);
2. The extent of the most amazing quality to the second generally vital worth (max/max2); and
3. The extent of the current year to the prior year.

Different Procedures Used by Forensic Accountant:

There are few methods which is used by the forensic accountant to perform

Document verification

Auditor focuses on the documents provided by the management. They verify these documents to ascertain the True and Fair view. Auditors verifies that all transaction entered have proper documentation. They focus more on accounting principles and arithmetic accuracy rather on fraud. Forensic Accountant on the other hand focuses whether the documents entered in the system are not fraudulent.

Alternative sources to verify

Though auditor also does third party confirmation, but they only verify from the general ledger the accuracy of the document. Experts tries to collect data from the outside sources and hence their information are more trustful on existence on these documents from the alternative source i.e., they try to verify their truth behind the documents.

Informal information techniques

Informal techniques are used to confirm the information or to investigate certain information forensic accountant try to validate the data from the informal sources.

Interviewing the employees

Forensic accountant tries to interview the employee to understand the system critically and also to get their view on the internal system of the organization.

Back ground verification of the employee

In order to control and verify the occupational fraud forensic accountant focuses and follow the procedure of back ground verification of the employee.

Analyzing Physical and Electronic Verification

Forensic accountant is not only having strong hold on accounting but also, they are expert in computer hardware and software. They play an important role in identifying and controlling internet and cyber frauds. They analyse and study hardware's and software's used by the organization. Company uses computer for their business transaction and hence they verify hardware and software of the company to ensure their safety.

CCTV cameras

Forensic accountant uses CCTV camera for observing the transaction happening in the organization. For example, loading and unloading of the goods. Physical property of the organization is safeguarded and verified through CCTV.

Analyzing financial transaction

Forensic accountant analyzes financial transaction to make sure that fraud has been occurred and if it has occurred that what is the quantum of the fraud. They explore financial transaction to draw the conclusion. They even use statistical tools to understand the complex transaction.

Observing verbal and non-verbal communication

Forensic accountant is good observer of the situation. They observe transaction and employee in the organization and on that basis, they derived the output of the case.

Surprise visits

Forensic accountant never plans or discuss their visit with the employee and hence they collect required and expected data from the organization.

Areas of Application of Forensic Accounting

Corporate Investigations: affiliations answer stresses that arise through various assets that would suggest possible wrong doing inside and without the expert work environment. From the mysterious calls or E-mail from disappointed work power and 1/3 social occasions, these issues should be kept an eye on catalyst and really to permit the undertaking to protect to pursue its goals. even more phenomenally, the legal clerk assists with tending to claims starting from adjustments and ill-advised dismissals to internal circumstances concerning charges of control or workforce awful way of behaving. At cases, a scientific accountant can meet with those

individuals impacted by the charges, pieces of tattle, or demands; they'll see the clerk as a fair and target party, and thusly be more arranged to team up in discussion.

Litigation help: **Litigation** control involves helping counsel in analyzing and looking over the reliability and aggregate implying such regions as loss of advantages, creation claims, thing commitment, financial backer discussions, liquidations, and enter of understanding. evidently, arraignment help is begun by a lawyer responding to a legal offense advancement of some kind.

Criminal issues: Efforts to hinder working class bad behavior have interminably used accountants and evaluators in try to sort out, check, and report on money related trades related to charges against people and associations in a scattering of conditions, for instance, incendiarism, stunts, deception (e.g., adjustments or misappropriation), shipper fakes, purchaser cheats, funding stunts, and monetary trade controls. In criminal subjects, accountants and analysts as expert eyewitnesses are continuously huge in court events.

Insurance Claims: The status and examination of consideration claims to serve the ensured and security net suppliers can similarly require the help of a measurable accountant to evaluate each the uprightness and the quantum of a case. The more critical gigantic domains relate to the calculation of disaster rising up bankrupt obstruction, consistent quality bond, or individual injury matters. while sure of those cases require monetary projections, many need old assessment and other bookkeeping and investigating orientated organizations.

Shareholder and Partnership Disputes: Forensic clerks ordinarily explore the financial clarifications and reports of various years generally through the technique in their assessment. this would allow assessing the challenged issue. The most notable events of such inquiries arise concerning the compensation and ideal conditions given to financial backers and partners. by analyzing the financial declarations of the business try in a specialist way, a legal clerk can endeavor to pleasantly decide such issues.

Business Investigations: Forensic clerks can be locked in with huge business assessments via accounts following, asset character and recovery, measurable information gathering and due assurance reviews.

Employee Fraud research: assuming there ought to emerge an event of delegate deception assessment, a measurable clerk chooses the presence, nature and level of blackmail and attempts to get aware of the wrongdoer. these assessments consistently include gatherings of staff who moved toward the resources and an all-around assessment of the story verification.

