

**CIO Symposium**  
**16<sup>th</sup> Americas Conference on Information Systems - AMCIS 2010**  
**August 13, 2010, Lima, Peru**



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**Business Intelligence and its Impacts**  
**Irma Becerra-Fernandez**  
**Florida International University**  
[Sabherwal, Becerra-Fernandez, 2010]

# + Outline

- What is BI
- Factors that drive BI
- BI and Related Technologies
- BI in contemporary organizations





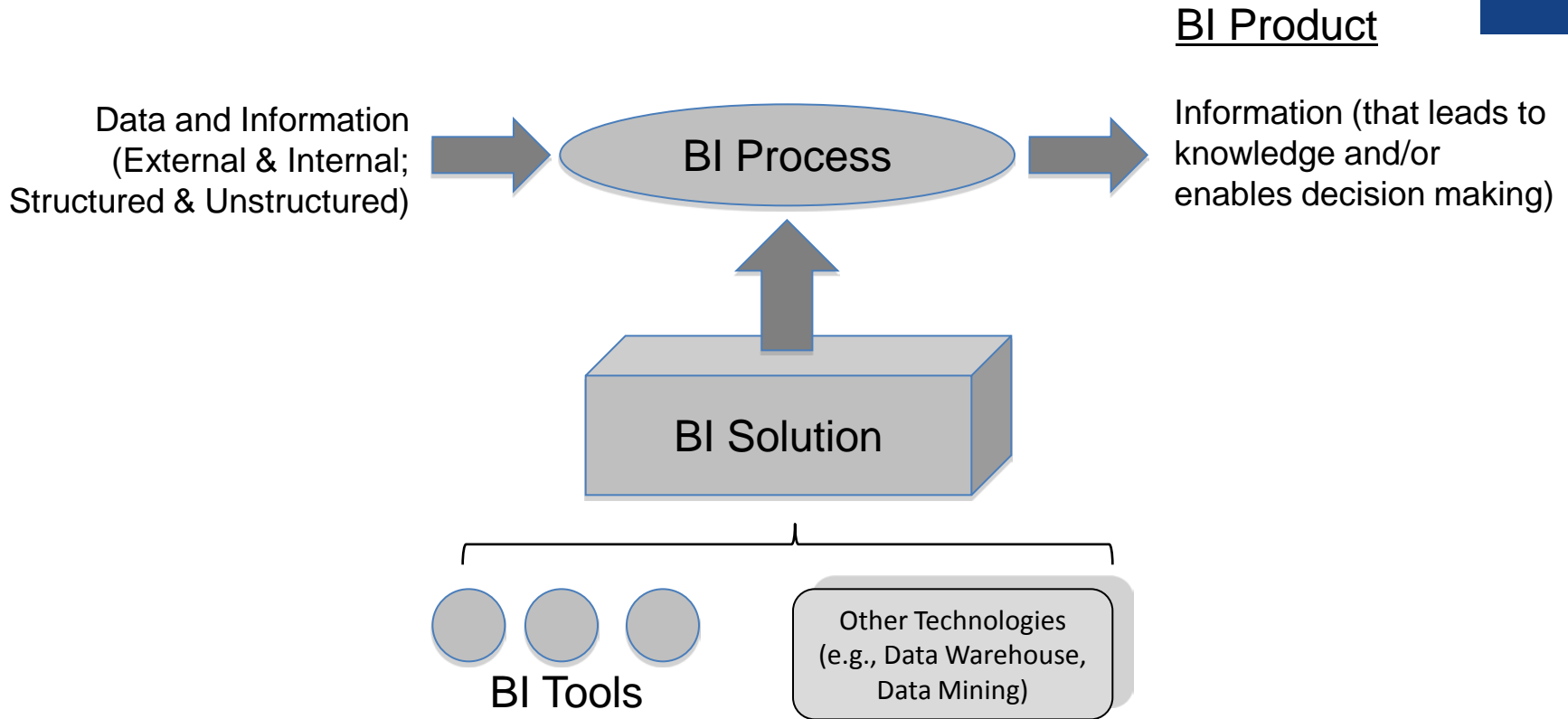
# What is Business Intelligence (BI)?



