UNDERSTANDING PERCEPTIONS OF KEY BANKING STAKEHOLDERS USING TEXT ANALYSIS

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Abstract

Fraud literature suggests that the perceptions of banking stakeholders play a significant role in identifying the major areas of concern. Given this consideration, the present study qualitatively explores the perceptions and views of the key banking stakeholders namely, management, auditors and customers who have personally investigated or closely observed a fraud using Text Analysis conducted through QSRNvivo12 software. The analysis of thirty interviews helps condense some of the interesting and in depth viewpoints on banking frauds. The broad areas concerning fraud vulnerability, accountability, impact and prevention of fraud are central to the articulations of the respondents' views. The results are likely to help capture significant areas of direct concern and improve proactive preparations related to frauds, both from an organizational and regulatory perspective.

Keywords: Text Analysis, QSRNvivo12, Fraud, Stakeholders, Perceptions

Introduction

Fraud is defined by Cambridge Dictionary as a phenomenon intended to deceive others, typically by unjustifiably claiming or being credited with accomplishments or qualities (Alleyne, Persaud, Alleyne, Greenidge, & Sealy, 2010). The ACFE further explains that the financial frauds can be regarded as an inevitable and undesired concomitant of economic development (Mathews, 2018). Financial frauds have emerged in various forms and valuations, throughout global financial history. Robert Shiller, a

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top housing expert in the United States wrote in Global Research that the mortgage fraud was a lot like the fraud which occurred during the Great Depression in 1930s (McCarty, Poole & Rosenthal,2013).

Some of the most notable and expensive corporate fraud scandals throughout the world including the cases of fraudsters like Charles Ponzi, Madoff, Jordan Belfort, Enron & WorldCom have been due gross mismanagement as well as lack of financial awareness (Straney, 2010). The last decade involved a significant coverage of banking frauds by the global media.

While the governments enact several laws aimed at restraining fraud, their meager enforcement has attenuated the intended impact. With the rise of digital transactions backed by technology, frauds have spread to new areas. The banking institutions act as financial intermediaries and providers of capital for major economic activities (Costa & Wood, 2016). Finding modes of preventing and detecting bank frauds is thus vital.

In India, the financial framework is as old as early Vedic period. The book of Manu contains reference with respect to stores progresses, promise strategy of advance, and pace of intrigue. From the earliest starting point of twentieth century banking has been created to such an extent that truth be told, has come to be designated "LIFE BLOOD" of exchange and business (Sharma, 2007).

In India, banking has created from the crude stage to the advanced arrangement of banking in a manner that has no equal on the planet history. With the beginning of autonomy, changes of huge size have occurred in India. After freedom India propelled a procedure of arranged financial action so as to conquer the large number of issues it looked as an immature country (Goyal & Joshi, 2012). The expanding rhythms of financial movement lead to enormous increment in the volume and unpredictability of banking action. Along these lines, the job of banks grew at a quick pace.

Figure 1: Number of banking frauds and amount involved

Reeling Under the Pressure

Bank Group/ Institution	2017-18		2018-19	
	Number of Frauds (₹ cr)	Amount Involved (₹ cr)	Number of Frauds (₹ cr)	Amount Involved (₹ cr)
Public Sector Banks	2,885	38,260.87	3,766	64,509.90
	-48.8	-92.9	-55.4	-90.2
Private Sector Banks	1,975	2,478.52	2,090	5,515.10
	-33.4	-6	-30.7	-7.7
Foreign Banks	974	256.00	762	955.30
	-16.5	-0.6	-11.2	-1.3
Financial Institutions	12	164.70	28	553.40
	-0.2	-0.4	-0.4	-0.8
Total	5,916	41,167.00	6,801	71,542.90

Source: The Economics Times, October 9, 2019

The above figure clearly indicates towards an increase in both the number of frauds and amount involved from 2017-18 to 2018-19, the public sector banks being the worst affected of all comparatively.

