



BI&A

BI&A refers to the transformation of raw data into meaningful and useful information for analysis purposes.

BI&A Area:

- Data Warehousing
- Business Intelligence
- Information Management
- Analytic applications



BI&A Motivations

Theoretical Motivations:

- Demand for predictive analytics

Practical Motivations:

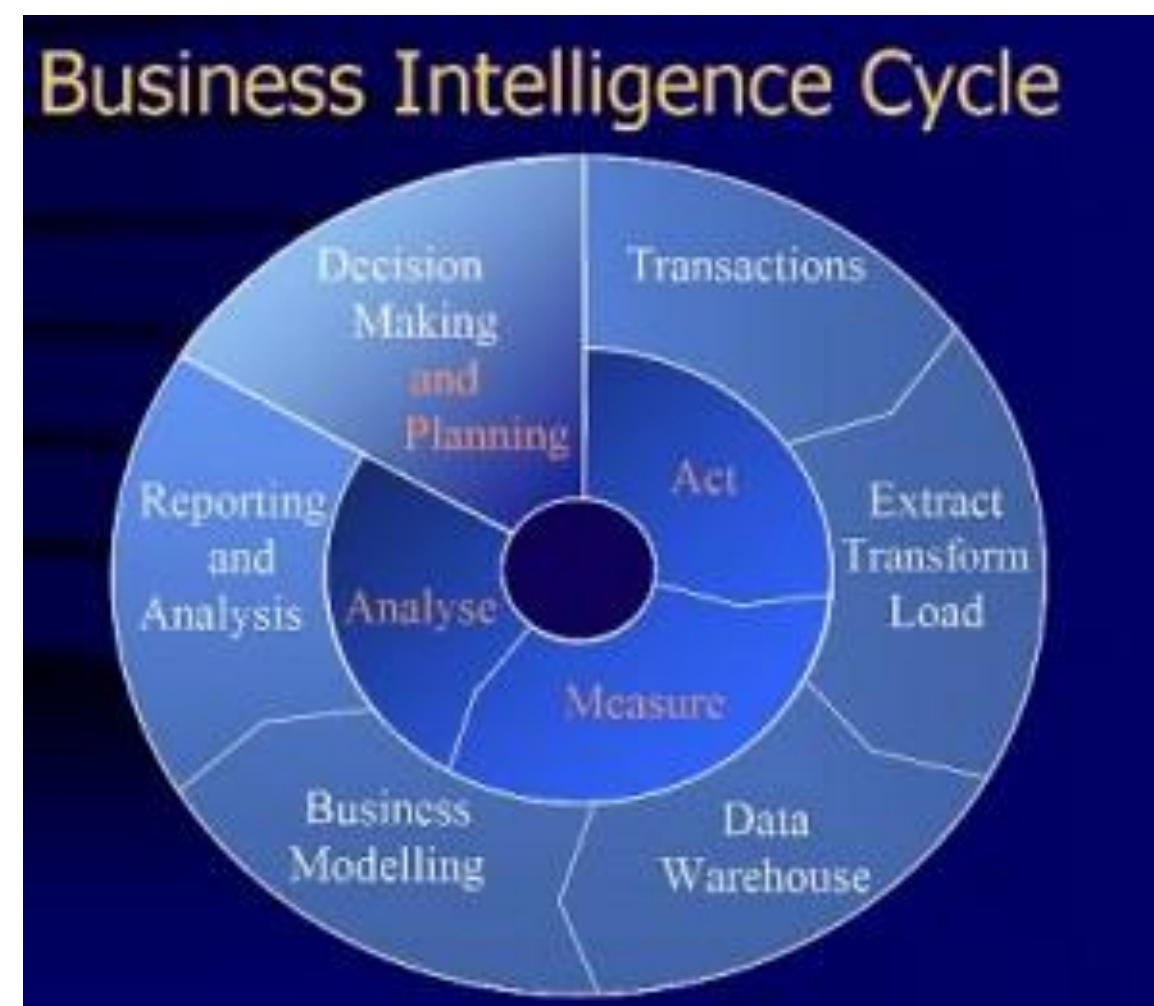
- Increase visibility of business operations to improve decision making and anticipate opportunities

