

ABSTRACT

Conference on Database Standardization/ Database Technical Support Theme

1. A Study on the Estimation of Database Development Cost and Fare System
2. A Study on the Standard Model for the Classification of the Classification of Database and Database Technologies
3. A Study on the Retrieval Commands for the Standardization

A Study on the Estimation of Database Development Cost and Fare System

The object of this research aims to estimate a system of database(DB) development cost and to organize a fare system for DB service. Up to this time, there are many researches and technical reports on the estimation of S/W development cost, but rare on DB development cost.

A matter of fact, the legend of S/W development cost estimation has been used in the DB development cost estimation for 10 years, however, it's natural absurdity that the cost of data handling which is the feature of DB is not considered.

This research shows the analysis about the difference between DB development and S/W development in process cost items, the account table of DB development cost, and the method to calculate in detail.

Although it may have some difference in man/month computing during process in verification step, I insist this research should be the most practical one, which reckons the measured cost from the real data that have been practically applied in the industries or the real fields.

If some pitfalls are compensated to apply in real projects, our DB cost estimation model can be surely applicable.

A Study on the Standard Model for the Classification of the Classification of Database and Database Technologies

The systematic classification of database and database technologies are much debated issue currently in the telecommunication and database industry. Nevertheless, the attempt to build the systematic model is nowadays nowhere to be found.

The purpose of this study is to gain a general overview relating to this subject and to make out a draft for the development of standard models.

In the Study for the database classification were presented the tentative draft. In this Model, database is classified from the 9 points of view : manufacturer, subject, processed form (level), (re)presented form, language, updating cycle, retrieval method, communication media, and use purpose.

Relating to the study on the classification for database technologies, it was presented the first draft. In this draft, database technologies are classified from the 4 points of view : technologies for the database development, technologies for the data management and processing, technologies of the database systems, and technologies for the use of database.

A Study on the Retrieval Commands for the Standardization

During the past decades many database distributors have served their own database services in this country. The variety and quality of the service have been expended according to their growth, and we(users) can retrieve plenty of information now. Some retrieval commands, however, used in a database service are in discord with those in other's. These inconsistencies make users complicated and inconvenient when they access the information.

To solve these problems, we have worked with lots of cases served by many domestic distribution services such as HiTEL, Chollian, POS-Serve, Now-Nuri, and foreign database distribution services such as CompuServe(US), PC-VAN(Japan), NIFTY-Serve(Japan). First of all, we took a general survey of main/sub menu screens, general/menu-specific commands and database retrieval commands, and then made an analysis about them whether there are something in common or not. As a result of our work, we suggest a standard to get rid of a burden that users have to learn different menu screens and their own commands whenever they use different services.

We kept the same commands of different database distribution services with its own function because many users were already familiar with them, and proposed completely new commands which have no relationship with that of each one's. Proposing a new command,

we preserved its semantics which the command itself had, as much as we could, and made the command as simple as possible to have users convenient. (The commands we had worked with included general commands taking a same effect on every menu, menu-specific

commands taking a different effect on each menu, and database retrieval commands) Besides of these works, we made an analysis on many main or sub menus provided by each database distribution services. We looked through the arrangement of its menu-items in conventional services and suggest a similar but not the same one in this paper. New arrangement for each served item has an easier lookaround and makes users more determinable compared with its conventional counterparts, according to our own test.

To check our proposing standard's availability, we took an opinion poll through users using the database services right now, which asking about what was more preferable among the commands of conventional one and of new one we had suggested in this report, in view of users, and what was user's wish if a standard had been suggested.

We present the result of our survey and analysis in this report which classified by its functional scope, so that it should be compared with its counterpart in the same functional scope. And we propose a standard based on our works which makes users easier to access database served by each database distribution service, who have their own commands different from others. At last, the questionnaire and the result of it, asking users that our proposing standard is helpful enough to use the database services and sounds in practice, have been presented in appendix of this report.