

Analysis of Fraud Detection and Prevention Strategies in the Indian Public Sector

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Abstract

This research paper particularly tries to understand and analyze how the frauds take place and what triggers such fraudulent activities with respect to the Indian public sector. The paper also tries to analyze what are the strategies and means by which the successful prevention and identification of such frauds can be managed beforehand. In order to find how in public sector in India the frauds start to occur, The researchers with the help of research questions, tries to achieve the objective of causes and reasons towards the incidence of fraudulent activities. In this paper various hypothesis were made and for that, review of the secondary literature related to the concerned topic was made. The formulated hypothesis Was put to pilot study, by taking the sample from the population. In this paper the public sector organizations in India Chosen for the pilot test were 30 companies from NCR. The major aim of the study was to Find out if there exists any relationship between the strategies, policies and procedures of these public sector organizations with respect to the scams and frauds happening in them. The researchers jaws 30 public-sector organizations and took out the sample size as 28 organize Asians using the “Yaro-Yamane” formula. Further, the researchers used the questionnaire survey tool for primary data collection and distributed 392 questionnaires to the respondents. Out of these questionnaires filled, The researchers could use and file 350 surveys from which the data was collected , being coded using SPSS 21.0. The required data analysis was done in order to approve or disapprove the major objective of this research. The main tests used were chi square and Analysis of variance. The researchers found that because of lack of the internal control and a vigilance system, the Indian public sector management is poor and lacks integrity due to which they are more prone to fraud happening. It was also found that there is a positively significant relationship between the use of management fraud prevention policies and the occurrence of these frauds. Hands in the public sector it is the very strong internal control mechanism that is required along with latest auditing methods in order to prevent the fraudulent activities. It was further found that because of lack of integrity and genuineness, the individuals get resorted and take advantage

by using various deceptive means that causes loss to another party.

Keywords: Corporate scam, fraud prevention, public sector, prevention audits, public perception.

Contextual Background

The researchers with the help of research questions, tries to achieve the objective of causes and reasons towards the incidence of fraudulent activities. In this paper various hypothesis were made and for that, review of the secondary literature related to the concerned topic was made. The major aim of the study was to find out if there exists any relationship between the strategies, policies and procedures of these public sector organizations with respect to the scams and frauds happening in them. The required data analysis was done in order to approve or disapprove the major objective of this research. The main tests used were chi square and Analysis of variance. The researchers found that because of lack of the internal control and a vigilance system, the Indian public sector management is poor and lacks integrity due to which they are more prone to fraud happening. Seetharaman, Sentivelmurugan & Periyanyagam (2009) pointed out that not only there is tremendous losses due to frauds and scams, but also the entire integrity and moral structure of the functionality of the organization. The negative word-of-mouth spreads faster and hence there are damaging consequences if the money has been stripped off due to lack of control and management measures.

INTRODUCTION

There are two types of fraud, first when there are errors and in accurate entries in the accounting records of the organization, this causes discrepancy which leads further do you causing errors which are intentional, Committed by the people who have relevant power and want to Rando unethical again to the perpetrator. When an employee tries to steal the organization’s physical or monetary assets including inexpensive items such as office stationary, Furniture or other

small small things. This miss-appropriation of assets is unauthorized. In similar scenarios the employees try to intentionally re-present wrong financial figures or try to portray the organization better than its actual state. It has been found from the second literature as well as the primary responses that opportunity is one of the most crucial instruments leading to commitment of fraud. In order to take control of opportunity for anyone in the organization, stringent internal controls come into play. There can be a strong rationalization in a particular case of client with the company like a medical emergency but at the same time it can also be weak rationalization which only means that the client wants the money and he thinks that he will not get caught. It becomes the duty of the auditors do use professional skills in proceeding with skepticism. The auditors should ensure compliance of established procedures like analyzing the situation and talking to all levels in the organization which are above the fraudster. India's biggest problem is fraud in public and private sectors. There had been many control checks, restrictions that had been used by the auditors. Fraud and fraudulent activities need absolute management in the public sector because in case any internal employee has greed, opportunity and pressure, scam could be initiated because of lack of proper control. Black (1989) in conceptualized the word 'Fraud' and he had been widely cited since then, like Pacini (2006) "all multifarious means which human ingenuity can devise and which are resorted to by one individual to get advantage over another by false suggestions or suppressions of the truth." Maani, (2013) shares this view but added that a single definition may be inadequate; thus defines fraud as called it unjust/illegal and intentional omissions in disclosure. Criminals seek to exploit government grant schemes in personal gain.

