The reconstruction of the history of information retrieval in Italy to provide inspiration and ideas for the research of tomorrow

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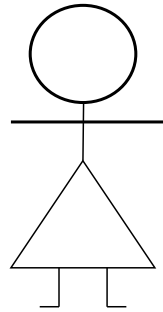
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Outline

○ Scope of Information Retrieval (IR)

○ Web Search Engines: a Well-known Type of IR Systems

○ Dimensions of the IR Process

○ Usefulness of the Reconstruction the History of IR

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# Scope of Information Retrieval (IR)

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A person - or user - has a specific **information need**

Information retrieval and **information retrieval systems** support individuals in solving their information needs
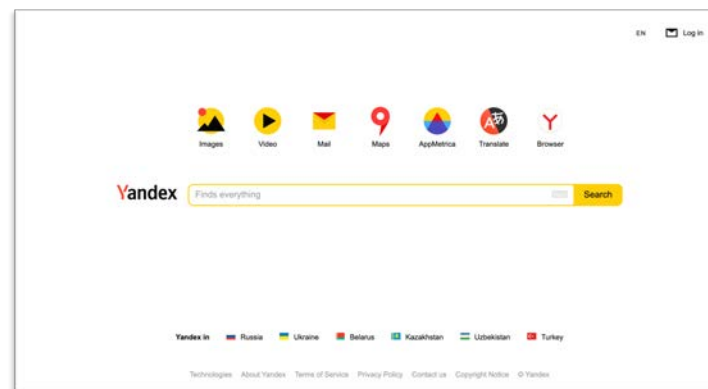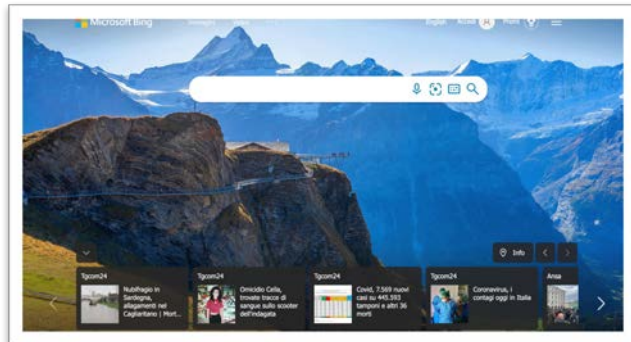
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Web Search Engines:
A well-known type of IR Systems

○ Nowadays when we have an information need to solve, we immediately think about using a Web search engine or, for short, search engine

○ A widely used search engine is Google

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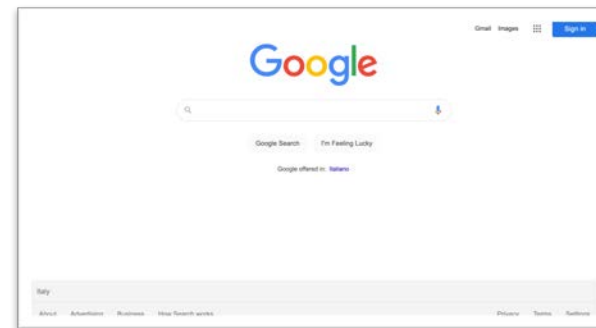
Other well known and used search engines

Some other generalist Web search engines are:

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Other Examples of Modern IRS

○ Every time there is a "magnifying glass" in the interface of an application

○ That application provides us with a search engine to find information of interest to us, e.g.:

