User-based information services
A slide-tape presentation
USER-INFORMATION SERVICES

A slide-tape presentation

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(Preliminary version)

General Information Programme and UNISIST

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For many years the General Information Programme of Unesco has been issuing an important number of documents to facilitate, in Member States, the development of national information systems, including libraries, information services and archives.

Many information specialists noted that information services are not as developed as they could be and when they exist they are often underused. One of the reasons for this paradox, according to some experts, is that users are not aware of their own information needs and how to fulfill them. Very often, they do not know which information services exist around them or how to make use of them.

This problem has been recognized for a long time within Unesco. For instance the second Medium Term Plan of Unesco indicates: "There also appears to be a need to familiarize users with the basic documentary techniques and with modern means of information processing, so as to encourage them to make full use of the systems available to them. Taken together, these training activities help to bring about conditions conducive to a fruitful dialogue between information specialists and the users of information -which alone can ensure that the services provided are continually adapted to changing needs" (Unesco Second Medium Term Plan - 1984/1989 - 4 XC/4 Approved, paragraph 7046).

Many activities under the Unesco Regular Programme are thus directed towards user sensitization and training, in particular organization of training seminars, preparation of training packages and publication of guidelines in the area of user education.

The slide/tape presentation User Based Information Services has been prepared within this perspective. It is to be used by a professional information specialist who wishes to inform users, and obtain from them a feedback with a view to improving existing services or to design new services which will better meet the needs of the community to be served. This package was prepared in Papua New Guinea and it is hoped that the presentation of real life situation will favour the acceptability of the ideas presented. Users of this package are invited, when making presentations, to focus on the concepts rather than on the details specific to a particular situation.

The designations employed and the presentation of the material throughout this document do no imply the expression of any opinion whatsoever on the part of Unesco.

Any comments or suggestions for improvement or any report on the experience gained by other countries in using the present document are welcome. Correspondence should be sent to the Division of the General Information Programme, Unesco, 7 Place de Fontenoy, 75007 Paris, France.
INTRODUCTION

This slide-tape presentation focuses on information service design and the evaluation of information services. It was devised as an aid for information professionals who want to develop ways to encourage the involvement of users in these processes. Changes in services will only be improvements if users perceive them as meeting their needs. Involving users in the design and evaluation of information services is one way of ensuring this outcome.

It is suggested that the script and photos of the slides in this presentation be examined carefully to see what parts could fit the programme being designed to reach a certain audience. Then the slides and audiotape for those parts should be previewed. The actual presentation should be tailored to fit the intended audience. Additional programme material, developed on site, will ensure the proper reception of the ideas presented.

As this slide/tape was produced in Papua New Guinea all the photographs show realistically how users in developing countries are helped by local information services, and how the users in turn have helped improve these services through analysis and feedback. Those photographed were a cross-section of information users in a developing country: from decision-makers and public servants in government, to health personnel, researchers, university faculty and students, lawyers, a journalist, workers in an appropriate technology center, and community school teachers.
OUTLINE OF POINTS TO BE MADE BY PRESENTATION
OF
"User-Based Information Services"

1. Different types of users have different information needs, and they will find libraries and other information services useful if the services offered are tailor-made to fit their requirements.

   Part 1, slides 3-38, covers the topic "Information Users and Today's Information Services".

2. Today's information professionals are receptive to the suggestions of users. New or improved services and products can be designed even though they start from a traditional base, such as a library or archive.

   Information from user groups about their requirements can affect the design and evaluation of services and products if user input is received on such important aspects as: content, context, and delivery.

   Part 2, slides 39-59, covers the topic, "User Involvement in Information System Design".

3. When a new service is being introduced, such as a computer-based information searching service, feedback will have to be received from users so that the service can be reviewed and adapted if necessary. There are several user survey methods which can be used: telephone survey, mail survey, personal interview.

