

Information Systems Auditing and return on IT investment assessment

Storyline...

The client is a leading public sector undertaking in Bhutan that provides financial services for its customers including Insurance, Pension and Loan products. The Organisation desired to have its business software applications used in various lines of business audited.

MaGC performed the Information Systems Audit for the Client.



Once upon a time...

The Client used several application software. The Management needed assurance on the timeliness, reliability, accuracy and completeness of the information generated and that its IT system incorporated the requisite controls. The Client had made significant investments in IT the past years and was looking for a professional opinion on the cost benefit of its IT investments

Moving on...

MaGC's team visited the Client and undertook a preliminary study to understand the Organisation's business processes, information flows, reporting/review mechanisms and control system. Following this, the audit team adopted the following methods to examine the client's Information System:

- Study of documentation including – Organisation structure, existing policies, procedures, schedule of authority, Detailed interviews with Users, Internal Audit reports, Statutory Audit reports, etc.
- Walkthroughs and scrutiny of files with Users
- User Survey - Survey of 227 users across the organisation on aspects relating to IT experience, usage, issues, etc.;
- KPI Survey - Survey of 41 executives regarding information availability for key decision making;
- Transaction sample testing of the applications (five software were within the scope) in a test environment – using test data

Observations were classified based on audit objective impact: Timeliness (T), Reliability (R), Accuracy (A), Completeness (C), and Control (K) - TRACK. Observations made in respect of IT administration were classified as per the CIA triad of IS: Confidentiality, Integrity, and Availability. Based on criticality and the category of observation, a risk scoring was applied and the five software ranked based on associated risk.

The recommendations arising out of the IS audit were classified according to the 3PT[®] framework: policy, process, people, and technology.

A framework for computation of Return on Investment (ROI) had to be developed and validated with the Client's Management. MaGC studied several internationally accepted methods and adopted the most suitable method (with appropriate assumptions) for the Client. The ROI was computed software-wise as well as for the whole organisation. Inference based on ROI were drawn and included in the report.

Finally...

The findings were presented the Audit Committee. The report was well received and appreciated. The Client's Management immediately initiated action to address the various lapses identified in the Information System. One of such initiatives was the preparation of an ICT Manual for which MaGC was engaged. The Client provided feedback that the recommendations provided by MaGC were most helpful in negotiating better service levels from its vendors and strengthening its Information System.