LITERATURE REVIEW

The degree to which those in authority in an entity have reason to commit management fraud; the degree to which conditions allow management fraud to be committed; The extent to which those on authority have an attitude or set of ethical value that would facilitate their commission of fraud. Loebbecke and Willingham (1989) in Gerald, Hillision & Pacini (2004) used the red flags approach to develop another concept model to evaluate fraud probability. A survey instrument was used to query 277 audit partners of a big 6 firm. Hylas and Ashon (1982) in Sabo (2003) performed an empirical study of 281 errors requiring financial statement adjustments on 152 audits. This researcher found that analytical review procedures and discussions with clients predicted a large percentage of errors. Wright and Ashton (1989) investigated the fraud detection effectiveness of client inquire, expectations based on prior years, and analytical reviews from a sample of 186 engagements. Blocher (2012) determined that only four out of 24 fraud cases were signaled by analytical procedures. Calderon and Green (1994) found that analytical procedures were the initial signal in 15 percent of 455 fraud cases. Kaminskib and Wetzel (2004) performed a longitudinal examination of various financial ratios on 30 matched pairs of firms. Using chaos theory methodology, metric tests were run to analyze the behavior of time - series

data. These researchers found no differences in the dynamics between fraudulent and non-fraudulent firms providing evidence of the limited ability of financial ratios to detect fraud. Apostolou (2001) survey 40 internal and external auditors on the fraud risk factors contained in SAS82. They document management characteristics as the most significant predictor of fraud followed by client operating /financial stability features, and industry conditions. Chen and Sennetti (2005) Moyes and baker (2003) in Abiola (2009) conducted survey of practicing auditors concerning the fraud detection effectiveness of 218 standard audit procedures. Results indicate that 56 out of 218 procedures were considered more effective in detecting fraud. In general, the most effective procedures were those yielding evidence about the existence and or the strength of internal control. McNamee (1999) introduced risk assessment as a tool to help to detect and deal with fraud in operations of organizations. He emphasized that managers had to take responsibilities to locate fraud. Risk assessment could also be used as a decision making tool to assist managers sort through a number of possibilities and single out those with the greatest payoff. Furthermore, managers could use this technique to identify and prioritize the most likely business processes where potential fraud could occur. McNamee further analyzed the three elements of risk assessment. First risk identification to determine the consequences of the risk and likelihood of its occurrence.

RESEARCH METHODS

The major aim of the study was to find out if there exists any relationship between the strategies, policies and procedures of these public sector organizations with respect to the scams and frauds happening in them. The required data analysis was done in order to approve or disapprove the major objective of this research. The researchers with the help of research questions, tries to achieve the objective of causes and reasons towards the incidence of fraudulent activities. The need for restrictions through stringent controls implemented in order to maintain the image and integrity of the process.

The study tries to answer the following research problems:

- Relationship between management internal control and occurrence of fraud in Indian public sector
- Fraud prevention and detection methods & Level of integrity and image for public sector

OBJECTIVES

The objective of this research is to find out the role of stringent control mechanism in preventing, controlling and treating scams and frauds, which will be of help to general public, investors, lenders and lending agencies, creditors before taking any financial decision as per needs of the client. Papers also throws light upon the fact that the external forces are generally the beneficiaries, when misappropriation in financial documents is done, because the external stakeholders do not have access to internal control mechanisms. This study tries to attain the following main objective:

To understand reasons in committing frauds w.r.t. public sector organizations in NCR and analyze factors that can lead to better internal controls on the same.

The specific objectives are:

1. To analyze the effect of using fraud prevention tools in Indian public sector
2. To understand the level of relationship between the two
3. To study impact of robust internal controls on prevention of frauds
4. To examine image of public sector organizations w.r.t. Ethics and Integrity

The study used both secondary and primary data collection. The primary data was employed by use of Questionnaire method of Survey Research. The population was twenty eight public sector organizations, consisting of lawyers, auditors, judges, accountants and general public. A total of three hundred and fifty respondents completely and rightly filled the survey questionnaires. The descriptive statistics was used. Data collected was coded and analyzed by use of statistical tools using the SPSS 21.0 software. The results were based on the statistical test value at 0.05 level of significance. If it was more than the table value then null hypothesis was rejected but if it was vice-versa, the null hypothesis was selected.