Fraud and its redressal is a major concern area for the banking sector and across all portfolios - retail, corporate, and priority sector. Some of the recent fraud incidents in India reported by the media relate to fixed deposits, loans disbursement or extending credit facilities for bribes, phishing and other internet/ ATM based frauds.

Figure 2: *Current fraud risks that are of high concern to banks*

Source: Jeyanthi, Mansurali, Harish, & Krishnaveni (2020)

Risks are inherent in the banking business, but with frauds on the rise, organizations need to put their business in order by having effective control mechanisms in place. There are a number of different "stakeholders" or interested parties in the banking sector. These stakeholders include customers and depositors, regulators, investors, taxpayers, politicians and the directors and staff of banks. All stakeholders, though, have an interest in the proper functioning of the banking system, none operates in isolation. Although each of the stakeholders differ in terms of control and expectations, each of the stakeholders seek returns that maximizes and safeguards their interest.

The risks taken by the banking sector are still worrisome, although there has been a bit of moderation. The same has been indicated by the bank stability. Banks were also worried due to poor quality of assets. The proportion of stressed assets has increased significantly in the past years. Given the amount of transactions in banking, it is imperative that banks implement a dynamic monitoring mechanism so as to remain vigilant to early signs of distress in the borrower accounts.

Keeping all this in mind, to find and implement an effective coping mechanism is therefore, not an option but the need of the hour. A significant aspect to enhance accountability and transparency within the banks may prove to be an effective mechanism to enable and empower the employees to raise and voice their concerns internally in an effective manner when and if they discover any malpractice. The study emphasizes on the perceptions of various banking stakeholders giving it a 360 degree overview of the current situation and issues. Their perspectives are extremely essential in accentuating their contribution in mitigating banking frauds.

Defining the key stakeholders

As of late, India has enacted laws explicitly supporting endeavors towards forestalling corporate extortion, negligence, and wrongdoing. This is an indication that controllers know about the difficulties looked by associations in checking misrepresentation and are resolved to guarantee business is led morally. The Prevention of Corruption (Amendment) Act, 2018 is currently increasingly extensive and targets pay off suppliers as well, with the goal of

guaranteeing that associations progress in the direction of setting up satisfactory techniques intended to forestall pay off. The Fugitive Economic Offenders Bill, 2018 is relied upon to stop people engaged with misrepresentation and other financial offenses.

Similarly, the changing consumer preferences and advanced technology have further elaborated the risks. With the huge surge in the cases of bank frauds, existing approaches seem to have become less effective at detecting and mitigating the risks. Now is the time to re-examine the overall approach, to review what risks are emerging and what responses are necessary.

It is also significant to explore how various stakeholders perceive their own responsibility towards preventing frauds. The senior management officials in banks have huge responsibility of monitoring the operations at various branches and taking necessary action in order to curb the growing cases of bank frauds. Auditors play a major role in intensive examination of large-value accounts, the nature of security provided by borrowers as well as financial statements of borrowers. With cyber frauds and identity theft on the rise, it has become more and more imperative for the bank customers to understand and be proactive against any kind of frauds they might encounter.

Research Objective

To analyze the perceptions of key stakeholders' on financial frauds in banks.

Literature Review

The literature on bank frauds and fraud detection methods has grown immensely in the past decade. As the volume and scale of frauds became extensive, several researchers began to explore the phenomenon. As stated by Rossouw (2000, p. 885) fraud is a worldwide phenomenon that ruins the profitability, reputability, and legitimacy of organizations wherever it occurs. As the researchers explore different arenas of financial frauds, the fraud theories became more sophisticated which describe fraud and its motivations thoroughly.

