Abstract—Recently personal information leakage and computer hacking occur constantly. The majority of the incidents are caused by the negligence of IT internal control. It is practically impossible to prevent all the security incidents caused by the insider. However, an Automated IT internal control system - considered about administrative, technical and physical internal control reinforcement for precaution and rapid response against the incident in the early stage - can reduce the security threat considerably. The object of this paper to present an IT internal control framework with enterprise-wide perspective embraced administrative, technical and physical internal control reinforcement.

Keyword—IT GRC, IT Internal Control, Governance, Risk Management, Compliance

Young Rok Yu* have completed a PhD in computer science from Chonnam National University in 2001. He received the MSc degree in computer science from Chonnam National University in 1998. He has worked for CAS Inc. in Seoul, Korea. His research interests are in GRC(Governance, Risk management, Compliance), software security, software engineering.

Seong Chae Seo received his PhD in computer science from Chonnam National University in 2006. He received the MSc degree in computer science from Chonnam National University in 1997. He is currently an post-doctoral researcher of computer science in the Chonnam National University in Gwangju, Korea. His research interests are in software analysis, software engineering, software quality, software security, software process, UML.

Byung Ki Kim received his PhD in mathematics from Chonbuk National University in 2000. He was chairman of Korea Information Process Science(KIPS) in 2007. He is currently a full professor of computer science in the Chonnam National University in Gwangju, Korea. His research interests are in software analysis, software engineering, software quality, software security, software process, software testing.