BEST: International Journal of Management Information Technology and Engineering (BEST: IJMITE)
ISSN (P): 2348–0513, ISSN (E): 2454–471X
Vol. 7, Issue 12, Dec 2019, 15–22

APPLICATION OF WBS-RBS AND APRIORI ALGORITHM IN SOFTWARE PROJECT RISK MANAGEMENT

WANG FANDI

Department of Management Science and Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, China

ABSTRACT

This paper takes the software development project as the research goal, and uses the work-risk decomposition method: Work Breakdown System-Risk Breakdown System (WBS-RBS) to identify the risk of the software development project. The Apriori algorithm is used to mine the risk correlation and provide the countermeasure strategy for the risk management of the software development project. Firstly, the software development project WBS is constructed, and then the RBS is constructed. Based on this, the WBS-RBS matrix is established, and the association between WBS and RBS is constructed. Using risk identification data as the data source, the association rules mining is implemented by Apriori in SPSS Clementine12.0 software. The mining results are analyzed and sorted, and valuable association rules are obtained, and rationalization suggestions for software project risk management are proposed accordingly.

KEYWORDS: Software Project Risk Management, WBS-RBS, Apriori, & Data Mining