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## SELECTIVE DISSEMINATION OF INFORMATION (SDI) SERVICE: A CONCEPTUAL PARADIGM

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**Abstract** - The study discusses the traditional and online procedures and outlines of SDI service. The paper has also taken an initiative to formulate an exact matching technique between user's subject interest and document profile with exploration along with electronic delivery of voluminous information technique. It also discusses some standard features and model of user profile. Finally, the paper explores some possible requirements for performing online 'SDI' service.

**Keywords:** CAS, SDI, EDDS, Workflow, Matching Process, Confined Searching, User Profile.

### INTRODUCTION

In the Current Awareness Services, users with varying interest are supposed to find out the relevant information depending on their choice and interest. But they have to make some extra effort to be aware of the new information which is also compiled with efforts put by the (information service) provider. Further, the subject areas of interest of modern scientists and engineers no longer conform to conventional concepts of disciplines. Therefore, a need is felt to devise a mechanism in the information system to decide quickly the relevance of each document from the point of view of each user's interest [2]. Later, such a mechanism has been devised and first introduced by H. Peter Luhn in 1958, who named this device as 'SDI' service. The earlier concept of 'SDI' by Peter Luhn now has undergone a significant change due to the latest innovation of computer and telecommunication technologies coupling with the present library services.

### OBJECTIVES

The study has been proceeded with the following specific objectives:

1. To establish a formal definition of SDI and their latest augmentation.

2. To explain a new approach on traditional procedures and conceptual workflow of SDI service.
3. To propose guidelines and procedures of online SDI service.
4. To focus on a concept mapping of online SDI service.
5. To propose a technique for electronic delivery of voluminous textual information.
6. To propose some standard features and model of user profile.
7. To explore the possible requirements for performing online SDI service.

**METHODOLOGY**

The study was conducted exclusively based on literature search.

**DEFINITION OF THE TERM ‘SDI’**

SDI is a service that can be regarded as a by-product of CAS which not only serves current information but also totally is user-oriented [2]. When CAS is rendered or offered to individual user on his specific demand, it involves in the working of Selective Dissemination of Information System. SDI is an idea to make the current awareness service a user oriented one by offering it at individual level of selected items and is restricted to every user’s area of interest [8].

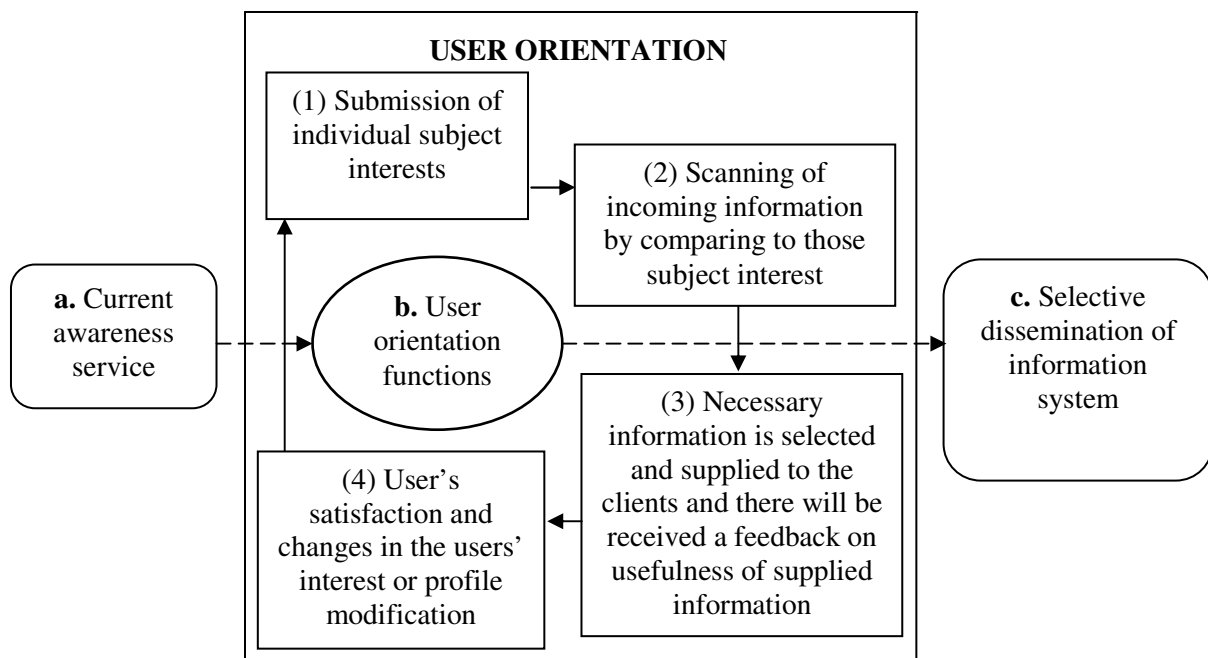


Figure 1: Conversion process of CAS into SDI.

