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Onome Imoniana, Joshua; Pompa Antunes, Maria Thereza; Formigoni, Henrique
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## THE FORENSIC ACCOUNTING AND CORPORATE FRAUD

Joshua Onome Imoniana Maria Thereza Pompa Antunes Henrique Formigoni Mackenzie Presbyterian University, SP, Brazil

#### **ABSTRACT**

This study is aimed at analyzing the characteristics of forensic accounting services performed by accounting firms in Brazil, using an exploratory approach. At the end of the study, there is a discourse analysis of a speech made by the CEO of one of the key players in forensic accounting services (Kroll) in Brazil. In order to guide this reflection, we pose the following question: what is the characteristic of forensic accounting that substantiates professional accountants' innovation to curb corporate accounting malpractices? In this intent, we accept the premise that the bone of contention in some unhealthy business environments is the inability of an auditor to track frauds. We used the icons (categories and/or nodes) that dynamically represent formalism in the theory of self re-production to explain the patterns found in the speech. Our findings make us conclude that the idea that frauds have been least detected by auditors begins to gain shape as auditors are more adequately trained to detect frauds instead of emphasizing the traditional segregation of duties and safeguard of assets.

Keywords: Forensic, Accounting, Fraud, Audit

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Joshua Onome Imoniana, Research Fellow at University of Bologna. He is a Professor of AIS and Auditing at the Graduate Program of Accounting at the Universidade Presbiteriana Mackenzie, Brazil. As CeGit and ISACA Advocate, is a PhD in Accounting from the University of São Paulo 1992. phone: +55-11-4702-7846 +55-11-21148273 E-mail: joshua.imoniana@mackenzie.br or: josh.imoniana@yahoo.com

Maria Thereza Pompa Antunes, is the Chair of Graduate School of Accounting and also Professor of Methodology and Financial Analysis in the Graduate Program of Accounting at the Universidade Presbiteriana Mackenzie, Brazil. She received a Ph.D. in Accounting from University of São Paulo - USP in 2004. phone: +55-11-5539- 3737 ou 2114-8887 E-mail: mariathereza@mackenzie.br;

Henrique Formigoni, Post-doctorate from University of Salamanca. Professor of Financial Accounting and Tax in the Graduate Program of Accounting at the Universidade Presbiteriana Mackenzie, Brazil. He received a Ph.D. in Accounting from University of São Paulo - USP, in 2008. Phone: +55-11-2114-8836 E-mail: hformigoni@mackenzie.br;

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#### 1. INTRODUCTION

The perspective of accounting influence on today's society will continue to be bright as users foresee in information providers the need of upholding the pillars of corporate governance; that is, accountability, fairness, responsibility and transparency. The last few years have witnessed a great expansion in both interest and research in the behavioural and social aspects of accounting, and there is little doubt that this area will be one of the increasing and important activities in the years ahead (Hopwood, 2009). Under the new ideological principles of economic development primacy, marketization, and mixed ownership paved the way for a different view of accounting to emerge (Ezzamel, Xiao and Pan, 2007).

Aware of this trend of accounting, and particularly as it has been construed in all parts of the world as eliminating boundaries, a fight against corruption and international fraud that corrodes the pause of most of the developing countries, accounting must be seen as going through a new era, with its end products assisting in the investigation and processing of the perpetrators of fraud.

Assuming that one considers fraud as the main source of human greed and absolute arrogance of the human nature, and that it is also innate in those who perpetuate it, never contented with what they have or always taking advantage of a perceived lack of control, forensic accounting is regarded as one area of these fields of accounting that is going to receive greater attention in future research, be it sociological or humanistic approach.

If we did not close our eyes to what has beheld our society for various decades, we would not be deceived by the fact that fraud has always existed. To make matters worse, new technologies are being developed to bridge the gaps between employees and employers, businessmen and agents, considering punitive measures to make fraud less interesting, but this has not been enough. According to Imoniana (2003), stealing, fraud under extortion and threat to businesses are normally perpetrated by employees or executives who possess the following profiles of:

- Being ambitious, excessively calculating and good planners;
- Living above their earnings;
- Having social and psychological problems;
- Having economic and financial problems;
- Always believing in the laws of advantage;
- Trusting their ability to perfectly manipulate others to conceal the trace of frauds;
- Being a collaborative employee;
- Gaining confidence of superiors and plotting their plans out of working hours;
- Performing overtime, but reluctantly requesting to be compensated;
- Taking short or no vacations; and
- Knowing the business better than anyone.



As implied, there is no gain saying that fraudulent acts and corruption have become a cankerworm that has eaten deeply into the fabric of our society. This seems to be in an escalating rate as we witness it day-in day-out through newspapers that public officers, managers entrusted with the life of businesses, manage business to their own advantage. Fraud has become an industry, not just for the fraudster; academics study it, investigators investigate it, lawyers litigate on it, and conference goers debate it; but the industry is built on managing the consequences of fraud rather than on preventing fraud (KPMG, 2009).

Ironically, this seems to be a lost game when we align what the accounting profession has always done to tackle issues at stake with the deliverables to the stakeholders, saying that it has taken its own part of the uncultured and deregulated society, whereby all the accounting information technologies are not enough to curb fraud.

Therefore, when we assume that the accounting profession is doing its own share of the task it seems to be comfortable, but one is yet to believe in this, since the normative positivist approach in accounting has not been totally ineffective, and also the purely positivist approach which takes with it an inductive approach is yet to be defeated. Thus, this is likely going to be the best bet of accounting for the near future.

In the recent years we have fraud auditing taking place as a result of a suspect of fraud in financial statements or accounting documents. In addition to this, we have expert witnesses; in this case, the accountant using his technical procedures and scientific know-how to give a proof, necessary to substantiate a decision, normally a litigious one, by providing accounting reports in accordance with the rules of law and professional ethics.

Today, the said fraud auditing has grown to include forensic accounting that entails a lot of more jobs. Invariably, the result may determine the future of the experts, should the evidence gathered be ruled as inadmissible in the court of Law.

According to KPMG (2009) providing expert accounting assistance is not simply a matter of adding up the numbers. First, the numbers may not be easy to find or are not in perfect order. Some information will be available internally, some only externally. So, considering the likeliness of information where something may be dubious, some information will require reworking to be useful and other information may not be available at all. Some parties may relate information about what happened, which may not bear any resemblance to reality. Then comes the need for someone to keep an eye on all these, hence, the requirement for an investigative bookkeeper otherwise known as forensic accountant.