Subbarao, (2009) enumerated the moral hazard problem in the banking system as privatization of profit and socialization of costs. Sandhu, (2016) conducted in depth interviews of the close coworkers of the offenders who identified certain behavioral red flags among their colleagues. The findings of the study highlighted certain common and significant factors identified among the offenders such as strong ambition, financial problems at home and dissatisfaction with the work. Yusof & Lai, (2014) presented an integrated model to predict financial fraud in their paper. The study incorporated three major theories of fraud namely, 'Theory of reasoned action, Theory of planned behavior and The fraud triangle (Zoubi & Khazali 2007). It was found that both individual and organizational factors impacted the indulgence of employees in financial frauds. Strawhacker, (2016) suggested that the organizations must embed ethical elements in the organizational culture to influence employee behavior in an optimistic manner.

Harjoto, (2017) revealed that the businesses scoring high in CSR activities had lower rate of financial frauds. Spicer, (2016) discussed the elements of the fraud triangle theory and their presence in the extracted cases. It was revealed that the theory was applicable where the fraudster had personal financial crisis at home.

Anderson, (2009) stated the factors such as over reliance on senior officers and outside experts as well as weakness in the regulatory system inducing the chances of occurrence of financial frauds. Yang, Moyes, Hamedian & Rahdarian, (2009) investigated the relationship between the professional demographics of auditors and their effectiveness in identifying red flags to detect financial frauds. Bossard & Blum, (2004) stressed upon the role of auditors to maintain professional skepticism and identify the fraud risks. Magro & Kunha, (2016) found that the internal auditors attributed greater importance to red flags associated with operational activities and internal control procedures.

Singh et.al, (2016) focused on the various kinds of phishing techniques used by the fraudsters in order to cheat the bank customers. Various cases reported by many private and public sector banks reported the existence of fake websites and emails which led to huge losses to their customers. On

similar lines, Thangamuniyandi & Ragavan (2016) stated that in order to have maximum access to security from phishing, the banks must focus on educating their customers to distinguish between original and fake websites and URLs. Also, the bank employees handling and controlling the systems must be adequately trained and aptly selected.

It was quite interesting to note that in case of studies related to bank frauds, with the change in technology, the cases became more sophisticated and complex. The popularity of the research areas thus shifted from accounting frauds or balance sheet frauds in early 2000s Ribstein, (2002); Uzun, Szewczyk & Varma, (2004); King, Nuxoll & Yeager, (2005) to areas such as cyber frauds and identity theft in the later decade post 2010 Jackson, Holland, Albrecht & Woolstenhulme, (2010); Aris, Othman, Ali & Rahman, (2013); Soltani, (2013); Lokare, (2014); Yamamura, Nishida & Kawamorita, (2019).

Research Methodology

The present research qualitatively explores the perspectives of the banking stakeholders. The data for the study was collected with the help of both Face to Face and telephonic interviews conducted by the author between January 2020 and July 2020. Post Covid 19, mixed interviews approach was considered particularly suitable for the present research since it permitted the respondents to completely articulate their own experiences from their homes via telephones and effectively convey their perceptions on the same (Ross & Squires, 2011).

The respondents of the study were selected by using purposive sampling techniques. The confidentiality of their responses was assured to the interviewees. Out of 41 people approached, 9 refused to participate in the study and 2 were unable to communicate due to connectivity issues. The good response rate is indicative of the willingness of the participants to share their perspectives on the subject matter. The interviewees were requested to provide the contact information of potential participants, in case the interviewee knew any. A total of 30 semi-structured interviews were conducted. The duration of the interviews ranged between 18 to 30 minutes. The interview schedule covered four broad areas given in the figure below.

