

A DEFINITION OF BUSINESS PROCESS INTELLIGENCE

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Thursday 14.00 - 15.00

Business Process Intelligence

- **Business Process Intelligence (BPI)** refers to the application of **Business Intelligence (BI)** techniques to **Business Processes (BP)**
- **Business Intelligence:** reporting analytics, data mining, business performance management, benchmarking, predictive analytics and prescriptive analytics, online analytical processing ...

Business Intelligence

- **Trying a definition...**
 - The first mention of the term “business intelligence” in the english corpora is dated since 1865
 - The first reference to Information Systems is dated to 1958. H.P. Luhn: “a business intelligente system is an automatic system developed to disseminate information ...”
 - The current use of the terms is coined by Howard Dresner in 1989 as “a set of methods to improve business decision making using system based on facts”

Business Intelligence

- **Trying a definition...**

- BI systems combine operational data with analytical tools to present complex and competitive information to planners and decision makers

(Negash, Solomon. "Business intelligence." The communications of the Association for Information Systems 13.1 (2004): 54)

- BI is as a set of methodologies, processes, architectures, and technologies that leverage the output of information management processes for analysis, reporting, performance management, and information delivery *(Forrester.com)*

- BI is a set of techniques and tools for the acquisition and transformation of raw data into meaningful and useful information for business analysis purposes *(Wikipedia.com)*

Business Intelligence



iMine system

Business Intelligence

DATA

ANALYSIS

KNOWLEDGE

Business Intelligence

DATA

Data Provisioning
Data Integration
Data Preparation

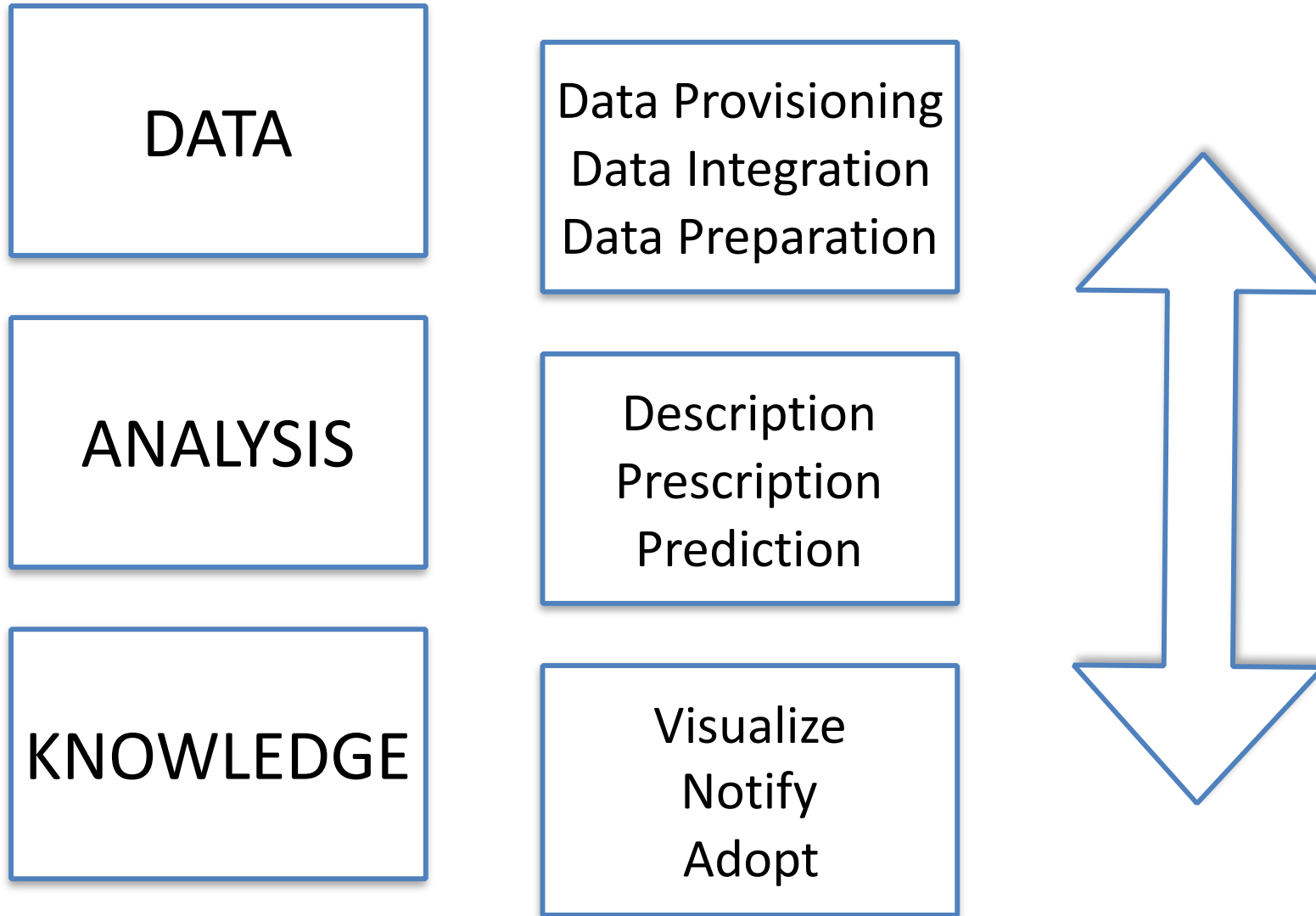
ANALYSIS

Description
Prescription
Prediction

KNOWLEDGE

Visualize
Notify
Adopt

Business Intelligence



Business Process Intelligence



Business Process Intelligence



Business Intelligence

- **We do not model data or procedures to optimise an algorithm**
- **We model to improve the value of data**
 - clear understanding of the users' needs and acceptance conditions
 - effective translation of the analytical results
 - sound integration of the techniques and tools adopted
 - consistent data integration and provision

Business Process Data

- **Data describing sequences of activities operated by an organisation or a system**
- May be hard to collect
 - systems provides us with events not necessarily mapped on activities
- Require complex algorithms for processing
 - combinatorial explosion
 - checking concurrency and synchronisation

Outline of the course

1. Definition of BI
2. Overview on BI methods
3. Focus on Process Mining algorithm
4. Requisites for a well founded BI project
5. Exercise: review BPI works

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