Therefore, this study is aimed at analyzing the characteristics of forensic accounting services performed by accounting firms in Brazil, using an exploratory approach. At the end of the study, there is a discourse analysis of a speech made by the CEO of one of the key players in forensic accounting service (Kroll) in Brazil.

Thus, as the current article comprised a study to source unavailability of literature through research, be it normative or supportive in nature, one sees relevance in it. This is what Littleton and Zimmerman (1962) described as perceptive; a search for a rational justification of the already accepted practice rather than a free inquiry into one or another of the many aspects of accounting knowledge. We do not expect practicing accountants to be social scientists any more than we expect practicing physicians to be physical or natural scientists. Their opportunity for services is by far another kind; it

lies in helping their clients or patients to the utmost of their professional abilities within the scope of ethical practices (Mautz, 1963, pp. 317).

Based on the aforementioned, we pose the following research question: what is the characteristic of forensic accounting that substantiates professional accountants' innovation to curb corporate accounting malpractices?

#### 2. LITERATURE REVIEW

## Antecedents of forensic accounting

In the antecedents of forensic accounting, for clarification purposes, we take investigative auditing or forensic auditing as the basis of all these changes.

Accordingly, Joshi (2003) sees the origin of forensic accounting traceable to Kutilya, the first economist to openly recognize the need for the forensic accountant, who, he said, mentioned 40 ways of embezzlement, centuries ago. He, however, stated that the term "forensic accounting" was coined by Peloubet in 1946. In the same antecedents, Crumbley (2001) stated that a form of forensic accounting can be traced back to an 1817 court decision.

The United States culture has been described as a lawsuit society. The growth in litigation has produced accompanying opportunities in a field called forensic accounting. The field is highlighted by accountants who serve as expert witnesses on both sides of a dispute (Dykeman, 1982). The Brazilian society is a learning type, where lawsuits are very sluggish, and it favours those who use them as a management strategy to drag and retard their effects on businesses. Organizations lose 5-6% of revenue annually due to internal frauds with the equivalent of \$ 652 Billion in US as of 2006 (Coenen, T.L, 2008).

Forensic accounting is primarily aimed at accounting practitioners who want to expand their services to attorneys. However, [...] some expert witnesses have sparked negative relations such as the Judge in the Eastern Kodak-Berkey Photo anti-trust case: "[...] too many of the people come in and think that they can sell whatever counsel is willing to buy and profit from it [...] you just can't and shouldn't be doing that kind of thing" (Dykeman, 1982).

Even though, as already introduced, forensic accounting takes care of fraud audits, Sarbanes Oxley is not leaving any stone unturned to provide for the coverage of any management negligence in the process of business controls. In this question, the SOX sections including Public Company Accounting Oversight Board (PCAOB) helps to clarify the auditor's fraud responsibility.

# Concepts of forensic accounting

It is difficult to conceptualize forensic accounting without comparing it with auditing, mainly because auditing has been used to assess business positions, accounting malpractices and even today auditors do perform investigative jobs. We have seen auditors perform fraud investigation, expert witnessing,, due diligence; etc. Probably as a new era, and professional advancement unfolding various strengths and opportunities and also embracing various perspectives, there is none gainsaying that accounting is also in this same trend.



KPMG (1999) defines forensic accounting as assistance in disputes which are likely to involve litigation, arbitration, expert determination, mediation or an enquiry by an appropriate regulatory authority, and investigation of suspected frauds, irregularity or impropriety which could potentially lead to civil, criminal or disciplinary proceedings; while focusing primarily on accounting issues.

Forensic accounting is intimately related to auditing, particularly when we mention forensic auditing. Thus, observing the comparative table 1, services provided by accountants include, amongst others: expert witnesses, being forensic services to give proof in accounting issues in litigations and auditing and to certify the veracity of accounting statements diligence. The forensic job is totally analytical in as much as in the end it tries to calculate the rate at which losses have been inflicted on the business. Generally, reporting in forensic accounting is programmed for a certain period. Yet, different from auditing, , there are no regulatory organizations which control efforts to be put into forensic accounting.

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Items for analysis	Forensic Accounting	Auditing
Why, When and Where the services take place	Serve as a backing to prove a fraud in the business in an apparent risk prone environment.	Continuous to certify the state of the art of a business and comply with an efficient market theory
Scope of the job	Present analytical accounting and financial information to support legal and administrative decisions	Opine on the accounting statements of business entities considering all criteria used in its preparation
Details of tasks performed	Detailed planning of tasks aimed at documenting deterministic and calculative analysis.  Sampled and/or probabilistic procedures to serve as a base of concluding the financial statement.	
Periodicity	When necessary and particularly according to the periods stipulated by the Judge or client.	Covering the fiscal year to substantiate the activities of the accounting period.
Reporting	Investigative or expert reports	Financial statements, management letters or auditors' report.

Table 1 - Comparison of Forensic Accounting and Financial Auditing

# **Ideology of forensic accounting**

The ideas of separating financial auditing from forensic accounting supports the premise that, unless it is investigative, financial auditing is not meant to investigate frauds, even though we have the provisions from the PCAOB for auditor's fraud responsibility. Therefore, in the various researches about the participation of auditors in detection of frauds, one would observe that their statistics show low participation during the course of an audit. This attempt boldly explains the cornerstone of corporate auditing by distinguishing the levels of accountability, integrity, transparency, ethics, competence and independence, apart from emphasizing the scope of work, data gathering, review procedures and reporting.

Forensic accounting, therefore, emanates from social discourses, as the accounting profession tries to give an answer to a typical problem brought by the growth and diversity of opinions in the social science structure. At the highest level, the social norms which guide the selection process are ideological (Mason, 1980, p. 30). Such discourses are replete in the works of Foucault, 1972; Larrain, 1979; Eagleton, 1991 and the host of others.

### **Characteristics of Forensic accounting**

In order to expatiate on the peculiarities of forensic accounting, it is worthwhile giving it a broader view under the taxonomies of a sub-activity of accounting. Such a breakdown for forensic accounting involves the following:

- a) Financial accounting, economics analysis, fiscal and criminal law, psychological, administrative and investigative dispensation;
- b) Application of forensic standards possibility to use the reports in a proof of Law in courts or tribunals,
  - c) Can be used in the following situations:
- Investigation of frauds thorough investigation and calculation of the impact on the business and therefore suggesting the arrest of the culprit for a criminal suit. Today, in the IT environment, where users' profiles are very similar and access controls are somehow lacking, this becomes critical. A general problem in forensic identification arises when a suspect is observed to have a particular rare trait, or combination of traits, also known to be possessed by the criminal (Balding and Donnelly, 1995).
  - ✓ Legal disputes and/or arbitration
  - ✓ Preparation and submission of expert reports
  - ✓ Supporting of Judges in subjects relating to accounting
  - ✓ Verification of accounting records
  - ✓ Supporting in due diligence.