Figure 3: Mind Map generated for broad areas covered under interview of key banking stakeholders

Source: QSRNvivo12 Output

S. No.	Gender	Age	Stakeholder Profile	Mode of Interview
1	Male	31	Bank Customer	Face to Face
2	Male	47	Bank Customer	Face to Face
3	Female	51	Senior Manager	Telephonic
4	Male	36	Bank Customer	Face to Face
5	Male	45	Senior Manager	Telephonic
6	Male	54	Senior Manager	Face to Face
7	Female	56	Senior Manager	Face to Face
8	Female	34	External Auditor	Telephonic
9	Male	53	Senior Manager	Telephonic
10	Male	54	Senior Manager	Telephonic
11	Female	43	External Auditor	Face to Face
12	Female	41	External Auditor	Telephonic

13	Male	52	Senior Manager	Telephonic
14	Male	38	External Auditor	Telephonic
15	Male	30	Bank Customer	Face to Face
16	Female	30	Bank Customer	Face to Face
17	Male	31	Bank Customer	Face to Face
18	Male	29	Bank Customer	Face to Face
19	Male	30	Bank Customer	Face to Face
20	Female	32	External Auditor	Telephonic
21	Female	38	External Auditor	Face to Face
22	Female	51	Senior Manager	Telephonic
23	Male	31	Bank Customer	Face to Face
24	Male	54	Senior Manager	Telephonic
25	Female	33	External Auditor	Telephonic
26	Female	36	External Auditor	Telephonic
27	Female	37	External Auditor	Telephonic
28	Male	47	External Auditor	Telephonic
29	Male	35	Bank Customer	Face to Face
30	Male	51	Senior Manager	Telephonic

The above table describes the demographic characteristics of the individuals interviewed by the author. Out of all the stakeholders, there were 18 and 12 male and female respondents respectively belonging to varied age groups and designations. The sample respondents belonging to varied categories were deliberately chosen equally by the author for interview (10 each).

Data Analysis

In the data analysis stage, two qualitative softwares were used to transcribe and analyze the data. The first software used was NVivo Transcription, which was used to transcribe the recorded interviews. The software assisted in converting the audio files into MS-Word files. The other software was

NVivo 12 which was utilized in the analysis of the transcribed data. NVivo is an information management tool especially useful for the qualitative research. The transcribed files were imported to NVivo and various analysis techniques namely, Word Frequency, Text Query, Word tree and cloud tags were applied to the collected data.

Word Cloud: A word cloud is a collection, or cluster, of words depicted in different sizes. The bigger and bolder the word appears, the more often it's mentioned within a given dataset.

Figure 4: Word Cloud as per most frequently used words by the respondents

Source: QSRNvivo12 Output

The word cloud in the above figure helps in capturing the whole view of responses in a single sight. The above figure shows the most common words uttered by respondents during interviews. It can be seen that the respondents focused upon data related frauds, use of analytics in fraud prevention, cybercrime, sophisticated technologies, business risks, etc.

Text Search Query: Text search queries aim at search for words or phrases in the data. It includes exploration of the usage of words while the researcher derives the context and meaning out of it.