RESULTS & CONCLUSION

Table 1: Fraud Activities

S/N	FRAUD	1-5 Times	6-10 Times	11-15 Times	16-20 Times	21 and above	No of respondents	Total sale FX	Mean score FX / N
1	Embezzlement; Taking money which one has been entrusted with on behalf of another party	15	36	39	100	160	350	1365	3.90
2	Advance fees fraud	36	40	28	100	146	350	1330	3.80
3	Benefit fraud (committing fraud to get government benefit)	200	100	30	10	10	350	580	1.70
4	Creation of false companies or long firms	10	11	28	100	201	350	1521	4.35
5	Forgery of documents or signatures	12	10	28	110	190	350	1506	4.30
6	Asset misappropriation	15	30	75	100	130	350	1350	3.86
7	Pay roll fraud	15	10	15	90	220	350	1540	4.40
8	Fraudulent financial statement	10	15	25	120	180	350	1495	4.27
9	Use of bribes and kickback	15	40	35	100	160	350	1400	4.00
10	Identify theft	18	22	30	180	100	350	1372	3.92
11	False invoice	12	28	30	100	180	350	1458	4.17
12	Theft of inventory or cash	100	90	80	40	40	350	840	2.40

SOURCE: Field Survey (2018)

The decision rule is to accept where the mean score is 3.0 and above and to reject where the mean score is less than 3.0. From the analysis on table 1 above, 15 respondents are on the opinion that embezzlement; - taking money which one has been entrusted with on behalf of another party occurs 1-5 times, 36 said 6-10 times, 39 respondents opined on 11-15 times, 100 respondents said 16-20 times and 160 respondents were on the opinion that embezzlement occurred 21 times and above in their ministries. The mean score of 3.90 implies that embezzlement in the ministries occurred very frequent which amount to high level of fraud committed.

On the issue of advance fee fraud, 36 respondents are on the opinion that advance fee fraud penetrated in their ministries up to 1-5 times, 40 respondent said it is from 6-10 times, 28 respondent opined that it is 11-15 times, 100 respondents said 16-20 times and 146 respondent said from 21 times and above. The mean score of 3.80 implies that advance fee fraud occurred very often in the ministries.

Benefit fraud (committing fraud to get government benefit occurred in the ministries 1-5 times as responded by 200 respondents, 100 respondents said 6-10 times , 30 respondents said 11-15 times, 10 respondents said from 21 times and above. The mean score of 1.70 implies that frauds committed in the ministries are not mostly for the benefit of government. In respect of creation of false companies to assist in committing fraud, 10 respondents are on the opinion that fraud is penetrated in the ministries through this means 1-5 times, 11 respondents said 6-10 times. 28 respondents said 11-15 times, 100 respondents opined that it is 16-20 times and 201 respondents said 21 times and above. The mean score of 4.35 implies that creation of false companies become one of the common means to which people used in committing fraud in the ministries.

As regards forgery of document or signature, 12 respondents are on the opinion that fraud is penetrated in the ministries through forgery of documents or signature 1-5 times, 10 respondents said 6-10 times, 28 respondents said 11-15 times, 110 respondents said 16-20 times and 190 respondents said 21 times and above. The mean score of 4.30 implies forgery of documents or signature in committing fraud in very high in the ministries.

As regards assets misappropriation, 15 respondents said it occurred in the ministries from 1-5 times , 30 respondents said 6-10 times, 75 respondents said 11-15 times, 100 respondents said 16-20 times while 130 respondents opined that it is from

21 times and above. The mean score of 3.86 implies that assets misappropriation is very high in the ministries as one of the means of penetrating fraud.

On the issue of pay roll fraud, 15 respondents said pay roll fraud is penetrated in the ministries 1-5 times, 10 respondents said 6-10 times, 15 respondents said 11-15 times, while 90 respondent said 16-21 times, and 220 said from 21 times and above. The mean score of 4.40 shares the high rate to which fraud is penetrated in the ministries through pay roll.

As regards fraudulent financial statements, 10 respondents said fraud is penetrated by this means 1-5 times, 15 respondents said 6-10 times, 25 respondents said 11-15 times , 120 respondents said 16-20 times and 180 respondents said from 21 times and above. The mean score of 4.27 implies that fraud penetration in the ministries through fraudulent financial statements presentation is more common and occurred most frequent.