However, to understand the meaning of SDI service, it is desirable to observe few definitions [1].

Luhn defines SDI as a service within an organization which concerns itself with the channeling of new item of information, from whatever sources, to those clients within the organization where the probability of usefulness in connection with current work or interest is high.

On the other hand, the service endeavors to withhold such information from clients where this probability is low. An attended objective is to prevent clients from being swamped by indiscriminate distribution of new information and to avert the resulting danger of not communicating at all.

Suseela Kumar defines SDI as the practice in some libraries such as special libraries whose users are small in number to maintain reader profiles which indicate the subjects of interest to them; advanced or elementary level in which they are and the form in which information is required. Whenever information is related to the subjects of a reader's interest received in the library, he is at once informed.

UNESCO defines SDI as the regular provision of scientific information to individuals or corporate users on predetermined subjects (interest profiles).

Dr. S.R. Ranganathan defines SDI as documentation list on a specific topic anticipated to engage the attention of the member of the parent body.

Fidoten defines SDI as a method of providing personal current awareness information to individuals or groups.

However, it can be defined in a comprehensive sense that, SDI is a type of current awareness service which under optimum conditions involves screening of documents, selecting information exactly tailored to meet the specific research needs of each user or a group of users and supplying the information directly to each individual or group so that user can keep abreast of the latest developments in the area of his specialization [5].

#### **TRADITIONAL PROCEDURES OF SDI SERVICE**

Every library is not equipped with computer particularly in developing countries. Mechanical operation is also a costly matter. No doubt that there are various limitations in the manual operation of SDI system but it is justified also while planning the SDI services. However, to operate SDI service manually, the following steps are carried in operation [8]:

##### **- SELECTION OF PROJECTS**

The first stage of planning SDI service is the selection of important projects to be covered by SDI system. Projects should be selected on preferential basis.

**- PROJECT PROFILE**

Users' interest should be recognized and a project profile should be prepared.

**- DOCUMENT PROFILE**

When projects are selected and profile is prepared, documents should be scanned and a document profile will be prepared.

**- COMPARING AND MATCHING**

When project profile and document profile are prepared, both the profiles should be compared and matched.

**- EVALUATION**

The system should be evaluated periodically.

**CONCEPTUAL WORKFLOW OF TRADITIONAL SDI SERVICE**

The sequence of functioning or workflow including the main activities in manual SDI service is explained in Figure 2.

**- EXPLORATION OF THE WORKFLOW DIAGRAM**

The workflow shows that the execution of manual SDI service involves some sequential operations which are explained below:

**Step 1: Starting point**

1. Receiving the new arrivals/documents.
2. Receiving user profile.

**Step 2: Scanning the document**

1. Specifying and recording bibliographical description of the new items.
2. Scanning the new documents in terms of subject matter and setting up appropriate subject headings and feasible number of keywords with appropriate page references.
3. Scanning new and old items in terms of user's interest and preparing index file for those items by selecting significant key terms relevant to users' subject interest.