   ○ email systems
   ○ social media platforms: LinkedIn, YouTube, Facebook, Instagram, ...
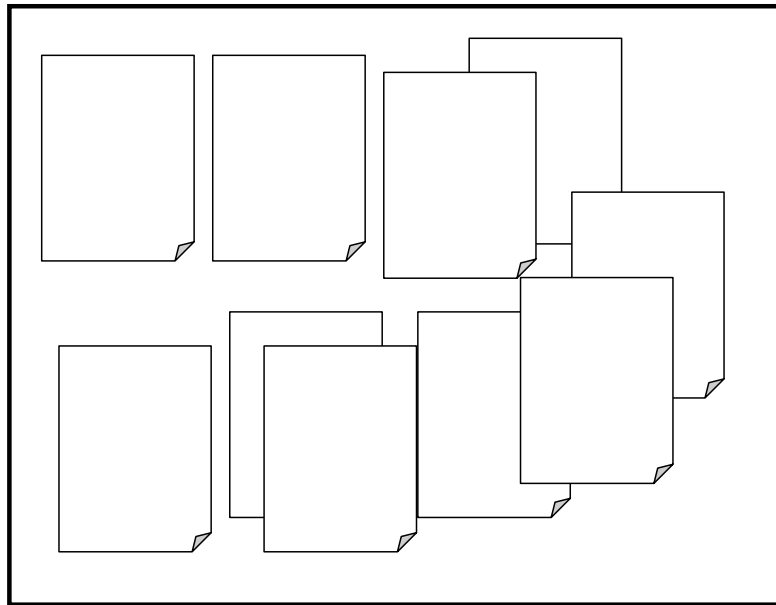   ○ e-commerce applications

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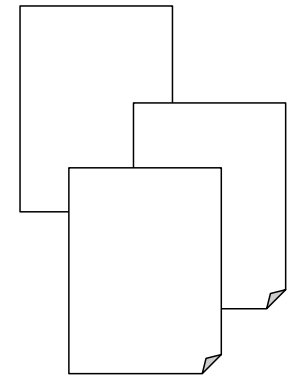# Information Retrieval Process

User with a specific **information need**
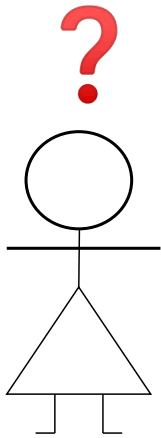
Document collection
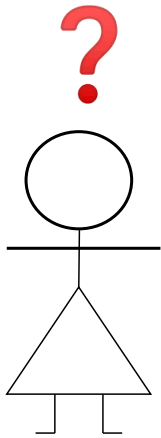
retrieval

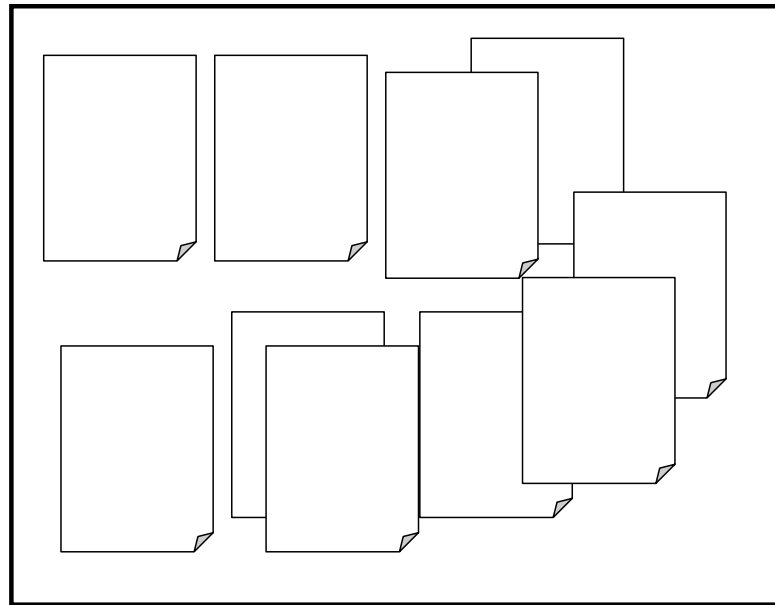**documents of interest or relevant documents**

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Classic Information Retrieval Process

