ABSTRACT

Telkom Institute of Technology (IT Telkom) is one of the universities that use Information Technology (IT) to support its operations. "Quality Assurance System Strengthening through Implementation Principle of Good University Governance" was one IT Telkom strategy forward. In line with this strategy, IT Governance should be realized immediately. Currently, there are some problems related IT Governance that is has not a clear understanding of IT related risk, lack of transparency will be a significant risk of SISFO business processes and lack of IT risk management responsibilities. In addition to the performance measurement of IT processes has not been done because the focus is still on development of information system and infrastructure, so measurement of IT is not on top priority. Base on these conditions, IT Telkom need to audit to evaluate IT controls and know the maturity level of IT implementation.

Audit supported by Control Objective for Information and Related Technology (COBIT) version 4.1, a framework which focuses on the definition, implementation, audit, measurement and improvement of control in a particular process that covers the entire IT life cycle. Each IT Process has risk, so the audit process involves the Risk IT that supported by Risk IT Framework. Therefore IT Processes to be audited is a process that has a high risk.

Base on risk analysis, mapping of the strategic plan and blue print IT into COBIT is obtained IT Processes to be audited, they are PO2, PO3, PO7, PO8, PO9, AI1, AI2, AI4, AI6, AI7, DS1, DS3, DS4, DS5, DS8, DS11, DS12, ME2. Generally, the audit consists of three processes are pre audit, field work, and reporting.

The results of audit showed that the maturity level of IT implementation in IT Telkom are 11% on 0-Non Existent level, 17% on 1-Initial / Ad hoc level, 33% on 2-Repeatable but Intuitive level, 39% on 3-Defined level, 0%, on 4-Managed and Measurable level and 0% on 5-Optimized level. Opportunity For Improvement (OFI) are arrange to achieve 4th to 5th level and grouped base on period are period I (2012 - 2013), period II (2013 – 2016) and period III (2016 – 2017).

Keywords: Audit of Information Technology, COBIT, IT Risk