

A Semantic Web-based Model for Evaluation of Electronic Resources and Services

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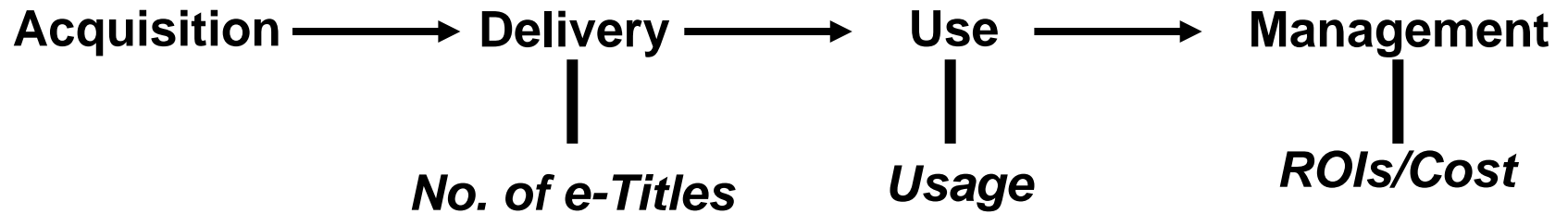
Outline

- Background
- RDF Graph for Semantic Web
- Adapted model for evaluation of e-resources and services
- Case Study
- Findings

Background

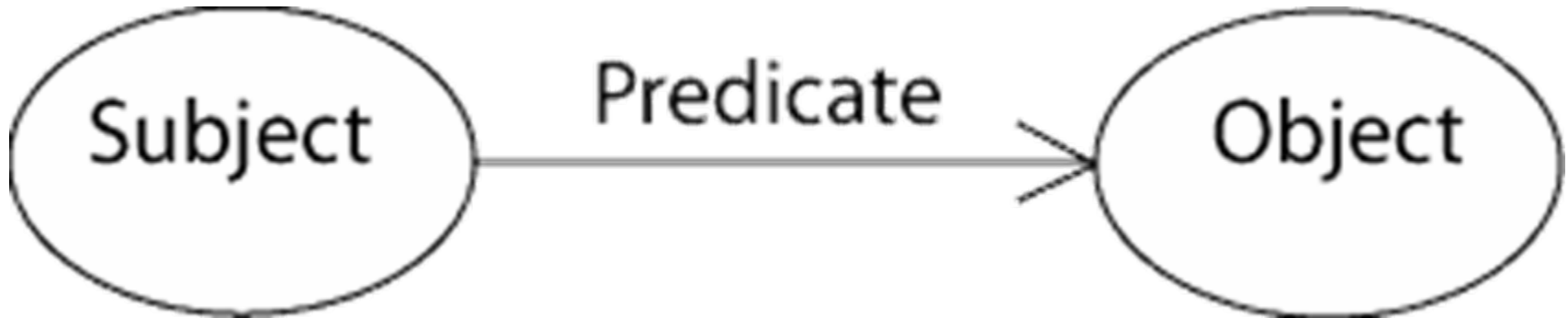
- No. of equivalent titles either of e-journals or e-books corresponding to the paper format.
- No. of titles either of e-journals or e-books.
- Usage of search, browse, article, journal, book and database.
- Cost of per access.