Yet, according to Zysman (2009) a capable Forensic Accountant should have the following characteristics:

- ✓ curiosity;
- ✓ persistence;
- ✓ creativity;
- ✓ discretion;
- ✓ organization;
- ✓ confidence; and
- ✓ sound professional judgment.

Still, according to the same author, a Forensic Accountant must be open to consider all alternatives, scrutinize the fine details and at the same time see the big picture. In addition, a Forensic Accountant must be able to listen effectively and communicate clearly and concisely.

According to Zysman (2001) forensic accounting activities include:

- Criminal investigation, which are usually on behalf of the police with the aim of presenting evidence in a professional and concise manner.
- Shareholders and partnership dispute that involve analysis of numerous year financial records for valuation and qualification of the issue in dispute;
- Personal injury claim, where, for example, economic losses from a motor accident or wrongful dismissal may need to be quantified.
- Business interruption and other types of insurance claim. These assignments involve a detailed review of the policy to investigate coverage issues and the appropriate methods of calculating the loss.



- Business/employee fraud investigations which can involve fraud tracing, asset identification and recovery, forensic intelligence gathering and due diligence review.
- Matrimonial dispute involving the tracing, locating and evaluation of assets.
- Business economic losses, where a disputed contract, construction claims, expropriation, product liability claims and trade marks are the issues.
- Professional negligence ascertains the breach and quantifies the loss involved, and mediation and arbitration, as a form of alternative dispute resolution.

## Frameworks and Laws enhancing the control of fraud

Lately, several frameworks otherwise known as best practices and *Laws* have been implemented to enhance the control of fraud in various countries that undoubtedly affect all corporations which have international exposure. They range from *COSO* (*COMMITTEE OF SPONSORING ORGANIZATIONS OF THE TRADEWAY COMMISSION, COBIT (Controls Objectives for Information and Related Technologies), Sarbanes Oxley Law* involving specially Sections 101, 202, 302, 404, 409, 802 and 906 which introduces the *PCAOB* (*Public Company Accounting Oversight Board*) Auditor independence, Corporate management responsibility; importance of Internal Control systems and the monitoring of the managerial responsibilities in general; corporate fraud, criminal concerns and penalization, to mention just a few. According to Tarantino (2006), in order to comply with SOX controls, one has to be in accordance with the recommendations of COSO, COBIT international standards of corporate governance.

Therefore, it is quintessential that the said frameworks and laws agree with what every SEC and Central Banks worldwide as regulating bodies offer in congruence with the objective of protecting the interest of stakeholders. This would assist the effectiveness of curbing money laundering and drug trafficking, is notoriously alleged as having a link with terrorism. Following Albrecht, Howe and Romney, (1984) an individual is influenced by a moral perception, situational pressure in which one is encountered and opportunity is taken to commit fraud.

### 3. METHODOLOGY

The study adopts an exploratory approach, distributed into theoretical and empirical to tackle the ideology of forensic accounting and its perspectives, and also, in the end, it performs a discourse analysis to solidify our research objectives.

In the theoretical approach, we summarized all the available literatures relating to the topic. This entailed a search in the host of libraries of the main schools of accountancy in the globe and the main databases: EBSCO, Business Sources Complete, Proquest, JSTOR and also Brazilian Institutional Database - CAPES that serves researchers nationwide and worldwide; and Journals such as AOS, JFA, AJM, BJSP, AR, JA, to mention just a few.

As we try to verify the characteristics of forensic accounting through empirical analysis, Bunge (1980, pp. 13-14) signals possible epistemological problems that should be checked. This enlists categories of problems such as: logical, semantic, gnosiological, methodological, ontological, axiological, ethical and esthetical. Thus,

within these problems, we relate forensic accounting more closely to gnosiological, which, according to the author aspire empirical concept.

In addition to this, we performed the discourse analysis based on a lecture given by GOMIDE, Eduardo de Freitas – CEO of Kroll, Brazil on March 5<sup>th</sup>, 2008 at The Municipal Government Centre of the City of Rio de Janeiro about Forensic Accounting and prevention of frauds. It is one of the steps in making every effort to continually improve the programs and activities developed by the institution towards goal congruence (MUNICIPAL GOVERNMENT OF THE STATE OF RIO DE JANEIRO, 2008). The discourse has been extracted from the *CONTROLLER'S Bulletin* - bimonthly Journal published in the format of dossiers concerning frauds and corruption.

While there is no fixed method prescribed for discourse analysis, there are common phases and some validation tests (Wetherell, Stiven & Plotter, 1987; Hollway, 1989).

In order to enhance our discourse analysis, we separate some terms, words, sentences, phrases and paragraphs used to guide emphasis given to the main portion of the speech by attributing coding categories with the aim to validate this discourse, we ran the NVivo Software for Qualitative Analysis version 9.

Thus, to establish the coding categories (otherwise referred to as nodes) that were used to analyze the discourse, we borrow a leaf from the coding families as proposed by Bogdan and Biklen (1992). The cited coding categories are: Context code; Situation code; perspective code; process code; activity code; event code; strategy code; and relationship and social structure code.

In our study, we associate them with the normal taxonomy for observable coding family (parent, child) for forensic accounting, among which we enumerated in the following discourse analysis.

#### 4. DISCOURSE ANALYSIS

As a reminder, the discourse analysis is on a lecture given by Eduardo de Freitas Gomide – CEO of Kroll, hereinafter referred to as EFG, in Brazil on March 5<sup>th</sup>, 2008 at The Municipal Government Office of the City of Rio de Janeiro about Forensic Accounting and prevention of frauds.

The entire discourse was analyzed and the frequency of the most frequent 32 words can be seen as in Table 2. In essence, these words or terms vary in their intent, peculiarity in the characterization of forensic accounting in which out of the mentioned words the most relevant ones were described by counts and weighted percentages respectively as follows: accounting 53 and 0.78%; analysis 25 and 0.37%; company 76 and 1.12%; financial 35 and 0.52%; forensic 39 and 0.58% and finally fraud 58 and 0.86%.

