



**RISK  
ADVISORY  
UPDATE**

## INTERNAL AUDIT IN EMERGING TECHNOLOGIES

### INTRODUCTION

Evolution has always been inevitable. Continuous changes are happening around us on day-to-day basis and adapting to those changes helps to thrive for better. There has been lot of changes in field of information technology and audit methodology too. Auditing environment has changed drastically from auditing around the computer to auditing through the computer and where lot of professionals struggled to change Paper oriented methods of auditing to computers embedded with ERP and accounting software. Internal Audit consultants ensures Risk management of the companies operating in current tech-environment using latest auditing technologies.

### NEED FOR CHANGE IN INTERNAL AUDIT METHODOLOGY:

- Large volume of transactions
- Data security threats
- Increased regulations
- Emerging technologies
- Real-time audit

According to data released by the National Payments Corporation of India (NPCI), PhonePe led the pack with 2.73 Bn transactions (45.84%) in June, followed by Google Pay with 2.02 Bn transactions (33.98%). Paytm was at the third position, processing 877.5 Mn transactions (14.72%). *-inc42*

84% of C-level executives say they had been targeted by at least one cyberattack in the past year, with phishing attacks again being the most common (54%) *- Forbes*

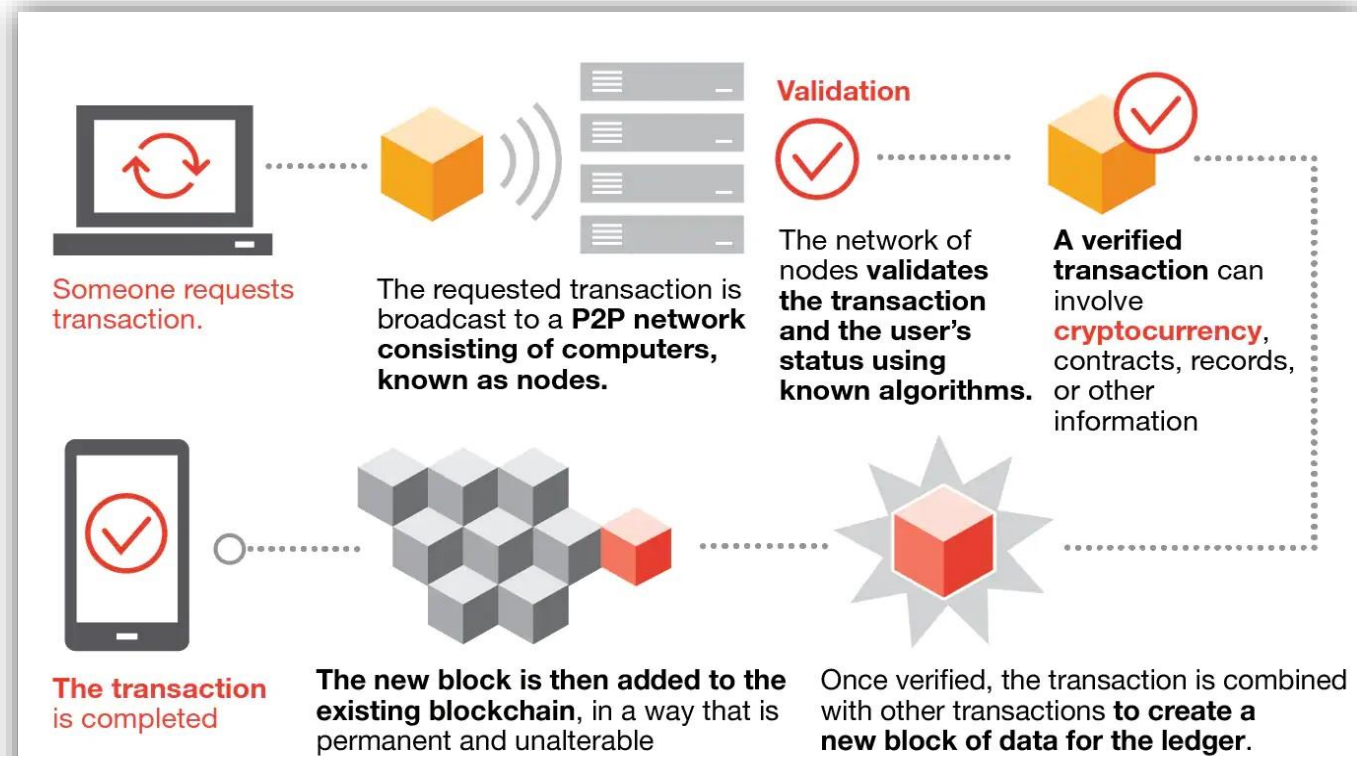
Single data breach now cost nearly Rs 17.5 cr in India, up 25% from 2020 *-IBT Times*