User with a specific **information need**
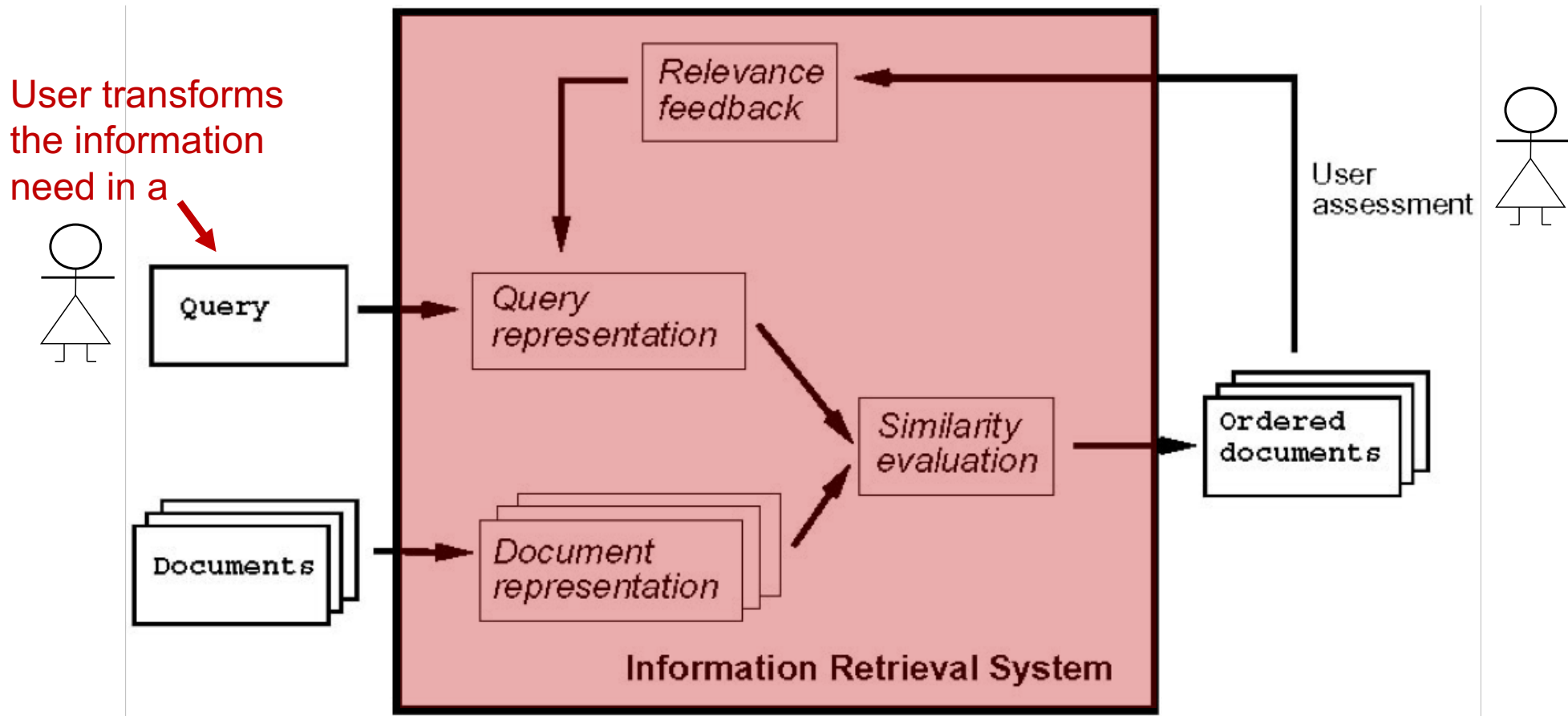
Document collection in physical