Table 2 – Word frequency Analysis

Word	Length	Count	Weighted Percentage (%)
Accounting	10	53	0,78
Analysis	8	25	0,37
Assets	6	18	0,27
Audit	5	19	0,28
Auditing	8	15	0,22
Billion	7	15	0,22
Brazil	6	16	0,24
Business	8	20	0,3
Case	4	21	0,31
Client	6	14	0,21
Companies	9	31	0,46
Company	7	76	1,12
Data	4	18	0,27
Financial	9	35	0,52
Forensic	8	39	0,58
Fraud	5	58	0,86
Identify	8	15	0,22
Information	11	22	0,33
Internal	8	27	0,4
Kroll	5	20	0,3
Million	7	15	0,22
More	4	16	0,24
People	6	18	0,27
Problem	7	22	0,33
Risk	4	23	0,34
Those	5	15	0,22
Time	4	19	0,28
What	4	39	0,58
When	4	25	0,37
Where	5	22	0,33
Which	5	46	0,68
Working	7	16	0,24

Thus, after a summary run by NVivo Software for Qualitative Analysis, one was able to assemble the following 23 categories describing forensic accounting and corporate fraud as in Table 3.

According to Laclau and Mouffe (2001) there are four key concepts that are interwoven, they are elements, moments, articulation and discourse. In the authors view, an element is a difference that has not been developed via discursive articulation. Once an element is identified linguistically, it is transformed into a moment.

Articulation is the practice of establishing a relation among elements that modify their identity.

Table 3 - Structure of Categories - Forensic Accounting and Corporate Fraud

Node	Color
Historical of forensic accounting	Blue
Concepts of forensic accounting	Red
Comparing auditing and forensic accounting	Blue
Classification of forensic activities	Blue
Peculiarities of fraudsters	Blue
Extension of forensic accounting activities	Blue
Audit guide on fraud audit	Blue
Focus of forensic Accounting	Blue
Auditors fraud responsibility	Blue
What is the relationship of auditing and forensic accounting	Blue
Internal management of Kroll	Red
Who hires forensic accounting services	Red
Monitoring frauds and enhancing financial performance	Red
Identifying Red Flags – Investigative Mentality	Red
Traces of Red Flags	None
Case Study of Enron	Red
Assessment and mitigation of risks	Red
Performance enhancement and mitigation of risk	Red
Preparedness of internal audit	None
Forensic accounting methodology	Red
Average working hours for forensic accounting job	Purple
Bone of Contention of fraud audits	Blue

In this respect, in order to expatiate on the said discourse, we bring all the logical representations shown in the literatures and otherwise, and project them towards the nodes; see Figure 1. This in turn represented in a number of icons that dynamically symbolize something to us in a self-reproduction and have been presented as follows.

**Group Query** Nodes Sources What is the geletianship of subling and forensic accounting Peculianties of fraudster Relationships of Auditing and Forensic Accounting Profile of a fraudste Historical of forensic accounting Focus of forensic accounting Primary aim of forensic accounting Extension of forensic accounting Emphasis on Red Flags PCAOB Difference of audit and fraud investigation Comparating auditing and forensic accounting Classification of forensic activities Bone of contention of fraud audit\Who hires forensic accounting service Origin of forensic accounting Bone of contention of fraud audit\Traces of Red Flags Ideology of forensic accounting Bone of contention of fraud audit\Preparedness of internal audit Bone of contention of fraud audit\Performance enhancement and mitigation of risk Bone of contention of fraud audit\Monitoring frauds and enhancing financial performano imanates of social discourse about forensic accounting Bone of contention of fraud audit\Internal management of Kroll Discourse by Krall Executive Bone of contention of fraud audit\Identifying Red Flags - Investigative Mentality Bone of contention of fraud audit\Forensic accounting methodology Bone of contention of fraud audit\Concepts of forensic accounting Concepts of forensic accounting Bone of contention of fraud audit\Case Study of Enron Bone of contention of fraud audit/Average working hours for forensic accounting job Comparative of Forensic Accounting and Financial Auditing Bone of contention of fraud audit\Assessment and mitigation of risks Characteristics of Forensic accounting

Figure 1 – Logical representation of nodes in relation to their source

## a) History of forensic accounting (Perspective code)

As a recapitulation, Economics as a field of study was the first to mention forensic accounting some centuries ago. This was said to have been emphasized by Kutilya who cited 40 ways of embezzlement.

In this discourse, EFG cited that the activity of forensic accounting as a financial service at Kroll seemed to have started a fight against fraud first in United States of America around 1938.

#### b) Concepts of forensic accounting (Context code)

The main aim of forensic accounting is not only to understand how a fraud was committed, but to document it with the highest possible accuracy. According to Gomide (2008, p. 167) a good forensic accounting combines accounting analysis and also requires good accounting and investigative skills). In the discourse, EFG cited that "it falls under general information or certain topics, or

subjects as it can be sorted. [...] general statements that people make to describe the subject, as investigative accounting, or even forensic auditing".

In order to have a broader view of forensic accounting, see the text search run report figure 2 below.

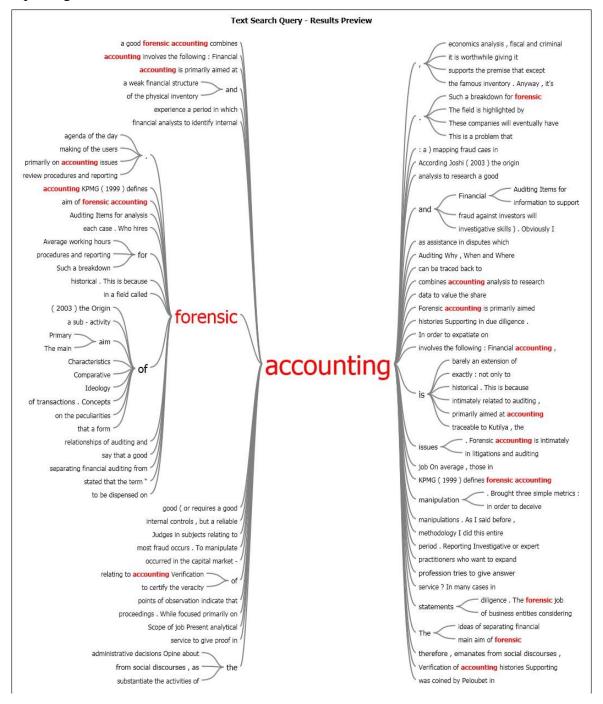


Figure 2 Broader concepts of forensic accounting

It shows right from the first text that "good forensic accounting combines [....] economic analysis and criminal.... say profile of the subject being investigated. This goes as far as to showing that forensic accounting was initially coined by Peloubet in 1946.