- Information technology which provides decision makers with valuable information and knowledge by leveraging a variety of data sources as well as structured and unstructured information.
  - Data sources external or internal to the organization
  - Information quantitative or qualitative
  - Output : knowledge
  - Input: information and data
- Business intelligence tools: used in BI solutions
- Business solutions: support the BI process



# BI Product, Process, Solution, and Tools





# Factors that drive BI

## ■ Exploding data volumes

- Cheaper storage
- More electronic connections (Internet, intranet,...)
- Regulatory changes (Sarbanes Oxley Act 2002)

**BI solutions provide managers the ability to more effectively utilize these larger data volumes**





# Factors that drive BI



## ■ Increasingly complicated decisions

- Multi-industry, global competition
- Decisions from structured and unstructured data

**BI solutions provide managers the ability to make decisions that incorporate all the important factors and are based on integration across the information.**



# Factors that drive BI



## ■ Need for quick reflexes

- Faster pace of change (volatility)
- Windows of opportunity close rapidly
- Overcome processing delays
  - Converting data from variety of sources
  - Integrating information across sources
  - Making the results available to the decision maker

**BI solutions help address each of the three types of delays**



# Factors that drive BI



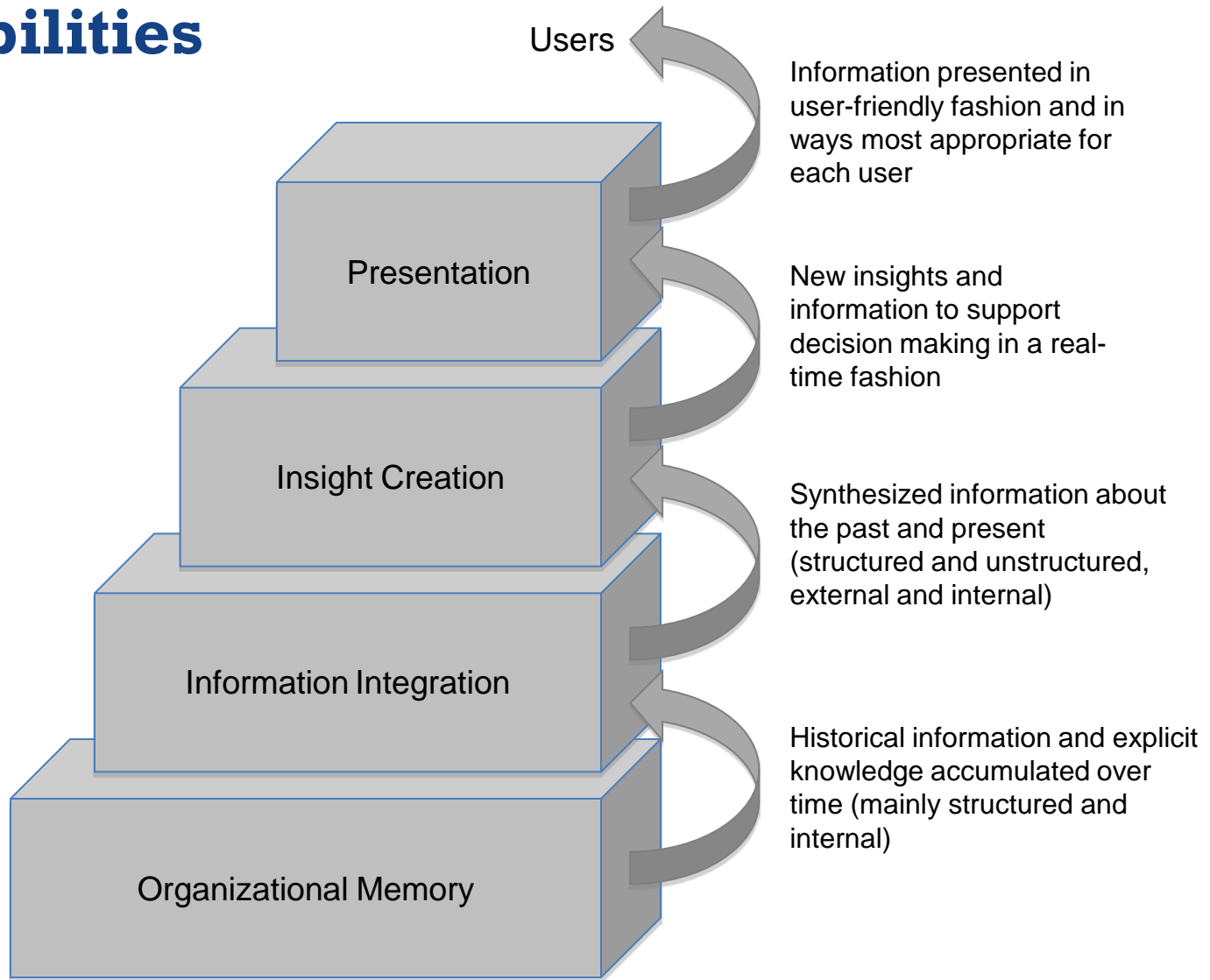
## ■ Technological Progress

- Decision Support Systems (DSS)
- Enterprise resource planning systems (ERP)
- Data warehousing
- Data mining
- Text mining

**BI vendors have the necessary inputs for developing effective BI tools, and organizations adopting them have the platform to make BI solutions most effective**

