ABSTRACT
Data warehousing has become an important issue for large-sized enterprises recently. However, the failure rate of constructing data warehouses is still extremely high due to the difficulty of defining user requirements at the initial stage. The purpose of this research is to seek to use Data Model Patterns proposed by Hay [24] to improve the requirements analysis for data warehouse systems. This research has used a case study (Traffic violation regulation of Changhua Motor Vehicle Station) to implement the proposed ideas. The results of this research indicated that by using Data Model Patterns to improve requirements analysis of data warehouses, user requirements can be defined quite precisely and consequently the dimensional model of data warehouses can be designed quite exactly. Based on the results of this case study, this research has proposed an approach to requirements analysis of data warehouses. This approach includes four steps: analyze business documents, use Hay's [24] Data Model Patterns to draw a conceptual model of business, conjecture summary information for decision-marking and define user requirements based on conjectured summary reports. The main contribution of this research is to propose a potentially new requirements analysis method to mitigate the problem of defining user requirements for data warehouse systems.

Keywords : Data Warehouse, Data Model Patterns, Conceptual Model, User Requirements Analysis.

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