Results of a Work Study of Interlibrary and Information Services at Helsinki University of Technology Library

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RESULTS OF A WORK STUDY OF INTERLIBRARY AND INFORMATION SERVICES AT HELSINKI UNIVERSITY OF TECHNOLOGY LIBRARY

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In 1975 statutes were enacted in Finland concerning costing principles for services rendered by public institutions to outside customers. The basis for costing is cost price. The regulations also concern university libraries, who, however, have not been able to follow the rules to the letter as regards interlibrary lending or copy services. The reasons for this are that interlibrary loans traditionally have been free and also the fact that average unit costs are not known.

Several work studies concerning library and information services and their service level have been reported in the literature (1). Studies have been carried out inter alia in the United Kingdom, the Federal Republic of Germany and in the U.S.A.

The project of the Nordic Committee of Scientific Information and Research Libraries aims at the development of a measuring system for the performance of discrete tasks in the field of information services. Statistical reporting of information services has been difficult, because there are no generally accepted definitions, no "Frascati manual". A Scandinavian study of interlibrary services revealed that the figures obtained in different work studies depended on both actual differences in the service costs and differences in the functional boundaries used (2, 3).

Work studies at Helsinki University of Technology Library

The task of Helsinki University of Technology Library is to serve the staff and students of the University as well as anybody requiring technical information, because, by statute, it also functions as the National Central Library for Technology in Finland.

The library system comprises, in addition to the main library, some 35 departmental and institutional libraries. Figure 1 (Appendix A) shows that the main library consists of four departments. Research projects, mainly in the computer field, are carried out by scientists reporting directly to the director. The staff of the main library numbers 45, of whom 50% have an academic degree and qualifications in library or information science field.

Service for which there is a charge is rendered mainly by two units: by the Bureau for Interlibrary Services (known as the Interlibrary Unit) and the Department of Information Service. In these two units work studies have been carried out recently to investigate the time needed for tasks and their unit costs. So far as the information service goes, every staff member kept a diary in which the starting time for each task was recorded with an accuracy of ten minutes. In the Interlibrary Unit the use of time was also recorded for partial tasks, as these were easy to differentiate.

Interlibrary services

The Interlibrary Unit employs seven persons, of whom two are graduates with library qualifications and the others have taken shorter courses in library services. The copying laboratory employs two persons. Interlibrary services of the Library of Helsinki University of Technology are rather extensive, the number of annual requisitions amounting to 40,000. During November 1976, the period the work study covered, 3,095 orders were dealt with by the unit.
The Interlibrary Unit receives orders by telex or by mail on completed order forms. The final tasks are defined as follows:

- loans from the library
- copies of material in the library
- copies of material in departmental libraries of the University
- orders transmitted to another library after bibliographical checking
- xpn-answer (not available)
- clarification of insufficient orders
- loans from abroad
- copies from abroad
- repeated orders from abroad
- orders from abroad without results

On the basis of an outline for processing orders made for the Interlibrary Unit these ten final tasks were divided into some twenty partial tasks. The partial tasks e.g. lending a book from the library are shown in table 1 (Appendix B).

The use of time at the Interlibrary Unit is shown in figure 2. It can be seen that 34% of the total working time was spent on the delivery of copies from publications belonging to the holdings of the library and 15% on copies procured from abroad. Delivering loans from the library's holdings took almost 10% of the total time and the delivery of loans procured from abroad more than 2%. 9% of the total time was spent on transmitting orders to other libraries in Finland, for sending answers with the IFLA code "xpn" and on the clarification of different incomplete orders. Almost a third of the time was spent on different administrative and miscellaneous tasks, including staff training and time off.

As revealed by table 2 the average unit time for the interlibrary service amounted to 22 minutes per order. When the Copying Laboratory's working time was included, the average unit time was 28 minutes per order. The average cost was 12 marks, including salaries and the cost for materials and equipment, but not overheads. The unit costs for final tasks carried out without the aid of foreign libraries were naturally lower than the average costs of all services. Loans and copies from abroad exceeded the average costs - loans from abroad cost three times the average service cost.

When the unit costs of the final tasks calculated on the basis of the results of the study are compared with the prices presently charged by the library, it can be seen that the billed costs are considerably lower than the actual costs.

Information service

In the Department for Information Service there are 7 information specialists who are graduates, four of whom have qualifications in information science. In addition there are two secretaries and a student assistant. The tasks of this department include advisory services to users of the library, reference work, information retrieval tasks, classification of the acquisitions, teaching the use of information media, and special projects.

In accordance with a work study carried out in February this year, the available working time was divided as shown in figure 3. About 10% of the time was used to advise users of the library. This activity is rather time-consuming because the Department of Information Service has organized a duty desk in the reference collection.
The work study revealed that the number of inquiries and the number of users assisted was larger than earlier estimated. Altogether 208 users had received advice and the average time used for one client was 27 minutes. On salary costs alone, the average price of this advisory performance was 18 Finnish marks.

More than 10% of the time was used on classification of acquisitions. During these months, 568 publications were classified. The average time therefore was 12 minutes and if only salary costs are counted, the average unit price was 8 marks.

About a third of the available working time was spent on special projects. These include input into the INIS system, an AKWIC Index to Finnish technical journal articles and a classified index to the list of current periodicals of the library. A research project on the suitability of online searches as an aid to teaching staff in electrical engineering and electronics was also underway at the time of the study. A quarter of the available working time was used on committee work within the university, on PR-activities, user training and different administrative tasks.

The remaining 20% of the available working time was spent on reference services, manual literature searches, selective dissemination of information, and online searches. This share is of special interest from the point of view of costing, because these services, with exception of reference services, are also charged.