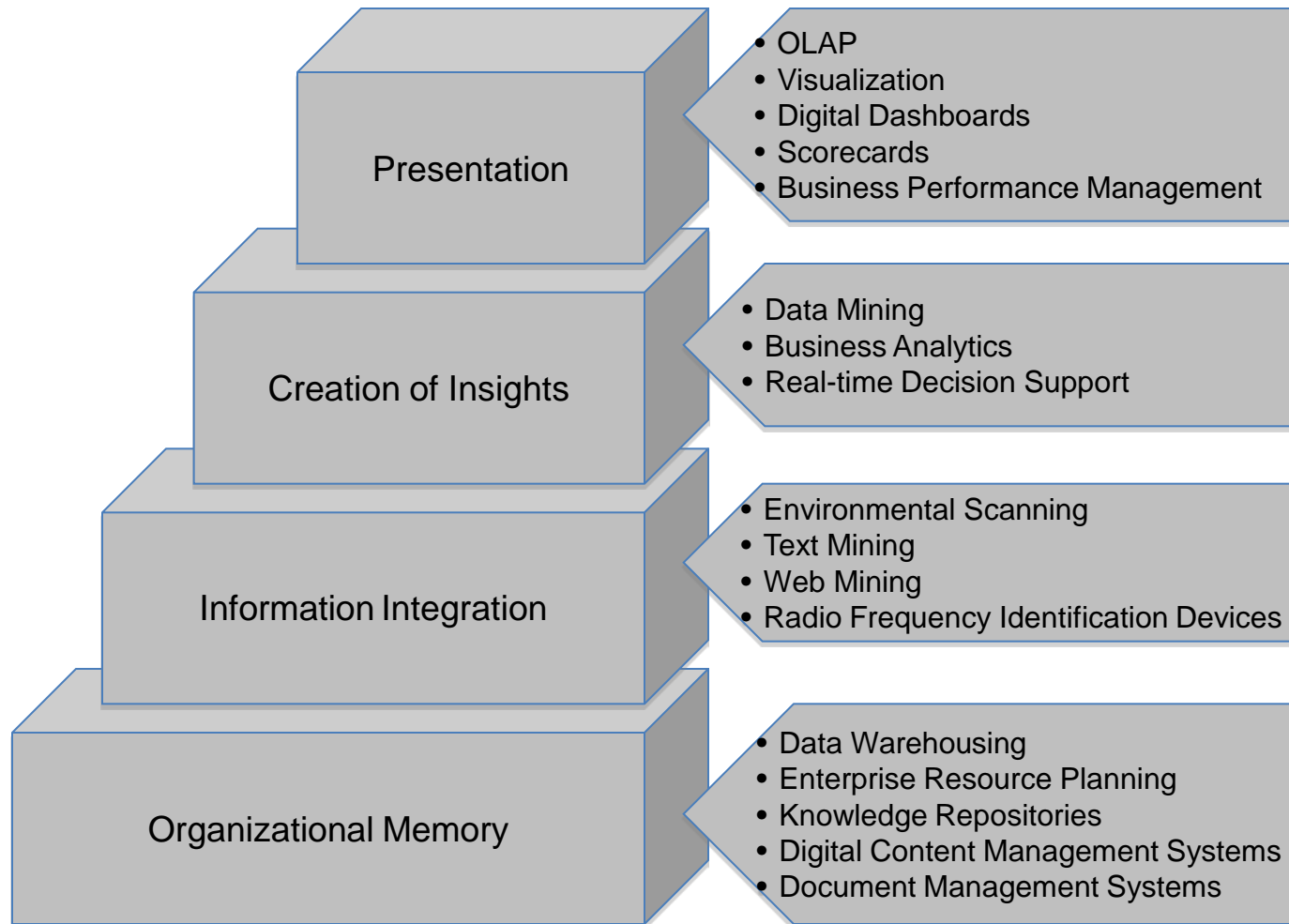


# Four Synergistic Business Intelligence Capabilities





# Technologies Enabling Business Intelligence Capabilities





# Four Contributions of BI



- Dissemination of user-friendly real-time information
- Creation of new knowledge based on the past
- Responsive and anticipative decisions
  - Decision-making based more closely on all the latest information
  - Incorporate predictions regarding the future
- Improved planning for the future
  - More effective use of information
  - Use of past data for predictions about the future
  - Development of knowledge based on information about the past