On the issue of bribes and kickback, 15 respondents are on the opinion that fraud penetration in this area is from 1-5 times, 40 respondents said 6-10 times, 35 respondents said 11- 15 times, 100 respondent said 16-20 times while 160 respondents said from 21 times and above. The mean score of 4.00 implies that most often fraud penetration in the ministries is by means of bribery and kickback. In respect to identity theft, 18 respondents said it is penetrated in ministries 1-5 times, 22 respondents said 6-10times , 30 respondents said 11-15 times , 180 respondents said 16-20 times, while 100 respondents said from 21 times and above. The score of 3.92 implies that there is high level of identity theft in the ministries. As regard false invoice , 12 respondents are on the opinion that fraud is penetrated in the ministries through false invoice 1-5 times, 28 respondent said 6-20 times while 180 respondents said from 21 times and above. The mean score of 4.17 implies that most of the fraud penetration in the ministries is through false invoice and the rate to which it occurred in very frequent and high.

On the issue of theft inventory or cash , 100 respondents opined that it occurred 1-5 times, 90 respondents said 6-10 times, 80 respondent said 11-15 times, 40 respondents said 16-20 times while 40 respondents said from 21 times and above. The mean score of 2.40 implies that theft of inventory or cash still occur in the ministries but not very regular.

Table 2: Management Policies

S/N	Management policies	5 Very High	4 High	3 Average	2 Low	1 Very low	No of Respondents	Total score FX	Mean score FXC/N
1	Corporate code of conduct/ ethics policy	20	30	200	80	20	350	2000	2.86
2	Preference check upon employees	19	11	180	120	20	350	939	2.86
3	Fraud reporting policy	10	30	140	100	70	350	860	2.46
4	Fraud prevention and detection training	28	12	150	140	20	350	938	2.68
5	Ethics training	19	30	102	100	99	350	820	2.34
6	Development of automated fraud prevention and detection system	3	7	40	100	200	350	563	1.61
7	Development of sound information security policy and procedures	11	19	150	70	100	350	821	2.35
8	Training on computer fraud	3	7	40	100	200	350	563	1.61
9	Proper recruitment system	14	06	100	100	130	350	724	2.07

Source: field survey (2018)

As regards management policy on corporate code of conduct / ethics , 20 respondents opined that it is very high, 30 respondents said the policy is high, 200 respondents said the policy is average, 80 respondents are on the opinion that the policy is low while 20 respondents said the policy is very low. The mean score of 2.86 shows that management policy on corporate code of conduct/ ethics in the ministries is low and served an avenue for committing fraud.

On the issue of management policy on reference checks on employees, 19 respondents are on the opinion that it is very high, 11 respondents said the policy is high, 180 respondent said the policy is average, 120 respondents opined that it is low while 20 respondents said it is low. The mean score of 2.68 implies that management policies on reference check on employees in low and served an avenue for fraud in the ministries.

In respect to management policy on fraud reporting, 10 respondents are on the opinion that the policy is very high, 30 respondents said the policy is high, 140 respondents said the policy is average, 100 respondents said the policy is low and 70 respondents said the policy is very low. The mean score of 2.46 implies that management policy on fraud reporting is low and does not discouraged employees in committing fraud in the ministries.

As regard management policy on fraud prevention and detection training, 28 respondents are on the opinion that

management policy on fraud prevention and detection training is very high, 12 respondents said the policy is average, 140 respondents said it is low while 20 respondents said the policy on fraud prevention and detection training is low. The mean score of 2.68 implies that ministries have not been training people on fraud prevention and detection as a matter of policy.

In respect to management policy on ethics training, 19 respondent said the policy is very high, 30 respondents said the policy is high, 102 respondents said the policy is average, 100 respondents opined that the policy is low while 99 respondents said the policy is very low. The mean score of 2.34 shows, that, the management policy on ethics is low.

On the issue of deployment of automated fraud prevention and detection system, 3 respondents said that policy on development of automated fraud prevention and detection system is very high, 7 respondents said the policy is high, 40 respondent said the policy is average, 100 respondents said the policy is low, while 200 respondent said the policy is very low. The mean score of 1.61 shows that deployment of automated fraud prevention and detection system is very low, which implies that ministries do not give much attention on fraud detection and prevention.