Interdisciplinary field



Examples of BI&A Applications

- Trajectory Data Warehouse
- Pattern Detection
- Mobility Data Integration
- Semantic Modeling
- Sentiment Analysis
- Community Detection
- Real Time Data Warehouse
- Event Streams Clustering
- Pervasive and Healthcare System
- Information Retrieval

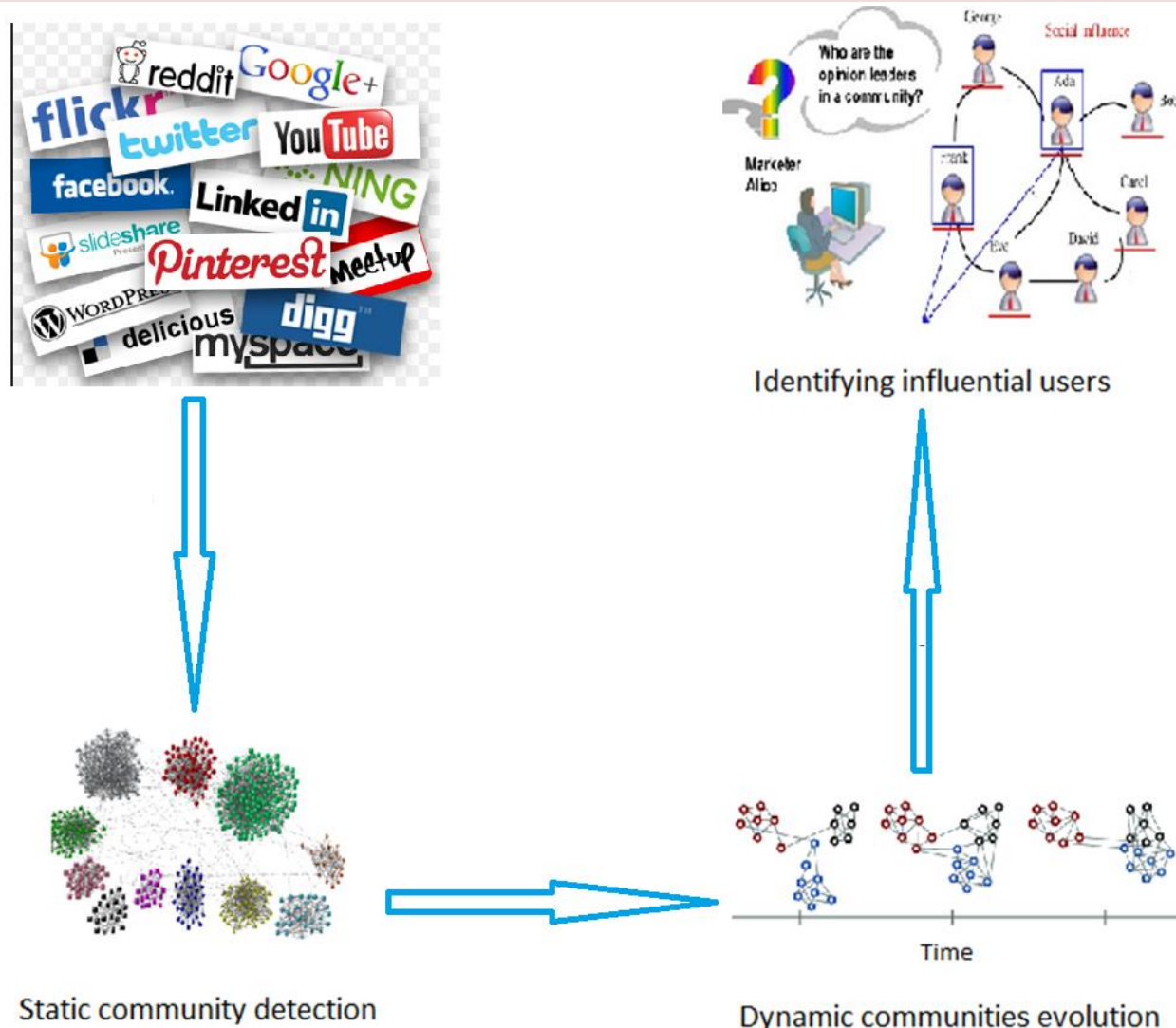


Approaches to BI&A

Data Mining
Centrality Measures
Bee Behavior
Machine Learning Techniques
Ontology Modeling
Reasoning
Extract-Transform-Load
Trigonometric Method
Fuzzy Logic
Histograms