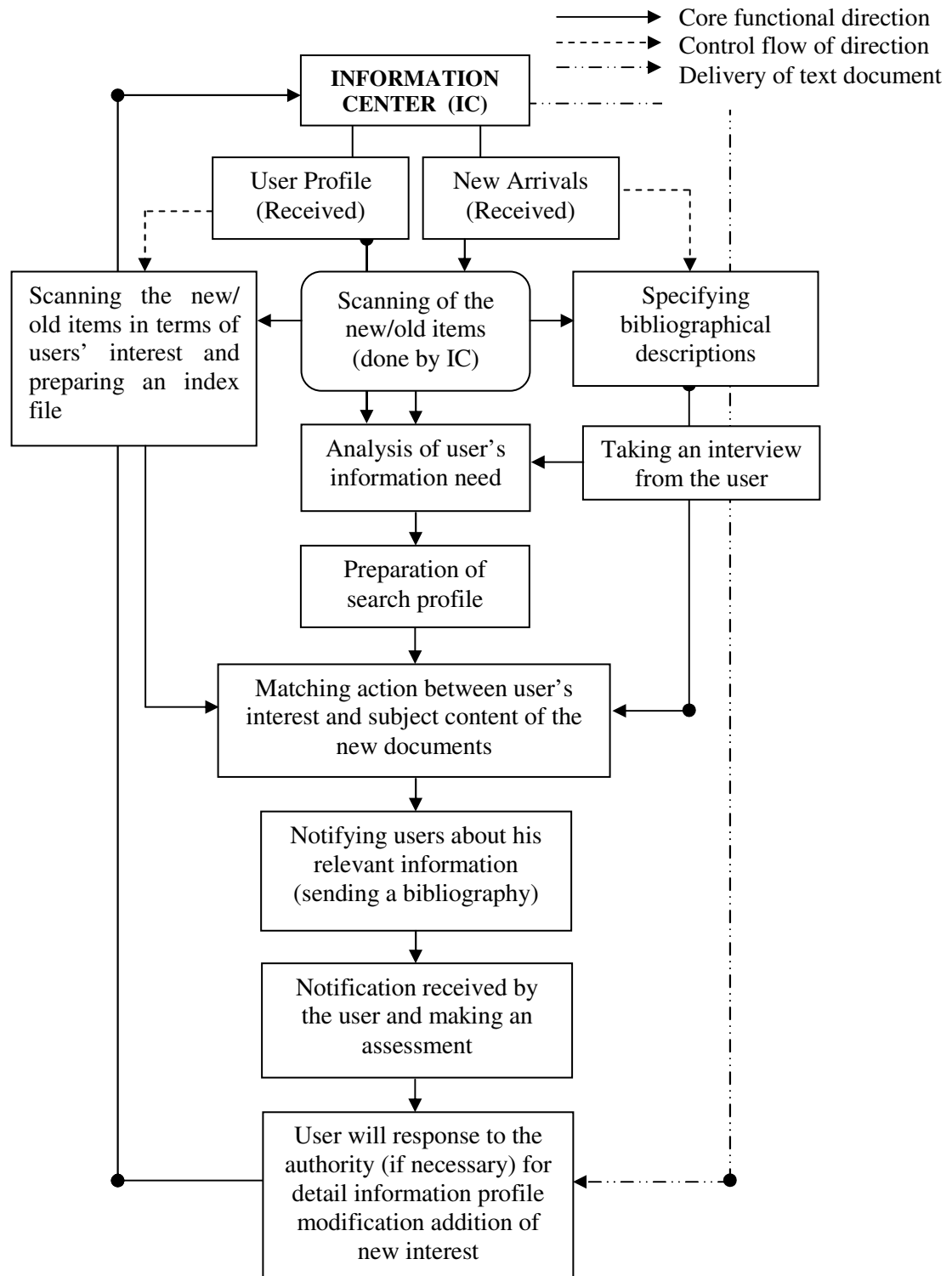


Figure 2: Conceptual workflow of SDI service.

### Step 3: Analysis of the user's need

1. Careful study of user profile.
2. Asking user through an unstructured interview regarding his need.
3. Preparing a search profile by selecting appropriate possible terms for searching

information relevant to concerned need.

**Step 4: Information matching action**

1. Study of the search profile.
2. Study of the document index file.
3. Study of the bibliographic description of the concerned documents.

**Step 5: Notification to user**

1. Sending a bibliographical list of publications relevant to user's need.
2. Assessing preliminary notification received by concerned user.

**Step 6: User's response to information center (IC)**

1. User may request for text information of specified items in detail after assessing the notified items.
2. User may request for profile modification or change, if he doesn't satisfy with the notified items.
3. User may request for additional new interest, if he wants more information than the notified items.

Finally, the information center will try to modify or attach user's additional need and thus the operation is going on as before.

## **ONLINE PROCEDURES OF SDI SERVICE**

SDI is a current awareness mechanism through which the individual information user can expect to receive regular notification of new literature and data in accordance with his/her statement of interest or profile. But this task is very difficult to perform due to accelerated growth of information publications in every moment. A computerized information system opens a number of possibilities with respect to current awareness services. One of the most significant innovations was the SDI program.

SDI is a service of providing textual information which involves graphics, charts or images, etc. in addition to text. The primary intention of a researcher in getting SDI service is to find out the specific relevant items of information. For this, they require an exact matching mechanism. However, in text database system there is generally no option for exact matching of information due to increased chance of words co-occurring in a document without really being related to each other, instead approximate matching is available in this type of database. So it is quite a problem for the researchers of science, social science and humanities to manage exact information from a volume of information in a text database that causes hindrance in their research work.

Therefore, a system should be developed, so that the researchers can find out their

interested information exactly and pin-pointedly. This is possible by introducing an exact matching technique with text database systems. An information filtering technique can effectively solve this problem and prevent information overload.

#### **- GUIDELINES FOR PREPARING ONLINE 'SDI' SERVICE**

P. S. Kawatra [3] proposed the following guidelines for preparing online SDI service in his book "Textbook of Information Science".

1. Acquiring user's profile and storing them.
2. Processing incoming materials.
3. Matching users' and document profiles.
4. Handling of cards.