## c) Focus of Forensic Accounting (Context code)

Forensic accounting falls within the context of our environmental needs. That is, to give forensic assistance in accounting issues. This is very vital in the environment that is flooded with fast moving businesses and polluted with politicians who have powers to corrupt well meaning businessmen. This normally happens in detriment of well planned public projects that are roughly implemented.

In terms of qualities of a forensic accountant, Fitzhugh (2010) mentioned that by the nature of the job, forensic accounting favors individuals who have prior work experience in fields like law enforcement and auditing. Maturity and prior professional knowledge give forensic accountants a frame of reference to utilize their professional judgment and frequently a "gut" instinct developed from years of experience. Entrylevel staffers right out of college generally do not have that life experience to have developed these talents.

## d) Comparing auditing and forensic accounting (Situation code)

The main difference between auditing and forensic accounting is that one performs audit to assist management in adequately implementing their strategies towards goal congruence, and also reports the true and fair state of affairs of a business to stakeholders to enable them make decisions while we perform forensic accounting to investigate conduct deviation and measurement of its impacts. Each forensic accounting job differs, and there are no generally accepted accounting principles for this practice area to provide guidance to practitioners on how to perform an engagement. It is an unstructured environment requiring self-motivation (FITZHUGH, p. 28, 2010). On the contrary, audit is structured and is guided through generally accepted auditing standards and procedures. As we are aware, one of the main procedures reviewed by auditors is the segregation of duties. By segregation of duties, we mean definition of responsibility by exposing a clear line of authority when defining processes; they are all obvious steps of accounting for fraud. But in the vast majority of companies in which forensic accounting is requested and performed, this is lacking, thereby showing a point of vulnerability to be observed.

## e) Peculiarities of a fraudster

EFG mentioned that when you see an employee who is excessively proactive, something could be wrong. ".... working weekends and never took a vacation. This is true in the football history, and took place in Victoria". Another case, the client in São Paulo involved a Santa Claus: the guy never took a vacation in life, worked at home for 20 years or so, was the favourite character in the company, fancied himself at the end of the year, distributed presents, and had earnings of \$ 1,500.00. Over seven years, defrauded the company of \$ 6 million".

According to EFG "In many cases in which we work, we see what is funny; it is the embezzler who hires us because we can expect to give him a certificate of good conduct. He thinks, "I will bring Kroll, who is reputed to be the best. It will audit, you will find nothing, so I'm fine."

### f) Extension of the forensic accounting investigation (Situation code)

The general framework of forensic investigation limits its coverage to areas naturally prone to malpractices, they are areas such as: contracts and negotiations;

billings; procurements and accounts payable. Others are payroll, information systems manipulation or maladjustments, to mention just a few.

"I often tell my clients that Kroll would not exist if they made a good contract analysis every year. If they made a simple analysis of adhesion of these contracts, I'd say 70% of fraud would cease to exist"

According to Gomide (2008), "We base our strategy in such areas that have greater exposure to risk of fraud". According to the business context such areas are: inventories, purchasing and generally they are exposed to theft of financial assets. "These have an obvious reflex in the activities of the organization, in the profitability because it opens a wound in the business whereby the organizational climate becomes highly polluted".

"We would say that a concurrent review of contracts would ultimately remove 70% of frauds. So, Kroll would not have as many clients as we have today if the simple verification of prices, volumes, due dates as stipulated in the contract are monitored." He mentioned further, "I have a client who paid unusual professional fees to a tax specialist to the tune of USD\$ 20 million before the consultant was changed, such expense could also raise an eyebrow". Marketing and publicity are very intangible, this is an escape to fraud; in general, outsourcing, which could be questionable, ought to receive management attention.

Concerning Turning Around Accounting Information Systems (TAAIS), through this tactics, the fraudsters are able to dribble the accounting information systems and module up the information provided by them to the decision makers. The structure and the integrity of the AIS are reviewed.

Normally, when companies acquire systems, they lose sight of adequate parameterization of such system when they try to borrow a leaf from the default parameter to reduce costs. This ends up in having a fragile ERP being implemented with wrong control procedures in place and even open to outsiders.

For Gomide (2008), it is very difficult to measure and monitor IT contracts. This is for us a black box which needs some clarification and some care. "When a client says he can only use certain technology (ABC or XYZ), we begin to raise some suspects."

### g) Auditors fraud responsibility

An auditor's role in fraud detection takes a new turn as we adapt SAS No. 99 Implementation Guide. As it may not be different from other corporations all over the globe, Brazilian corporate management is very cunning. For them all controls are effective except if you are able to prove otherwise, meaning to say that it is virtually impossible for you to hold them responsible for fraud due to lack of direct evidence as they are able to camouflage traces of malfunction. So forensic accounting plays an important role in this moment since we perform information systems audits.

In the discourse, EFG represented fraud detection in forensic accounting with various symbols. Figure 3 – Forensic Accounting and Fraud - demonstrates the various interpretations one was able to have from this discussion.

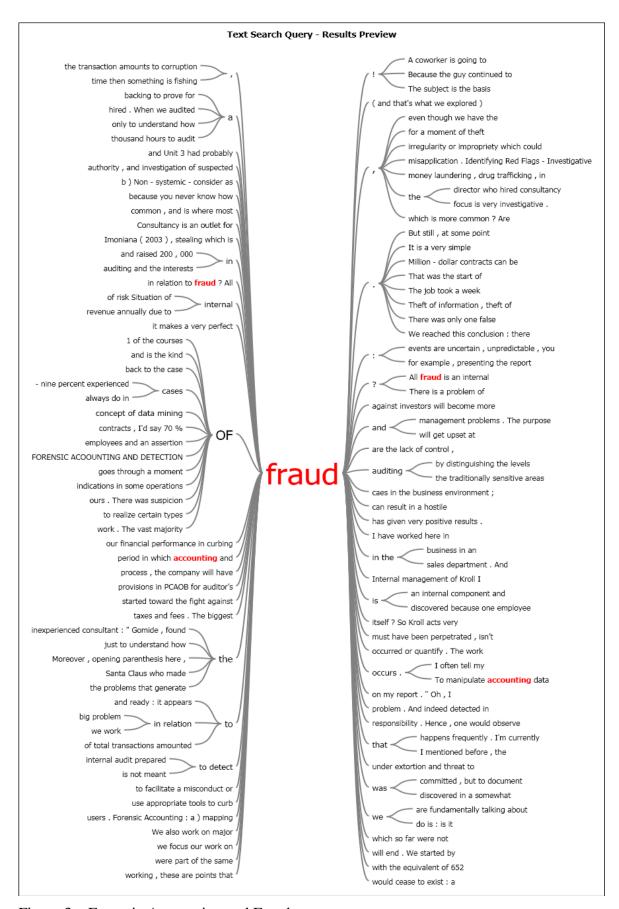
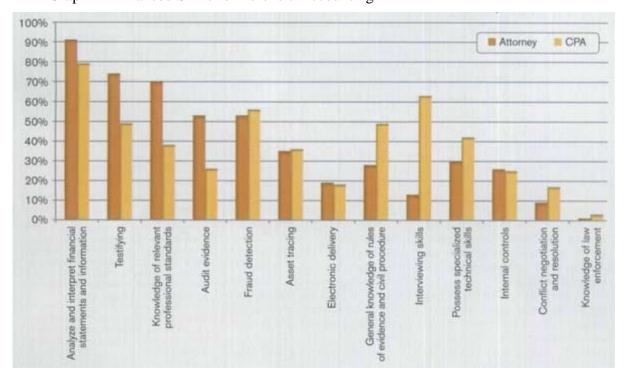