   Part 3, slides 60-78, covers the topic "User Survey Methods for the Evaluation of a New Information Service".
GUIDE FOR THE USE

OF

THE SLIDE/TAPE PRESENTATION,
"User-Based Information Services"

The target groups for whom this presentation was designed include any group of users who have been brought together to encourage their involvement in the design or evaluation of information services. If a library or specialized information service center serves government workers or university personnel, researchers or health personnel, there is a common message which should reach that group of users about their possible involvement in changes and improvements of information services. That message is incorporated into this slide/tape presentation.

PROGRAMME IDEAS

There are three distinct parts to this slide/tape presentation. Each part could be used separately or together with other parts.

A presentation of all three parts at one sitting is not recommended.

The three parts are:

1. Information Users and Today’s Information Services (slides 3-38)

2. User Involvement in Information System Design (slides 39-59)

3. User Survey Methods for the Evaluation of a New Information Service (slides 60-78)

A combination of parts 1 and 3 could be very effective for introducing the idea of a new service and involving users in its design and evaluation.

A combination of parts 1 and 2 could stimulate a discussion with users about the need for different types of delivery of information services, or for a different kind of indexing vocabulary.

Besides using Part 1 and 3 with user groups, these two parts may be a useful vehicle for stimulating discussion among staff members and users about changes in services or help introduce a workshop of user survey methods.

Part 1 alone could be used to introduce some ideas about the value of information service and the possibility of integrating information products and services for multipurpose uses.
TECHNICAL CONSIDERATIONS
BEFORE SHOWING "User-Based Information Services"

1. Whenever any part is presented, slides 1-2 and 79-80 should also be shown, to indicate the title and credits.

2. There are no "beeps" for automatic slide changes, but there is a long pause in the narrator's presentation which will guide the operator to make slide changes.

3. The three parts on the cassette are separated by music before and after the narration. The music at the beginning of the first part shown should be the signal to show the title slides (1-2) and the music at the end of the last part to be shown is a signal to show the credit slides (79-80).

4. Overhead transparencies for four slides.

Four slides are not photographs but are graphic representation of some concepts. As they contain a great deal of information, some of the content may not be grasped in the time allowed to view the slide.

To reinforce the information in these slides we have included overhead transparencies which could be used after the presentation of the slide/tape, or if useful the slide/tape presentation could be stopped and the overhead projector turned on. The later method might interrupt the flow but could be effective if handled properly by the presenter.

The following four slides have overhead transparencies:

42. Information Need Assessment and Evaluation Studies
52. Value of Information
76. Analysis of Information Users' Needs
77. Examples of Operational Report from Survey Data

Remember to use these overhead transparencies if it will reinforce the message you are trying to get across.
CONTENTS

This presentation consists of 80 slides, 35mm square, which may be shown on a projector that accepts this size of slide. For convenience of those who have a carousel projector, the slides have been numbered 1-80.

There is one audio tape which will run on any standard audio cassette player. The duration of each part is as follows:

Part I : 6 mn
Part II : 7 mn
Part III : 5 mn

For four of the slides there are corresponding overhead transparencies which can be shown on any overhead projector.

Programme ideas for the use of this material and technical considerations for the programme organizer are contained on pp. 3-4 of this brochure.
BACKGROUND READINGS
FOR THE INFORMATION PROFESSIONAL USING
"User-Based Information Services"

1. Dosa, Marta L.
   "Information Transfer ... A Centralized and a
   Decentralized Model" in Gerontology & Geriatrics Collections,

   "Online access to remote data bases: An experiment in
   user sensitization" Journal of Information Science, 7 (1983),
   107-115.

   "Specialist groups in the preparation and production
   of Information Analysis and Consolidation Products", Library
   Science, 19 (September, 1982), 162-185.