In respect of sound information security policy and procedures, 11 respondents opined that management policy on the matter is very high, 19 respondents said that the policy is

high, 150 respondent said the policy is average, 70 respondents said the policy is low , while 100 respondents said the policy is very low . The means score of 2.35 shows that deployment of sound information security policy and procedures that would reduce fraud in the ministries is low. On the issue of training a computer fraud , 65 respondent are on the opinion that management policy on training on computer fraud is very high, 71 respondents said the policy is high, 114 respondents said the policy is average, 50 respondents said the policy is low , while 50 respondents said the policy is very low. The mean score of 1.61 shows that training on computer fraud is poor.

As regard proper recruitment system, 14 respondents are on the opinion that the proper recruitment system in the ministries is very high, 6 respondents said that the policy is high, 100 respondent said the policy is average, 100 respondents said the policy is low, while 130 respondent said the policy is very low. The mean score of 2.07 shows that management policy on proper recruitment system is low and created more avenues for fraud to be committed in the ministries.

Table 3: Internal Control

S/N	Internal control	5 Very high	4 High	3 Average	2 low	1 Very low	No of respondent N	Total score FX	Mean score FX/N
1	Operation of internal audit department	100	150	50	21	29	350	1321	3.77
2	People intensive internal control automated content	150	140	20	20	20	350	1430	4.09
3	Proper accounting system	50	50	100	50	100	350	950	2.71
4	Recruitment of skilled and computer staff	30	20	150	100	50	350	930	2.66
5	Cleared organizational structure	150	100	40	32	28	350	1362	3.89
6	Segregation of duty	130	100	40	35	45	350	1285	3.67
7	Staff rotation	50	30	135	105	30	350	1015	2.90
8	Constant supervision of staff on e-environment	31	24	200	50	45	350	996	2.85
9	Development of automated anti-functionality	10	15	125	100	100	350	785	2.24
10	Periodic vulnerability assessment penetration testing and information system review	12	28	150	100	60	350	882	2.52
11	Adequate verification of account	3	2	200	90	55	350	858	2.45

SOURCE: Field Survey (2018)

From the analysis on table 3 above , the responses from 100 respondents shows that operations of internal audit department in the ministries is very high, 150 respondents said in high, 50 respondents are on the opinion that it is average, 21 respondents said the operations of internal audit dependent is low while 29 respondents said it is very low. The mean score of 3.77 implies that operations of internal audit department in the ministries are very effective.

As regard the issue of people intensive internal control with automated content, 150 respondents said very high, 140 respondents said is high, 20 respondents said is average, 20 respondents said is low while the remaining 20 respondent

said is very low. The mean score of 4.09 implies that people intensive internal control with automated content is very high in the ministries.

As regard proper accounting system, 50 respondents said it is very high, 50 respondents said it is high, 100 respondents said it is average, 50 respondents said it is low and the other 100 respondents said it is very low. The mean score of 2.71 implies that the keeping of proper accounting system in the ministries is low.

On the issue of recruitment of skilled and competent staff, 30 respondents are on the opinion that it is very high, 20

respondents said it is high, 150 respondent said it is average, 100 respondentssaid it is low while 50 respondents said it is very low. The mean score of 2.66 shows, that, the recruitment of killed and competent staff is low.

In respect of clear organizational structure, 150 respondents said it is very high, 100 respondents said it is high, 40 respondents said it is average, 32 respondents said it is low while 28 respondents said it is very low. The mean score of 3.89 shows, that, there is clear organizational structure in the ministries. As regard segregation of duty, 130 respondents said that segregation of duty in the ministries is very high, 100 respondents said it is high, 40 respondents said it is average, 35 respondent said it is low while 45 respondents said it is very low. The mean score of 3.67 shows, that, the level of segregation of duty in the ministries is very high.

On the issue of staff rotation, 50 respondents said it is very high, 30 respondents said it is high, 135 respondents said it is average 105 respondents said it is low while 30 respondents said it is very low. The mean score of 2.90 shows, that, there is low level of staff rotation in the ministries. In respect of constant supervision of staff on e-environment, 31 respondents said it is very high, 24 respondent said it is high, 200 respondents said it is average, 50 respondents said it is

low, while 45 respondents said it is very low. The mean score of 2.85 shows, that, there is no constant supervision of staff on e-environment in the ministries. As regard deployment of automated anti-fraud solution with alert functionality, 10 respondents said it is very high, 15 respondents said it is high, 125 respondents said it is average, 100 respondents said it is low while 100 respondents said it is very low. The mean score of 2.24 shows, that, there is no deployment of automated anti-fraud solution with alert functionality in the ministries.