libraries and archives
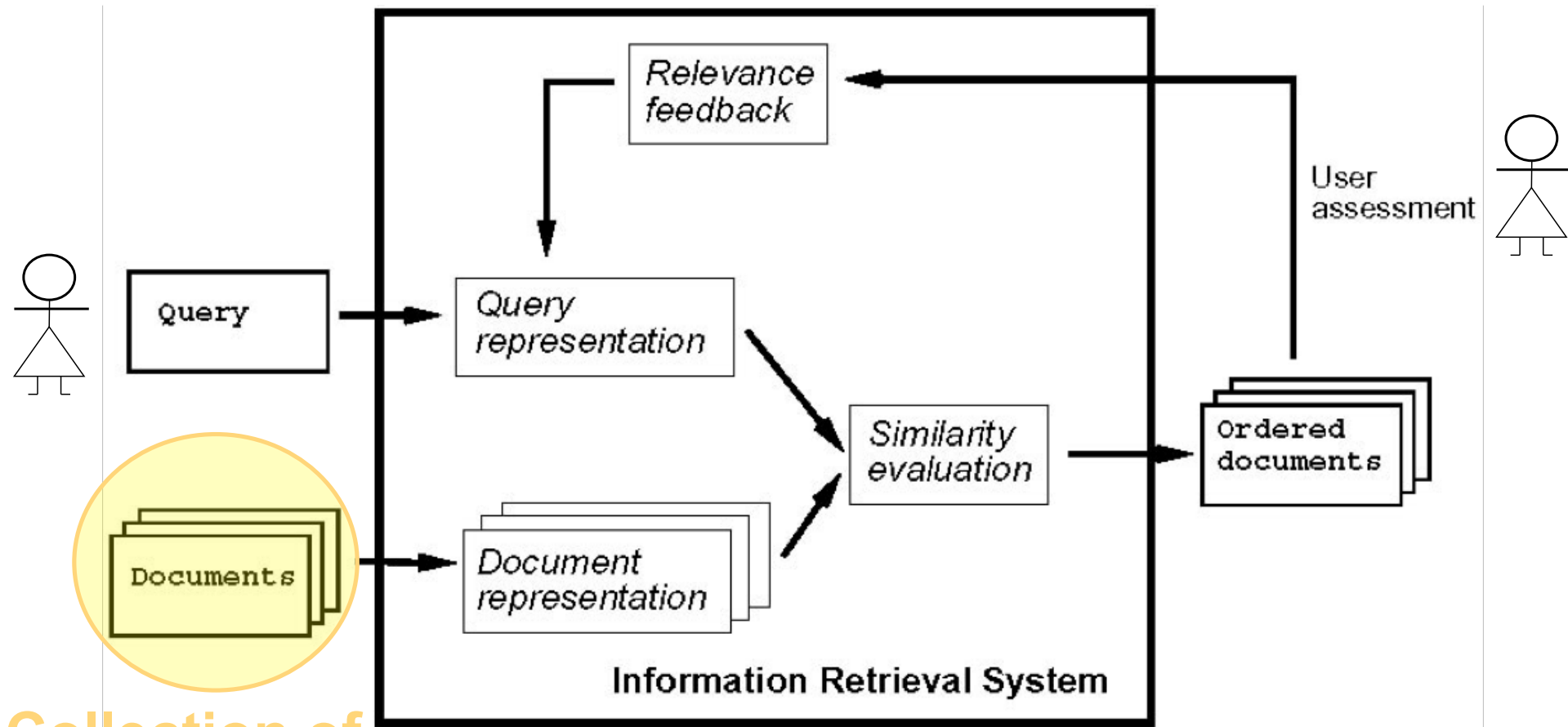
documents of interest or relevant documents