### EMERGING TECHNOLOGIES & THEIR EFFECT ON INTERNAL AUDIT

#### BLOCKCHAIN:

A blockchain is a digital ledger created to capture transactions conducted among various parties in a network. It is a peer-to-peer, internet-based distributed ledger which includes all transactions since its creation. In practice, many different types of blockchain are being developed and tested. However, most blockchains follow this general framework and approach. A properly functioning blockchain is immutable despite lacking a central administrator. With blockchain, we can imagine a world in which contracts are embedded in digital code and stored in transparent, shared databases, where they are protected from deletion, tampering, and revision. In this world every agreement, every process, every task and every payment would have a digital record and signature that could be identified, validated, stored, and shared. Individuals, organizations, machines and algorithms would freely transact and interact with one another with little friction.

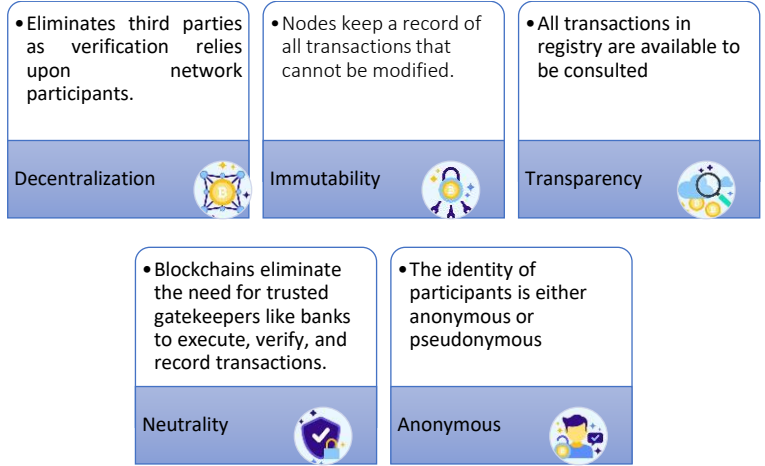
## HOW BLOCKCHAIN WORKS?



Blockchain technology offers an opportunity to streamline audit processes. Today, account reconciliations, trial balances, journal entries, sub-ledger extracts, and supporting spreadsheet files are provided to an auditor in a variety of electronic and manual formats. Each audit begins with different information and schedules that require an auditor to invest significant time when planning an audit. In a blockchain world, the auditor could have near real-time data access via read-only nodes on blockchains. This may allow an auditor to obtain information required for the audit in a consistent, recurring format. Speeding up audit preparation activities could help reduce the lag between the transaction and verification dates — one of the major criticisms of financial reporting. Reducing lag time could offer the opportunity to increase the efficiency and effectiveness of auditing by enabling management and auditors to focus on riskier and more complex transactions while conducting routine auditing in near real time. With blockchain-enabled digitization, auditors could deploy more automation, analytics and machine-learning capabilities such as automatically alerting relevant parties about unusual transactions on a near real-time basis. Supporting documentation, such as contracts, agreements, purchase orders, and invoices could be encrypted and securely stored or linked to a blockchain. By giving auditors access to unalterable audit evidence, the pace of auditing could be improved.

## USES OF BLOCKCHAIN IN AUDITING

- Audit trail for all transactions
- Digital thread
- Smart contract and real-time automated digitalized processes
- Immutable ledger with easily verifiable tamper-proof data
- Automated data reconciliation



## CHARACTERISTICS OF BLOCKCHAIN

## ARTIFICIAL INTELLIGENCE

Artificial intelligence is evolving and it has made its way through driverless cars, chatbots, smart voice assistants, etc., Quantum algorithm is found to break a lot of encryption methods that are commonly used. The Fuel to AI & Machine learning is quantum computers running those algorithms. AI enables the analysis of the full population of data and can identify outliers or exceptions as well as it covers several interlinked technologies like data mining, machine learning, and speech recognition, image recognition, and sentiment analysis. It can also be used to automatically code accounting entries and auditors can improve fraud detection if sophisticated machine learning-based models are developed.

Benefits of AI:

- Performance accuracy
- Continuous monitoring
- Audit Quality & efficiency
- Identify key terms, patterns and outliers in contracts

At present time many professional fears the replacement of the workforce by AI. However, AI doesn't replace an auditor's decision-making, judgment, or assessment interviews. It does enhance their effectiveness by giving them more tools and potential findings to work with. AI can help the internal audit process by accelerating the planning and execution of activities related to corrective and preventive actions.

As blockchain systems & AI standardize transaction starts processing across many industries, internal auditors may be able to help users with the technology. The internal auditors may be able to fill a potential future role because of their skill sets, independence, objectivity, and expertise. Every organization should be thoughtful about the changing scenarios of audit methods in this modern world.


## Disclaimer

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