BI&A Application Domains of Interest

SOCIAL NETWORK ANALYSIS

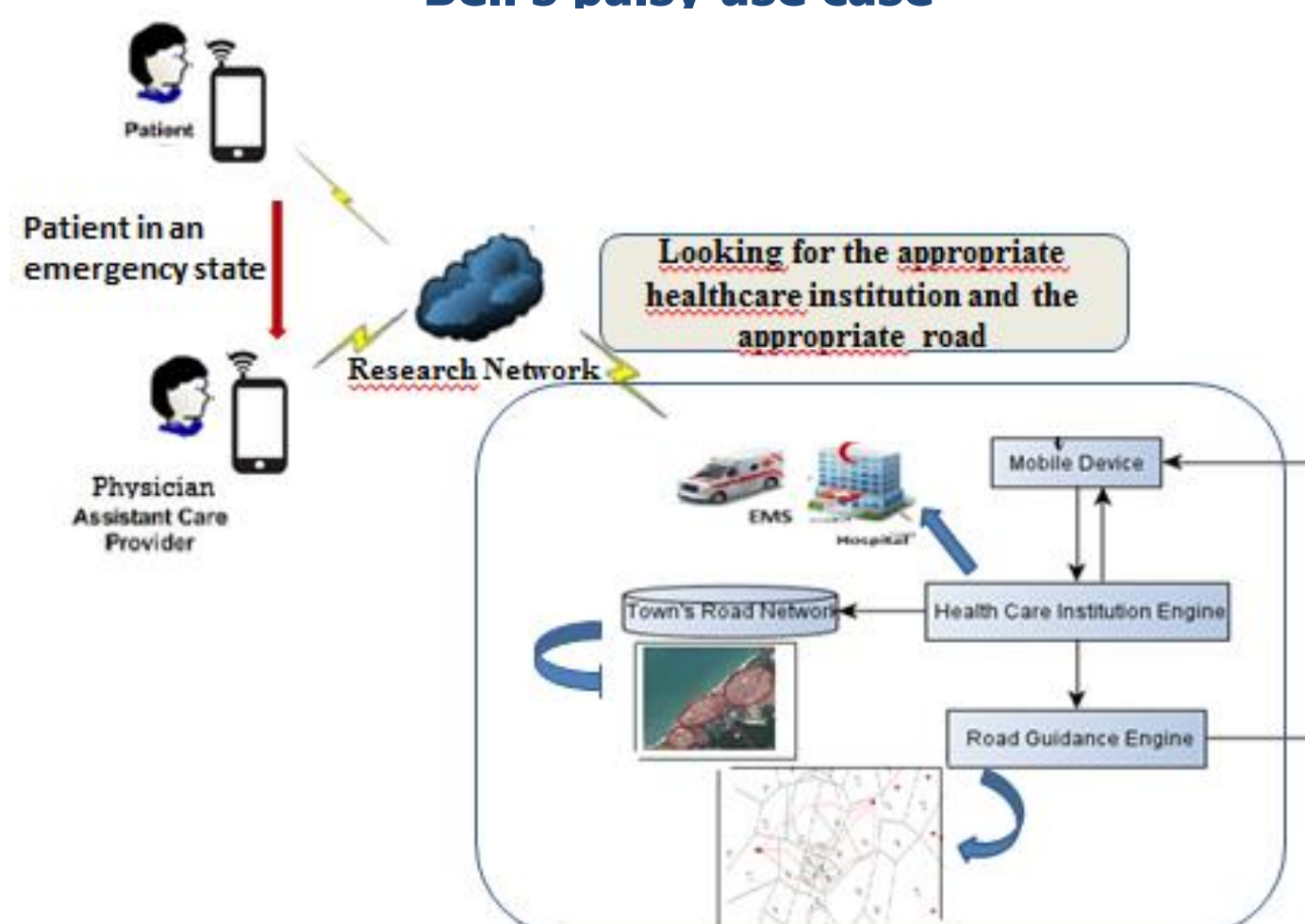


HEALTHCARE PERVASIVE SYSTEMS

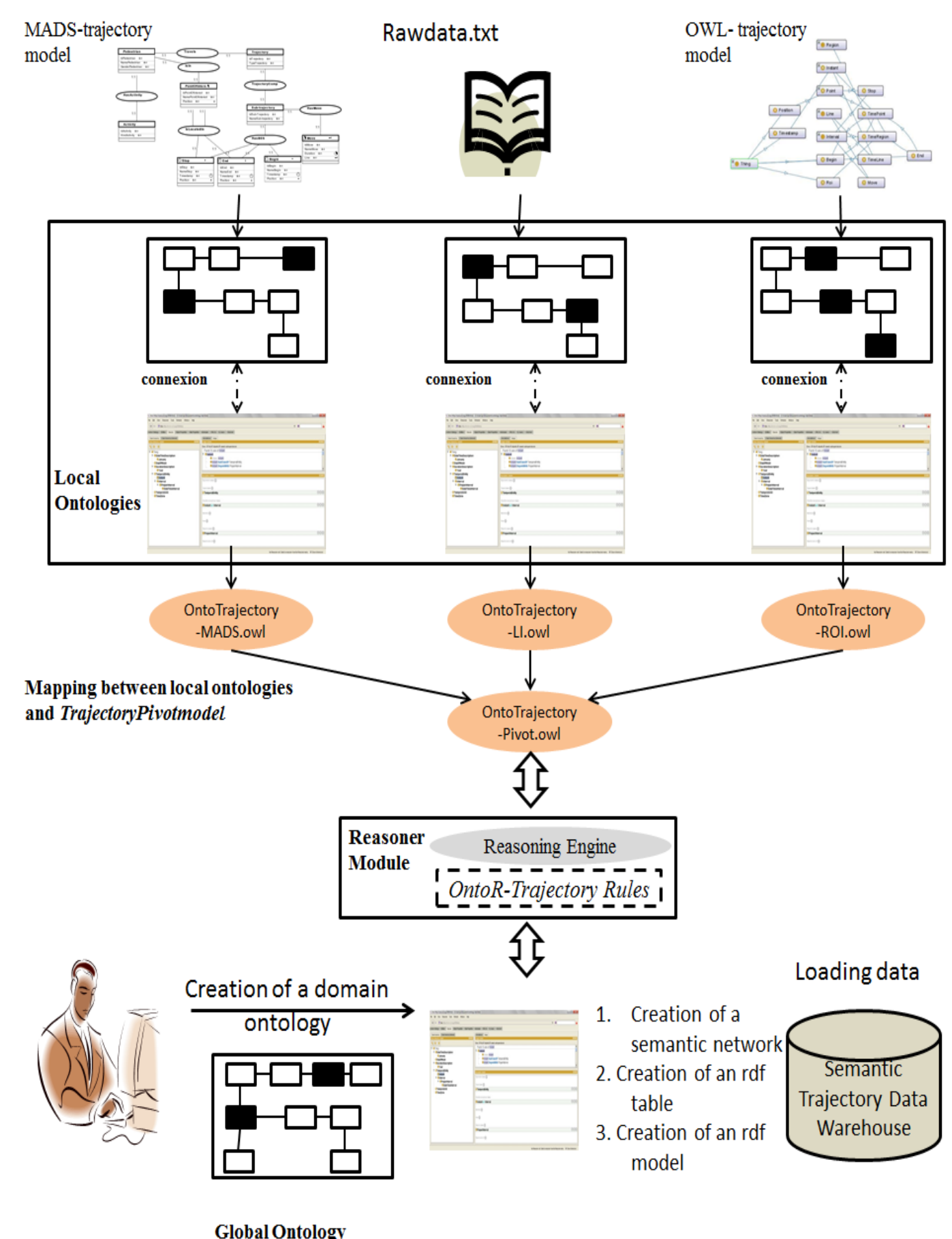
Semantic Annotation of BioInformatics Web Services



Modeling and Mining of Event Streams: Bell's palsy use case



MOBILITY DATA MODELING AND ANALYSIS



Semantic Integration of Heterogeneous Mobility Data Sources

Dynamic Social Networks Analysis

Pervasive System for Searching the Appropriate Medical Institution and the Best Road