On the issue of periodic vulnerability assessment penetration testing and information system review, 12 respondents said it is very high, 28 respondents said it is high, 150 respondents said it is average, 100 respondents said it is low while 60 respondents said it is very low. The mean score of 2.52 implies that there is no periodic vulnerability assessment penetration testing and information system review in the ministries. In respect of adequate verification of account, 3respondents are on the opinion that the adequate of verification of account in the ministries is very high, 2 respondents said it is high, 200 respondents said it is average, 90 respondents said it is low, while 55 respondents said it is very low. The mean score of 2.45 implies that the adequate verification of account in the ministries is low.

Table 4: Management Integrity

S/N	Management integrity	5 very high	4 high	3 average	2 low	1 very low	No of respondent	Total score FX	Mean score FX/N
1	Encourage communicating employee about behavior that is not acceptable and how to report them	0	0	100	120	130	350	670	1.91
2	Create culture of honesty, openness and assistance	5	8	57	80	200	350	588	1.68
3	Create a positive work environment that encourages honesty	15	10	100	105	120	350	745	2.13
4	Wiliness to adhere strictly to the rules of the game	0	20	110	130	90	350	760	2.17
5	Management supportive attitude towards internal control at the time independency competence and exemplary leadership	0	0	50	100	200	350	550	1.57
6	Cancel some financial document of the ministries prior to audit check	200	100	15	20	15	350	1500	4.29

SOURCE: Field Survey (2018)

As regards the issue of communicating employees about behavior that is not acceptable and how to report them, 100 respondents said it is average, 120 respondents said it is low, while 130 respondents said it is very low, none of the respondent responded to whether it is very high or high. The mean score of 1.91 implies that employees are not communicated about their behaviors that are not acceptable and even on how to report such behavior which has given room for fraud in the ministries. On the issue of creating the culture of honesty, openness and assistance, 5 respondents said it is very high, 8 respondents said it is high, 57 respondents said it is average, 80 respondents said it is low while 200 respondents said it is very low. The mean score of 1.68 shows, that, there is no culture of honesty, openness and assistance in the ministries. As regards creating a positive work environment that encourages honesty, 15 respondents said it is very high, 10 respondents said it is high, 100 respondents said it is average, 105 respondents said it is low while 120 respondents said it is very low. The mean score of 2.13 implies that there is no positive environment that encourages honesty in the ministries. About the willingness

to adhere strictly to the rules of the game, 20 respondents said it is high, 110 respondents said it is average, 130 respondents said it is low while 90 respondents said it is very low. The mean score of 2.17 shows, that, the willingness to adhere strictly to the rules of the game in the ministries is low. In respect of management supportive attitude towards internal control at all time, independence, competence and exemplary leadership, 50 respondents said it is average, 100 respondents said it is low while 200 respondents said it is very low, none of the respondents responded to whether it is high or very high. The mean score of 1.57 shows that there is no management supportive attitude towards internal control at all times, independence, competence and exemplary leadership in the ministries. In respect of cancellation of some financial documents of the ministries prior to audit check, 200 respondents said it is very high, 100 respondents said it is high, 15 respondents said it is average, 20 respondent said it is low. While 15 respondents said it is very low. The mean score of 4.29 shows that there is very high level of cancellation of some financial documents of ministries prior to audit check.

Table 5: Fraud Prevention and Detection Methods

S/N	Fraud Prevention and Detection Methods	5 Very High	4 High	3 Average	2 Low	1 Very Low	No of respondent N	Total score FX	Mean score FX/N
1	Fraud auditing	0	0	10	230	110	350	600	1.71
2	Fraud vulnerability review	2	3	55	240	50	350	717	2.05
3	Fraud Hotline	6	4	140	150	50	350	816	2.33
4	Whistle Blowing	13	6	133	150	48	350	836	2.39
5	Organizational use of forensic accounting	0	0	50	240	55	350	685	1.96
6	Surveillance equipment	2	4	84	200	60	350	738	2.11
7	Increased role of audit committee	30	20	100	151	49	350	881	2.52
8	Staff rotation policy	8	12	200	100	30	350	918	2.62
9	Employment counseling programs	24	26	190	70	40	350	974	2.68
10	Cash reviews	50	30	100	100	70	350	940	2.69
11	Inventory observation	13	6	150	100	81	350	820	2.34
12	Bank reconciliation	150	100	40	30	30	350	1360	3.89
13	Discovery sampling	0	0	190	100	60	350	830	2.37
14	Continuous auditing	26	14	160	100	50	350	916	2.62
15	Virus protection	30	10	150	110	50	350	910	2.60
16	Password protection	20	25	125	100	80	350	855	2.44

