



IMARK

Module

Investing in Information for Development

Information Access

Lesson 2: External Information Providers

Learner Notes



© FAO 2005

Table of contents

Learning objectives	1
Introduction.....	1
The current market for external information	1
Commercial journal publishers.....	4
Open access journal publishers.....	4
Open archives organizers	5
Aggregators	5
Secondary information providers	6
Platform providers	7
Dataset providers	8
Summary.....	9

This lesson is part of the IMARK Module on “Investing in Information for Development”. The Module contains six units. The unit on “Information Access” comprises five lessons:

Lesson 1: Introduction to Information Access

Lesson 2: External Information Providers

Lesson 3: Internal Information

Lesson 4: Management Interventions

Lesson 5. Reducing Costs

This course is available in self-paced e-learning format on CD-ROM and the Internet

(www.imarkgroup.org).

Learning objectives

At the end of this lesson, you will be able to:

- identify the main characteristics of the external providers from whom you may acquire information.

Introduction

As your organization develops its information access plan, it will need to find out:

- **what** kinds of information are available;
- **where** they are; and
- **how much** they cost.

We have seen that information is a commodity and that it comes at a price. We also know that the sources of information may be either external (publishers) or internal (within the organization).

In this lesson, we will look at **external providers**.

The current market for external information

How does your organization acquire its external information?

Today, the most important means of acquiring information about new scientific developments are **scientific journals**.

Publishers originally distributed such journals only in print versions. However, the use of technology has changed, so that more libraries have started using the Internet, and more

electronic versions of journals have appeared. In this lesson, we will concentrate on the different choices available for digital information acquisition.

Today, most publishers offer digital versions of their journals, and the market has become extremely complex. Also, the introduction of e-books and e-journals has raised issues concerning traditional library processes such as selection, acquisition, cataloguing, storage and preservation, and user services.

Moreover, the shift from paper to digital format is modifying the world of information providers. This is happening in two ways:

- a change in the role of **traditional players** (such as publishers and authors); and
- the emergence of **new players** (such as full-text aggregators).

We will now take a look at the roles of the main players in the provision of external information:

- **Commercial journal publishers**
- **Open access journal publishers**
- **Open archives organizers**
- **Aggregators**
- **Secondary information providers**
- **Platform providers**
- **Dataset providers**

Some of the features of each player are described in the table that follows, but please keep in mind that providers within a given category do differ, and their market strategies, products and services are continually changing. Moreover, their roles are sometimes overlapping. (For instance, some “publishers” do offer services similar to the ones offered by “aggregators”.)

Type of information provider	Main Features
Commercial journal publishers	Provide access to the electronic versions of their journals. The subscriber pays to view.
Open access journal publishers	Provide access to their e-journals. Free to subscribers, but authors pay to have their articles reviewed and published.
Open archives organizers	Provide free access to online document repositories, most of which are organized by institutions to allow their own authors to store and disseminate their papers.
Aggregators	Act as brokers between publishers and libraries, and organize uniform access systems.
Secondary information providers	Provide access to secondary content at the article level, through bibliographic databases and links to full –text.
Platform providers	Provide licensed products for cross-database searching and link Management.
Dataset providers	Produce and exchange datasets.

Commercial journal publishers

Most publishers that offer electronic journals are still in the process of defining these new products. However, six characteristics are fairly common:

1. The publishers own the content.
2. They have a direct relationship with both authors and subscribers (or aggregators).
3. The electronic subscriptions offered often include the costs of the print versions.
4. They make their electronic versions available either on their own servers or on a server at the site of the subscriber.
5. Access is usually restricted to users within the subscriber's computer network (either via a password or verification of an IP address).
6. Subscription prices are highly negotiable, depending on the number or potential simultaneous users, the number of physical locations that the organization has, and/or whether an organization also wants a subscription to the printed version of the same journal(s).

For a list of publishers, you may look at the following URL:

<http://library.wur.nl/desktop/vrr/publish.html>

Open access journal publishers

Open access journals and open archives have appeared as partial solutions to the problem of rising journal costs. In fact, many organizations can no longer afford to subscribe to journals, even though these may be central to their mandates.

Open access journals provide access to full-text articles for free. They do not have subscription fees.

These journals meet their costs by charging authors, who must pay to get their papers reviewed and published.. Some open access journals encourage authors from Asia, Africa and Latin America by giving them reduced rates.

Examples of this type of publication are BioMed Central and the Public Library of Science.

Open archives organizers

Open archives are usually developed by research institutes and universities.

Scientists from within these organizations can store electronic versions of their papers, reports and any kind of informal or “grey” literature in such archives, knowing that this material will then be available on the Internet for free.

The number of open archives is growing fast, but the number of full-text documents in them is still quite limited (though also increasing).

One promising development has been the appearance of a software protocol that enables the “harvesting” of information from different open archives.

