

# Information Retrieval

## Design and Sources

Roslina Othman



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# INFORMATION RETRIEVAL: DESIGN AND SOURCES

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**Editor**

Roslina Othman



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## 1. IR MODELS AND APPROACHES: AN OVERVIEW

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Roslina Othman

### **ABSTRACT**

This chapter provides an overview on the IR models and approaches that constitute the first part of this book. An IR at its design process comprises indexing rules on documents and formulation of queries as representation of an information need. Thus, at both ends, there has been adoption of IR models, such as the Boolean, vector and probabilistic models, and approaches such as the cognitive and behavioral approaches. Evaluation is also part of the IR design process; and thus, it has always gone through the major archetypes.

### **1.1 Introduction**

This chapter introduces briefly the models and approaches adopted in designing an IR system. Since these models and approaches were specifically designed for the areas of IR, they are often termed as IR models and approaches. The theoretical aspects of IR are mostly from the cognitive and behavioral approaches; while the pragmatic has always been the models such as Boolean, vector, and probabilistic.

Other elements that also have an impact on IR design came from the evaluation side. The elements are: collection or database; information needs; users who submit the queries as representation of their information needs; searches; relevance judgment and its activities; and the degree of control in the conduct of the evaluation test. The evaluation test is to be carried out as system-oriented or user-oriented. The former focuses on models, while the latter on approaches.