EPSRC

Engineering and Physical Sciences Research Council

NATIONAL SERVICE Chemical Database Service

INSTITUTUION CCLRC - Daresbury

ASSESSOR A5X

Case for a Service

The scientific case for high speed, continuous, access to a range of databases is unquestionable - much modern high-quality science would be impossible without rapid access to both primary literature and to databases abstracted from it.

The financial case for central purchase and support of database services is also pretty compelling. It is fortunate that some institutions can afford to take out local licences for software products since this ensures some kind of competition and development, but the majority of users can be well-served by an efficient and responsive central facility.

Rationale for database provision

As above

Demand

It is very difficult to get accurate figures for 'demand' since this term is not well defined. Taken together, measurable quantities like access rates, download rates and size, query rates and numbers of registered users provide useful indications. Perhaps the most useful indicators would be rates of change in these quantities compared with previous years.

User surveys are rarely well supported (185 replies to 3621 questionnaires) , and it is difficult to assess whether the responses come from a disgruntled few, people with time on their hands, or workers with a genuine desire to help the Service.

Counting citations is also likely to be little more than indicative. On-line searching is now taken for granted in almost all research, and the service providers are no more citable than the Water Boards or Electricity Companies.

A number of software systems associated with instruments now have the capability of interrogating databases for similar materials. In my experience, this has required the databases to be installed locally. Automated query submission to remote services is desirable, and would affect the demand.

Management

Judging from the levels of service, the management team are working effectively.

Amongst areas they might like to look into are:
1) Locally installed databases, with the aim of discovering if there are any real advantages of local installation.
2) Objective comparisons of central services with commercial services made by experienced real-life users using pre-prepared scenarios.

Training (workshops/summer schools)

In my own field, half-day workshops tagged onto large national and international meetings have proved very effective ways of raising awareness and skills in the user community.

Publicity (highlighting service to new users)

This is always a major problem for service providers. If potential new users do not realise that a service exists, they will not try to find it. This ground-roots level of education can probably only be effectively achieved with the cooperation of university or departmental IT officers.

Finding the CDS is not always easy. My department website has no link to the CDS. Googling "CDS" does not rank it highly (though the full name scores a bulls eye). The EPSRC home page (http://www.epsrc.ac.uk/default.htm) does not have an evident link to central services and facilities, and typing CDS into the search box finds a moved page, and eventually to a Cambridge University website, which does have a valid link.

Overall (including recommendation as to whether this should be invitation to full proposals

The CCLRC CDS is now part of the essential infra-structure of UK chemistry. Of itself, it is unsexy, low profile and unlikely ever to hit the scientific headlines. None the less, it is key to maintaining quality and efficiency in almost all chemistry based research.

An enquiry should be made into why certain institutions and individuals choose to use locally installed or commercial databases, and the results of this enquiry be used to formulate part of the development plan for the next 5 years.