New and disruptive technologies are emerging at a rapid pace. Furthermore, the COVID-19 pandemic has accelerated digital transformation. However, going digital has major consequences on the finance and internal audit functions of an organisation.

There are numerous software tools and techniques available to assist finance and internal audit functions within organisations, such as cloud computing, robotic process automation, process mining, machine learning, artificial intelligence and big data. Such technological innovations change the way the management processes data and performs operational activities.

Understanding the impact of technological advancement

Increasingly, organisations are automating and digitising their processes for achieving their objectives of efficient and effective operations. Technology automation within the finance function provides greater insights, reduces the time of repetitive activities, results in efficiency and enables management to focus on the core activities that result in business value enhancements. However, new technologies also bring emerging risks and therefore organisations should strive to identify, manage and monitor such risks. The most common information technology systems related challenges are malware, phishing, network eavesdropping i.e. attacks that target individuals as well as devices or software.

One of the biggest risks identified in the finance function is the use of spreadsheets in preparation of critical and confidential financial data. This is because, although spreadsheets are a powerful tool of analysis, the data and information captured in them can be easily manipulated and altered as they often lack internal controls. To address this issue, organisations should adopt robust access control measures on such spreadsheets, develop and implement data privacy and data leakage policies, train staff on information security dos and don’ts and implement controls around access, manipulation, anti-virus/malware, and undertake technology risk assessment to keep controls relevant.

Additionally management should consider adopting Straight Through Processing (STP) technology to exclude manual intervention and also consider to build touch less interfaces using Application Programming Interfaces (API) so that download and upload of files are avoided. However, introducing these technologies gradually would be preferable as opposed to doing all at once.

Similarly, technology developments have a profound impact on the approach, and methodology that the internal audit function adopts in carrying out its tasks. Therefore, the internal auditors are expected to have in depth knowledge and skills about the emerging technologies and ensuing risks. Internal auditors can effectively utilise data analytical tools to effectively carry out audits.

Such skills and knowledge enable internal auditors to review the robustness of the information technology environment and assess any weakness or deficiency in the design and operation of any information technology controls within the entity.
Matters to contemplate given the impact of information technology:

- Understand the extent to which the information technology environment is used to record, compile, process and analyse information and the systems of internal control that exists in the entity
- Review how information technology systems deployed in the entity maintain confidentiality, integrity, availability, compliance and validity of data and information
- Consider the implications on risks due to adoption of new technologies in the context of the organisation
- Implement processes whereby the organisation identifies emerging threats, reviews relevant threats and designs, implements and operates corresponding controls against such threats
- Keep the employees and internal audit staff updated on emerging technologies
- Consider how key checks such as authorisation, segregation of duties, workflows, mandatory checks, reconciliations, etc. are enabled through information technology
- Consider the impact of computer-based accounting system on the audit trail that could otherwise be expected to exist in an entirely manual system
- Update the scope of internal audits to determine if new areas, which have an impact on financial controls, are included such as software lifecycle development controls for financially relevant custom developed applications, and cloud related controls
- Adoption of analytics and technology tools by the internal auditor teams to carry out audits efficiently and effectively.

Considerations for the management/Board/Audit Committees

Management functions such as planning, organising, staffing, directing, and controlling are being automated with the use of information technology. With digitisation, various tools are being used to collaborate across functions and to respond to specific challenges impacting businesses. Such technological tools have also enabled close collaboration between organisations and suppliers and improved customer experience in multiple facets such as real time access to inventory and payment information. Use of information technology has led to increase in operational performance, facilitating information flow and teamwork, improved decision-making by recording, analysing and acting upon relevant information in a timely manner.

Further, in today’s digital age, expectations from the Chief Financial Officer (CFO) have increased. A CFO is expected to become an enterprise-wide strategist, an innovation and change leader and a proactive decision maker, utilising technology to look at the bigger picture. Modern CFOs are expected to manage present and future financial positions and risks to the organisation. They are expected to take strategic decisions such as automating the supply chain and introducing new data management technologies. In order to play a greater role in digitisation, they need to understand and manage risks that become relevant with technology deployment and use such as information availability, cyber security, data integrity, etc.

Additionally, Audit Committees play an important role in maintaining and building trust in financial reporting. Audit Committee members are required to be familiar with information technology related knowledge in order to provide effective oversight over company’s operations. Therefore, it is essential that the Audit Committee devotes appropriate time to understand digitisation initiatives within the enterprise and how such initiatives impact the finance and internal audit functions.

Organisations may need to evaluate and undertake the necessary upskilling required for Audit Committee members to be able to appropriately appreciate and supervise the company’s actions relating to information technology.
Following are the key considerations for the Audit Committee with regard to emerging technologies:

- Understand the company’s emerging technology strategy, with focus on specific technologies contemplated to oversee the entity’s financial reporting process and Internal Controls over Financial Reporting (ICFR)
- Understand management’s risk identification and risk assessment processes related to such technologies and their response to address identified risks
- Consider building of requisite controls in emerging technologies: preventive, detective and corrective
- Evaluate management’s contingency plans to address information technology failures
- Review scope of internal audits to determine if emerging technologies have been covered as part of audit plans
- For a secured information technology environment:
  - Recommend appointment of a chief information technology security officer if not already done
  - Recommend appointment of competent information technology auditors to identify information technology related risks, control failures, security issues
  - Ensure the company’s employees are adequately trained to make use of the information technology deployed by the organisation and are routinely made aware of cyber and emerging risks
  - In case the information technology systems are outsourced, the Audit Committee would review and assess the reports of service organisation auditors.

The bottom line

Technology can help organisations to transform themselves and grow their businesses. Therefore, it is essential for Board of Directors and Audit Committee members of an organisation to understand the need for technology for the growth of the business. The Board and Audit Committee members should focus on topics such as need for technology to boost operational performance, digital transformation, cyber related risks and protection of the organisation’s data and assets as they play an important role in determining the technology budget and investment to develop new business capabilities.

We would like to thank our Audit Committee Council Members for their time in providing us with their valuable insights and perspectives that have contributed to building this point of view document.

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