P. S. Kawatra also proposed some guidelines for preparing modified online SDI service in his book, which are as follows:

1. Users' demographic profiles, professions and subject interests are surveyed.
2. New and earlier materials are reviewed.
3. Relevant publications are matched with subject interests of users.
4. Selected materials are processed by abstracting, extracting, reviewing and analyzing or compiling.
5. Packets of materials in different forms are sent to users.
6. Users are asked to fill out feedback questionnaires in order to find out usefulness of packages and update user's profile.

#### **CONCEPTUAL MAPPING OF ONLINE SDI SERVICE**

The sequence of online functioning of SDI service including its main functions and activities are explained in Figure 3.

#### **- EXPLORATION OF CONCEPT MAPPING OF ONLINE SDI SERVICE**

The SDI service in the above online method is divided into two segments. One is related to online operations and other is related to manual operations.

#### **- - ONLINE OPERATIONS**

Online operations are those functions that are to be performed through computerized database systems. In online segment, following steps are performed in operation which involves three stages to operate soundly.

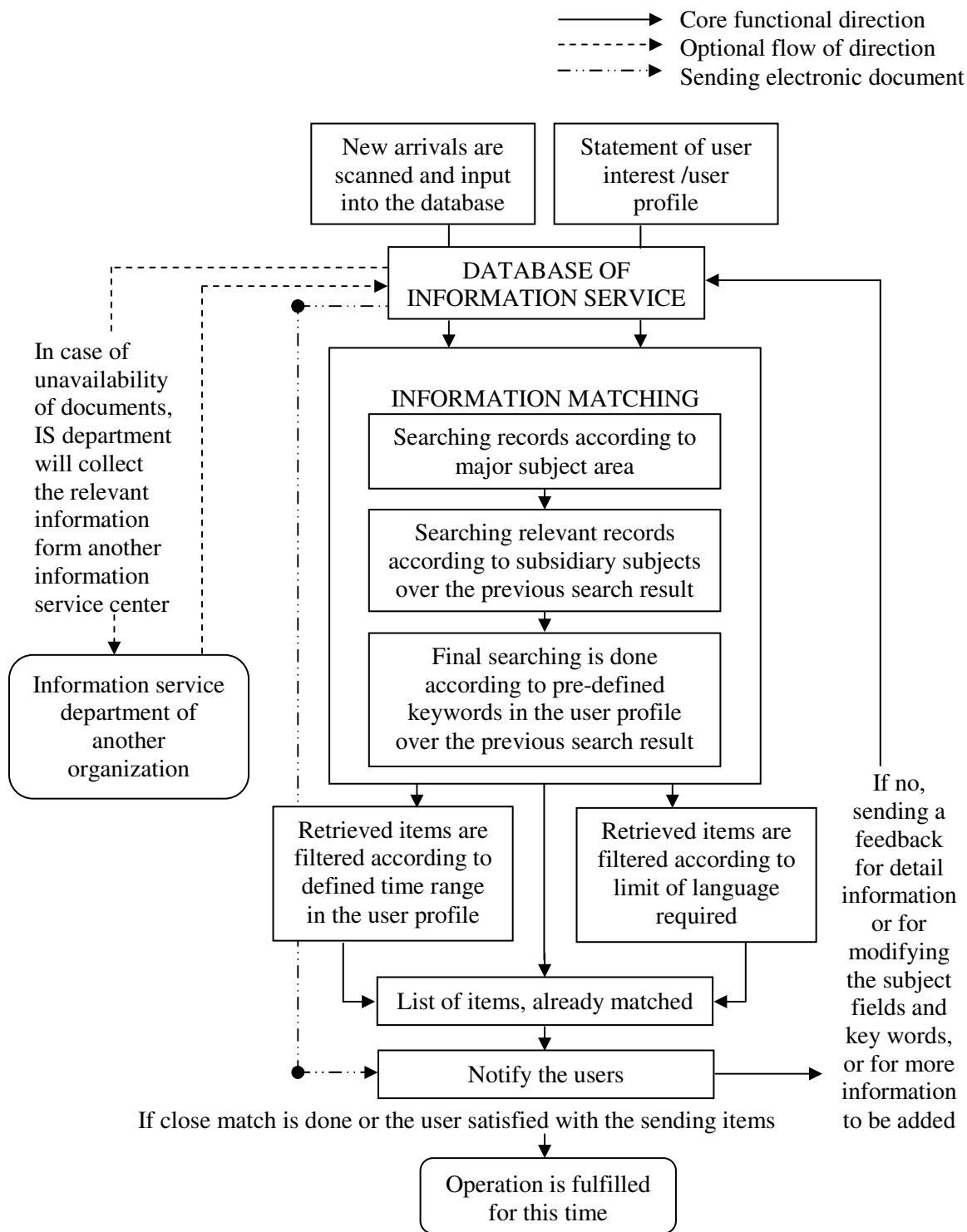


Figure 3: Conceptual mapping of online SDI service.