Figure 5: Text Search Query for 'Fraud'
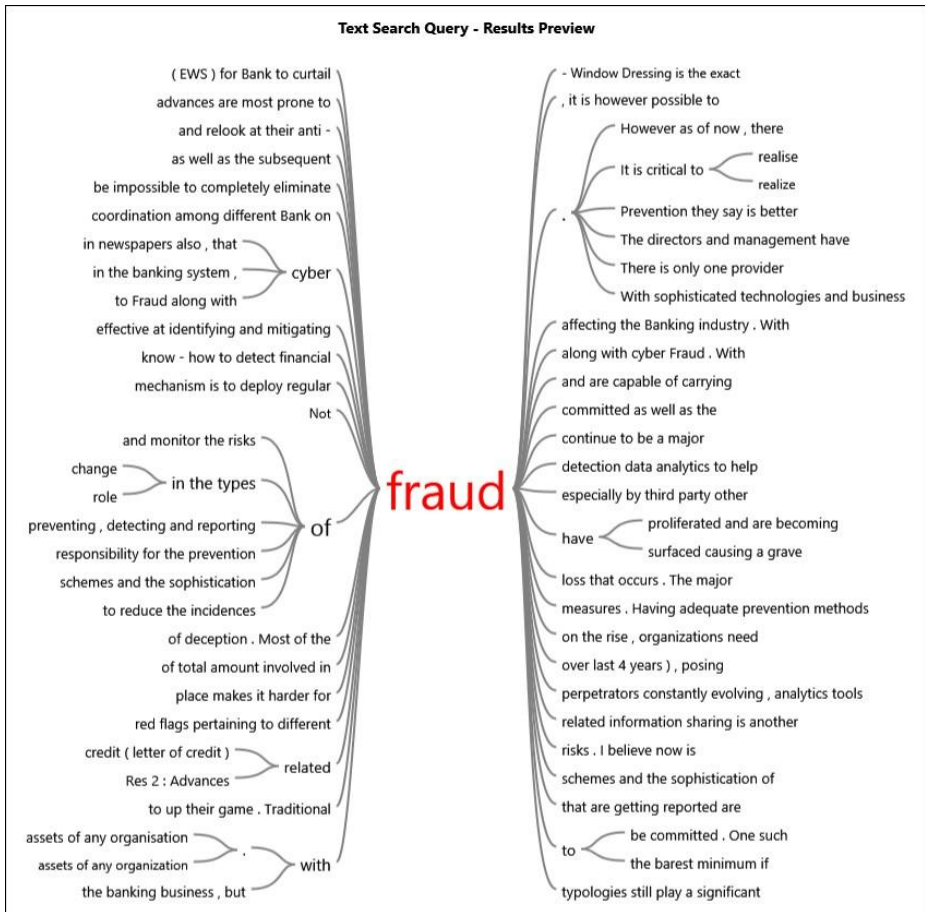
Source: QSR NVivo12 output

The above figure shows the word tree which was generated by text search query for the word 'Fraud'. There are several associations which can be easily drawn out of this query such as 'advances being more prone to bank frauds', 'cyber frauds can be prevented through data analytics', 'identification of various red flags to reduce fraud incidences, schemes and sophistication of fraud techniques, etc.

Figure 6: Text Search Query for 'bank'
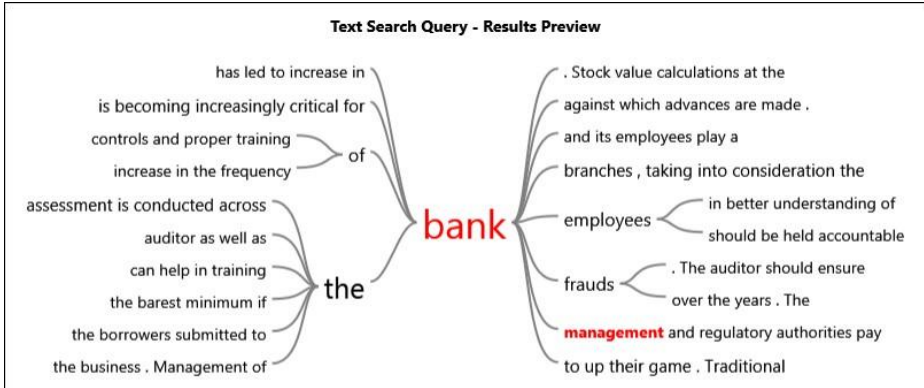
Source: QSR NVivo12 output

Many inferences can be drawn from the above figure by adjoining sentences like 'Auditors as well as the bank employees should be held accountable in case of oversight of discrepancy', 'A better understanding of bank frauds is becoming increasingly critical for bank management', Bank frauds can be at barest minimum if the management and regulatory authorities pay attention', etc. Text queries for individual stakeholders are given below.