Business money related Losses: The measurable clerk can be called to research and analyze the endeavor - monetary incidents parts including contract questions, advancement claims, seizures, thing commitment claims, brand name and patent infringements, and disasters coming from an enter of non-competition understanding.

Professional Negligence: A measurable clerk can moreover look at the presence of expert recklessness in any indictment. There are focuses related with such assessment. One is the particular perspective, with the aide of which the measurable clerk takes a gander at whether the bookkeeping and investigating systems had been painstakingly stuck to or overlooked. the opposite perspective is the estimation of incidents arising out of master inconsiderateness. On the off chance that there ought to emerge an event of monetary or bookkeeping adversities, criminological accountant drives the assessment from each the places in some other case he could be coordinating hardship estimation best.

Family Disputes: assuming there ought to be an event of family discusses which integrates conjugal course of action burdens, a measurable clerk can assist with following, finding and standing out the family things from appear at an agreeable strategy for settlement and spread. The property to be regarded may be associations, houses or others.

Capital market capacity: A criminological assistant likewise can play a colossal breaking point in settling shareholders' grumblings and decreasing protections business center cheats. In the forefront making business center condition, there are requests in regards to veritable deal charge valuations. A legal bookkeeper's cutoff might be principal in isolating the proposition worth moves and the explanations behind unending rate contrasts.

Corporate Governance: The extended importance given to corporate organization in Indian associations has made a further degree for scientific accountants. The internal controls of an association ensures suitability and efficiency of errands, the steady nature of cash related reporting and consistence with appropriate regulations and rules. nevertheless, with various social occasions getting exploitative practices to satisfy accomplices, the inside control device is needing concentrated examination and changes. social events can use the capacities of a measurable clerk for growing an anticipated contraption of association organization, dispersing records inside and outside the affiliation, guaranteeing that organization procedures and targets are embedded into the interior control structure, and setting up blackmail aversion systems to separate cheats.

Government: Forensic clerks can help states with gaining regulatory consistence by techniques for protecting that workplace keep the fitting rule. grant and sponsorship assessments and public solicitations structure a piece of this carrier to subject matter experts. To summarize the kind of situation that requires a scientific clerk, it may be communicated that measurable accountant is expected while there is a probable seen mishap, authentic financial hardship, or hazard of incident.

Objective of the Study

- To describe and investigate the classification of frauds under forensic accounting.
- To study the perception of accounting professionals' regarding forensic accounting.
- To study various techniques of forensic accounting to prevent and reduce technological fraud.
- To study the various techniques of forensic accounting to prevent and reduce occupational fraud.

Sample and Population

The universe for the research shall be professionals in the field of accounting, auditing and forensic accounting based at Gujarat. Simple Random Sampling technique shall be used. Sample size will be 70 respondents who are CA, ICWA, Accounting firms for Pilot Survey of the study.

Sampling Frame and Sample Size

Primary data: shall be collected by way of structures questionnaires from Auditor, Accountant, Chartered Accountant, Cost and Management Accountant, Company Secretary

Secondary data: shall be collected from sources like government agencies and organizations, Chamber of Commerce and Industry and also from websites, magazines and Journals.

Data Collection Instruments

Data has been collected through structured questionnaire. "Google Form" technique of data collection is used by the researcher.

Scale of Measurement

There are four types of measurement of scales out of which Nominal scale is the form of scale which does not require the use of numeric value it is just used to identify different objects. In case of ordinal scale, it measures identity and extent of the object. Interval scale shows the extent, identity and equal interval between the objects. Ratio scale measure all four elements like extent, identity, equal interval and minimum value of zero. In this research majorly five and seven Likert scales are used.

Method of Data Analysis and Statistical Tools Applied

The information collected from the field needs to be processed so as to make it meaningful and relevant if researcher give justification on the basis of statistical tools. Descriptive statistical tools used by the researcher for knowing customer behaviour and present conclusion about relationship between variables which is used for the study.

Frequency Distribution/Simple tabulation

Frequency distribution display the numbers times a particular observation has been repeated as a response to a particular query. It is a summary of the questionnaire data or field data represented as count and presented (Hazarika, 2012).

Arithmetic Mean

It is used for the measuring central tendency. It is the sum of the values of a variable x divided by the number of the value or observation (Hazarika, 2012). (G. M. & A.R., 2012) States that the educator and researcher often create survey Likert scale type's items and calculate mean scores of the same. In which researcher used more than 25 questions for the study.