Table 3 shows that the average time for reference assistance was 48 minutes, for manual literature searches 82 minutes, and for online searches 43 minutes. The corresponding average costs were 30 marks, 57 marks and 30 marks respectively.

In these unit costs only salary costs have been included. In addition to salary costs, billing covers costs for copies, telecommunication costs and costs billed by the information brokers, ESA/ESRIN, SDC, Lockheed etc. For manual literature searches requiring more than one hour's work and for online searches the information service has billed 60 marks per hour.

The SDI service during the month of the study required 38 minutes per client and 10 minutes per search profile. These figures were exceptionally high in February 1977, because the input of all search profiles was carried out in the online mode during January and February for the whole year.

When units costs were compared with invoices sent to clients, it could be seen that the actual costs of manual literature searches and online searches had been charged. Reference service, on the other hand, was free of charge and a questionnaire survey carried out earlier has revealed that customers are not prepared to pay for reference service or data retrieval.

Conclusions

Because of differences in cost factors, it is difficult to compare the results with those from earlier studies. The unit times of straightforward interlibrary services should be comparable and the results obtained point in the same direction as those of earlier studies.

It is, however, almost impossible to make comparisons of incomplete interlibrary service orders or orders for information services, because the degree of complexity varies. Unit times for performances also depend on the personnel structure of the service unit.

Our results can, of course, be utilized in operational planning and long range planning of the library, and they might also prove useful in national planning for library and information services.

As a management tool, work studies and cost analyses are essential. Furthermore, they tend to increase the morale and enthusiasm for work among the staff studied.
References


As revealed by table 2 the average unit time for the interlibrary service amounted to 72 minutes per transaction, including the time for the material to be received and the time for the staff to deal with the collection of the material. The average time for the final tasks were divided into 48 minutes per transaction. The average time spent on the collection of the material from the library's holdings took almost 10% of the total time. Material had to be procured from abroad more than 9% of the total time was spent on transmissions of orders. Loans and copies from abroad exceeded the average costs of all services. Loans and copies from abroad exceeded the average service cost three times the average service cost.

When the unit costs of the final tasks calculated on the basis of the results of the study show that the staff is efficient in their work, the unit costs are only 32 cents per transaction. The unit costs are based on the cost of the material, the staff's wages, and the cost of the library's holdings. The unit costs of the final tasks are calculated as the cost of the material plus the cost of the staff's wages and the cost of the library's holdings. The unit costs of the final tasks are calculated as the cost of the material plus the cost of the staff's wages and the cost of the library's holdings.

In accordance with the work study carried out in February this year, the available working time in the library has been reduced from 42 to 30 hours per week. The library, however, will continue to provide the information service and all other library services to users of the library. The library's information service has organized a duty desk in the reference collection.
Figure 1
Helsinki University of Technology Library Organization

Figure 2
The Interlibrary Unit
The time study

Appendix A
Figure 3
Department of Information Service
The time study
### Table 1: The Interlibrary Unit
Average times and costs of partial tasks for lending a book from the Library

<table>
<thead>
<tr>
<th>Task</th>
<th>Minutes</th>
<th>Fmk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorting and stamping for numbering</td>
<td>0.35</td>
<td>0.08</td>
</tr>
<tr>
<td>Checking the card-catalogues of the Library</td>
<td>1.52</td>
<td>0.31</td>
</tr>
<tr>
<td>Fetching from the shelves</td>
<td>5.78</td>
<td>1.23</td>
</tr>
<tr>
<td>Loan recording and record filing</td>
<td>7.56</td>
<td>1.78</td>
</tr>
<tr>
<td>Missing publication, searching</td>
<td>0.19</td>
<td>0.04</td>
</tr>
<tr>
<td>Packaging and mailing</td>
<td>4.00</td>
<td>2.13</td>
</tr>
<tr>
<td>Return of the loan</td>
<td>6.00</td>
<td>1.44</td>
</tr>
</tbody>
</table>

### Table 2: The Interlibrary Unit
Average times and costs for final tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Minutes</th>
<th>Fmk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans from HUTL</td>
<td>25</td>
<td>9.40</td>
</tr>
<tr>
<td>Copies from HUTL - main library</td>
<td>27</td>
<td>10.20</td>
</tr>
<tr>
<td>- departmental libr.</td>
<td>33</td>
<td>12.10</td>
</tr>
<tr>
<td>Bibl. checking, sent to another library</td>
<td>8</td>
<td>4.20</td>
</tr>
<tr>
<td>Xpn-answer (IFLA-code)</td>
<td>4</td>
<td>3.60</td>
</tr>
<tr>
<td>Clarification of insufficient orders</td>
<td>24</td>
<td>6.70</td>
</tr>
<tr>
<td>Loans from abroad</td>
<td>40</td>
<td>37.00</td>
</tr>
<tr>
<td>Copies from abroad</td>
<td>26</td>
<td>20.50</td>
</tr>
<tr>
<td>Repeated orders from abroad</td>
<td>19</td>
<td>6.70</td>
</tr>
<tr>
<td>Orders from abroad without results</td>
<td>33</td>
<td>11.50</td>
</tr>
</tbody>
</table>

### Table 3: Department of Information Service
Average times and costs of information services

<table>
<thead>
<tr>
<th>Service</th>
<th>Minutes</th>
<th>Fmk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference service</td>
<td>48</td>
<td>30</td>
</tr>
<tr>
<td>Manual literature searches</td>
<td>82</td>
<td>57</td>
</tr>
<tr>
<td>Online-searches</td>
<td>43</td>
<td>30</td>
</tr>
</tbody>
</table>