Background



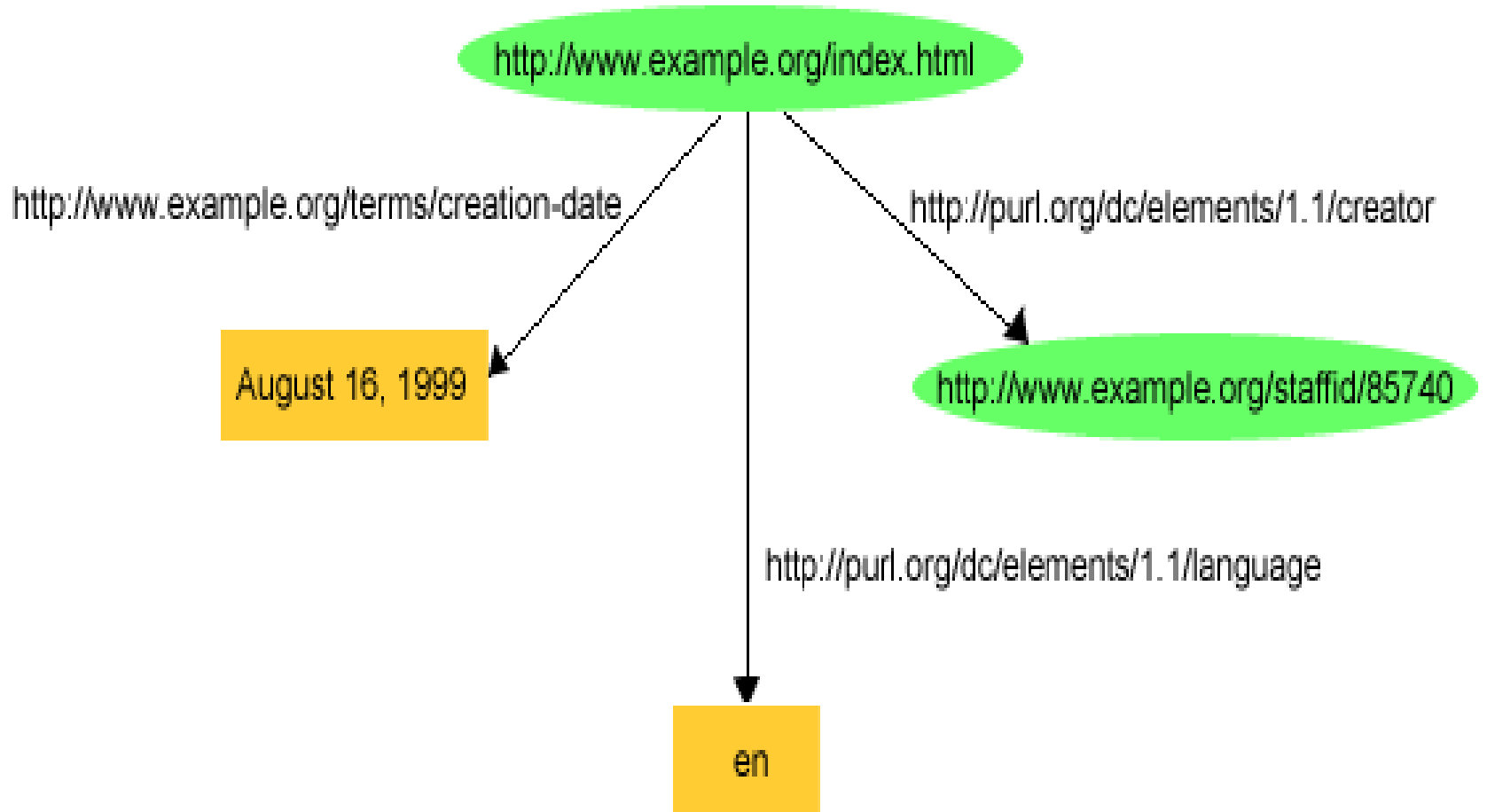
- It **lacks a holistic view** for analyzing the information resources and services together to serve as an integrated base for decision making.

