

Analytics

What it Means to the Organization

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About the Speaker

- Experienced BI practitioner, educator, consultant and manager
- BAsC and MASc degrees in engineering
- CBIP certification at the mastery level
- TDWI Faculty Member
- eLearningCurve Instructor

- Systems experience includes:
 - ❖ Real-time monitoring
 - ❖ Transaction control
 - ❖ DW and BI
 - ❖ Modeling and analytics
- Business experience includes:
 - ❖ Strategy
 - ❖ Program management
 - ❖ Operations
 - ❖ Process improvement
- DW and BI educator since 1995
 - ❖ Course authoring and co-authoring
 - ❖ Course and workshop delivery on a global basis

- Regular speaker at BI industry conferences



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Partner, InQvis

Purpose and Objectives

Questions for Today

- + How do BI and Analytics become related to the organization's vision and objectives?
- + What exactly is Analytics?
- + Do the terms "BI" and "Analytics" mean the same thing?
- + Can "Reporting" and "Analytics" be used interchangeably?
- + How do Business Measurement and Continuous Improvement fit it?
- + How do you create alignment across these different initiatives?

Introductory Ideas and Concepts

Business Intelligence – Early Days

Evolving perspectives about Business Intelligence

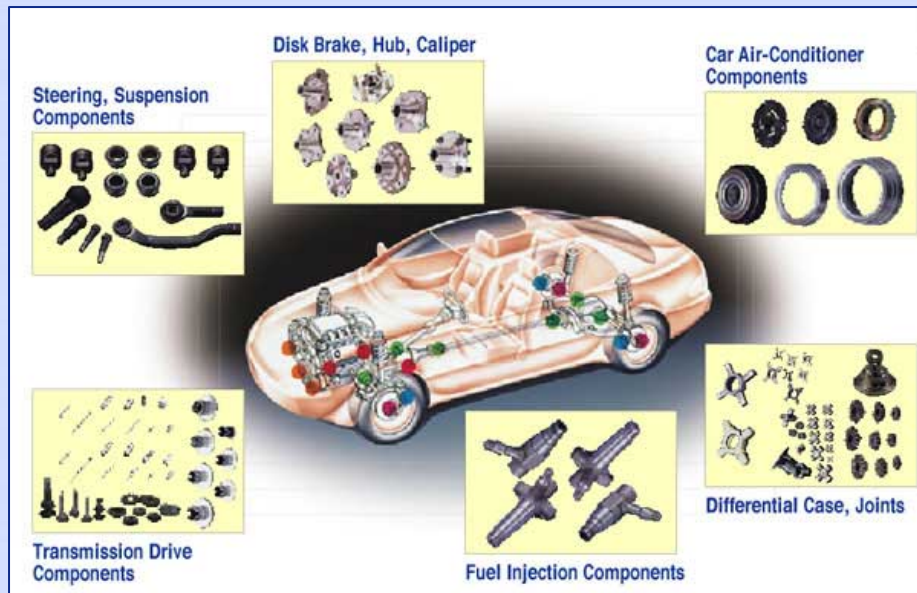


From the early 1990's to the mid 2000's
Howard Dresner, Wayne Eckerson, David Loshin, Larissa Moss and others
provided a common theme centered around data and process

Business Intelligence is...

“The process, technology and approach for transforming data
into information to drive improved business decisions.”