5. Saracevic, Tefko
   "Processes and Problems in Information Consolidation",

6. UNISIST Guidelines on Studies of Information Users (Pilot
<table>
<thead>
<tr>
<th>Picture Number</th>
<th>Commentary</th>
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<tbody>
<tr>
<td>1</td>
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<td>2</td>
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<tr>
<td>3</td>
<td>As the next few slides flash by, try to answer the question: What do all these people share in common?</td>
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<tr>
<td>4</td>
<td>Members of Parliament</td>
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**PART ONE**
5 A Secretary for Finance

6 Government workers

7 Laborers

8 Lawyers and Solicitors

9 A Biochemistry class at university
10 A radio journalist

11 A doctor

12 A language professor

13 A teachers' workshop

14 The answer is that they all share a need. It is a need for information which will help them do their work.
15 Some of these users need information that is up to date.

16 For example, a Member of Parliament must know the status of a bill.

17 A Secretary for Finance must have the latest figures on debt service.

18 And research workers in a fast moving field must have the latest research reports.
19 Some information users need information in a form which they can use with their clients.

20 For example, a teacher in a community school needs visual materials during a health lesson.

21 A nurse needs materials which she can use in a clinic.

22 Many people need information in a special form which is useful to them.

23 Lawyers, for instance, need loose-leaf publications because of the continuous changes in regulations and laws.
24 Geological materials must be graphic.

25 And many researchers, like this linguist, need computer-based information.

26 Information Services today can be as varied as the users they serve. Once user needs are perceived, improvements can be introduced.

27 Handling telephone requests may be the most effective way an information service can reach a busy decision maker in government.

28 Personalized service in a Parliament Library or in a national archive is a common practice.
29 Guides to a library's collection and open stacks are available where users like to serve themselves, such as this student in a medical library.

30 Information from around the world is made available in a library via computers when needed for researchers and decision makers.

31 Delivery of materials to the desk of a busy researcher worker is a common occurrence in a special library.

32 The link between research and information is recognized in many developing countries such as Papua New Guinea. Information users can tell operators of information services what they consider essential services. On the basis of such data, old services can be redesigned or new ones introduced.
33 When information users are dissatisfied with the information service they receive, they may stop using the service, or

34 they may begin to wonder about its usefulness,

35 Some may consider the collection unwieldy,

36 Others may find it difficult to locate anything easily.
37 Users in frustration, may discard information or return it unused.

38 When users feel overwhelmed by the amount of information they receive, there needs to be a reassessment of the type of service being supplied.

User feedback, both positive and negative, is considered necessary to insure user satisfaction with today's information services.

39 To design improvements in information services, cooperation between information users and information providers is required.

40 Sometimes this cooperative effort will be hampered by the image users have of an information service. For example, some people view a library as only a collection of materials.

The correct view of today's libraries and information centers is that they are service centers where materials are organized to be easily used, and staff assistance can be found.
41 To obtain user input and to present the correct image of information services, discussion groups such as this one can be formed.

When special data are required from users, a mail service or interview is sometimes used.

42 Information need assessment studies help determine the characteristics necessary when a new information service is being designed. Evaluation studies show where improvements are needed. When information workers design or redesign services they start with user input and perform tests in the design stage. From these findings they can modify, upgrade, or even abandon the service.

43 User input is especially required during the design or redesign of three aspects of information service:

Content
Context
and Delivery

44 For example, take the information worker in a department of fisheries who is responsible for cataloging and indexing all the materials received.

* For this slide an overhead transparency is included.
45 This information worker needs to collaborate with the researchers being served before choosing the data elements in the catalog record, and especially when choosing the keywords used to describe the subject content.

46 What material will form a collection is another area where user input is very helpful. When display space is limited, the user and the information worker can review the magazines for display.

47 After content, the second important aspect of an information service is. If the information is not available at the right time and in the right form it becomes useless information. The context, or user environment, must be considered carefully.

48 User Guides must be displayed prominently so that a novice user will find them easily and be where tour guides can point to them.
49 Scripte and background materials for a radio announcer must be tailored to fit the time, subject, and age level of the intended audience.