retrieval

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LIBRARIAN

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https://thumbs.dreamstime.com/z/friendly-librarian-7578678.jpg
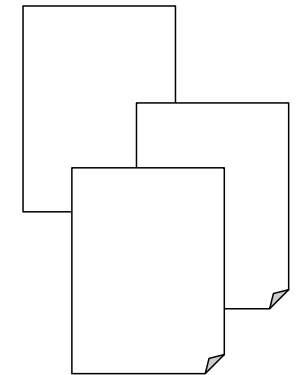
Modern or Automatic Information Retrieval

User transforms the information need in a

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Modern IR: dimensions of the IR process
Collection of documents

Collection of documents

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Modern IR: dimensions of the IR process
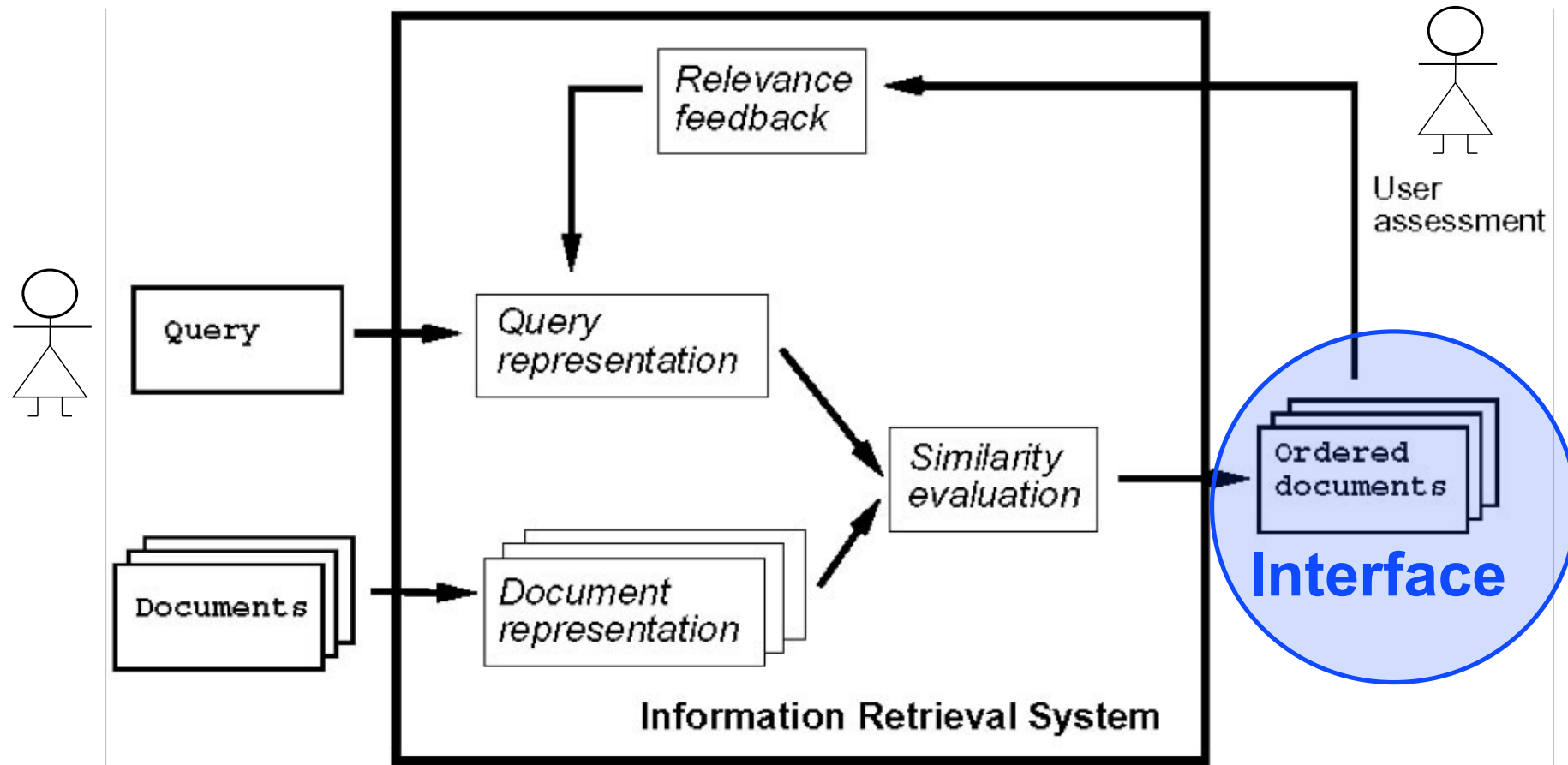## Indexing is a probabilistic process