SOURCE: Field Survey (2018)

As regards fraud audit, 10 respondents were on the opinion that fraud audit in the ministries is at average, 230 respondents said it is low, while 110 respondents said it is very low, none of the

respondents expresses opinion or whether it is very high or high. The mean score of 1.71 implies that there is no fraud audit in the ministries. In respect of fraud vulnerability review, 2 respondents said it is very high, 3 respondents said it is high, 55 respondents said it is average, 240 respondents said it is low while 50 respondents said it is low. The mean score of 2.05 shows that fraud vulnerability reviewed in the ministries is low. As regard fraud hotline, 6 respondents opined that fraud hotline is very high, 4 respondents said it is high, 140 respondents said it is average, 150 respondents said it is low, 50 respondents said it is very low. The mean score of 2.33 implies that the fraud hotline in the ministries is low. On the issue of whistle blowing, 13 respondents said it is very high, 6 respondents said it is high, 133 respondents said it is average, 150 respondents said it is low while 48 respondents said it is very low. The mean score of 2.39 implies that whistle blowing in the ministries is low. As regard organizational use of forensic accounting, 50 respondents said it is average, 240 respondents said it is low while 55 respondents said it is very low. The mean score of 1.96 implies that the use of forensic accounting in the ministries is low.

On the use of surveillance equipments, 2 respondents said it is very high, 4 respondents said it is low while 60 respondents said it is very low. The mean score of 2.11 shows, that, the surveillance equipment is low. In respect on increased role of audit committee in reducing fraud, 30 respondents said it is very high, 20 respondents said it is high, 100 respondents said it is average, 151 respondents said it is low, while 49 respondents said it is very low. The mean score of 2.52 implies that the role of audit committee in reducing fraud in the ministries is low. On staff rotation policy in the ministries, 8 respondents are on opinion that it is very high, 12 respondents said it is high, 200 respondents said it is average, 100 respondents said it is low while 30 respondents said it is very low. The mean score of 2.62 shows that staff rotation policy is low in the ministries. On the issue of employee counseling, 24 respondents opined that the level of employee counseling is very high, 26 respondents said it is high, 190 respondents said it is average, 70 respondent said it is low while 40 respondents said it is very low. The mean score of 2.78 implies that the level of employee counseling in the ministries is low. In respect on cash reviews, 50 respondents said it is very high, 30 respondent said it is high, 100 respondent said it is low while 70 respondents said it is very low. The mean score of 2.69 shows that the cash review policy in the ministries is low. As regard inventory observation 13 respondents opined that the inventory observation in the ministries is very high, 6 respondents said it is high, 150 respondents said it is average, 100 respondents said it is low while 81 respondents said it is very low. The mean score of 2.34 implies that the level of inventory observation in the ministries is low. In respect on bank reconciliation; 150 respondents said it is very high, 100 respondents said it is high, 40 respondent said it is average, 30

respondents said it is low while 30 respondents also said it is very low. The mean score of 3.89 shows, that, bank reconciliation in the ministries is very high. On the issue of discovery sampling, 190 respondents said it is average, 100 respondents said it is low, 60 respondents said it is very low while none of the respondents were on the opinion that it is high or very high. The mean score of 2.37 implies that discovery sampling in the ministries is low. As regard continuous auditing, 26 respondents said it is very high, 14 respondents said it is high, 160 respondents said it is average, 100 respondents said it is low while 50 respondents said it is very low. The mean score of 2.62 implies that there is low level of continuous audit in the ministries. On the issue of virus protection, 30 respondents said it is very high, 10 respondents said it is high, 150 respondents said it is average, 110 respondents said it is low while 50 respondents said it is very low. The mean score of 2.60 implies that virus protection in the ministry is low. In respect of password protection, 20 respondents said it is very high, 25 respondents said it is high, 125 respondents said it is average, 100 respondents said it is low while 80 respondents said it is very low. The mean score of 2.44 implies that password protection in the ministries is low.