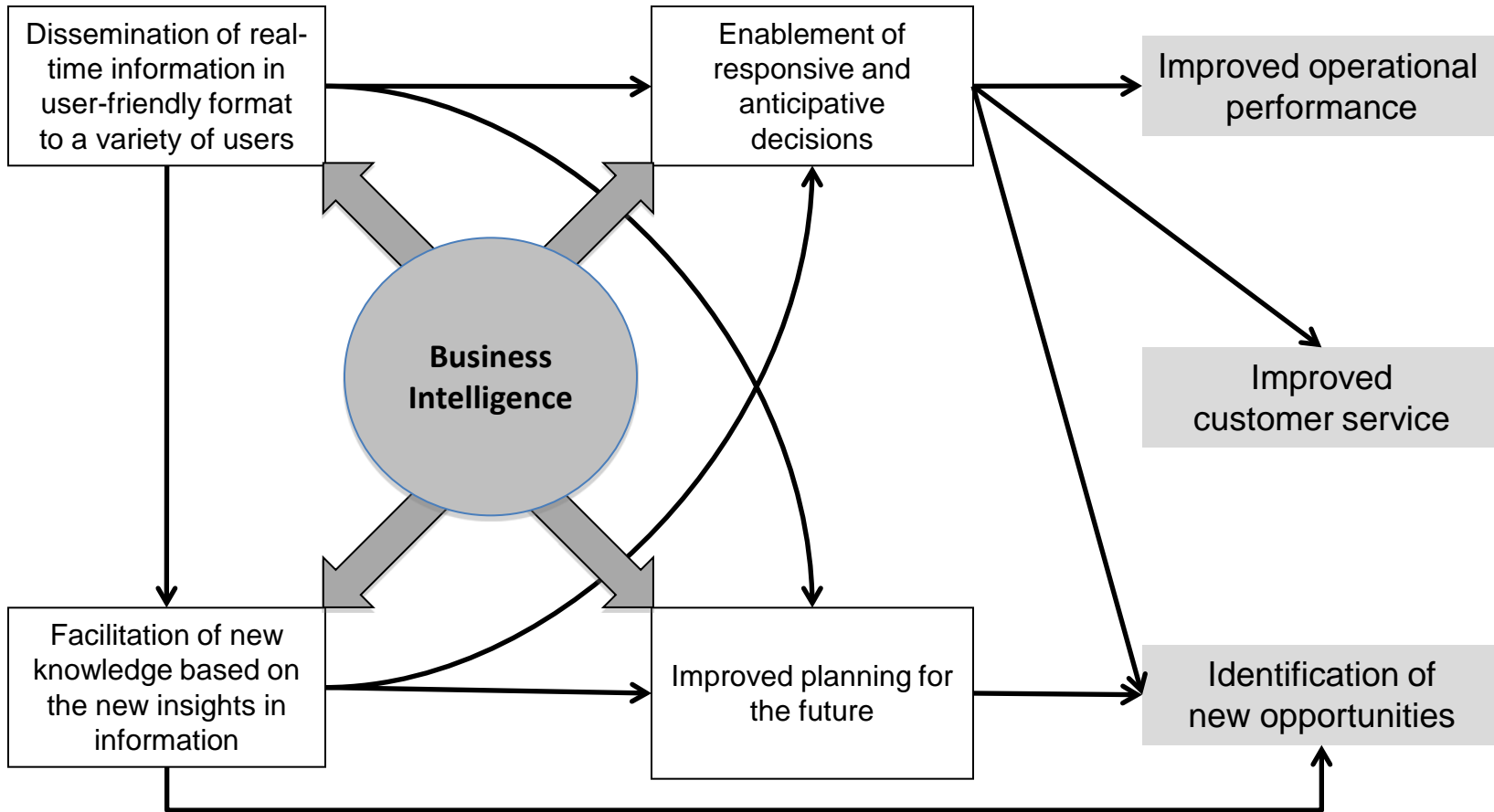
# Three Benefits of BI to Organizational Success



- Improvement in operational performance
  - Provide real-time information on how performing
  - Help make organizations more efficient
- Improvement in customer service
  - Improve quality of customer service provided
  - Identify problems and potential solutions quickly
  - Reduce customer concerns and improve retention
- Identification of new opportunities
  - Facilitate new insights through discover of unknown patterns
  - Track innovative projects more effectively