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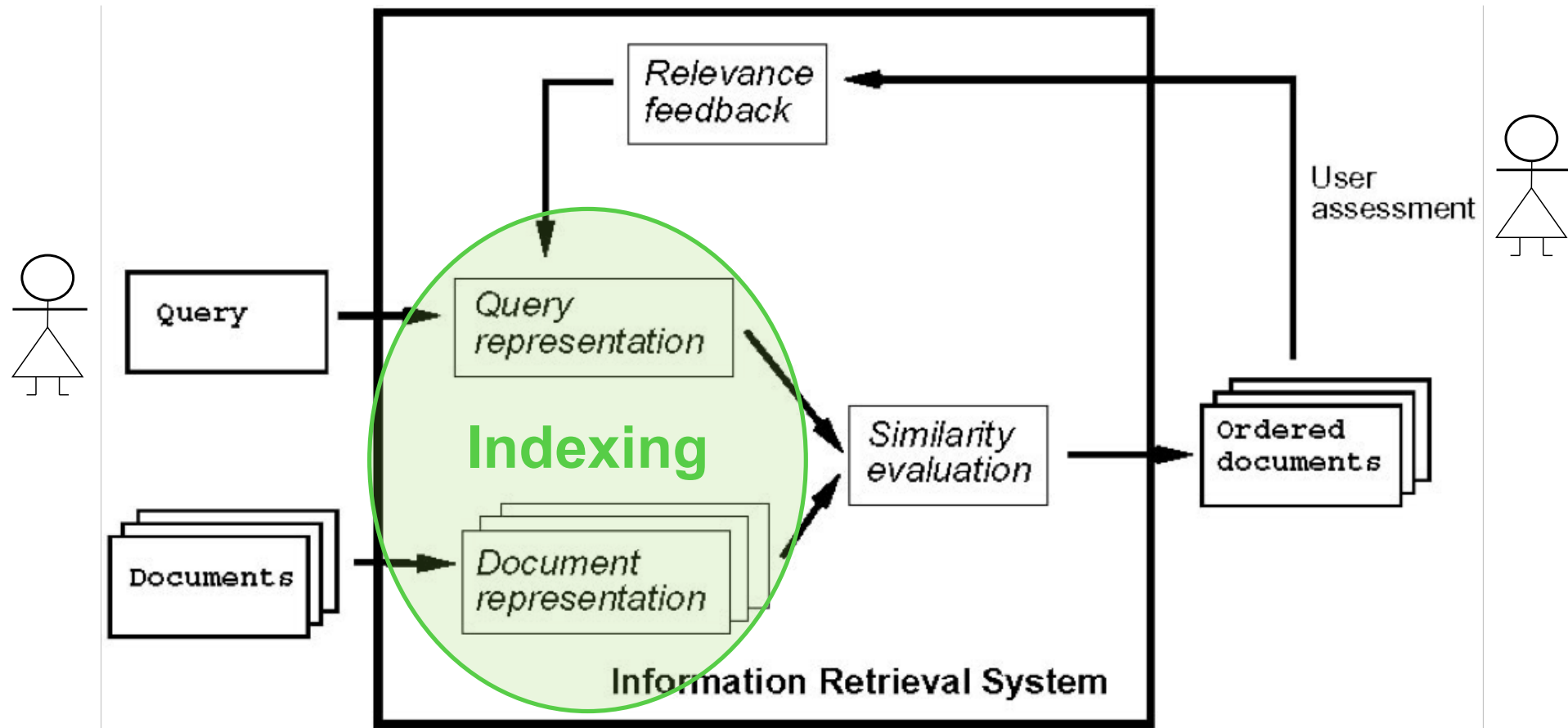
Modern IR: dimensions of the IR process