H1

Table 4.6.1: Test of Homogeneity of variances

Levene statistic	df1	df2	Sig.
4.361	4	40	.005

Table 4.6.2: ANOVA

	Sum of squares	Df	Means square	F	Sig
Between groups	80348.222	4	20087.056	13.558	.000
Within Groups	59261.778	40	1481.544		
Total	139610.00	44			

The result of data analysis in table 4.6.1 and 4.6.2 reveals that the mean is statistically positive and significant at 5% level of significance. The $F(4,40) = 13,558$ is greater than the $F(\text{tab}) = 2.61$, therefore the estimated parameters are statistically positive and significant. This means that the Null hypothesis is rejected, while accepting the alternate hypothesis since the $F(4,40)$ of 13.558 is greater than the $F(\text{tab})$ of 2.61: we therefore concluded that there is positive and significant relationship between management policies and Indian public sector fraud.

H2

4.7.1 Test of Homogeneity of variance

Levene statistic	df1	df2	Sig
7.657	4	75	.000

Table 4.7.2: ANOVA

	Sum of Squares	Df	Mean square	F	Sig
Between Groups	188538.13	4	47134.531	24.498	.000
Within Groups	144300.56	75	1924.008		
Total	332838.69	79			

The result of data analysis in table 4.7.1 and 4.7.2 reveals that the mean is statistically positive and significant at 5% level of significance. The $F(4,75) = 24.498$ is greater than the $F(\text{tab}) = 2.53$. Therefore, the estimated parameters are statistically positive and significant. This means that the Null hypothesis is rejected while accepting the alternate hypothesis since the $F(4,75)$ of 24.498 is greater than the $F(\text{tab})$ of 2.53. We therefore, concluded that fraud prevention and detect ion methods have influence on Indian public sector fraud.

H3

Table 4.8.1 Test of Homogeneity of variances

Levene statistics	df1	df2	Sig
2.475	4	44	.058

Table 4.8.2 ANOVA

	Sum of squares	Df	Mean square	F	Sig
Between Groups	22424.351	4	5606.088	2.079	.100
Within Groups	118621.20	44	2695.936		
Total	141045.55	48			

The result of data analysis in table 4.8.1 and 4.8.2 reveals that the mean is statistically positive but not significant at 5% levels of significance. The $F(4,44) = 2.079$ is less than the $f(\text{tab}) = 2.60$, therefore the parameter are statistically positive but not significant. This means that the Null hypothesis is accepted since the $F(4,44)$ of 2.079 is less than $F(\text{tab})$ of

2.60, we therefore conclude that there is no strong internal control system.

H4

Test of Homogeneity of variances

Levene statistics	df1	df2	Sig
877	4	25	.492

Table 4.9.2: ANOVA

	Sum of squares	Df	Mean square	F	Sig
Between Groups	41686.333	4	10421.583	3.300	.027
Within Groups	78951.667	25	3158.067		
Total	120638.00	29			

The result of data analysis in table 4.9.1 and 4.9.2 reveals that the mean is statistically positive and significant at 5% level of significance. The $F(4,25) = 3.30$ is greater than the $F(\text{tab}) = 2.76$, therefore the estimated parameters are statistically positive and significant. This means that the Null hypothesis is rejected while accepting the alternate hypothesis since the $F(4,25)$ of 3.30 is greater than the $f(\text{tab})$ of 2.76, we therefore concluded that management integrity has influence on fraud prevention. The research analyzed why attention has to be given to the question of fraud prevention in the Indian public sector, it has discussed the management policies as regards fraud prevention. There is need for developing strong management policies and such policies be supported with training and guidance because they are vital in maintaining the effectiveness of the strategy for the detection and prevention of fraud. The policy setting process should be modernized and streamlined to ensure that guidelines can be attended, created or eliminated as changing condition dictates. take advantage of modern accounting and auditing soft ware's to enhance efficiency and smooth operation of the task of detection prevention and recovery through the application of relevant information technology. As regards internal control system in the Indian public sector, the government need to support indention and work related training, particularly for employees involved in internal control system and accounting units to ensure their responsibilities and duties are regularly highlighted to reinforced and that best practices are followed across the nation service as this will build up effective. On the issue of management integrity, policies should be set up to ensure that management integrity be enforced as it has influence on fraud prevention. Those management level and even those at lower level should avoid actual or apparent conflict of interest, refuse any gift, favor, or hospitality that would influence or would appear to influence their actions and avoid any other act that would temper with their integrity.

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