Figure 7: Text Search Query for 'Management'
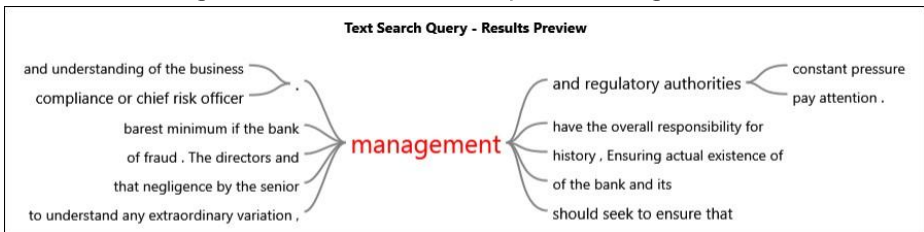
Source: QSRNvivo12 Output

A lot of perceptions are highlighted in the above figure like, 'Negligence by the senior management at times', 'The directors and management are under constant pressure', 'To understand any extraordinary variation, management and regulatory authorities should pay attention', 'compliance or chief risk officer have the overall responsibility to prevent frauds', etc. A few notable mentions which were repetitively frequent in the interviews were "Most of the frauds that got reported were credit related so I think both the regulators and customers must understand the accountability", "I think setting up of a

Special Surveillance Cell with forensic trained staff with a proactive approach is the main requirement". "There are inadequate tools and technologies in place to detect early warning signals and red flags pertaining to different frauds".

Figure 8: Text Search Query for 'Customers'
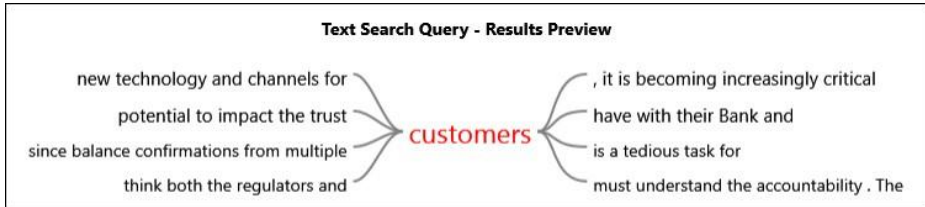
Source: QSRNvivo12 Output

The above figure containing text query depicts the most frequent perceptions of bank customers. Various issues have been highlighted such as 'increasing usage of new technology and channels', 'fraud has the potential to impact the trust customers have with their bank', 'both regulators and customers must understand their accountability' etc. A notable reference in one of the interviews was the "Due to sophisticated technologies and usage of various electronic channels, the consumers are not given due attention in terms of enhancing the knowledge on security measures especially in rural areas. This is something the banks definitely need to improve."

Figure 9: Text Search Query for 'Auditors'
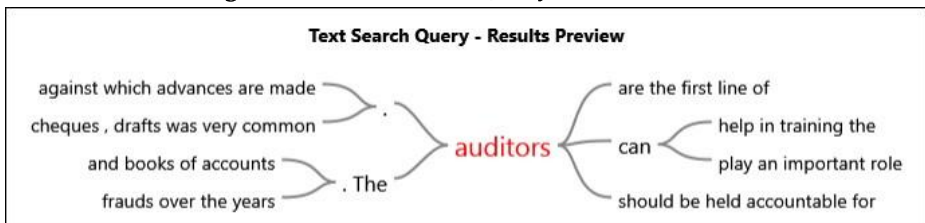
Source: Nvivo12 Output

Text query search for the word 'Auditors' described various perceptions such as 'Cheques and draft based frauds were found to be very common by the auditors', 'Auditors are the first line of defense', 'The Auditors can help in training the bank employees to remain vigilant', 'The auditors should be held accountable for identification of fraudulent transactions in books of

accounts', etc. Banks would only be able to reduce the occurrence of frauds by ensuring competent working of staff, whereas, if we talk about the detection of frauds, the importance of the auditors' role can never be denied. Armed with specialized combination of skills, these financial detectives are significant assets.

