

Emerging Need for Standards on Information Systems Audits— *How Can India Lead This Initiative*



Over time, the demand for investors and regulators to require assurance as regards the integrity and reliability of financial reports by an independent qualified professional, is now an accepted tradition worldwide. Such demands for assurance have progressively placed increasingly significant demands on the accounting and audit profession. There has always been the implied trust placed by various stakeholders on audited financial reports. Amongst the fundamental factors that help maintain the quality of audits and hence, provides the foundation for trust are the standards for auditing.

With trade and commerce in for an explosion led by a critical deployment of IT-enabled business models and increasing businesses proliferating the cyberspace; more often referred to as the emerging Digital Age, public and private investments out there, not far into the future, are in for a geometric rise. As a natural outcome, information systems, along with the value and risks that they bring in, are increasingly woven into the fabric of every organisation and have assumed centre-stage in their success and survival.



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The need for a re-look at Indian Auditing Standards

Auditing standards for audit of financial assertions have held recognition for their codification of baseline best practices. Such standards have helped set the uniform expectations, both from what is expected of a professional practitioner in his ensuring optimal discharge of his duties.

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On the other hand, the standards also provide a benchmark of what constitutes minimal professional performance from the perspective of the user for placing reliance on the work of auditors. Hence, it is a fundamental expectation for auditors to observe utmost professional care, and to sincerely uphold the stakeholders' trust and faith.

In the emerging new world order, driven significantly by technology, we are witness to the rapidly transforming landscape, rules are being rewritten and traditional theories tossed out. This has significant and multi-dimensional factors that include; how accounting information is generated, its critical dependence on information technology, integration with operational and e-commerce systems. These emerging technologies are defining the way business gets done with intensely interconnected stakeholders in real time.

Business technologies today, comprise not only of ERPs, mail systems and legacy applications but include active engagement with emerging technologies, more prominently cloud computing, social media, mobility, big data and analytics, not to mention the next big revolution waiting around the corner...the Internet of everything! From an audit standpoint, these present tremendous challenges with inherent risks of the connected cyberspace, complex system inter-operations, burgeoning cybercrime, *etc.* to name a few.

India is no doubt in the global spotlight more than ever, and is counted amongst the top digital economies with other larger business dimensions expected to take off. The recent slew of policy initiatives by the Indian government, with accent on "India as a world IT destination", "India as a connected economy" with smart cities and national data grid, "Greater governance with e-governance" and "Make in India", while on one hand hold immense potential for global investment, on the other hand, with the burgeoning multi-faceted risks, there is also need for providing the foundation of trust through quality assurance.

For the auditing profession in India, this signifies a great opportunity with the business community, government and regulators across the globe, who

will look for independent professional assurance on multi-various dimensions of business risk with a view to protect stakeholder interests. However, the auditor today faces an increasingly complex audit universe, while the expectations of trust and faith from audited works remain unchanged or even amplified. Besides the radical changes in the Indian legal and regulatory landscape, more specifically the corporate and cyber laws, place further unfathomable demands on auditors. Both auditors and consumers of their work are often feel lost on getting the right confidence for want of a well-knit framework of auditing standards and professional guidance that considers the intricacies of today's technology driven business environments and related control considerations.

With the right moves, India with its enormous talent in IT & auditing, through its flagship and globally recognised accounting body, the Institute of Chartered Accountants of India is potentially well positioned to take this lead and harness the emerging potential for information systems assurance services. Such services will be in demand to cater to the trust and assurance expectations of stakeholders with interests in India. One of the urgent and critical needs for both the profession as well as the consumers thereof, is the need for a framework of auditing standards integrated with systems audit standards that considers harmonisation with relevant global standards.

Need for a harmonised framework for audit standards

To enable a better understanding of the imminent need for holistic audit standards framework, that includes financial, internal and systems audit standards, it would be useful to consider the contemporary audit and assurance needs, which can be broadly categorised into the following:

- a) Financial Audits: includes all types of audits that provide assurance on historic financial information (financial reports) and related aspects.
- b) Strategic and Operational Audits: includes all types of audits related to various aspects of business strategic requirements and operations, these include GRC (Governance, risk and compliance) audits, audit of business functions and processes such as production audits, human resource audits, sales to cash *etc.*, special purpose audits such as quality

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audits, environmental audits, energy audits *etc.*

- c) Information Systems Audits: IS audits can further be categorised into (1) Application and database audits (2) Audit of IT governance and general controls.
- d) Forensic audits: forensic audits are emerging as a separate need with their special purpose and nature of such audits and includes digital forensics.

Further types of audits, by dimension can be classified as:

- a) External or Statutory Audits: these include audits mandated by laws and regulations, sector specific mandated audits, mandated compliance audits, customer sponsored audits *etc.*
- b) Internal or Management Audits: these include a range of audits sponsored by management, either required by regulation or otherwise.

In each of the above, what needs to be understood is the intertwined nature of the information systems and the way businesses operate today. Hence the need for financial audit standards to consider internal controls over processes and information systems, as well as the need for special audit of information systems or aspects thereof. Every audit needs to take into account the risks and controls considerations at every layer, that have either a direct or indirect bearing on the audit and thereby the design of audit procedures that will achieve the objectives with an eye on the audit risk.

