

# Pervasive Business Intelligence

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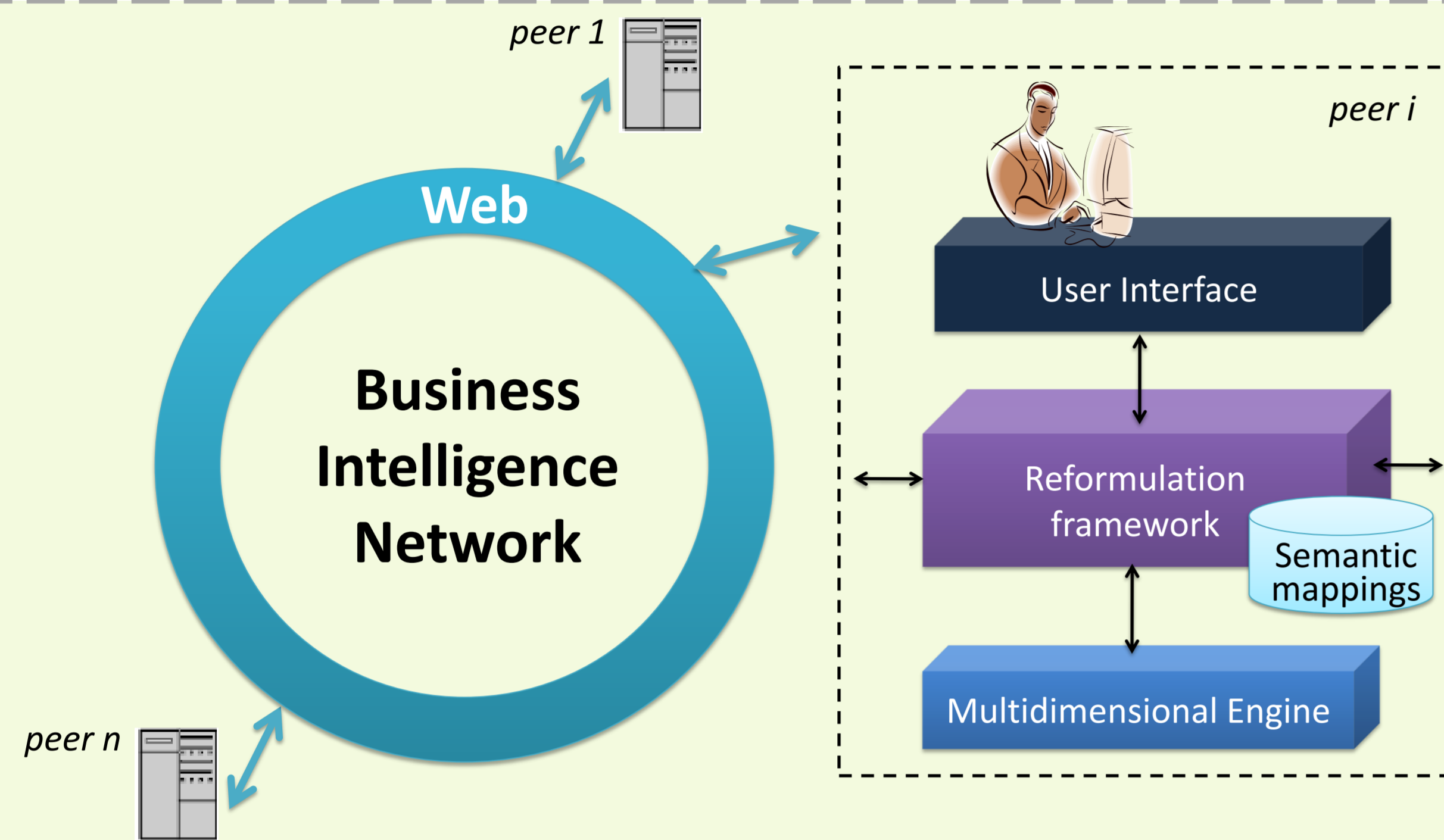
<http://www-db.deis.unibo.it/~srizzi/indexBI.html>

DEIS - University of Bologna (ITALY)



## Collaborative BI

Users need to access information anywhere it can be found, by locating it through a semantic process and performing integration on the fly.