# Impacts of Business Intelligence



# + Recap

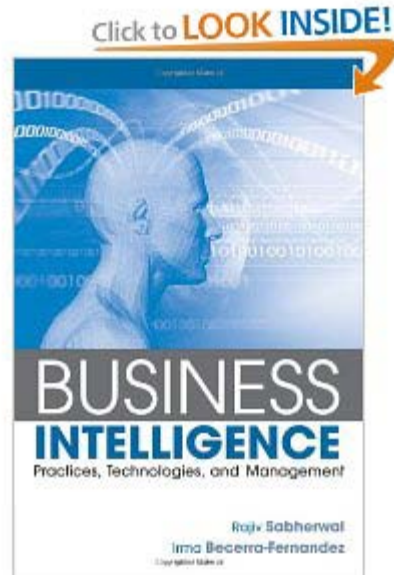


We have:

- *Discussed some of the basics of BI*
- *Explained what BI is and how it differs from other information technologies*
- *Discussed the factors driving the importance of BI*
- *Examined some direct effects of BI and looked at its impacts on organizational performance*



# References:



Sabherwal, R. and Becerra-Fernandez, I. *Business Intelligence: Practices, Technologies, & Management* (2010). Publisher: Wiley, Hoboken, NY, USA. ISBN-13: 978-0470461709.