

# Emerging Facets of the Audit Function at Banks

## Abstract

Technology is driving change across different banking functions and audit is no exception. Only a few years ago, bank audits were conducted using traditional, mainly manual, processes. But, digitalization of banking has led to technology making inroads into the audit function as well. That said, we feel that the use of technology tools in the audit function has been rather limited. Going forward, banks must opt for more extensive digital technology adoption in this area to keep pace with their digital transformation initiatives. This paper discusses the applicability of some digital technologies in the audit function.

## How the Audit Function has Changed in the Last Few Years

Till recently, a typical bank audit was largely manual, and involved a team of accountants performing preparatory activities prior to audit and physically verifying various aspects. Limited adoption of technology tools has meant that the impact of information technology (IT) on auditing has also been limited. However, the rapid digitalization of banking operations is leading to a shift in the way audit is performed.

The evolution of audit can be segregated into two phases. The first phase encompasses the changes ushered in by the advent of electronic formats in banking. Contracts, documents, consent forms, agreements, vouchers, digital signatures, and so on are now stored electronically and have replaced paper, which means that they can be remotely audited from a central location. Furthermore, banks have adopted software packages for the planning and preparation of financial statements. However, despite the automation of several audit-related processes, human intervention is required – an auditor with domain expertise has to validate and verify the accuracy of financial statements, which is unlikely to change in the foreseeable future.

In the second phase, in tandem with the next wave of digital revolution in banking, the audit function will see an increase in the use of cognitive technologies and real-time analytics. This will enable more in-depth analyses to reveal more about banks' operations and create a better understanding of the risks involved. A successful transformation, however, will require buy-in from banks' internal audit committees, standard setting bodies, and national professional organizations. In addition, changes to the academic curriculum will be required to equip CPAs to handle the digital demands of their evolving roles.

## The Future of Audit

Going forward, we expect a higher degree of automation in audit processes, mainly by leveraging emerging technologies. In fact, the process has already started as evidenced by the use of blockchain technology accelerating the progression of the audit function into its second phase of evolution. For instance, before the advent of electronic formats, auditors had to wait for physical (paper-based) confirmations from counterparties. This changed to digital confirmations through workflows and emails in the first phase. Going forward, a

blockchain platform will be able to render confirmations from trusted counterparties in the close user group. Smart contracts will replace conventional contracts, and the focus of audit will shift to real-time verification of the veracity and integrity of smart contracts. This in turn will reduce the overall cost of audit, enhance traceability, improve accuracy, and facilitate near 100% auditability (albeit through verification of evidences supporting the transactions).

A brief look at some of the technologies that will transform the audit function:

### **Cognitive technologies**

The use of cognitive technologies, typically a combination of artificial intelligence (AI), natural language processing (NLP), and machine learning, will help automate manual tasks, thereby enabling auditors to focus on potential risk elements. In addition, it will enable auditors to perform a more detailed scrutiny of large numbers of documents, identify key tags, interpret them, and infer results from them. The cognitive technology moderated system may eventually become self-learning to intuitively handle new audit use cases and scenarios as well.

### **Real-time analytics**

Real-time data analytics can provide early warning signals by deriving incisive insights on potential risks. The focus goes beyond numbers to the quality of data, pattern-based monitoring, inferring outcomes, and unlocking value from it. Analytics can aid auditors to set tolerance limits – benchmarks across each of their activities such that a breach would invite scrutiny from an audit specialist for evidence of malfeasance.

The use of real-time analytics can especially help in fraud prevention, which is a key focus area for banks. Analytics can help auditors identify patterns in fraud and enable profiling based on parameters like geography, customer type, currency, amount, and so on. Further, analytics of transaction patterns can help trigger alerts so that banks can proactively reach out to customers when they observe a large value transaction at variance with the norm for that particular account, or when a huge amount is transferred to a new beneficiary. Similarly, analytics can help identify fraud-prone geographies so that preventive measures can be adopted.

## Cybersecurity

The audit function has traditionally been manual, which is why the question of cybersecurity risk never arose. However, the explosion of technology in banking and ongoing digitalization means that the audit function now subsumes IT and cybersecurity as well.

Today, auditors and banks' IT teams are required to jointly attest that banks have a robust cybersecurity framework to manage cyber risk, confirm that security checks are conducted at regular intervals, and verify if the documentary records pertaining to evidence related to security measures are adequately maintained. This will involve certifying that banks perform vulnerability assessment, penetration testing, and security operations audit, and confirming that the operations conform to security policies. In addition, auditors are required to ensure that banks use pre-approved software suites and check that the compliance records are in order. Ensuring compliance with the standards laid down by international bodies like ISO and ISACA, and conducting audits of vendor management programs to alleviate concentration risk and improve vendor risk management too falls within the ambit of the audit function. Moreover, heightened focus on cybersecurity within the ambit of external regulatory audit has made it imperative for bank audit teams to gear up to handle queries around this area.

To efficiently perform these functions, auditors require techno-functional acumen. This will require auditors to upskill themselves across niche technology areas of IT and cybersecurity. Therefore, the academic curriculum too will need to be revamped to equip auditors to handle their growing responsibilities.

## The Road Ahead

Both internal and external audit will be impacted by the changes brought in by the digitalization of banking operations. While banks' business and IT priorities will mandate increased automation and technology adoption across the audit function, the decision to implement digital initiatives rests with the audit committee. In the absence of a one-size-fits-all approach, individual banks will have to define their own strategies to digitalize the audit function based on organizational and

strategic priorities and a detailed cost-benefit analysis. We believe that the span of digital initiatives will be influenced by two key aspects:

- Realization of the need for increased use of technology in the audit function by regulators and standard setting bodies
- Recognition by internal stakeholders of the expanding role of technology and its ability to augment audit, and the need to keep pace by suitably adapting the audit approach

The audit function is governed by statutes and is standards driven; in addition, banks' financial statements must comply with prescribed regulations. An error in the financial statements can lead to adverse consequences. As a result, embracing new technologies or methodologies may require approvals from the standard-setting authorities or boards. Accounting and audit rules devised in the pre-digital era will also need to be modified to suit the digital era. Depending on the guidance from regulatory agencies and standard setters on the adoption of new technologies in audit coupled with individual banks' business landscape, financial institutions must draw up a strategy to gear up for the oncoming technology explosion.

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