## Business Intelligence Network (BIN)

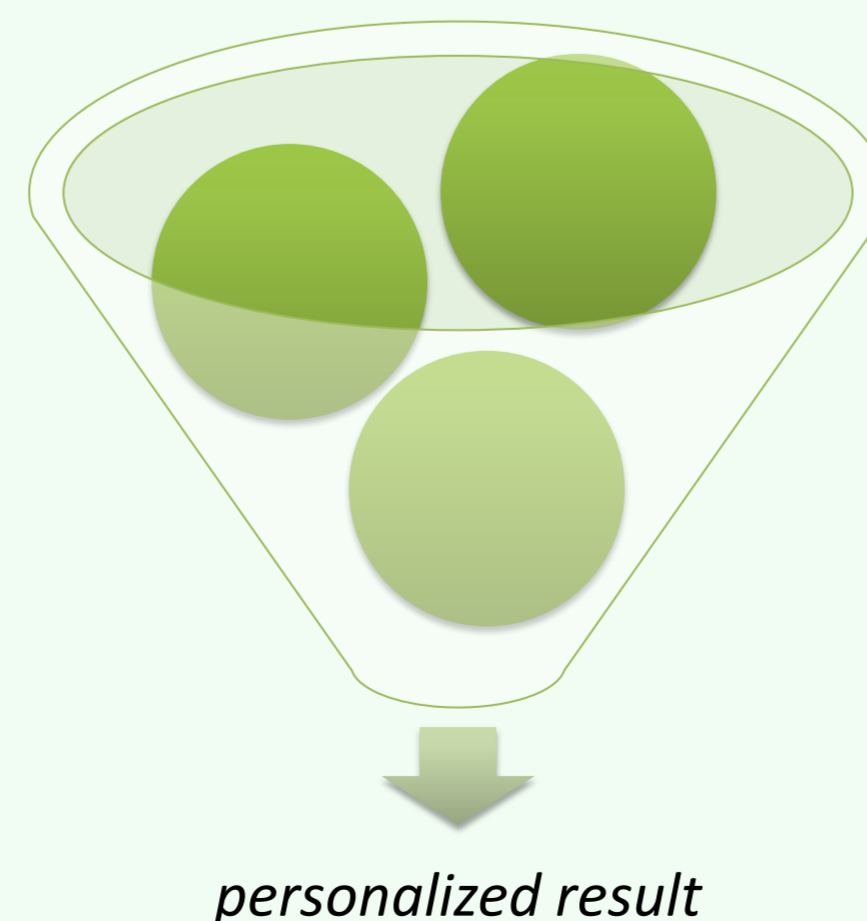
- An inter-business collaborative context where companies organize and coordinate themselves to share opportunities, respecting their own autonomy and heterogeneity.
- The users transparently access the business information distributed over the network.
- The framework provides a language for the definition of semantic mappings between the schemata of different BI systems.
- An ad-hoc algorithm allows the reformulation of a user query on the different BI systems.

## OLAP Query Personalization

Fostering the use of BI tools not only by business analysts but also by front-line employees.

Simplifying the OLAP analysis by providing a set of preferences that could reduce the query result to the most relevant information:

1. **Association rules mining:** OLAP preferences are defined by exploiting a set of association rules mined from past user queries.
2. **Graph-based approach:** OLAP preferences are defined by exploiting past user sessions and a graph representing a map of similar sessions.



## Lean BI

Promoting the BI tools distribution even in small and medium companies.

**Four-Wheel-Drive (4WD):** couples traditional data warehouse methodologies to Agile approaches, to faster the data warehouse development.

- Incrementally and risk-based iteration
- Prototyping
- User involvement
- Component-reuse
- Formal and light documentation
- Automated schema transformation