Findings

1. The stakeholders' perceptions on fraud prevention majorly stressed upon the usage of data analytics to prevent cyber frauds.
2. It was highlighted that in case of internal bank frauds, identification of various red flags to monitor the employees may drastically reduce fraud incidences.
3. Auditors as well as the senior management considered themselves accountable in case of oversight of internal discrepancy
4. Repetitively, the respondents from banks' senior management, focused upon setting up of a 'Special Surveillance Cell' with forensic trained staff having a proactive approach and inadequacy of tools and technologies to detect early warning signals and red flags pertaining to different frauds.
5. With fraud techniques being complex and sophisticated, a better understanding of bank frauds is becoming increasingly critical for bank management.
6. Bank customers' perception mainly highlighted the fact that fraud has the potential to impact the trust they have with their bank.
7. Bank customers' sentiment also reflected upon complexity of sophisticated technologies and stressed that the consumers must be given due attention in terms of enhancing the knowledge on security measures especially in rural areas.
8. Cheques and draft based frauds were found to be very common by the auditors
9. Auditors considered themselves as the first line of defense and a few expressed interest in volunteering for training the bank employees to be careful.
10. Overall, the fraud incidences encountered by the stakeholders were most frequently found to be of cyber frauds and frauds pertaining to loans and advances were found more frequent than others.

Suggestions

1. Since frauds related to loans and advances were found quiet frequent, due diligence for sanctioning of loans as well as end use of funds must be done periodically and observations of bank's system and procedures should be thoroughly checked.
2. Implementing an employee whistle blowing hotline can prove to be an effective measure to curb internal bank frauds so that the employees anonymously report malpractices without fear.
3. Auditors must conduct a thorough fraud risk assessment using data analytics to identify and address high-risk areas to cater to cyber frauds.
4. Retired and credible bank officers can be hired to facilitate the internal audit of the bank. Since they possess the required operational and regulatory knowledge, they must be empanelled.

Practical Implications

The Indian banks are marching through an increasingly difficult scenario with increased financial frauds and low recoveries. The stakeholders' perceptions highlighted by the author in this study facilitates an in depth understanding of various facets of banking frauds and clearly raise concern to work on the increased regulatory scrutiny with respect to modus operandi and extent of accountability of the respective stakeholders. Recent banking frauds and willingness to gain a deep understanding of various facets related to bank frauds served as the prime motivation to carry out this detailed study. The research is useful to the banks and regulatory authorities as it as a reality check to analyze the current withstanding of these institutions with regard to their current compliance level as perceived by their key personnel of interest and to determine the further steps to be taken in order to prevent frauds from occurring in future.

Conclusion & Scope for future research

The potentially greater impact from frauds is reputational damage and diminished customer and investor confidence. These issues have the potential to impact the trust customers have with their bank and in worst cases, it may lead to an overall systemic crisis. The accountability is not of a

single individual. Risks are definitely inherent in the banking business, with frauds on the rise, effective control mechanisms are definitely required to be put in place. Banks need to take a comprehensive view of their and relook at their anti-fraud measures. Having an adequate prevention method in place makes it harder for fraud to be committed. With fraud schemes and the sophistication of fraud perpetrators constantly evolving, analytical tools provide the ability to discern anomalies, across available data that might otherwise go unnoticed. Also, with cyber crimes on the rise, the customers have to ascertain to remain vigilant and secure at all times while using any of the E-banking channels. Though the overall sentiment of all the key stakeholders were found to be optimistic about prevention of banking frauds, certain areas still need specific attention like new technologies, new entrants into the industry, new regulations and changing consumer preferences which may combine to disrupt the existing approaches towards banking frauds.

The study leaves the scope for further research. One interesting area of research can be the identification and coping mechanisms of various difficulties faced by bank employees. The present study highlights the growing sentiment and concern of stakeholders regarding cyber frauds, therefore the researchers can further explore the upcoming areas of data analytics, artificial intelligence and other sophisticated techniques to decrease the frequency of frauds and their detection time.

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