**Stage one:** This is the primary stage of SDI service. Operations in this stage are related to scanning the new arrivals and inputting them, recording and storing information of users' profile into database. This function is not an internal operation of SDI program. But the whole operation of online SDI program is based on this recorded



information.

**Scanning the new arrivals:** Examines or scans every new document received in the library in terms of subject matter very keenly and extensively to ensure maximum subject coverage as well as input them into the database program.

**Scanning the users' profile:** The database should contain separate functions for SDI service incorporated with user profile. User can open a profile on his name, then fill-up and submit it. Profile opening and submission function can be done from PC or manually. But in case of manual submission, the information officer should input the particulars of user profile into the database carefully.

**Stage two:** The operations in this stage are related to information matching which involves the following steps:

**Step 1:** Document specification: It is the process of information matching. In this step, required information is to be surveyed over the whole records of the information center database for exact matching of subject matter. This function is performed in three levels.

**Level-1:** Searching to select the major specific subject field over the whole records of the information center database.

**Level-2:** Searching to select the subsidiary subject field (if any in the user profile) over the previous search result on major subject field.

**Level-3:** Searching extensively according to pre-determined keywords in the user profile, over the previous search result on subsidiary subject fields to select the appropriate items of information.

**Step 2:** Time range specification: In this step, search operation is performed according to required time range (mentioned in the user profile) of information published, over the previous search result on required subject matter.

**Step 3:** Required language specification: In this step, search operation is performed parallel according to required language of information over the previous search result on required subject matter.

**Note:** In case the user's query is not confined to certain range of time in which 'the document published' and when no specific medium of language of information is required, then ultimate matching function is performed directly over the latest search result and document profile is prepared.

**Stage three:** The operations in this stage are related to notification of the concerned users on his query for information which involves the following steps:

**Step 1:** Sending notification to the users: The final list of closely matched or relevant information is primarily sent to the concerned users in the form of bibliographical presentation.

**Step 2:** Ultimate matching: User will try to verify the received bibliographical items

for ultimate matching in terms of his need for information.

**Step 3:** Sending user's feedback to information center: After verification, user will send a feedback to information service center. It is essential that how much information are sent or added to it. User may also request the information officer for the delivery of selected information on descriptive form.

**Step 4:** Delivery of voluminous textual information: On the basis of user's feedback, textual information is to be sent in detail according to his need at any form of information distribution (i.e. hand-to-hand, postal service, facsimile, email, etc).

But, in case of using telecommunication methods for delivery of voluminous textual information, if the information gathered is in printed hard copies, then following technique may be carried on:

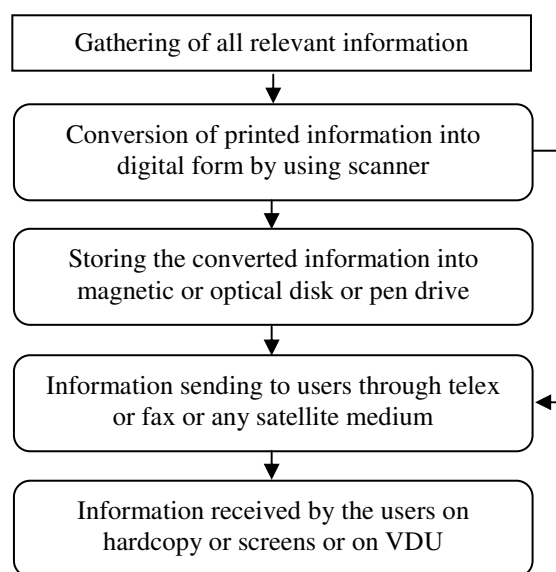


Figure 4: Online procedures of information delivery.

## - - MANUAL OPERATIONS

Manual operations are those functions that are to be performed manually and which are related to qualitative and quantitative approach of information on the basis of users' capabilities and nature of requirements for information. The manual operation involves mainly four options.

**Preparation of search profile:** An intellectual effort from both the users and information officer is required for the construction and revision of search profile [6]. This can be done followed by pre-determined subject fields and keywords mentioned in the user profile. If information officer feels need, he may request for clarification on the concerned subject matter from the user.

This function is to be done at the time of scanning the user's profile as well as identification of user's need and obviously before the matching operation is started.

**Selection of qualitative information:** The retrieved information are to be selected

on the basis of users' skill and experience, education, expertise, job involvement, perceiving capabilities of the concerned users on that information gathered.

For instance: If the user is a Ph.D. researcher, he needs more and more specialized information on his field of specialization that may not be equally required by the M.Phil or MA Thesis students.

**Selection of quantitative information:** It relates to the volume of information to be provided based on the nature and purpose of need for information.

For instance: If the required information is for research purpose, then it would need more specialized information from many specialized sources. In that case, information is to be provided in high volume. But in case of preparing a lecture sheet or making a speech, it would not require such volume of information.