IR Model
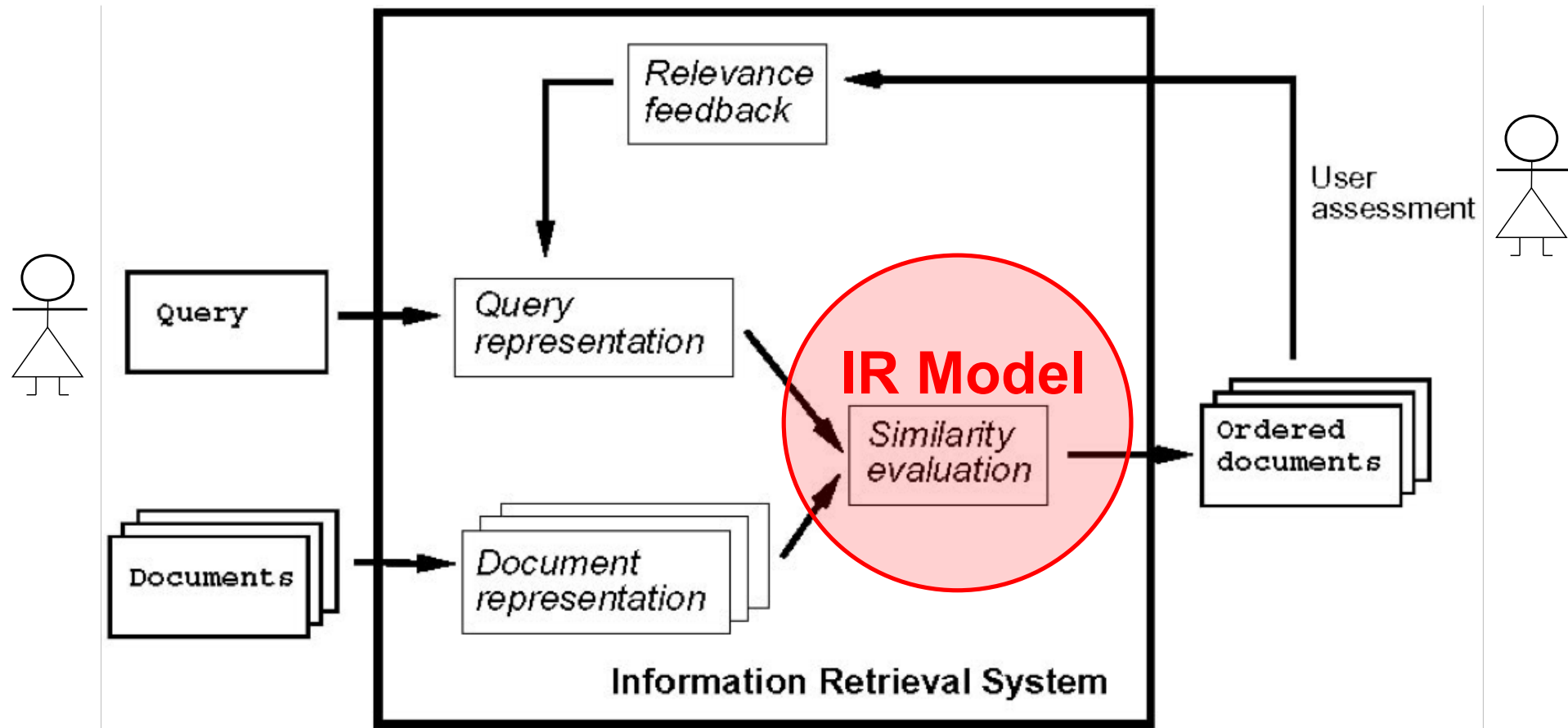
Modern IR: dimensions of the IR process
Presentation of Results - Interface