RDF Graph for Semantic Web

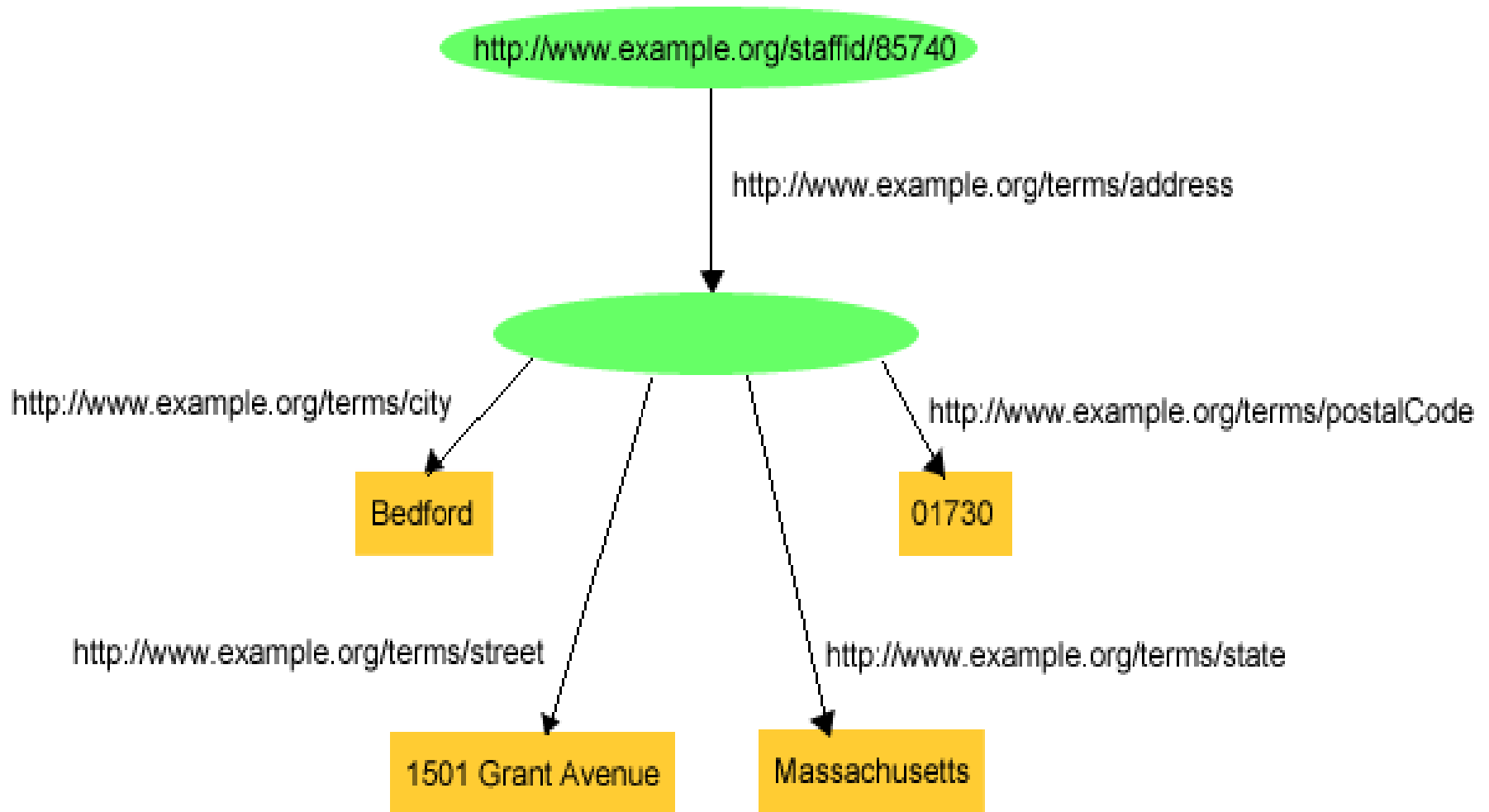


- Each triple represents **a statement of a relationship** between the things denoted by the nodes that it links.
- Each triple has **three parts**:
 - a subject,
 - an object, and
 - a predicate (also called a property) that denotes a relationship.