**Distribution of voluminous information:** In case the volume of information is too large or bulky that is difficult to distribute or parcel in online method to concerned user, then hand-to-hand parcel or parcel by postal service or facsimile is preferable for information distribution.

The whole operation assists to meet the users with their core information need through this information matching technique.

There is another external operation of SDI program. In case of unavailability of related information or documents in-house, information service department may have to collect the relevant information from another information service center. The external information service center may provide them information in online or in printed form. For this, a functional liaison with external information center (preferably who are established on the same objectives) is essential to be maintained.

## CONSTRUCTION OF USER PROFILE

Discovering the needs of the user is an essential part of any information provision. When the service to be provided is the supply of current awareness, it becomes paramount or chief. This is because a current awareness service, by its nature, must be closely tailored to the interest of the recipients [4]. Finding out about the needs and interests of users is called user profile. It is something which must be undertaken in considerable detail.

A user profile consists of information about the user that has bearing on the user's information needs. A simple user profile is much like a query. It consists of a set of key terms. Such profile is originally developed for simple need of using Current Awareness Information (CAI). In contrast to the simple user profile, an extended user profile that is designed for the researchers, contains information that is more difficult to correlate with documentary information but may still influence retrieval.

After all, an information service is always meant to be for the benefits of its users. Obviously, the more you know about those users, the more easily you will be able to supply the information that they really need. If no effort is made to clearly understand the user's actual need, then how a fruitful result will be delivered to concerned users.

The efficiency of an SDI system depends to a great extent on the construction of individual or group user's profiles [6].

However, a good user profile should contain the following features of information related to concerned users:

**User's identity specification:** In this feature, user's personal information such as name, address, contact no., e-mail, etc. is to be included.

**Qualifications and experience of the users:** This feature includes the user's educational qualifications, related experience and the profession involved. It assists to gather qualitative information in context of user's knowledge and perceivable capabilities.

**Subject coverage in details:** This is the cardinal part of user profile on which the required information is scanned, retrieved and then delivered to the concerned users.

Subject coverage should therefore be carefully interpreted that could be explained into following segments:

1. Scope of the core subject matter: To scan the core subject matter, it is necessary to mention the broader subject of the study, subsidiary subject related to it, title or topic of the study and a number of feasible keywords that can keenly interpret the core subject matter while essential information is not skipped over.

2. Purpose of the study: It is an essential part in determining the volume of information to be distributed on the basis of mode of work such as research work, course work, article writings, making lectures or speeches, etc.

3. Date range of publications: This option indicates that those information are to be gathered which are published within this specified date range.

4. Medium of language required: Information may be published in different medium of language. So there should be the option to specify that on which medium of language information is to be delivered, for example English, Bengali, Arabic, Urdu, Persian, French, Chinese, etc.

5. Sources of reference: It would be very useful if the user also supplies some references to papers, journals, reports, bibliographic databases, etc., which he considers relevant to his area of work.

**Level of computer literacy:** The option is necessary to know the user's knowledge on computer operation. It will assist to select the nature of information sources (i.e. information on digital source, printed hard copies, etc.) according to user's expertise on information handling in variant sources.

**Mode of distribution or delivery of information:** This option is related to distribution of finally assembled information to the concerned users which covers the type of presentation (i.e. providing only bibliographic information or bibliography along with articles); form of dissemination (i.e. printed hard copies, soft copies, e-mail, etc.); mode of delivery of information (i.e. hand-to-hand delivery, delivery by postal service, delivery through e-mail, etc.).

**Frequency requested in distributing information:** There should be an option in the user profile that, what is the actual interval (i.e. weekly, fortnightly, monthly, etc.) the users would like to be informed about latest information on his/her interested subject fields? This option is definitely necessary for the research scholars and for those persons who are engaged in conducting any long-term development projects.

It can be seen that the preparation and maintenance of user profile is the most important aspect on which the entire concept of 'SDI' service involves [5].

## **REQUIREMENTS FOR ONLINE SDI FUNCTIONS IN DATABASE APPLICATION**

### **- USER PROFILE**

Profile construction technique is discussed above. The given user profile may be used for both traditional and online SDI purpose.

### **- NATURE AND CHARACTERISTICS**

The database should be the text information management systems having the facilities of operating at any network environment and linked with the library's own web page.

### **- SUBJECT COVERAGE**

The success of online SDI service particularly depends on scanners ability to identify the concerned documents on their accurate subject matter by selecting broader and subsidiary or related subject fields and appropriate keywords that will lead that document on its accurate core contents.

1. Core subject matter of the document is to be covered by using at least one broader term of subject, more than one subsidiary or related terms of subject and a feasible number of keywords as to ensure maximum coverage and utilization of the concerned document by maximum number of users.