Figure 3 – Forensic Accounting and Fraud

## h) Monitoring frauds and enhancing financial performance

According to EFG, what we do is use that information derived from historical performance doing the trimming of time - as companies change over time. Thus, we use the past two or three years of information, understanding the normal pattern of this company and detect exceptions. At the moment, one detects an exception and proceeds to a closer investigation, which is barely an audit. It is therefore important to map frequency, values, and probabilities and understand the internal controls that are in practice within the company. Wise characteristics, the skills needed are such as those shown in the Graph 1, ranging from analytic to fraud detection and asset tracing skills.



Graph 1- Enhanced Skills for Forensic Accounting

Adapted from Davis; Ogilby, and Farrell (2010)

#### i) Identifying Red Flags - investigative mentality (event code)

The use of interpretation of red flags arising from accounting information is hammered in the discourse. "Something smells like fish" [...] these are some adaptations of some controls developed in banks, particularly to track some problems related to money laundering (Gomide, 2008, pp. 8). What can one consider as an example of red flags - unusual revenues, earnings or earnings management for instance? This applies to companies negotiated in stock markets whose book values are manipulated so that investors are unable to follow the twists and turns of events. According to EFG, "I have an example of a client in Rio, who nearly zeros his inventory as he pushes sales to the wholesaler at the close of quarterly reporting. A month later, he receives a bunch of returns, but the headquarters had recognized all the revenues. Three years late, this *modus operandi* was changed after hiding bad results for so long a time".

Controlling problem manifests itself through a variety of easily identified symptoms – red flags that usually reflect poorly designed processes or questionable ethics (Bickley, 2004). These symptoms could be as in Table 4.

Table 4 – Red Flags

1	Organization has multiple charts of accounts	
2	Accounts procedures not documented	
3	Large adjustments are made after preliminary results are known	
4	Organizations reports on other business segments with a net loss	
5	Accountability for each general ledger account is unclear	
6	Reconciliations are not automated	
7	Large transactions are given special terms	
8	Commissionable sales and bonus pools exclude significant items	
9	No adequate systems for major AIS (Accounting Information Systems)	
10	Standards are not documented	
11	Spreadsheets are a key part of important processes	
12	Processing staff work takes a lot of overtime (especially when reporting dates)	
13	Restructuring Expenses excluded as a percentage of the revenue drop in the quarter	
14	Dormant ledger accounts exist	
15	Customer are assigned multiple numbers	
16	Internal accounts do not reconcile	
17	Management reporting adjustments do not net to zero	
18	Each small subsidiary has its own separate accounting processing group	
19	The organization has a large number of special purpose entities	
20	Evaluation of control effectiveness is left to internal audit	
21	Performance metrics do not exist for transactional processes	
22	Exceptions to policies are routines	
23	The books are closed prior to quarter end	
24	Ad hoc test and implementation plans are used for system upgrades	
25	Below-satisfactory audit ratings are always reflected in performance appraisals	

According to EFG, the signs of red flags are innumerable. They range from the following:

- a) Revenue and profitability unreal;
- b) High volume of financial transactions with very low assets;
- c) Hiring Consultants, Lawyers, Marketing Experts, Advertising Agency; Outsourcing; NGOs services;
  - d) Excessive volume of receivables;
  - e) Lack of inventory count;
  - f) Limitation in usage of IT software or resources.

He added "The biggest fraud I have worked on here in Brazil was relatively simple: the director hired some legal advisors, they gave an opinion to the company about the collection of certain taxes. Revenue came in the course of justice and would win in the second or third instances and, later, the company marked up all their calculations. Only in that case until rulings, the company had paid \$ 20 millions in

consultancy fees to tax consultants". He added, "Be at alert when you hear "I can only use this technology......" or "I can only hire one company for maintenance because they are the ones who know that database."

## j) Traces of Red Flags (Event code)

What is the sign shown to the management that it has ignored all along? In all circumstances, all the business trends are shown by the financial statements. They accept that the management receives overlapped information that the control environment permits, there is always the likelihood of having the hunches about the happenings.

This event code has the preoccupation with the frequencies of the cases that generate forensic accounting services and what the alerts presented to the management are. Are the management, regulatory organization and the research institutions prepared to give the support needed to track a more disastrous impact on business? Suppose we associate the impact of norms that are readily prepared by the government to safeguard the interest of the investors, what technologies are used to dribble the said regulators.

# k) Case study of Enron (Event code)

To describe how the financial analysis is used to track anomaly in business transactions, the discourse used as an analogy, in the case of Enron, is demonstrated in figure 4. This notorious case showed the results of 1999 as compared with those of 2000. In 1999 the revenues were US\$ 40 billion whereas in 2000 they were US\$ 100 billion. According to Gomide (2008) just in a quick look, a question surfaces: how does a company grow 100% between an exercise and the other? What is the rationale? Has the price of energy sky rocketed, made a significant investment? Is it a point of interrogation of which we must be interested in? Cost of sales grew in the same proportion, from USD\$ 39 billion to USD\$ 98 billion?

At this juncture, one would like to analyze further; eyebrows are raised when one sees that cash and receivables have grown from 3 billion to 13 billion within the period. In a breakdown we observed that it is as a result of price risk management activities related to the operation of derivatives. We therefore perceived that from one year to the other, Enron decided to change operations (from energy Generation and Distribution Company, to trade and negotiate receivables through derivates). Forensic accounting sees this as unusual to the business and questions whether the perspective of the business is bright and, for that, it may be uncertain.