An example of RDF Graph¹



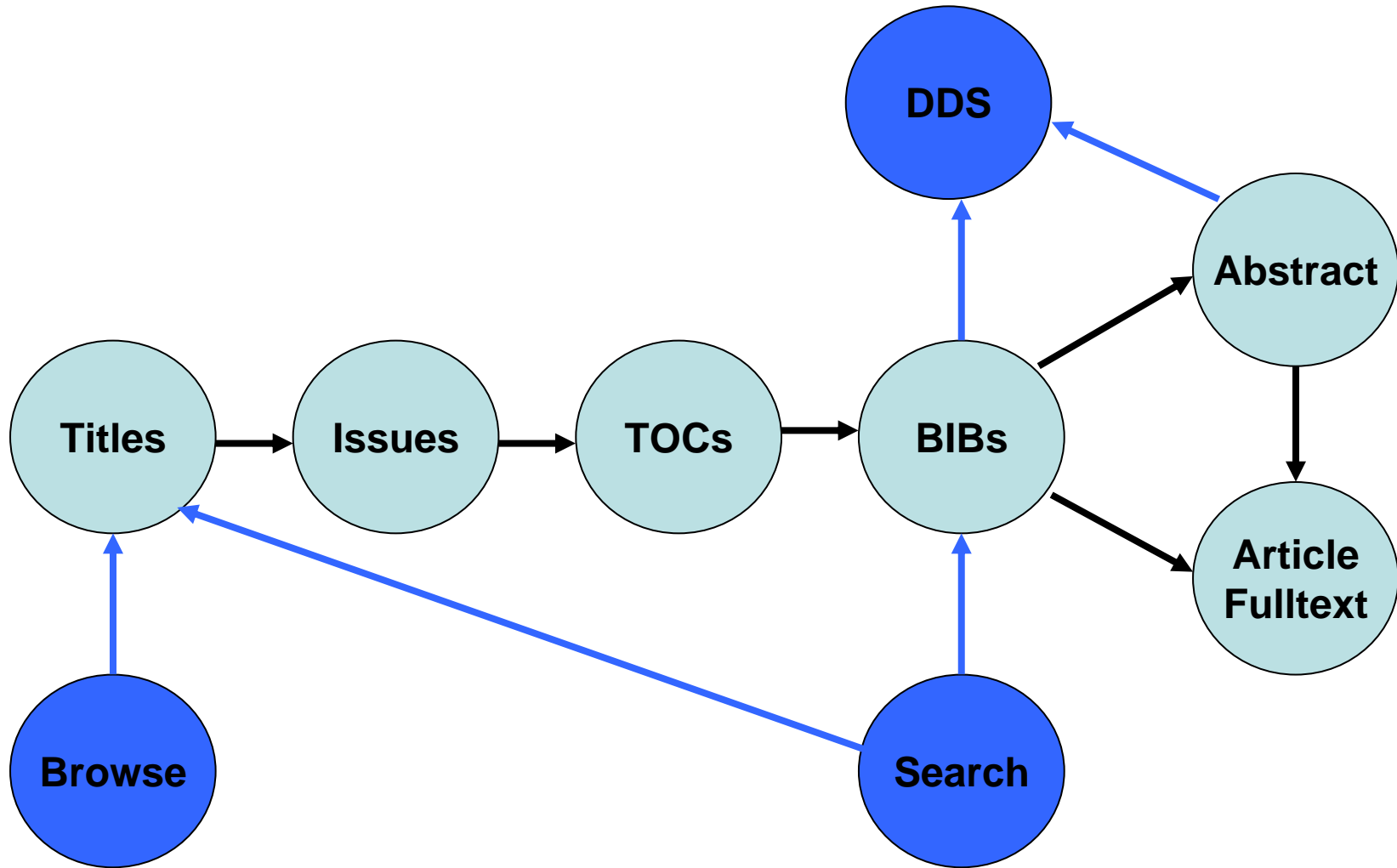
An example of RDF Graph²



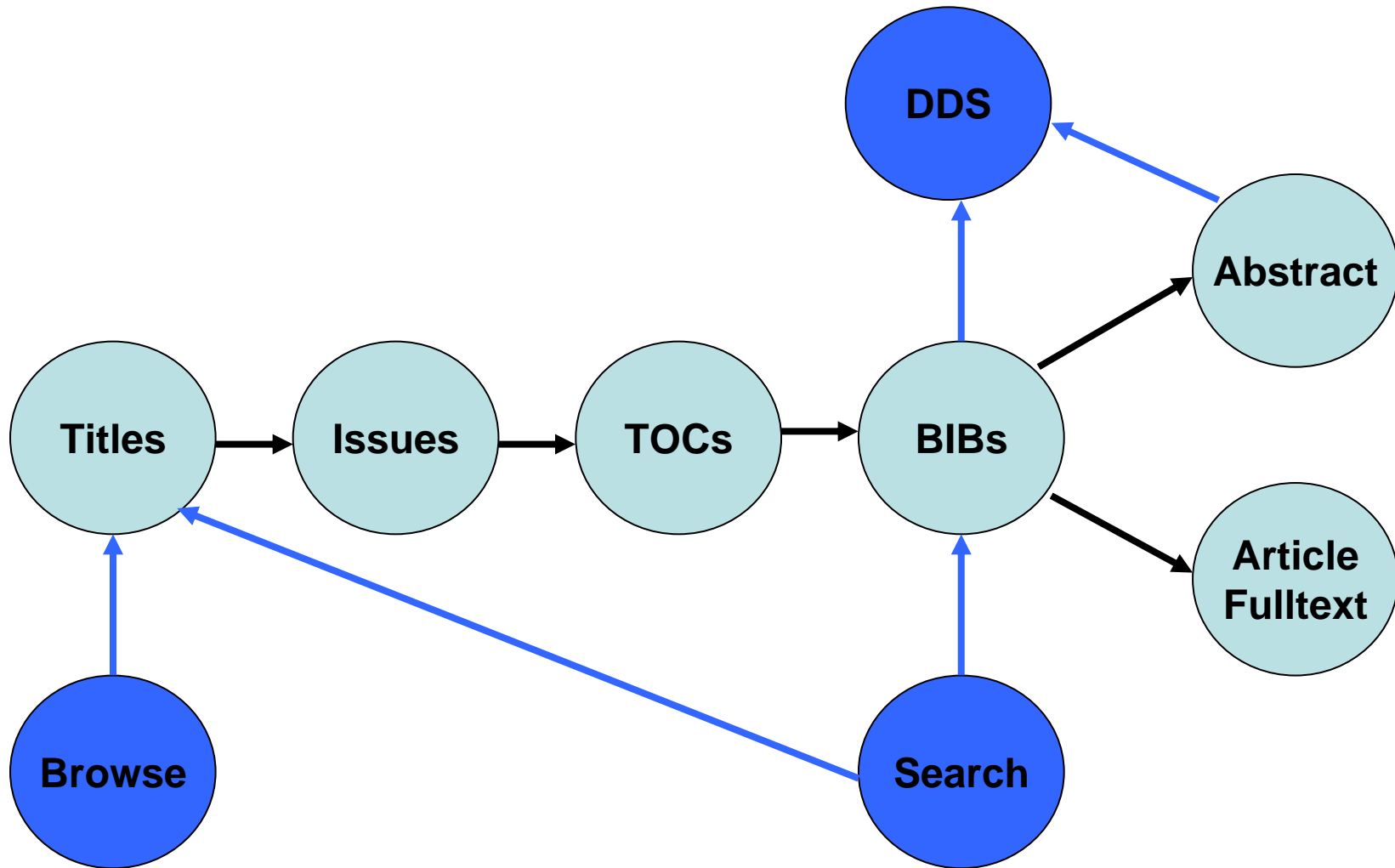
Adapting RDF concept for e-resources and e-services

- Each subject or object can be an information resource or service for users and libraries.
- Predicate denotes a functional direction or link to indicate the relationship between resource and service.
 - Predicate is redefined to be “is accessible to”

