

# IMPROVED COMPLIANCE MANAGEMENT IN BANKS THROUGH COGNITIVE ANALYSIS

#### **Abstract**

With greater importance being added to interpretations of regulatory needs and compliance requirements, banks and FIs have started to invest in tools and technology for compliance functions. Regulatory requirement is no more a 'tick the box and submit results to regulatory boards' process; rather, it is a process where banks concentrate on it with more insight to identify, interpret, and cascade the implications across units. Interpolating the validations with AI makes the current labor-intensive activity not just automated but also streamlined and cost effective.





# Tapping on cognitive techniques for integrating compliance and policy management in banks and FIs

The banking landscape is perpetually flooded with new regulations and guidelines, which have changed compliance programs from being just 'expectations' to 'requirements'.

The challenge for banks is that they have to often re-engineer their compliance infrastructure to enforce the actions advised by the regulatory bodies, and needless to say, they have to bear the upsurged costs involved in changing their compliance monitoring program.

Noncompliance pulls the bank into both legal and public complications, ranging from monetary penalties, reworking of agreements, and hampered reputation, to even cease and desist in some extreme instances.

Insourcing and training of compliance officers or agents have become front-running action points and investment requirements for banks. If this can be modified to incorporate AI, the onerous task of manpower dependency and the occurrence of errors can be reduced, thus providing a sustainable and effective compliance monitoring framework.

## Why do banks eye cognitive analysis for compliance management?

Banks' compliance adherence has never been 'pick the choice'. It continues to use the traditional rationale of analyzing a multitude of legal and guidance documents to derive the regulatory implications with the help of compliance experts. Compliance checking is majorly a routine task with dedicated budget allocations which loom with the regulations enforcement spread across LOBs.

The structuring and automation of compliance monitoring is the need of the hour, considering the following observations, which are widespread across most organizations:

- Regulations and guidelines that are difficult to comprehend and apply
- Overlapping and inconsistent policies that do not fit with the current process flow
- Guidelines that do not seem to have a clear purpose and objectives

 Regulations that prove to be bureaucratic, adding another layer of control rather than value to enhance the system

This list calls for extensive manual intervention of special experts and extended efforts to actually grasp their regulatory intention so that the rules are effectively mapped to the process and the system. In most situations, the detached guidelines seem to have a hard face on practical business realities that force the employees to just 'pass the check', leading to regulatory breaches.

Bringing in **cognitive analysis** that can leverage regulatory domain expertise, along with big data, which utilizes semantic associations and algorithms, can effectively derive the regulatory-impacted LOB and related process / policy change pertaining to the implications.

Leveraging the cognitive capability in technology innovation allows systems to scan, (using OCR text matching techniques and NLP), analyze, and interpret the regulatory documents with the instored domain guidelines. Detecting semantic similarities against the reference documents and matching them with the responses that were processed for similar cases earlier, will enable organizations to upkeep compliance monitoring. By doing this, the compliance / legal team will have to review only the outcome or the exceptions highlighted owing to semantic differences.

KYC compliances and BSA regulations that majorly impact the banking industry will see a smooth run-through with cognitive insight, by employing machine-learning research procedures like phonetic algorithms and string matching to provide comprehensive and real-time decisions against the required compliance observance.



## Key benefits and promising possibilities

The key benefits that call out for AI in the compliance monitoring process are as below:

- Efficiency in decision making that brings out the blind spots in compliance checking, which is usually not possible in manual processing
- Highly cost effective in reducing manpower intrusion by demonstrating quality, productivity, and proficiency
- Accentuating data support to efficiently handle communications with regulators
- Collaborating the data

- fragmented across various LOBs to bring in transparency in policy implementations
- Evolving algorithms that transform data to self-feeding and proven hypotheses that grow and handle changing compliance programs

The compliance monitoring process will typically have the following enhanced possibilities with AI adoption:



#### **New Cognitive Process**

- Automated, ability to interpret text and image
- Minimal human intervention at only a few stages
- Dynamic and self adaptable

