

Title	業務プロセスの信頼性のアセスメント手法の提案 - 取引の伝票不整合リスクのある業務プロセスを判定する手法 -
Author(s)	河本, 高文
Citation	
Issue Date	2017-03
Type	Thesis or Dissertation
Text version	ETD
URL	<a href="http://hdl.handle.net/10119/14251">http://hdl.handle.net/10119/14251</a>
Rights	
Description	Supervisor: 二木 厚吉, 情報科学研究科, 博士

## 学位論文の内容の要旨

### 【要旨】

From the viewpoint of internal control, management has a responsibility to establish business processes that do not cause deficiencies over financial reporting. However, there is no criterion of the reliability of business processes. The reliability of the business process is judged based on the expert knowledge and experience by such as public accountants. For this reason, there is a problem that, when management establish the reliable business process in the company to comply with the requirements of internal controls, he cannot judge whether the business process is reliable, or unreliable.

Therefore this paper proposes one of criteria of the reliability of business processes by checking transaction documents for inconsistency risks from the research of the accounting audit by public accountants. Business processes can be classified into two categories according to the criterion. Inconsistency refers to a mismatch between items (product name, quantity, unit price, amount price, etc.) among transaction documents. For any process in the first category, the consistency of any pair of transaction documents in the process is checked, and there is no risk of inconsistency. For any process in the second category, the consistency of some pairs of transaction documents in the process cannot be checked, and there is a risk of inconsistency.

This paper also proposes a method for assessment of risk inconsistencies in the business process according to the criterion. The method is consists of Business Process Diagram and Inconsistency Risk Detection Algorithm. Business Process Diagram is a diagram to detect the state of checking transaction documents in the business process. The state of checked transaction documents is represented by Checked Documents Matrix. The transitive closure of the matrix is calculated by Inconsistency Risk Detection Algorithm. Then when all components of the matrix are 1, it's that all transaction documents in the business process are checked, and there is no risk inconsistency. When some components of the matrix remains 0, some transaction documents are not checked in the business process, there is a risk inconsistency.

By using the method of assessment it is possible that management can judge inconsistency risks among the business process.in the company.

Keywords: Internal Control, Transaction Documents, Reliability, Inconsistency Risks, Checked Documents Matrix.