2. A suitable heading with keywords should input into database against each chapter heading of the document.

3. A brief outline of important chapter, for which keywords already setup, should also be input into database.

<b>USER PROFILE</b>			
01. QUERY/ PROFILE NO: <input style="width: 100%;" type="text"/>	02. DATE OF QUERY: <input style="width: 100%;" type="text"/>		
03. NAME: <input style="width: 100%;" type="text"/>			
04. ADDRESS: (LOCAL): <input style="width: 100%;" type="text"/>			
(OFFICIAL): <input style="width: 100%;" type="text"/>			
(PERMANENT): <input style="width: 100%;" type="text"/>			
05. CONTACT NO: (PHONE): <input style="width: 20%;" type="text"/>			
(MOBILE): <input style="width: 20%;" type="text"/>		(E-MAIL): <input style="width: 20%;" type="text"/>	
(FAX): <input style="width: 20%;" type="text"/>			
-----			
06. PROFESSION: <input style="width: 100%;" type="text"/>			
07. QUALIFICATIONS: <input style="width: 100%;" type="text"/>			
08. EXPERIENCE: <input style="width: 100%;" type="text"/>			
09. COMPUTER LITERACY: <input type="checkbox"/> BASIC <input type="checkbox"/> MEDIOCRE <input type="checkbox"/> EXPERT IN USING INTERNET,CD-ROM			
-----			
10. SUBJECT INTERESTS: (MAJOR): <input style="width: 100%;" type="text"/>			
(SUBSIDIARY): <input style="width: 100%;" type="text"/>			
11. RANGE OF SUBJECT QUERY: (KEY WORDS): <input style="width: 20%;" type="text"/>			
<input style="width: 20%;" type="text"/>		<input style="width: 20%;" type="text"/>	
<input style="width: 20%;" type="text"/>		<input style="width: 20%;" type="text"/>	
12. PURPOSE OF THE STUDY: <input type="checkbox"/> RESEARCH <input type="checkbox"/> COURSE WORK <input type="checkbox"/> ARTICLE WRITING			
<input type="checkbox"/> LECTURES OR SPEECHES <input type="checkbox"/> OTHERS			
13. TITLE / TOPIC OF THE STUDY: <input style="width: 100%;" type="text"/>			
14. MEDIUM OF LANGUAGE (REQUIRED): <input type="checkbox"/> BENGALI <input type="checkbox"/> ENGLISH <input type="checkbox"/> ARABIC <input type="checkbox"/> URDU			
<input type="checkbox"/> PERSIAN <input type="checkbox"/> SANSKRIT <input type="checkbox"/> OTHERS <input style="width: 20%;" type="text"/>			
DATE RANGE OF PUBLICATIONS: <input style="width: 20%;" type="text"/>			
<input style="width: 20%;" type="text"/>		<input style="width: 20%;" type="text"/>	
15. SOURCES OF REFERENCE (FROM): <input type="checkbox"/> TEXT BOOKS <input type="checkbox"/> JOURNALS <input type="checkbox"/> PROCEEDINGS			
<input type="checkbox"/> E-SOURCES <input type="checkbox"/> OTHERS (SPECIFY): <input style="width: 100%;" type="text"/>			
-----			
16. TYPE OF PRESENTATION: <input type="checkbox"/> PROVIDING BIBLIOGRAPHY ONLY			
<input type="checkbox"/> BIBLIOGRAPHY ALONG WITH ARTICLES			
17. FORM OF DISSEMINATION: <input type="checkbox"/> PRINTED HARD COPIES <input type="checkbox"/> SOFT COPIES (CD-ROM, FLOPPY)			
<input type="checkbox"/> ATTACH FILE VIA E-MAIL <input type="checkbox"/> ANY OF THOSE			
18. MODE OF DELIVERY: <input type="checkbox"/> HAND TO HAND DELIVERY <input type="checkbox"/> DELIVERY BY POSTAL SERVICE			
<input type="checkbox"/> DELIVERY BY FACSIMILE <input type="checkbox"/> DELIVERY BY E-MAIL			
19. DATE OF DELIVERY: <input style="width: 20%;" type="text"/>			
FREQUENCY: <input type="checkbox"/> WEEKLY <input type="checkbox"/> MONTHLY			
21. SIGNATURE: (CLIENTS): ..... (AUTHORITY): .....			
22. PROFILE UPDATED DATE: [01] <input style="width: 20%;" type="text"/>			
[02] <input style="width: 20%;" type="text"/>		[03] <input style="width: 20%;" type="text"/>	

Figure 5: A sample model of user profile.

4. In case of multilingual entries of document, all the subject fields particularly should be input into English term parallel with other terms.

**Note:** Actually the utility of a multilingual retrieval system may depends heavily on the intended body of users. Many potential users can not read a second language well enough to be benefited from multilingual systems.