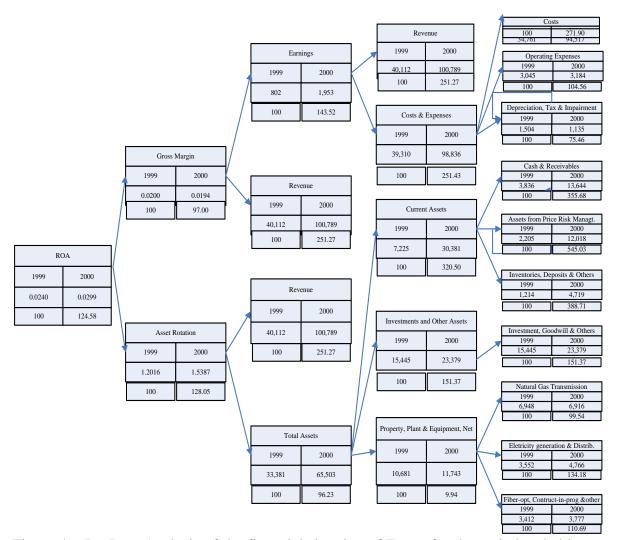


Figure 4 – Du Pont Analysis of the financial situation of Enron for the period ended in 2000

EFG added, "Let's see profitability by comparing the net income to the cost of goods sold, also from one period to another. There was a variation of 117%. It means I became much more efficient from 1999 to 2000, I was much more efficient in managing my net income minus my cost of goods sold".

### 1) Assessment and mitigation of risks

The discussant mentioned that they based their control monitoring assessment in such areas that have greater propensity to presenting a lack of internal control procedural risks. Internal control risks are the risks whose material errors not effectively prevented or detected by internal controls are in a timely manner (Imoniana, 2001, p.83). However, it is worthwhile mentioning the inherent risks and their detection at this point in time. According to AUS-402 (2002), "inherent risk means the susceptibility of an account balance or class of transactions to misstatement that could be material, individually or when aggregated with misstatements in other balances or classes, assuming there were no related internal controls". Detection Risk (Imminent Proofs of Misstatement) - What is the risk that the auditor would not be able to detect adequate proofs about misstatements and be lured to giving opinion about financial statement that is materially incorrect? (AUS-402, 2002)

## m) Performance enhancement and mitigation of risk (Process code)

In this code category, we intended to know how the subject sees the environment in which forensic accounting activity is being performed. According to Gomide (2008), it tells you how the subject defines their setting. [...] How do they define what they do?

When we talk about improving financial performance in curbing frauds, we are fundamentally talking about internal controls and compliance. Inherently, businesses are exposed to some risks (systematic) known to the management and it should use their skills to amour the business flow against risks of cash flow or market fluctuation, normally through hedging and other market tools to dilute such risks. On the other hand, the unsystematic risks are uncertain and are not easily forecasted. Exactly for this reason that some people use it as means for perpetrating frauds. "When I mention that Brazil is yet to see an escalation of accounting frauds against investors, and that this will become more rampant in the period to come, it is not a gain saying. I know a couple of companies which performed IPOs and went to the Stock Market, but do not have an adequate control structure. Neither do they have a corporate governance practice but still with a deplorable financial structure" (Gomide, 2008).

## n) Preparedness of internal audit (Perspective code)

There is a very great concern towards prevention and/or detection of frauds by internal auditors. By expatiating on this code, the study tries to give some prognostics about what is likely going to happen to the profession and the business in a short period to come, concerning the services of forensic accounting.

Through a substantive analysis normally used by the auditors, this code approaches the discourse by emphasizing our standard operations that need retouches so that internal audits could be performed with the aim of tracking accounting malpractices. In these said operations, even though some people might question them, the concerns of corporate governance are a stimulating upbringing of internal auditors to match the trends of business frauds.

## o) Forensic Accounting Methodology (Strategy code)

In order to perform a forensic accounting job, there are various approaches which could be adapted. This ranges from adaptation of auditing approaches to even criminal investigative approaches. For instance, one can follow the procedures laid out in the methodology summarized in table 5.

St	Detailed Procedures
eps	
1	Meet with client and clarify scope
2	Perform a conflict check and identify main actors
3	Perform an initial investigation to classify the apparent risk level of the environment
4	Develop an action plan, choose the approach and team
5	Gather the relevant evidence by locating documents, information and/or assets
6	Perform end of finding analysis and measure damages inflicted on the business

Table 5 - Methodology for executing forensic accounting engagement

In this methodology, the auditor is expected to have the first contact with the auditee, identifying who and who in the case, making his initial conclusion about the environment, and selecting the existing strategies to investigate the case. Additionally, he should gather the relevant data to substantiate his hypothesis and perform end of findings analysis by quantifying the damage made on the business.

Zysman (2009) outlined the following steps in executing Forensic Accounting engagement;

- ✓ Meet with the client to obtain an understanding of the important facts, players and issues at hand.
  - Perform a conflict check as soon as the relevant parties are established.
- ✓ Perform an initial investigation to allow subsequent planning to be based upon a more complete understanding of the issues.
- Develop an action plan that takes into account the knowledge gained by meeting with the client and carrying out the initial investigation and which will set out the objectives to be achieved and the methodology to be utilized to accomplish them.
- ✓ Obtain the relevant evidence: This may involve locating documents, economic information, assets, a person or company, another expert or proof of the occurrence of an event.
- Perform the analysis: this may involve: (a) calculating economic damages; summarizing a large number of transactions; (b) performing a tracing of assets; (c) performing present value calculations utilizing appropriate discount rates; (d) performing a regression or sensitivity analysis; (e) Relevance of Forensic Accounting utilizing a computerized application such as spread sheet, data base or computer model; (f) and utilizing charts and graphics to explain the analysis.
- Prepare the report. Often a report will be prepared which may include sections on the nature of the assignment, scope of the investigation, approach utilized, limitation of scope and findings and/or opinions.

The discourse makes it clear that the Kroll type of methodology is tailor-made. It is the one that operates from the floor of the factory where all the information about the

company permeates. According to the discussant, even though they use all the techniques (in our view - questionnaires, corroboratory inquiry, observation, documentary evidences, re-execution) used by the auditors in a graduated format, their methodology allows them to interview, the Cleaners, Gardeners, Maintenance Technicians, etc: posing questions such as – is the company ethical? However, since the employee might not know what ethic is, he tries to explain what everyone does in details. There lies the analysis which could be done through our software based on qualitative data analysis. Kroll uses a variety of tools. These are such tools as SAS apart from the application of the Excel resources, which are very useful for data analysis.