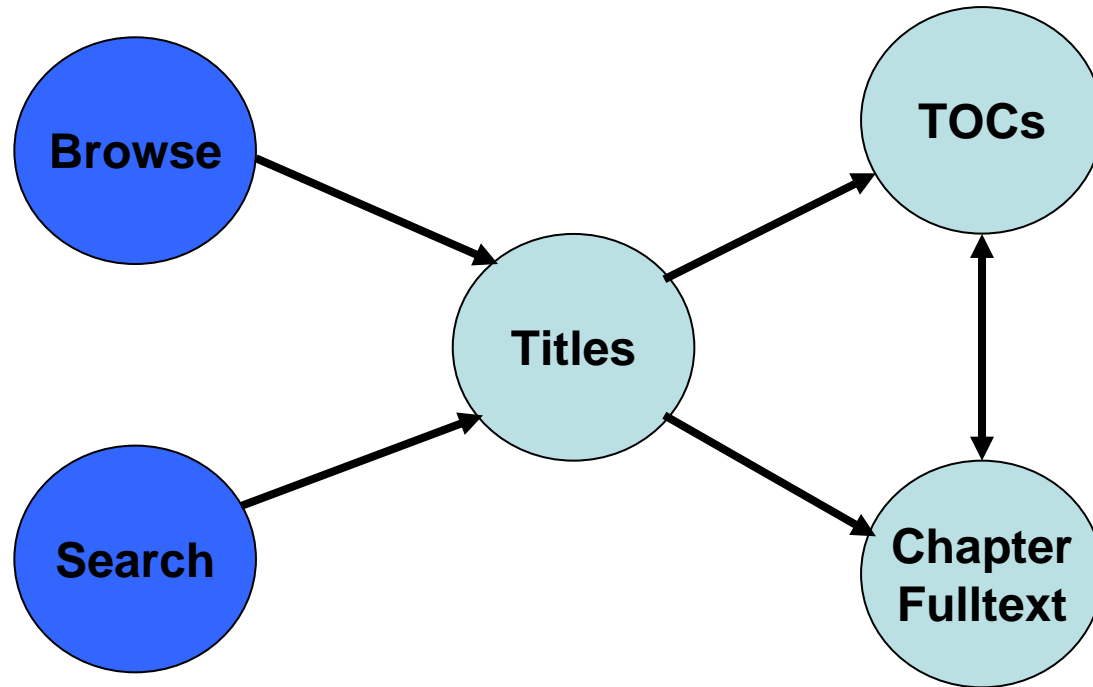
An example – Journal DB¹



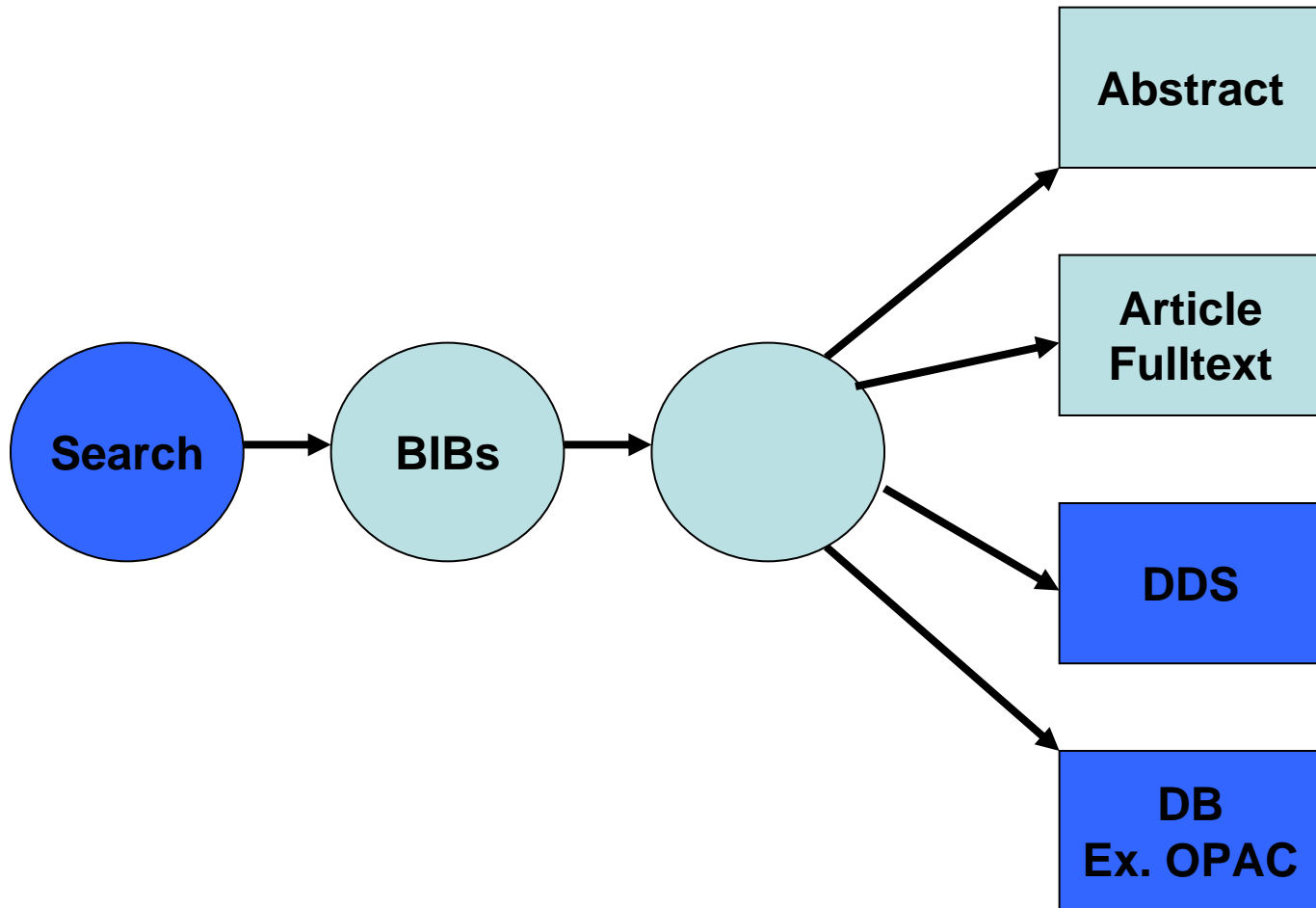
An example – Journal DB²



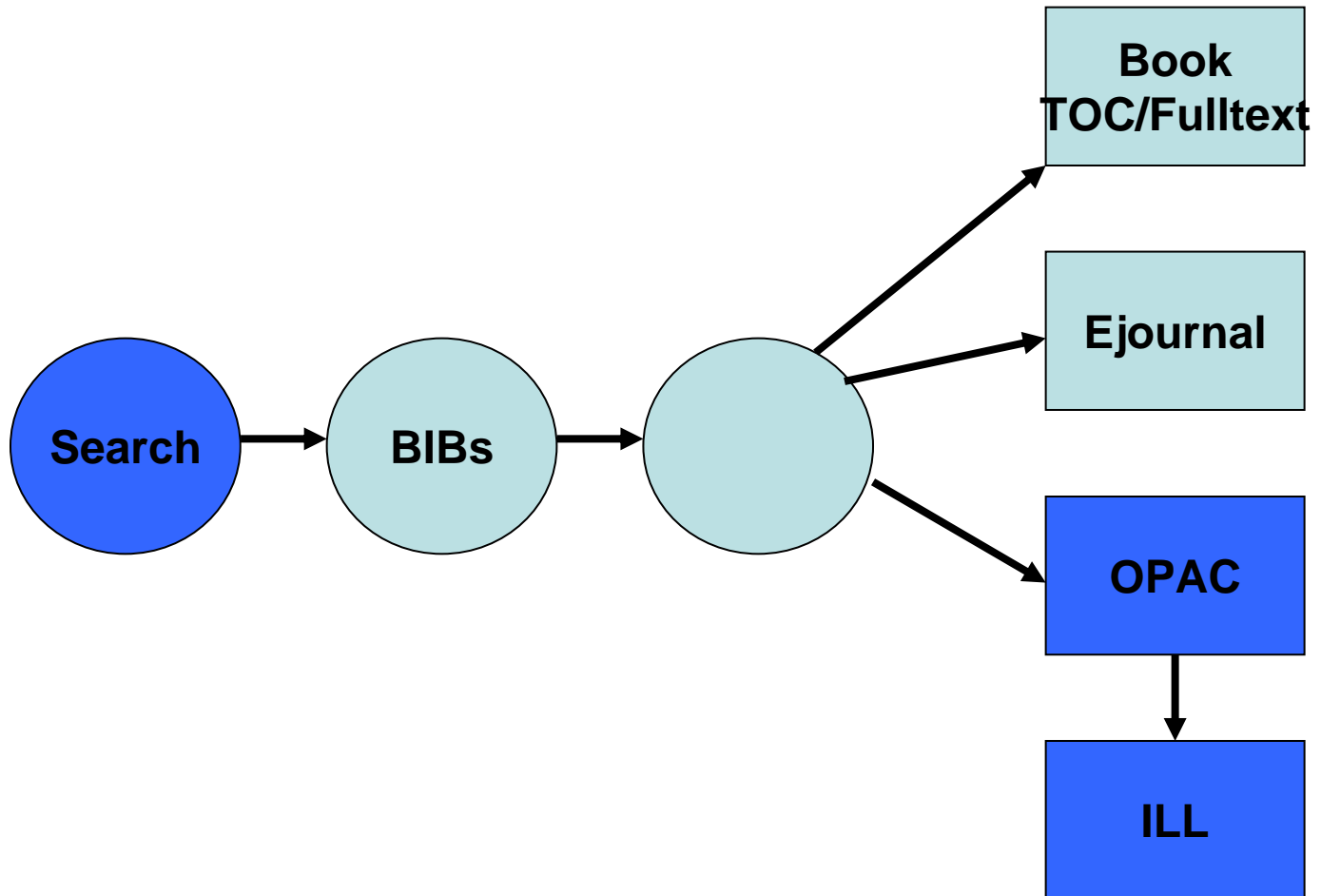
An example – Ebook DB



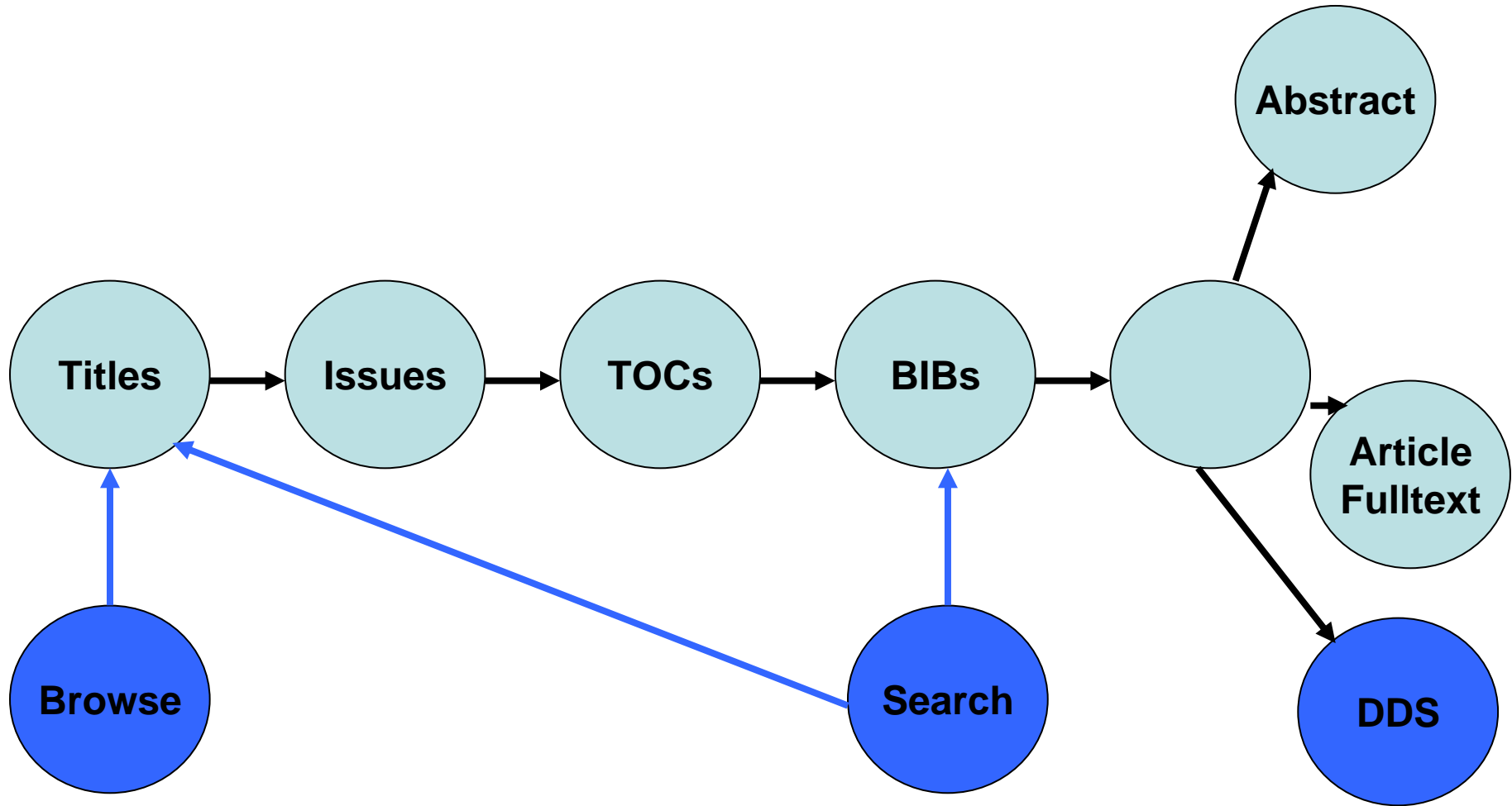
An example – A&I DB



An example – LIS DB



An example – DDS DB



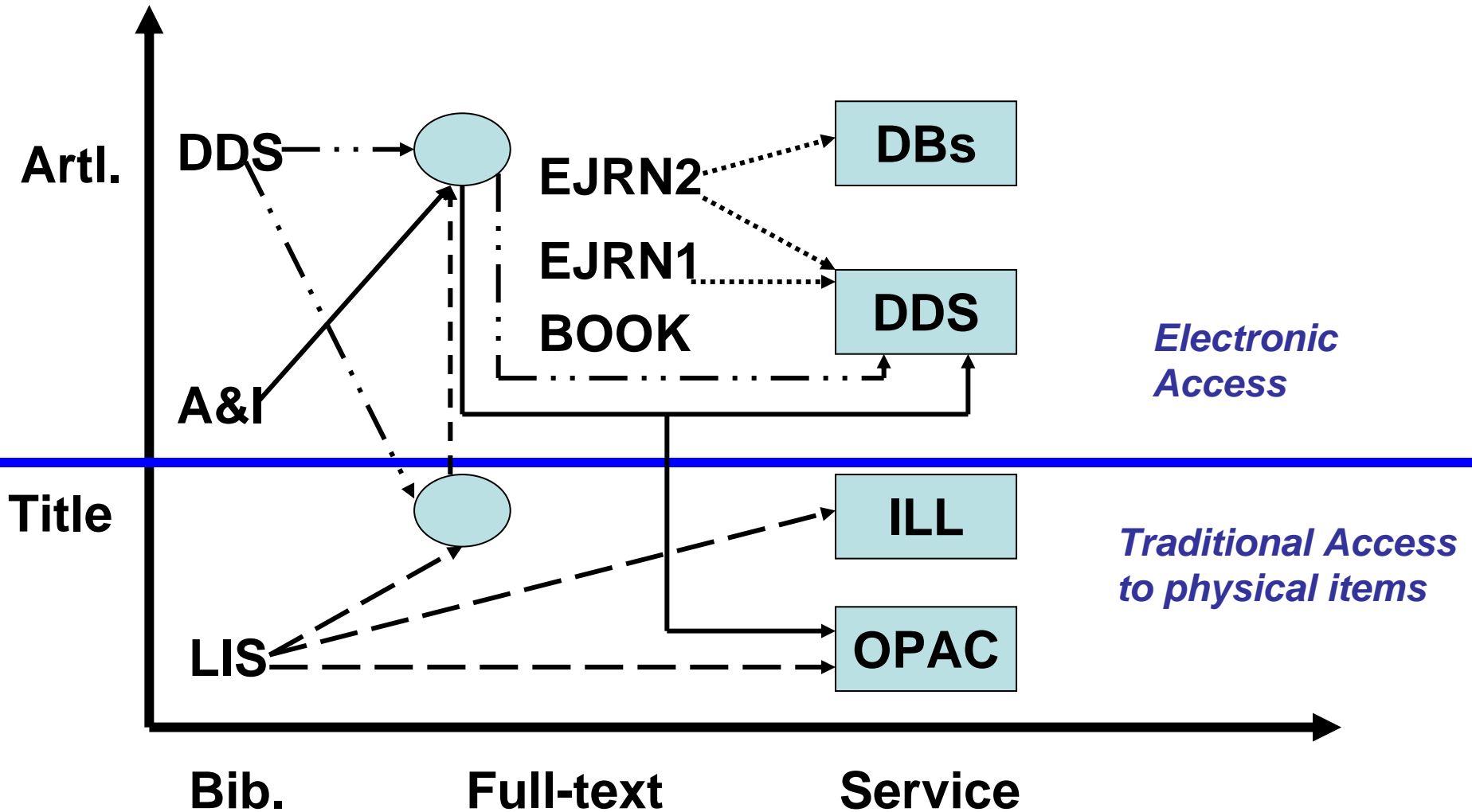
Results¹

	Title	TOC	BIB	ABS	Artl.	Chap.	DBs	DDS	ILL
EJR1	◆ A1	◆	◆	◆	◆ A2			◆	
EJR2	◆ B1	◆	◆	◆	◆ B2			△	
Book	◆ C	◆	◆			◆			
AI	△ D1		◆	◆	△ D2		◆	◆	
LIS	△ E1	◆	◆ E2		△ E3	△	△	◆	◆
DDS	△ F1	◆	◆	◆	△ F2			◆	

Results²

- Content-based level
 - To offer full-texts directly.
- Value-added Service level
 - To offer functional services for users based on the discovery of existing TOCs and bibs, such as DDS, ILL, and linkage access to other DBs. Granularity includes title and article level.

Results³



Question

- Do we know what kind of e-resources and services and their purposes are required for this library?
 - ERM (Electronic Resources Management)
 - Federated Search
 - Google
 - Amazon

Findings¹

- This model is useful for decision making to
 - Analyze existing electronic contents of electronic journals and books. (**resource-based view** - collection development)
 - Show current services and their positions and functions each other, including ILL, DDS, linkage access, etc. (**functional service-based view** – service delivery)
 - Illustrate the relationship between e-resources and services. (**an integrated view** – link the relationship between resources and services)

Findings²

- This model is
 - a **RDF-based path model** for planning integrated e-resource service to evaluate or include other resources and services **in a component approach**
 - a complement rather than a replacement to other models.

Thank for your attention!