ACI-japan -It's Perspectives for the Future-

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Even in the field of humanities, some research methods using databases has become very popular. It, however, is still necessary for researchers to have some specific knowledge and skills of database when creating and handling it. ACI-Japan project is designed to improve this situation. ACI means "Academic Contents Initiative" and the project will provide software and hardware for researchers who want to create database by themselves. In this paper, we discuss the problem of database creation, the philosophy of database and the database supporting project mentioned above in detail.

Databases in the Academic World

IT (Information Technology) has brought many changes in various ways, in not only our daily life, but also the academic world. Personal Computers have become the main tools for our academic activities, and they may replace the traditional tools such as "paper and pencils." In every academic field, various data are being created everyday in electric media and this means that many databases are opened for the academic researches.

Many research institutions have set up and proceeded with database projects vigorously and systematically with a big budget. The following are some examples: a) Large-scale corpus of classical Japanese literary works by The National Institute of Japanese Literature; b) Database of the museum's large collection by National Museum of Ethnology; c) Electronic publishing of various information in Japanology by International Research Center for Japanese Studies; and d) Database about Japanese history and archaeology by National Museum of Japanese History.

The Ministry of Education and other ministries have the policy of encouraging database projects by giving them grants.

Because of this policy, large-scale databases have been steadily developed. Along with high popularity of the Internet, the importance of contents has been greatly acknowledged and useful contents in various academic fields have begun to appear.

It, however, is still difficult for individual researchers to start developing their own databases. Once we begin to work with data such as word-processor files, spreadsheet data files, also sometimes yet in the shape of some paper, etc., we can find soon that the office is filled with a large amount of data.

Many portions of such precious data can be used more effectively and repeatedly, if they are compiled as a database. Many researchers, nevertheless, feel awkward and think that it is very difficult to create databases of their own data, and very few of them try such a task in fact.

Issues of Database Creation

Apart from budget-related problems, there may be two major issues: one is researchers' skill, and the other is quality and quantity of data.

(1) Researchers' skill:

Generally researchers in the humanities, who have long used only paper and pencils, become able to use PCs, but may not manage

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well to build databases by themselves. Even if they have developed databases, it seems to be difficult to make those databases widely available via WWW. Because they may not have enough knowledge/skills, besides no time to deal with their database and no motivation to learn how to realize it.

(2) Quality and quantity of data:

Useful databases have to contain high standards, in other words, quality and quantity of data. Data should be controlled very carefully, because low-quality databases, for example, incompatibility of data, lack of consistency, typos, misinterpretation, etc., are fatal defects, and have very little value. Unfortunately, DBMS generally has not so much consideration for these quality control issues. These are considered to be the responsibility of each database owner or creator, despite the quality control management improve database's value greatly.

As a natural consequence, many data which have been collected with great efforts are left as raw data, not organized as database. We have some experiences that we met many valuable data that were accumulated by professors and researchers, and those accumulated data have gone somewhere at the moment of the their retirement. That is so regrettable and also would be a great loss for the future study.

ACI-japan Project

ACI-Japan is a project to find ways to solve these problems. Its objectives are 1) to support individual researchers to create databases of useful academic contents; and 2) to assist them to spread their databases widely though Internet.

Although this project did not start with research grants, it has been mainly supported and maintained by volunteers of each study area. Basically, as our policy, researchers who want to join the project are responsible to make their own databases and to open them on the Web in order that other researchers can use them freely. All ACI-Japan can do is to offer the opportunities, that means, to provide hardware and software to support the database development and their activities.

So far, for examples of software support, ACI-Japan has two software packages: BBDB (Bare Bone Database) and BBQC (Bare Bone Quality Control), both of which were solely developed in this project.

BBDB has been developed for researchers who can use merely word processors, and enables them to build their own databases easily and to open the databases into the Internet world painlessly.

BBQC is for database quality control. As the name "Bare Bone" suggests, both packages of software doesn't have any bells and whistles and have been designed as simple as possible for novice users because we consider that the easiness of database operation is important.

ACI-Japan is now developing new software called "BBCC (Bare Bone Collaborative Creation of Database Contents)." This program will give support to gigantic database development in collaboration with several people, or maybe, dozens of people. It also have some potential of collaborative database creations beyond space-time.

ACI-Japan has just started. It consists of now only 10 members and developed 8 databases. We are now actively expanding this project, but cannot foresee how it develops in the future. It is our responsibility to pass down intellectual property to future generations. I hope ACI-Japan will contribute to this important assignment.

ACI-japan URL: *http://aci.soken.ac.jp*
Databases in ACI-japan
· Shellmound in Japan
· Bibliography for Shellmound in Japan
· Sakyo Komatsu Corpus
· Kokin Database
· Illustrations for Japanese
· Illustrated Sentence for Japanese
· Sentence & Vocabulary Test for Japanese
· High Resolution Molecular Spectroscopy