In summary, according to EFG it is the same principle, only instead of using the financial analysis used to identify correlations and regressions red flags, we use statistical modelling.

## p) Average working hours for forensic accounting job (Strategy code)

This strategy code opens our eyes toward the recommended approaches to handling different forensic accounting tasks, weighing the cost/benefit analysis of running certain procedures. With the vast IT resources available nowadays, the forensic accountant has from manual to computerized approaches to execute its tasks. It does rest on him to be prepared to give the best professional judgment when it is necessary; this, however, is based on his experience.

Generally, the working hours depend on the team and their experience and, most importantly, the review procedures are chosen by the auditor. There is no rule of thumb as to determining hours to be spent since it involves more detailed diligence.

On average, those in a forensic job, take between one month, one month and a half, with three professionals working full time. EFG said, "we budget for hours, but we try to define it in advance because no one wants to receive a bill for 500 hours when he was expecting 100 hours. We seek to define the scope and project for hours, but it is always an estimate, because you never know how a fraud will end".

## q) Bone of contention of fraud audit (Relationship and social structure code)

The societal relationship is always something of great preoccupation. What is the impact of a business that has its continuity interrupted or near collapsed, that generates resources to say, sustain a municipal government? Should the budget of the municipal administration depend highly on these resources, the exercise of forensic accountings turns to be a social responsibility to bring about transparency and restore ethics.

Does one say that auditors do not normally discover frauds in their cause of their evaluation because their structured approach does not permit such a deviation? Auditing is, traditionally, business inclined and risk based. Or, are auditors afraid of performing additional jobs which would not be readily accounted for? Normally, the independent auditor comes and stays for a very short period. It does not seem to be a ripe time for someone to gain his confidence and reveal to him some dangerous plans for frauds in the organization.

What about the internal auditor? Why is it that their control recommendations are not rightly implemented? There is a great concern about the effectiveness of the works of the internal auditing, the neighbours of the fraudsters. Questions about whether management has lost faith in the internal auditors are factors which trigger additional reflection.. Or that a fraud is revealed by discontentment of employees who have ideas

of the case, in some cases employees who are afraid of the faith of the organization, who bear the grudge of such malpractices, with the element of suspicion and revealing it or anonymously giving a sign to the auditor by reporting the fraud. Something that has helped the auditors recently has been suggestion boxes installed all over the organisation where information about frauds could be lodged. "Kroll utilizes the statistical software by performing the regression and correlation analysis to pinpoint unusual transactions". By mapping and tracing financial errors that are socially unacceptable. Those which fall out of the realms of the normal authorization, particularly in the cluster analysis, are clearly shown as abnormal. "In such a situation, we observe excess confidence on employees, lack of adequate procedures and segregation of duties, where the same employee purchases and effects payments" (Gomide, 2008).

According to research carried out by Ernst & Young covering corruption or compliance - weighing the costs in 10<sup>th</sup> global fraud survey, the result is alarming. As it can be observed in table 6, the percentage of the success of an internal audit job shows "teeth for tat". In analysis of one of the questions posed to the respondents, being executives from all works of life: "How successful are internal auditors in detecting bribery and corrupt practices":

Table 6 – Percentage saying internal audits are not very or not at all successful

Central and Eastern Europe

44

Central and Eastern Europe	44
Australia/New Zealand	32
Western Europe	25
North America	19
Far East	11
Middle East, India and Africa	11
Japan	8
Latin America	7

Adapted from Ernst & Young (2008)

According to Gomide (2008) "by experience, a vast number of frauds in which I have worked were not detected by auditors and by an internal control review, because the internal control structure was not effective". He added that a fraud suspect is revealed because that employee who takes short or no vacations, plays soccer with the majority of the big lords of the organization, breaks his leg and someone takes up his tasks in order to keep the operations moving, then the problem is discovered.

#### 5. CONCLUSION

As far as the our findings go, firstly, we characterize forensic accounting activities in eight perspectives, namely: (i) investigating all works of life say: psychology, philosophy, economics, finance, law and finally concentrating on accounting issues (conceptual aspects); investigation of frauds (mitigating internal control procedural risks), (iii) judicial disputes on organizational structures and succession (arbitrations with true and fair accounting figures on inherent risks), (iv) elaboration and submission of expert reports (giving expert opinion), (v) due diligence (giving bases for value definition).

Thus, in as much as forensic accounting emanates from investigative auditing, it is difficult to detach it from pure auditing. As we can observe in table 2, words or phrases

building which show the most common words, which one is able to construct with the sources available in this study.

There is the fact that the forensic accounting practice is observed as a detachment of auditing. This enables it to be categorized as one of the professions that will gain space in time in terms of importance, because corruption is gaining ground in most of the developing countries, be it in the public sector or private businesses.

The main elements of the characteristics of the forensic accounting practice in Brazil match with the global practices as one reflects upon the discourse made to the municipal government of Rio de Janeiro expatiated upon in this study. It tends to give support to management and stakeholders at large to decide on doubtful fraudulent transactions.

Fragile internal controls in some organizations seem to carry the vote in terms of avenue that gives room to be perpetrated by fraudsters. Unless this is addressed, enterprises will continue to spend their scarce resources to maintain fragile strategies which could be foiled towards goal congruence.

Results show that, in practice, Kroll, and other accounting profession organizations are assisting in consolidating the new function of accounting to support the new era of accounts in the territories where they operate, such as Brazil. Even though enterprises like Kroll utilize the standard audit approach to gather evidence, the closeness to the lower echelon of the staff seems to be the most productive approach to fishing information relating to frauds in the organization.

Noteworthy that some frauds have a link with control culture developed by the management of some organizations, sometimes associable to probable fiscal malpractices by some management who are afraid of retaliation from close allies. Normally, these weaknesses are known to some fraudsters; therefore, they create reluctance in the process of infringement of punitive measures on some employees caught in certain fraud acts.

Lastly, the fight for maintaining the internal audit activity has just begun. In the recent decades, during the boom of reengineering, it was classified as one of the departments (cost centres) that were wiped out in some organizations but it managed to survive. Nowadays, we have the issue of frauds that is becoming very rampant and the necessity to have an effective internal control to back corporate governance rules is gaining ground. The idea that frauds have been least detected by auditors is changing shape as auditors are rightly trained to detect frauds apart from emphasizing traditional safeguard of assets.

As a hint for further researches, one would suggest the comparative study of discourses presented by key actors of the forensic accounting profession in other countries for analysis. This will enable other researchers to sense the state of art in other countries where the practice is highly disseminated since nobody reveals how he or she performs the forensic investigation.

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