NEED OF DISRUPTIVE PARADIGM TO MANAGE TRANSFORMATION – A CRITICAL ANALYSIS OF THE RECENT HAPPENINGS IN PNB SCAM

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Abstract- "Need of Disruptive Paradigm to manage transformation - A critical analysis of the recent happenings in PNB scam" A cursory glance at the various banking scams sends a strong message that it is critical for the banking industry to ensure that risk management framework is in place which will allow effective identification and tracking of risky accounts. This requires innovative, industry changing technologies and this may bring about disruption in the industry. The regulatory initiatives should also be of global standards because we as a developing country and do not want to lag behind. In the light of the above, it is imperative on the banking industry to come out with innovative solutions for the age old problem of scams. This paper is an attempt to discuss about the recent banking scams and offer the discussion on the innovative solutions that can disrupt the banking industry and the framework of risk management.

Key Words: Innovation, Scams, Banking industry, Innovative solutions and the current trends

"Times of crisis, of disruption or constructive change, are not only predictable, but desirable. They mean growth. Taking a new step, uttering a new word, is what people fear most".

- Fyodor Dostoevsky

Introduction:

All disruption starts with introspection. The term disruption or to be more specific, disruptive innovation is a process where a new product or service is launched and it gradually overtakes the existing market leaders. Disruption often happens with introduction of new technology and processes and, today, disruption is often used to denote transformation. There are a few industries which are highly disruptive like the IT industry and a few like banking industry which do not often believe in disruption unless otherwise warranted for. We are facing turbulent times right now where the banking sector has been facing numerous scams and the industry is reeling under the handiwork of frauds and scamsters. Change is inevitable, and the disruption it causes often brings both inconvenience and opportunity. Disruptors don't have to discover something new; they just have to discover a practical use for new discoveries.

A look at the table below gives a bird's eye view of the various scams that has happened in the landscape of Indian Banking industry in the last six months

Serial No.	Name of the Scam	Amount Involved	Bank Involved	Scamsters
1.	PNB Scam	11,400 crores	PNB	Nirav Modi & Mehul Choksi
2.	Rotomac	3,700 crores	Consortium of seven banks	Vikram Kothari & Rahul Kothari
3.	SBI	824.15 crores	SBI and consortium of 13 other banks	Kanishk Gold Private Ltd.
4.	RP Infosystem Scam	515.15 crores	SBI, PNB and consortium of banks	Two directors of RP Infosystem
5.	PNB Scam	91 million	PNB	Chandri paper and allied products
6.	Karnataka Bank Scam	86.47 crores	Karnataka Bank	Mehul Choksi of Gitanjali Gems
7.	United Bank of India Scam	Disproportionate assets of MD of UBI	United Bank of India	Archana Bhargava

At the top of the table is the PNB scam clocking a loss of 11,400 crores to the banks.

What really went wrong with PNB?

Who is to be blamed for the fiasco?

What steps needs to be taken to avoid such occurrences in future?

This paper is an attempt in this direction to study and analyse the PNB scam and offer pointers to avoid such scams in future. This paper also discusses the need for innovative techniques to be adopted to avoid scams and discusses a few innovations for the banking industry in the pipeline.

Objective of the Study:

The main objective of the study is to analyse the happenings at PNB and introspect as to what went wrong and offer suggestions to avoid such scams in future using innovative and latest techniques.

Methodology:

This study is basically done by analysing the various newspaper articles, papers and write ups and the expert comment given by financial and banking experts on various media. The study is based on secondary data, but, the data has been collected from various published sources.

DNA of the Scam:

The root cause of the scam can be traced to unauthorized use of Letter of Undertaking (LOU) and the failure of human intervention at the right stages of the process. Moreover, the issued letters of undertakings were not linked to core banking solutions which has led to system failure. Letter of undertakings were issued by junior bank officials unauthorisedly and the surprising fact is that this has gone unnoticed for many years and it has escaped the eyes of both internal as well as external auditing. Is it the failure of auditing system, human failure or break down of process due to less or no intervention?

A LoU is a request made to another bank in the SWIFT (Society of Worldwide Interbank Financial Telecommunication) to loan money to a client. The bank that issues the LoU guarantees the other bank that receives the LoU request that it stands by the creditworthiness of the borrower. While this is the general procedure, what has happened in PNB is that employees at one of its branches in Mumbai issued fraudulent LoU's that were not authorised by its management. This allegedly allowed Mr.Nirav Modi's companies to obtain loans from the overseas branches of various Indian banks.

The information systems at PNB were not seamlessly linked to SWIFT and that is stated as the reason that the huge funds transferred to Nirav Modi through SWIFT went undetected for so long. Linking SWIFT to core banking would have saved the scam but, PNB failed to follow the directives of RBI. Moreover, RBI directives clearly indicated that all SWIFT transactions have to be verified by the concerned branch manager and vetted by auditor of the branch which also has been blatantly disregarded by PNB. These are not the only set of directives flouted by PNB. They have issued LOU's for 365 days as against the rule that they can be issued for only 90 days. Even this has been done by not obtaining collateral security from Nirav Modi and therefore, when Niray Modi had defaulted, PNB had to honour and legally pay the amount.