50 Teacher's guides are arranged in a prescribed way so that they are useful for inservice training as well as for classroom teaching. These examples of the consideration of CONTEXT show how vital an aspect it is.

51 The busy decision maker has contextual requirements too, and his assistants and advisors take this into consideration when presenting him with reports.

52 The value of information in decision making is greater, the shorter the document is. When full reports or documents are given to a decision maker, they have less value than abstracts or summaries, and these in turn have less value than an analysis of these documents. The basis for this value assessment is the time and effort it takes the executive to process and filter the information he is given.

53 The third important aspect to consider in information service is the form of delivery.
54 For the busy doctor in a remote health care center, the proper delivery of information is an SDI service where copies of journals selected by the doctor are sent to her from a central library. These can then be routed to others at that center or returned after use. This may require several subscriptions of the same journal, but it is considered cost effective in terms of information delivery.

55 Mail service to extension agents in forestry stations is another useful service. Delivery upon request is different from automatic Selective Dissemination of Information because it is a service that responds to individual requests.

56 Many special libraries and information centers are open around the clock, when staff are not easily accessible. To insure that service will be delivered at the first possible moment, request forms such as this one can be prominently displayed in the center.

57 Once the staff report to duty on the next day, they can fulfill the request, making photocopies if necessary and delivering the requested information.

58 When the medium of the information requires the use of machinery for viewing, the service center provides catalogues for selection as well as the equipment for viewing. Small and large group viewing is usually accommodated.
59 Although there are many other aspects of an information service which can be improved with user input, we have concentrated on three aspects here: Content, Context, and Delivery. User requirements and cost-benefit analysis will help the information worker decide what information to collect and how to deliver it.

60 When new services are introduced all these aspects are considered to ensure that the service will be user-oriented and customized.

An example of a new service is that associated with computer-based literature searching.

61 When such a service is inaugurated, the local information staff assume the role of intermediary for the user because the indexes and catalogues to be searched are only accessible over long-distance telephone lines and by following strict computer protocols.

62 The information worker must listen carefully to the user's request and help him use any special thesauri. The request must be negotiated into a search query which will be processed by the computer system.
63 When the staff member has all the information needed from the user, then she is ready to make the connection to the computer.

64 The user's request can then be input.

65 The computer's response can be seen on the screen.

66 If speedy delivery of the response is required, a printout can be made immediately; if not, a mail delivery of the results is ordered.

67 When the printout is reviewed by both the user and the information worker, there can be instant feedback and a failure analysis can be performed immediately. Not all information services can be designed with the ability of instant monitoring, but computer-based services lend themselves to this quite nicely.
68 Technological changes in information systems and services may require changes in user behaviour.

69 Browsing through shelves of magazines and searching in a card catalogue are two activities in libraries and information centers which are changing.

70 Instead of the magazine on the shelf there is now the microfiche edition. Instead of the card catalogue, there may be a microfiche or online catalogue.

71 More and more users must become familiar with the new technology and use it as successfully as they did the old services.
72 To insure that there are no problems with any information services, old or new, monitoring of use and user attitudes is essential. Several methods for this can be used.

73 A telephone survey can be an open-question and free flowing conversation, with permission to record comments. Those chosen for such a study usually provide critical incidents of use.

74 A questionnaire sent to users, or to potential users, is very cost effective and can be completed at leisure. When this method is used, proper sampling of the user population must be insured.

75 The personal interview, or examination of some records of use is another good way to collect data about user attitudes and experiences.
The analysis of user needs can provide invaluable data to the information service.

When the data are analyzed, operational reports can be written from this survey data. In the report shown here, the number of users and their needs for resources and frequency of delivery were determined.

User-based information services, by definition, change with user input. All these methods are important tools for that input.

[none] (Unesco logo)

[none] (Credits)

* For this slide there is also an overhead transparency.
ACKNOWLEDGMENT

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