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Modern IR: dimensions of the IR process
Evaluation
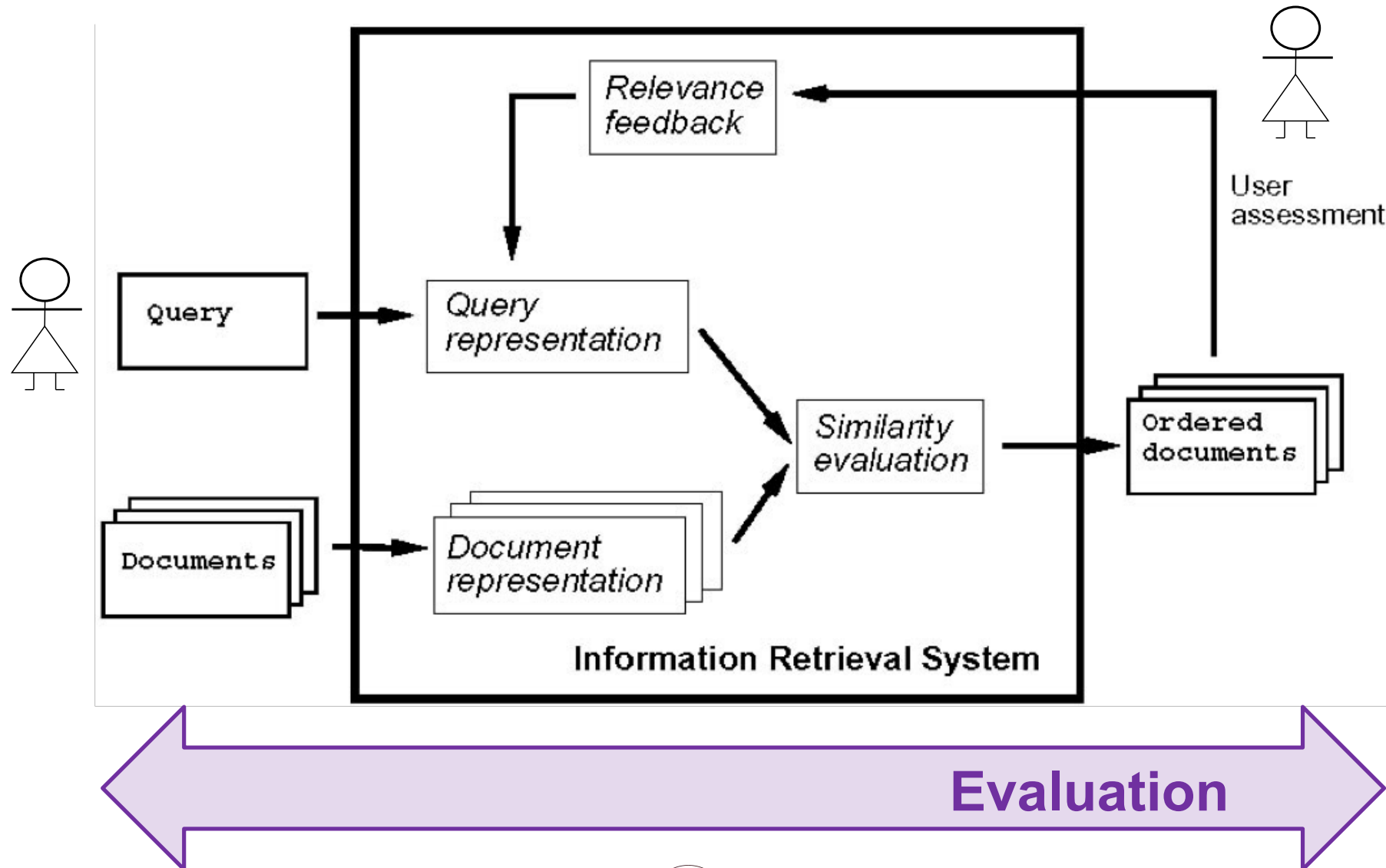
The reconstruction of the history of information retrieval

○ It is possible to reconstruct the history of successes

○ But it is also possible to reconstruct the history of failures:

  ○ A role that a person who has years of experience of scientific research can contribute to the analysis of the failures that have occurred and

  ○ Helping to find analogies between past mistakes and mistakes that could be made today in order to avoid them

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Thank you for your attention

Questions?