An index of open archives can be found at <http://www.oaister.org>.

Aggregators

Aggregators are companies whose main business is to sell collections of electronic journals and articles from different publishers. They do not own content and, in general, are more user-focused than are publishers.

From the point –of view of the user, they provide at least three essential and inter-related services:

- They **facilitate access** to a range of journals and articles (including negotiation of licenses).
- They **administer subscriptions** (including renewals and payments).
- They have **uniform procedures** (including rules regarding the use of copyright material).

The most popular specific services from aggregators usually fall into three categories:

- **Administration**

Aggregators can provide subscriptions to many journals in one license.

- **Content provision**

Most can provide electronic versions of the tables of contents of all the journals in an organization's subscription collection. This service is very useful, since most readers cannot go to the library to scan the latest issues of all journals.

- **Database searching.**

Many aggregators maintain a database of full-text articles from thousands of publications, which can be searched via proprietary software.

Since most aggregators are quite technology-driven, they are continually creating new and custom-designed services. Also, their relationships with publishers are constantly changing (and often overlapping).

Secondary information providers

Secondary information providers offer a wide range of services to help users find information.

Their early products were mostly hardcopy bibliographies, though recently they have moved to digital products like abstracting and indexing databases. Often they add value to these newer offerings by including keywords or abstracts of primary documents.

CAB International, BIOSIS, Chemical Abstracts Service and many others distribute bibliographic databases containing metadata (data which describes other data or information) for articles in scientific journals.

Platform providers

Platform providers offer products that perform two functions: **searching** and **linking**.

SEARCHING

These platforms allow a user to search data collections from different secondary information providers (for example, CABI or BIOSIS), using the same software and user interface.

An organization that wishes to subscribe pays one fee to the platform provider. In turn, this provider passes on part of the fee to the secondary information source (for royalties) and keeps part for itself (for platform services).

Most platform products are available on CD-ROM, or for installation on a local area network, or (increasingly) online.

Examples of platform products for searching are Ovid/Silverplatter and Cambridge Scientific Abstracts.

LINKING

After a user has searched various databases and found various references, the next step is to move to the full-text. This function is called linking. Being able to make the link depends on whether the user's home organization has subscribed to the journals in question.

Most platform providers have developed linking solutions for their customers. Some even offer products that work across different platforms (that might include the local library catalogue, for example).

Linking solutions work because publishers have developed a system to identify articles in electronic journals (as well as electronic books). Each article has a DOI (Digital Object Identifier), which is the online equivalent of the ISBN for printed books.

Products for linking usually work with “resolving services”, like CrossRef, a collaborative service created by publishers. Here’s how it works:

- 1. In each citation or abstract, publishers embed a DOI (Digital Object Identifier).*
- 2. The user clicks on the DOI, and CrossRef then uses the DOI to redirect the user to the location of the article in an electronic journal at the publisher’s website.*
- 3. The publisher checks the user’s credentials through a password or IP number, and if these credentials are in order, the user is able to access the document.*

Dataset providers

Datasets are collections of data organized in tables or databases consisting of records with several fields. Most dataset providers are actually the same organizations that produce them. The FAOSTAT dataset provided by FAO is an example.

The market for datasets is not as complex as the one for journals. Some providers do sell their datasets as commercial products.

New Information Technologies have affected the production of datasets in at least two ways:

1. Some data can now be recorded automatically, with the result that enormous datasets can be produced with little human intervention. An example is a meteorological dataset that includes information from dispersed (and automated) weather stations.
2. Some datasets can now be linked with comparable datasets from other organizations. But a prerequisite for such linking is agreement on exactly what is being measured and on data standards for those measurements. Some larger organizations have actually created specialized jobs for “data managers”.

Sharing of data between organizations is an important management issue. For example, if we want to link data about weather conditions from one organization, soil conditions from another, and crop production from another, we should make sure that all the relevant datasets refer to exactly the same locations.

An example of a dataset provider is FAO, which produces and uses statistical datasets on agricultural production, rural incomes and land use (among many others). The FAO Statistical Database is an on-line multilingual database currently containing over 1 million time-series records from over 210 countries and territories. It includes data on agriculture, nutrition, fisheries, forestry, food aid, land use and population.

Summary

As your organization develops its Information Access Plan, it will need to find out what kinds of information are available, where they are, and how much they cost. The sources of information may be either external or internal. In this lesson, we have concentrated on the external. Today most journals are available in electronic versions and the market has become extremely complex. The main consequences are the transformation of traditional players (such as publishers) and the emergence of new players (such as full-text aggregators).

The main types of external information providers are:

- Commercial publishers;
- Open access journal publishers;
- Open archive organizers;
- Aggregators;
- Secondary information providers;
- Platform providers; and
- Datasets providers.

Each provider has its own market strategies, products and services, which are changing frequently.