Inteligência nos negócios

"BI Software is a collection of decision support technologies for the enterprise aimed at enabling knowledge workers such as executives, managers, and analysts to make better and faster decisions."

CHAUDHURI, Surajit; DAYAL, Umeshwar; NARASAYYA, Vivek. An overview of business intelligence technology. Communications of the ACM, v. 54, n. 8, p. 88, 2011. Disponível em: http://portal.acm.org/citation.cfm?doid=1978542.1978562.

Dois horários semanais

Teórica e Prática

Inteligência de negócios ou Business Intelligence.
Conceitos básicos. Data warehousing. Análise de negócios e visualização dos dados. Data mining, text mining e web mining. Business Performance
Management (BPM). Redes neurais para data mining

Objetivo Geral: Fazer com que os alunos do 8º período saiam para o mercado de trabalho embasados nos principais assuntos envolvendo inteligência nos negócios. Sendo aptos a discutirem sobre tais assuntos além de utilizá-los em seu cotidiano de trabalho

Objetivos Específicos: Conhecer Data Mining, técnicas de BI e desenvolver laboratórios.

LAUDON, Kenneth C. Sistemas de informação gerenciais. 9.ed. São Paulo: Pearson Education, 2010. 428p

SQL server 2000 enterprise edition SQL server 2000 developer edition. [S.l.]: [s.n.], 2003.

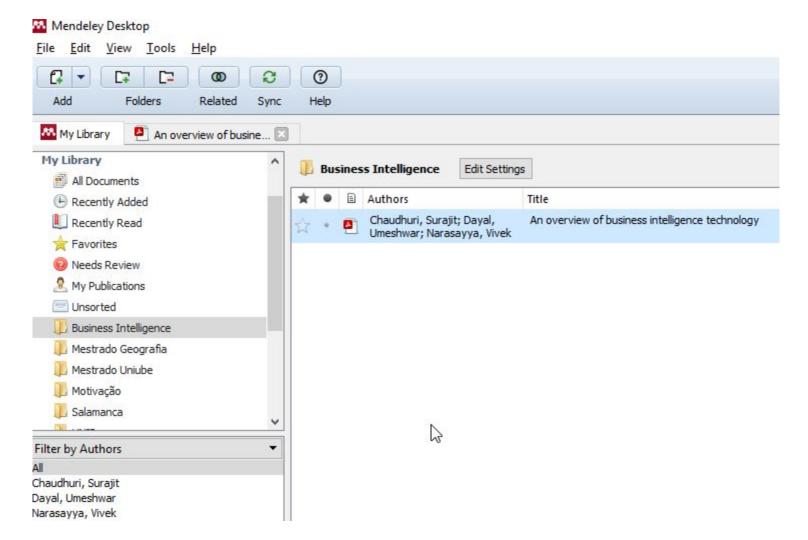
GRAEML, Alexandre Reis. Sistemas de informação: o alinhamento da estratégia de TI com estratégia corporativa. 2.ed. São Paulo: Atlas, 2003. 159p











Artigo

Inteligência nos negócios BI			
Aula	Data	Dia	Obs
1	4/11	Seg	Apresentação da estratégia de trabalho
2	11/11	Seg	Entrega da Atividade 1
3	18/11	Seg	Entrega da Atividade 2
4	25/11	Seg	Entrega da Atividade 3
5	2/12	Seg	Avaliação Final
6	9/12	Seg	Vista de Prova

BI

» key insights

- The cost of data acquisition and data storage has declined significantly. This has increased the appetite of businesses to acquire very large volumes in order to extract as much competitive advantage from it as possible.
- New massively parallel data architectures and analytic tools go beyond traditional parallel SQL data warehouses and OLAP engines.
- The need to shorten the time lag between data acquisition and decision making is spurring innovations in business intelligence technologies.

Figure 1. Typical business intelligence architecture. Data Data movement. **Data warehouse** Mid-tier Front-end sources streaming engines servers servers applications Search Relational Extract Transform OLAP Enterprise **DBMS** External Data Load (ETL) Server search engine Sources Spreadsheet Dashboard MapReduce Operational Complex Event engine Databases Data mining, Reporting Processing Engine Server text analytic engines Ad hoc

Fonte: CHAUDHURI, Surajit; DAYAL, Umeshwar; NARASAYYA, Vivek. An overview of business intelligence technology. Communications of the ACM, v. 54, n. 8, p. 88, 2011. Disponível em: http://portal.acm.org/citation.cfm?doid=1978542.1978562.

"An example of such an ad hoc SQL query is: find customers who have placed an order during the past quarter whose amount exceeds the average order amount by at least 50%."

"Reporting servers enable definition, efficient execution and rendering of reports—for example, report total sales by region for this year and compare with sales from last year. The increasing availability and importance of text data such as product reviews, email, and call center transcripts for BI brings new challenges"

Web analytics

CRM built-in analytics

mobile Bl

Challenging Research Problems

Data Storage

RDBMS

Relational Database Management Systems

near real-time Bl

enterprise search

data mining & text analytics

Alguns conceitos BD x BI

Index structures (bitmap, scan, intersection)

Materialized Views (precomputing and materializing summary data)

Data Partitioning (performance): Pode ser por hash ou range

Data Compression: Economiza banda, espaço (Exemplo dictionary compression)

https://www.baciotti.com