#### **- RETRIEVAL TOOLS AND TECHNIQUES**

a) Confined searching (i.e. search within previous results), b) Boolean searching, c) Keyword searching, d) Range searching, e) Hyper-text searching, f) Phrase searching, g) Truncation, h) Free-text searching, etc.

**Note:** Among these searching techniques, the 'Confined searching' will be the paramount for performing information-matching operations in online SDI functions.

#### **- - SPECIALITIES**

a) There may be a terminological dictionary (i.e. thesaurus) of database for searching information with exact spelling of search term in which all the terms are to be arranged on a logical relationship.

b) All the nearest similarly spelling words will be appeared as tool-tips at the time of inputting a term in free-text searching. This is so as to ensure the exact spelling of the search term as well as giving information about related subjects' terms in advance.

c) There may also be an automated indexing system in which all the terms are linked with the related sources of reference. In this system, all the terms are stored automatically into the database and arranged in an alphabetic sequence whenever a new term is input into any field of keywords or subject headings.

d) A basic option in support of online SDI service is the possibility of saving the search profile so that it may be executed again at a later date [7]. The search results may also be saved under suitable subject heading/headings for general reference purposes.

#### **- MANAGEMENT AND ADMINISTRATIVE FUNCTIONS**

1. There should be separate department or cell for providing SDI service
2. Liaison should be maintained with other resourceful library or information centers to collect necessary information with text materials, under inter-library cooperation program.
3. Liaison should be maintained with a number of subjects' specialists for consultation whenever necessary.

**- OFFICERS' AND STAFFS' REQUIREMENTS**

1. Officers who will be responsible for providing SDI service, should possess at least a minimum standard of qualifications, experience and efficiencies.

2. All officers of this department should possess at least Hons. and Masters degree in related discipline preferably in information science and library management.

3. At least two or three years experience in related job may be helpful for providing the SDI service.

4. They must have good scanning ability to identify the core subject contents of any document as well as users' information need.

5. They must also be capable of handling and using all technological tools and techniques related to perform the SDI service.

6. Staff with good skills in English typing are also essential.

7. Some staff may also be appointed as the nature of workload and necessity.

**- HARDWARE REQUIREMENTS**

1. Computers with CD writer include servers, terminals and related tools.

2. Printer, scanner, photocopier, spiral machine or related ones, etc.

3. Fax or tele-facsimile, communication link (i.e. broadband, radio link, etc).

4. Modem, NIC (Network Interface Card) and related tools.

**- SOFTWARE AND OTHER PROGRAMS' REQUIREMENTS**

1. Network supported operating systems, preferably Window 2000, Windows XP, etc. including regular updateable antiviral software.

2. Library's own website.

**- SDI SERVICE'S COST RECOVERY FUNCTIONS (FROM CLIENTS)**

Library and information centers are generally established on non-profit and service oriented attitudes. But due to the increased emphasis on consuming information product and service that may often exceed the confined budget of the library or information centers, they may take an initiative from the customers for only cost recovery functions against the service. However, the functions may include the following aspects:

1. Computer printing cost.

2. Photocopying and other reproducing cost (in case of reproducing into any digital form like a CD-ROM, Floppy disc, etc.).

3. Information parceling or delivery cost which includes fax, e-mail, postal service, etc.



4. Communication cost such as telephone talk, e-mail, etc.
5. Consultancy cost including consultancy with concerned subject specialist, if necessary.
6. Information gathering cost which includes information downloading from web sites, information collected from other agencies on fee or purchase, if these are not available in-house.

## CONCLUSIONS

In the process of going through the above discussion, it can be quoted that the selective dissemination of information service is a practice of notifying the items, documents, information likely to be of interest to individuals and is also the matching of required information with the potential clients [1]. It is in fact a service of providing textual information particularly to the researchers. It is a current awareness mechanism through which the individual information user can expect to receive regular notification of new literature and data in accordance with his/her statement of interest or profile [7]. But this task becomes very difficult to perform due to accelerated growth of publications in every moment. Moreover, the exact matching of information is also a difficult matter through the contemporary approaches of SDI service. The introduction of computer and telecommunication technologies coupled with the library services, enables this difficult matter more easy.

The present study highlights some significant features of traditional and online 'SDI' functions that may assist to perform the concerned job suitably coping with the current situation. Few of them are as follows:

1. The most significant renovation in the proposed online SDI service, is the introduction of '3-Layer Matching Process'.
2. A well-defined conceptual approach of SDI functional workflow is given over contemporary flow of SDI functions.
3. A new approach to online SDI service is also clearly explained.
4. A plan is given for transmitting voluminous information through electronic medium which is called EDDS (Electronic Document Delivery Systems).
5. A well-structured user profile with maximum coverage of user's particulars is clearly defined.

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