Today, business operations are critically dependent on various kinds of business technologies. Hence, a not so uncommon scenario could include the following, that highlights the pervasive nature of IT and information systems that in turn deliver to business processes and strategic needs:

- financial and management information reports generated either directly or indirectly from ERP (Enterprise Resource Planning) systems
- financial systems including finance and accounting modules of ERPs, in turn draw data from integrated enterprise operational modules of the ERP or even possibly

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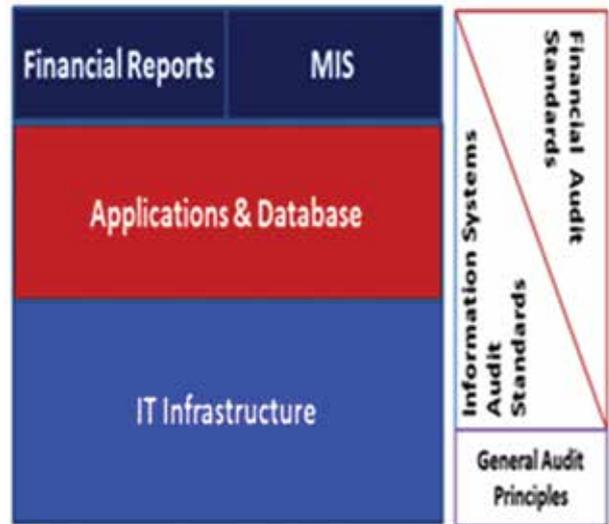


Figure highlighting the integrated nature of information systems audit considerations

connected or disparate legacy systems that automate specific processes.

- ERPs could also in-turn connect to either entity owned or external or customer, vendor and partner extranets, outsourced arrangements, payment mechanisms using e-commerce and CRM platforms that include social media, e-governance (e-filing) systems, *etc.*
- all of these systems find their foundations in IT infrastructure that includes a host of technology components such as servers, end points, networks and network devices, the Internet, related systems software utilities, facilities and people required to run these.

A suitable holistic framework for auditing standards will need to inter-weave the overlapping components of standards for financial auditing, internal audit and information systems audit on the canvas of generally accepted audit principles. The framework also needs to be aligned with global movement for convergence of auditing standards, so as to deliver globally acceptable audit performance with quality and reliability in results of audit work while ensuring reduced cost of compliance.

ICAI has demonstrated its commitment to global convergence, by joining the global Clarity Project for convergence of standards on the accounting and financial auditing with the release of revised Standards on Auditing (SA) and Standards on

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Assurance Engagements (SAE) aligned with IAASB's standards on auditing and assurance.

Following the direction of convergence for professional bodies, is also the adoption of the standards of their counterparts who are globally recognised for standards setting in areas of internal auditing, management systems auditing and information systems auditing. These together

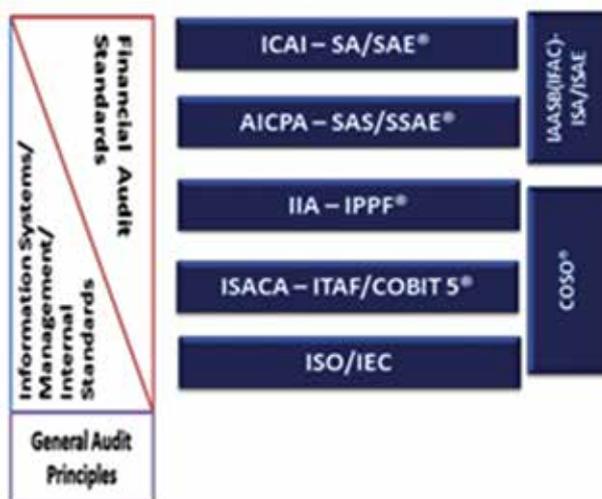


Fig: Need for integrated framework for auditing standards

represent the components of inter-woven nature of auditing, where again the global movement is to move towards integrated audits and not in silos. On the standards on internal audit, the International Professional Practices Framework (IPPF) from the Institute of Internal Auditors and the standards of audit of management systems from the International Organisation for Standardization (ISO/IEC) respectively are an accepted global benchmark. On Information Systems Audit, the Information Technology Audit Framework (ITAF) and COBIT 5 from ISACA are widely recognised and adopted.

With information systems auditing as a critical component of every audit, what is required for a holistic auditing framework for India is the integration of ICAI's globally aligned financial



audit standards with existing global standards for information systems, management systems and internal auditing from contemporary professional bodies such as the Institute of Internal Auditors (IIA), ISACA and ISO/IEC. By reason of the largely country and compliance neutral nature of information systems, management systems and internal auditing standards, these can be effectively and efficiently adopted and integrated to achieve the objectives.

The work of ICAI in this area, holds a great potential for collaboration with government agencies that include various regulatory bodies such as the RBI, SEBI, NSE, IRDA, and the Office of the Comptroller and Auditor General of India, where CAG of India holds the privilege of chairing the global workgroup on IT Audit at INTOSAI. Some of the potential areas where such an auditing standards framework can help address the needs include e-governance audits, audit of service organisations (on the lines of SSAE16/SOC of AICPA), audit for applications such as banking applications, e-commerce systems and payment mechanisms under RBI norms, to name a few.

In one of the recent OECD summits at Tokyo, nations discussed on building trust in the data-driven economy and recognised the need to uphold trust of individuals as a fundamental value. They also emphasised the importance for risk-based approaches as regards information systems with the goal of ensuring measurable transparency, with accent on protecting security, ethics and privacy. The participants recognised the need for ensuring greater transparency and accountability.

ICAI leading the effort in this direction, while being an imperative necessity of re-looking at systems auditing standards that support integrated audits, will also enable standing up as a demonstrable example to the world in meeting the expectations of the stakeholders, while actively contributing to India's and its members growth, in the changing world order. ■