Another flouting of rule happened when PNB did not rotate the officers every five years and the clerical staff working in the branch every three years .Occupying the same position for a number of years emboldened the staff and gave them avenues to commit the fraud. To top all this, the concurrent auditors, statutory auditors and even the auditors from RBI failed to smell the scam. The forex transactions of PNB were done through advance remittances for import and PNB should have been more vigilant for heavy flow of funds to prevent laundering of funds. This aspect also has been ignored. All these had a cascading effect and have lead to the biggest scam in the history of independent India.

Discussion on possible INNOVATIVE solutions:

There cannot be a one stop solution for the problem of scams. All the stakeholders should join their hands together in bringing in good governance. There is a popular opinion that by leveraging the power of data analysis software and using predictive modelling techniques, banks can detect fraud sooner and mitigate the negative impact of significant losses occurring due to fraud. Moreover, the predictive modelling will help the banks predict about the banking customer, his likelihood of fraud or cheating.

Data Analytics to the rescue of the Banks:

Big data analytics, data glyphs, biometrics, cheque image processing, data mining and use of various predictive modeling techniques have been touted as the next big things that will change the landscape of banking industry, improve security and decrease the amount of nonperforming assets. Professor Bhasin who has been a proponent on adoption of technologies like strong authentication systems, payer verification, payee verification etc. states that the following can be adopted to prevent frauds.

- Calculation of statistical parameters to identify outliers that could potentially signal fraud
- Using classification to find patterns amongst data elements
- Stratification of numbers to identify unusual entries
- Joining different diverse sources to identify matching values where they should not exist
- Duplicate testing to identify duplicate transactions such as payments, claims or expense report items.
- Gap testing to identify missing values in sequential data where there should be none.
- Summing of numeric values to identify control totals that may have been falsified
- Validating entry dates to identify suspicious items for postings or data entry.

Use of Neural Networks to reduce risk of fraud:

Neural networks are notable for being adaptive, which means they modify themselves as they learn from initial training and subsequent runs provide more information. Neural networks can help in areas of banking and for these purpose neural networks systems should be trained on previous cases of fraud, to make systems learn the various trends and patterns of fraud. According to Bhasin, fraud cases are statistically analyzed to find relationships among input data and values for certain key parameters in order to understand the patterns of fraud. In neural networks, this knowledge of fraud trends is then iteratively taught to feed forward neural networks, which can successfully identify similar fraud cases occurring in the future, thus making fraud detection at an earlier stage or even giving warning before the fraud actually occurs.

Use of Fuzzy Logic & social network analysis fight bank fraud:

Fuzzy logic can be used on the data of the banking companies and this data analysis reveals precise results which can be used on the prediction and further analysis of the banking customer. This fuzzy logic technique along with social network analysis can reveal the threats of possible frauds and malpractices. In addition to fuzzy logic, if the reporting framework is strictly formalised and a rigour is followed, thefts, frauds and losses can be minimised.

Fraud Detection software & Data Science Studio for predictive Modelling:

Due to the complexities involved fraud detection techniques used in predictive analytics need to be fine tuned at creating connections from raw data and then discovering which interactions convey potential fraudulent behaviour. Creating all of those connections from raw data is the job of Data Science Studio (DSS). DSS enables the banks to quickly prototype the complex data transformations required to create highly-effective fraud analytics models.

Others:

Red flagging of defaulters accounts, analysing the behaviour of banking customers to detect fraudulent activity and improvising on the learning techniques to identify banking frauds and thefts. Integrated banking solution is the need of the hour to provide a comprehensive answer for the problems by integrating, collating and analysing data from various layers like CBS, SWIFT and other core banking areas.

Conclusion:

It is evident from the discussions that scams are here to stay and as changes happen the scamsters also get bolder day by day and innovate new ways. Therefore, it is the need of the hour for the people at the helm of affairs as gatekeepers to innovate and come out with new solutions to beat the scamsters. This is where disruptive technology and innovation meets the need of the hour.

References:

- https://www.thehindubusinessline.com/opinion/pnb-scam-how-a-system-was-gamed/article22818081.ece
- http://www.thehindu.com/opinion/op-ed/the-nuts-and-bolts-of-a-fraud/article22818138.ece
- https://qz.com/1208266/the-1-8-billion-punjab-national-bank-niray-modi-fraud-explained/
- https://indianmoney.com/articles/could-the-pnb-scam-have-been-prevented
- https://ibsintelligence.com/ibs-journal/ibs-news/indias-punjab-national-bank-hit-1-8-billion-scam-single-branch/
- https://www.hindustantimes.com/india-news/punjab-national-bank-fraud-an-explainer-on-what-we-know-sofar/story-d6LHHPoimqorJtaUZ3QoBK.html
- https://www.moneylife.in/article/rs11300-crore-fraud-at-pnb-many-unanswered-questions-about-governmentbanks/53092.html
- https://www.law.ox.ac.uk/business-law-blog/blog/2018/03/punjab-national-bank-scam-opportunity-reform-indiaspublic-sector
- http://businessworld.in/quickbytes/5-Recent-Banking-Frauds-In-India/15-02-2018-316/
- https://www.huffingtonpost.in/2018/02/25/eyes-wide-shut-the-1-8-billion-indian-bank-fraud-that-wentunnoticed a 23370779/
- http://www.blog.sanasecurities.com/5-famous-financial-frauds-in-india/