# Chapter 100 Information Evaluation: A Scientific and Comprehensive Approach

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#### **ABSTRACT**

Evaluation in the context of information services has mainly looked at three distinct areas: service performance evaluation, information retrieval evaluation, and information flow evaluation. This last area, especially used in archives and designated as "appraisal," aims to define the information's fate after several years of use, and its purpose is to eliminate documents in order to free space in the stacks. This study provides a brief overview of the two first areas and analyzes the third one in depth from a perspective that sees evaluation as a methodological operation that can be applied to information produced and used in any context. Criteria and parameters are proposed to assist with objective action in practice.

## 1. DEFINING THE SUBJECT: PRELIMINARY CONSIDERATIONS

A simplistic and objective definition of the term "evaluation" found in any ordinary dictionary indicates a very concise meaning, that is, "value attribution". Obviously, to achieve the valuation of something we need to know what is meant by "value", to understand the context in which that same value is determined and to undertake a series of actions that lead to the desired result, assuming a previous process of analysis. The glossary on "value analysis", published by the European Commission under the Program SPRINT (Euro-

Placing evaluation procedures in the field of Information Science (IS), we found that there has been a scattering of criteria and parameters asso-

pean Community Programme for Innovation and

Technology Transfer), is a useful tool for evaluation, since it fixes and defines general terminology

and basic concepts, and is operatively valid for

the topic of this text. Thus, value is defined as the

"ratio of the contribution from one function to the satisfaction of the need and cost of such function".

This definition incorporates the sense of action

to achieve a result, a meaning that is close to the

perspective that we advocate for the concept of

evaluation explained: a methodological operation.

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ciated with practices and which are contained in different, fragmented approaches to Information and its Services. Despite this generalized dispersion, some authors advocate broader positions, assuming that any aspect of the operation of an information system as an organic entity is liable to be assessed. Illustrating this approach we have an interesting work by Tom Wilson, which responds to the question *What can we evaluate?* as follows:

The answer to the question "What can we evaluate?" is very simple: any aspect of organizational functioning can be subject to evaluation. Thus, we can evaluate:

- The way the management structure functions;
- Internal operations relating to information materials, such as cataloguing and classification, indexing, etc.;
- *Library/information services to users;*
- *New programmes of service delivery;*
- New possibilities for technological support to services;
- *Alternative possibilities for doing anything;*
- The functioning of a total system prior to planning change; etc.

To overcome the differences and multiplicity of criteria and assimilate the many facets that can be considered for evaluation, we need a rational and integrated strategy. We can focus on three major areas of specific application, and so evaluation can thus focus on:

- Information Services (typically diluted in the notion of system) performance, an approach built up over decades and quite extensive in the provision of a functional offer of quality of Libraries, Documentation Centres and Information Services<sup>1</sup>:
- 2. The "fineness", i.e. the effectiveness and efficiency of information retrieval, provided

- by inventories, catalogues, databases in fact all the findings aids providing access to information, which we can designate generically as "indexes";
- 3. The flow of information<sup>3</sup> from any type of entity or organization, since it is organically produced/received and accumulated, that is, during and through the effect of an activity designed to save continuous "informational segments" and to eliminate those that do not need, objectively, to be kept in present and future memory, condensing and blocking it<sup>4</sup>.

This methodical division into three major areas results from a systematization that we intended to do after a survey, by way of sampling, considering all kinds of studies that focus on the issue of evaluation, in the broad sense. An Internet search on the term *evaluation of libraries* yielded 772 references, analysis of which revealed a considerable precision of the retrieved information<sup>5</sup>.

However, it is not always possible to fit all the studies identified either on the Internet or in bibliographic databases in one of three areas defined. It often happens that certain approaches to the issue of evaluation focus on research variables which may be included in more than one of those areas. For example, multiple studies relating to informational behaviour6 are addressed either through the prism of the flow/use of information (area 3), or focus on the issues of information retrieval and effectiveness of finding aids (area 2). Similarly, another segment of studies relating to acquisition policy and the constitution of collections in libraries/documentation centres, can be inserted in the evaluation of the performance of services (area 1) or in the evaluation of the flow/ use of information (area 3). The evaluation of the effectiveness of information retrieval systems (area 2), often deals with aspects that are inseparable from information behaviour, such as identification of user interests, and clearly intrude into the area of information flow (area 3). And, in the current

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