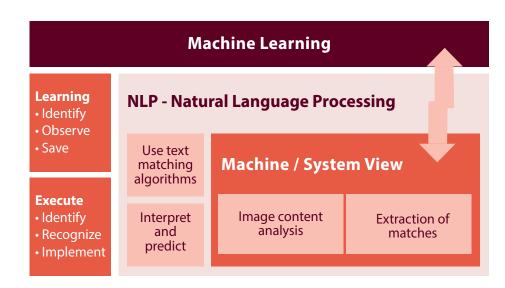
#### **Current Process**

- · Manual process to collect data
- Steady human intervention at all stages
- Pre-modeled process

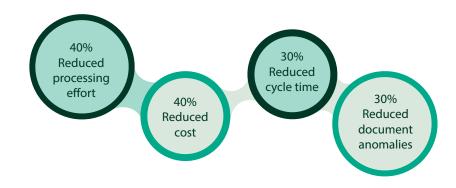


# A cognitive compliance system typically works as follows:

- Has a learning and execution phase that analyzes large quantities of structured and unstructured data.
   Performs semantic comparisons and rule inductions to make predictions and decisions
- Uses machine learning and Natural Language Processing (NLP) to evaluate a given compliance guideline or instruction and makes suggestions in a meaningful way – in human style
- Based on result validity, the recommendations are fed back to the system to evolve and emulate manual computing



One of the world's leading global investment banks, as well as another financial institution, has transformed the manual compliance process, which was predominantly people- and document-dependent, to a cognitive-assisted, automated system with significant benefits on the cost and effort front (as highlighted below).





# Below are some considerations that banks will have to exert while driving digital reasoning in compliance processing:

- Since cognitive processing in compliance is a fresh and emerging capability, comprehensive education and awareness in all roles and at all levels to validate system outcomes (that will be refed to the system as proven results) to mitigate risks is a key priority
- Should be aware of the potential investment required for machinelearning systems and infrastructure
- Optimize and plan strategies to make the new system (cognitive processing) suitable for the process, rather than making it work within the existing environment
- No automation can replace human effort; hence, organizations should have the right balance while defining the framework so as to be able to validate and review the outcomes
- As the market is competitive with new entrants offering solutions with varied logics, banks must pick the product or build their own as per the regulations that are applicable to them



Most financial institutions are facing formidable challenges from regulators to improve their compliance process and technology. With the huge amount of data that they have and generate, banks have a tough time collating all the data to conform to the recommendations of the regulatory boards.

Cognitive-based compliance processing is an emerging and critically important component in the regulatory landscape, which though takes time to mature, is definitely the prudent choice for banks, to stabilize the otherwise cumbersome and impulsive process.

IDC's statistics, based on its analysis, reveal that over US\$5.7 million gets typically

wasted in the process of trying to find information, getting access for required systems to get data, and consolidating the procured details to meet the regulatory guidelines.

It will result in big savings for banks if a cognitive-based compliance process was in place to confront this challenge.



The realm of financial services is inundated with many technical disruptions, and Al-based cognitive solutions for compliance processing are on prime focus, because of their ability to optimize impractical, largescale manual processes, and make them automated and sustainable.

Cost saving is just one aspect in imbibing this technology. Knowledge management for improved outcomes and real-time decision making, tapping the abundant data that the bank already has, is the predominant push to think about its implementation.

Until recently, the technology was seen as a sophisticated proposal, but with the capabilities demonstrated, it is seen as

the best option to churn revolutionary benefits in automating routine manual processes.

Banks must choose to either refurnish or replace their existing compliance processing methods by adding the additional service layer of cognitive analysis to keep regulators better informed on the compliance front.

## **About the Authors**



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Manikandan has close to 14 years of experience in transformation and re-engineering projects in cash management, lending, and core banking. He has vast experience in banking, process management, MIS reporting, and decision support in the financial services / IT sector.

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