Weighted Average

The obtained by giving due importance to the count of responses in a particular series of data is collected the weighted average mean are calculated for the knowing most important factor. Here weighted arithmetic mean for giving set of non - negative data and used for that $\{x_1, x_2, x_3, \dots, x_n\}$ with non - negative weight $\{w_1, w_2, w_3, \dots, w_n\}$ can be used this formula. (Hazarika, 2012)

$$\bar{X} = \frac{\omega_1 x_1 + \omega_2 x_2 + \dots + \omega_n x_n}{\omega_1 + \omega_2 + \dots + \omega_n}$$

Where,

X= Representative Value

W= Number of occurrences of x (weighted)

X= Weighted Arithmetic Mean

Cross Tabulation

This statistical technique used for the display two or more variable simultaneously in terms of tables and this table represent two or more variable in same place. (Malhotra & Dash, 2016)

Chi-square test

This statistical tool used for the determination of the statistical significance of the observed association in a cross-tabulation data and stated that this test not based on assumption of normality if our data were not normally distributed so that we can used chi-square test and it is applicable when both large and small samples. It is usually applied when total frequency is more than 50 are there and sample observations are independent.

Assumptions of Non-parametric test

Non-parametric tests can be applied when:

- Data don't follow any specific distribution and no assumptions about the population are made.
- Data measured on any scale.

For the Kruskal Wallis test

- One independent variable with two or more levels (Independent Groups). The test is more common,
- The Kruskal Wallis H test is a non-parametric procedure that can be used to compare more than two populations in a completely randomized design
- It's more powerful than chi-square test.
- It is computed exactly like the Mann-Whitney test, except that there are more groups (>2 Groups).
- Applied on independent sample with the same shape (but not necessarily normal).

$$H = \frac{12}{n(n+1)} \sum_{i=1}^k \frac{R_i^2}{n_i} - 3(n+1)$$

Mann Whitney-U test

This is a very popular test amongst the rank sum tests. This test is used to determine whether two independent samples have been drawn from the same population. It uses more information than the sign test or fisher-Irwin test. This test applies under very general conditions and requires only that the population samples are continuous. However, in practice even the violation of this assumption does not affect the result very much. (C.R., 2004)

$$U = n_1 \cdot n_2 + n_1 \frac{(n_1 + 1)}{2} * R_1$$

Assumptions

- All the observations from both groups are independent of each other,
- The responses are ordinal (i.e., one can at least say, of any two observations, which is the greater),
- Under the null hypothesis H_0 , the distributions of both populations are equal.

Forensic accounting implementation in India

In India, Forensic Accounting misses the mark on due affirmation even resulting to upsetting increase in the complex monetary bad behaviors and nonattendance of acceptably ready specialists to explore and give insights about the mind-boggling cash related infringement. The task of Forensic Accountants is dealt with by Chartered Accountants who isolated from dealing with standard daily schedule of inspecting as expected under the Organizations Act, 1956 or Income Tax Act are called upon by the law execution workplaces or on the other hand the associations or private individuals to assist with investigating the money related bad behavior or stunt. The CA or CWAs in India are generally suitable for this calling on account of their monetary sharpness got in the midst of their intensive getting ready which can be further honed by introducing post capacity degree or affirmation in Investigating and Measurable Accounting like one introduced by CICA. The CA or CWA who get post ability in Investigative and Forensic Accounting can use the task CA-IFA or CWA-IFA also, be legally seen as the Forensic Accounting Experts to deal with the assessment of cash related infringement and give ace assertion in the Court of Law. Regardless, no undertakings have up until this point been made by the ICAI and ICWAI, the two-driving legal bookkeeping capable bodies to move in this heading and set up an establishment which can offer the post ability acknowledgment in Investigative and Forensic Accounting to its people. In any case, creating monetary extortion cases, late stock marker stunts, disillusionment of non-cash related keeping cash associations, wonders of evaporating associations and home associations and frustration of the managerial framework to check it has obliged the Government of India to shape Serious Fraud Investigation Office (SFIO) under Ministry of Corporate Affairs which can be regarded the underlying advance of Government of India to see the importance and advancement the calling of measurable bookkeeper. The SFIO is a multidisciplinary

affiliation having experts from monetary division, capital business area, bookkeeping, legitimate audit, charge evaluation, regulation, information advancement, association regulation, customs and assessment. These experts have been taken from various affiliations like banks, Securities and Exchange Board of India, Specialist and Auditor General and concerned affiliations and authorities of the Government. Regardless, the basic fundamental regulation prerequisite office included directly in battling fakes is the Police, CBI, DRI, etc.

Conclusion

Indian Markets have been expanded through joint venture, amalgamation and consolidation. With the increase in the business trade white collar scams and financial scams questioned the credibility of the financial structure of the business organization. More efforts are needed to create awareness regarding forensic accounting among Indian accounting professionals. It was found that forensic accounting is more effective compared to the traditional auditing techniques.

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