A System



Components

- Individual and distinct

System

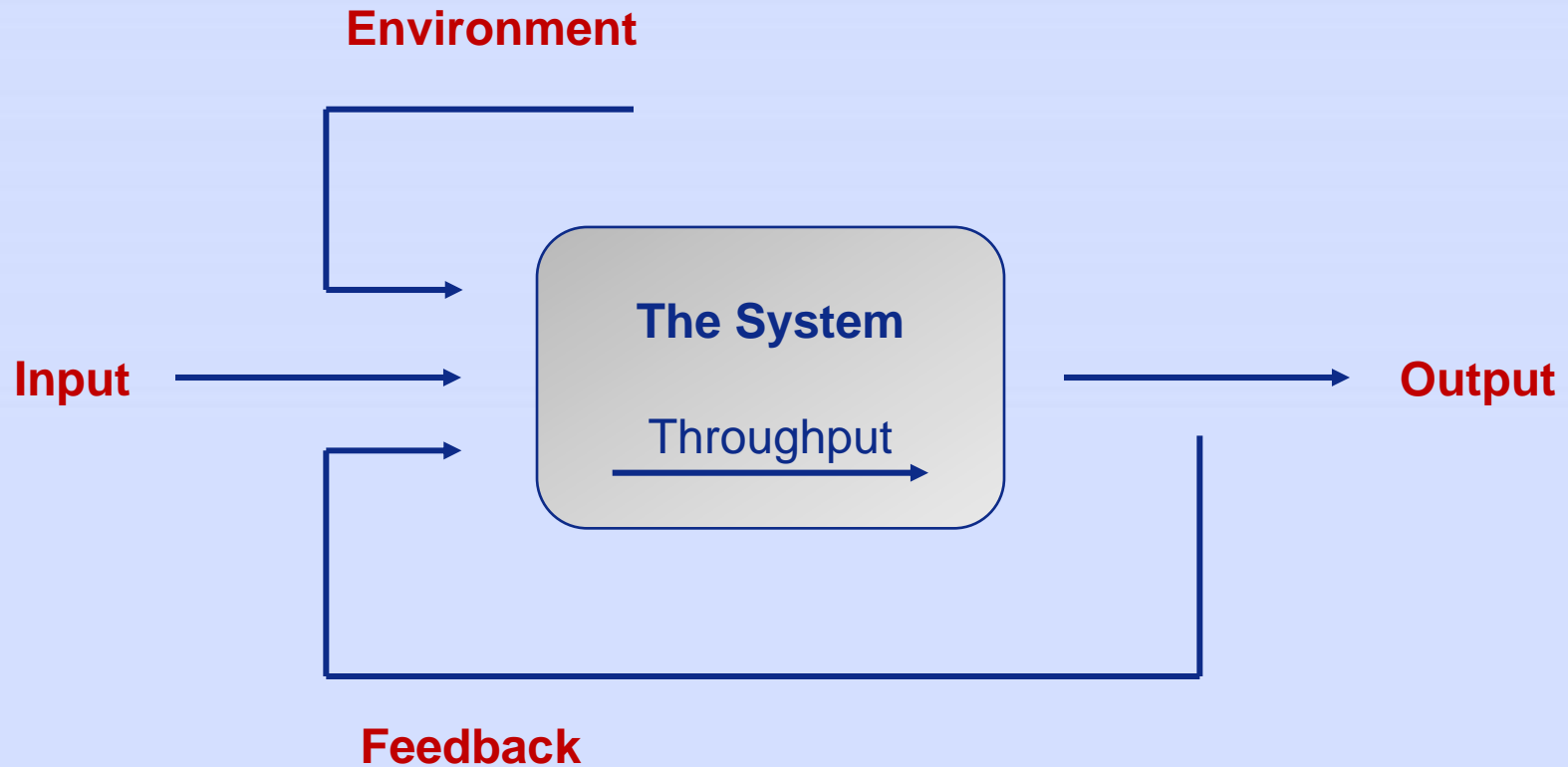
- Assembly of parts for a purpose

External environment

- Roads
- Weather
- Other vehicles
- Signals, signs and controls



General Structure of a System

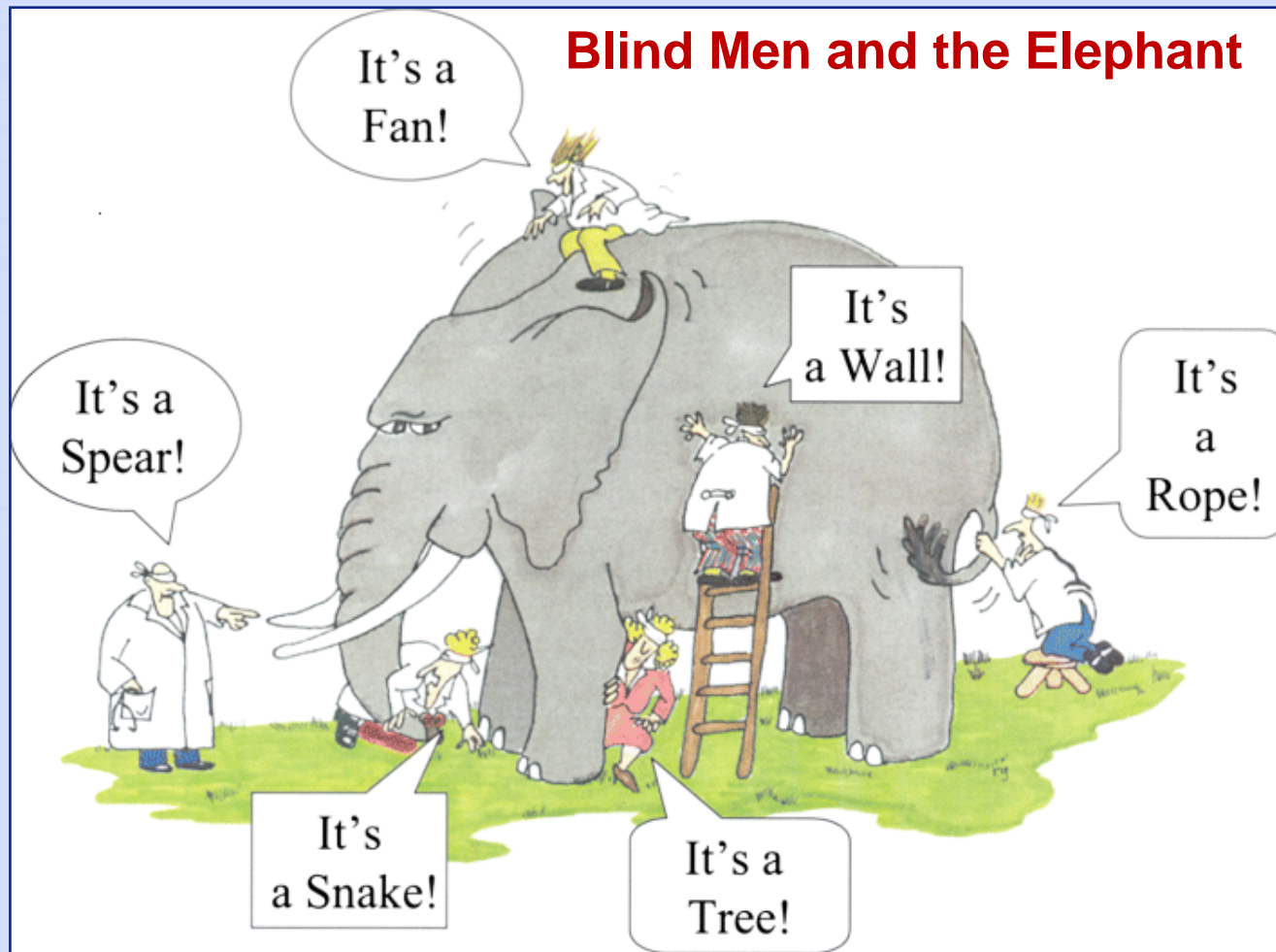


Systems Thinking

Systems Thinking is ...

Based on the belief that the behavior of a system can best be understood in the context of how its component parts relate together and interact with each other.

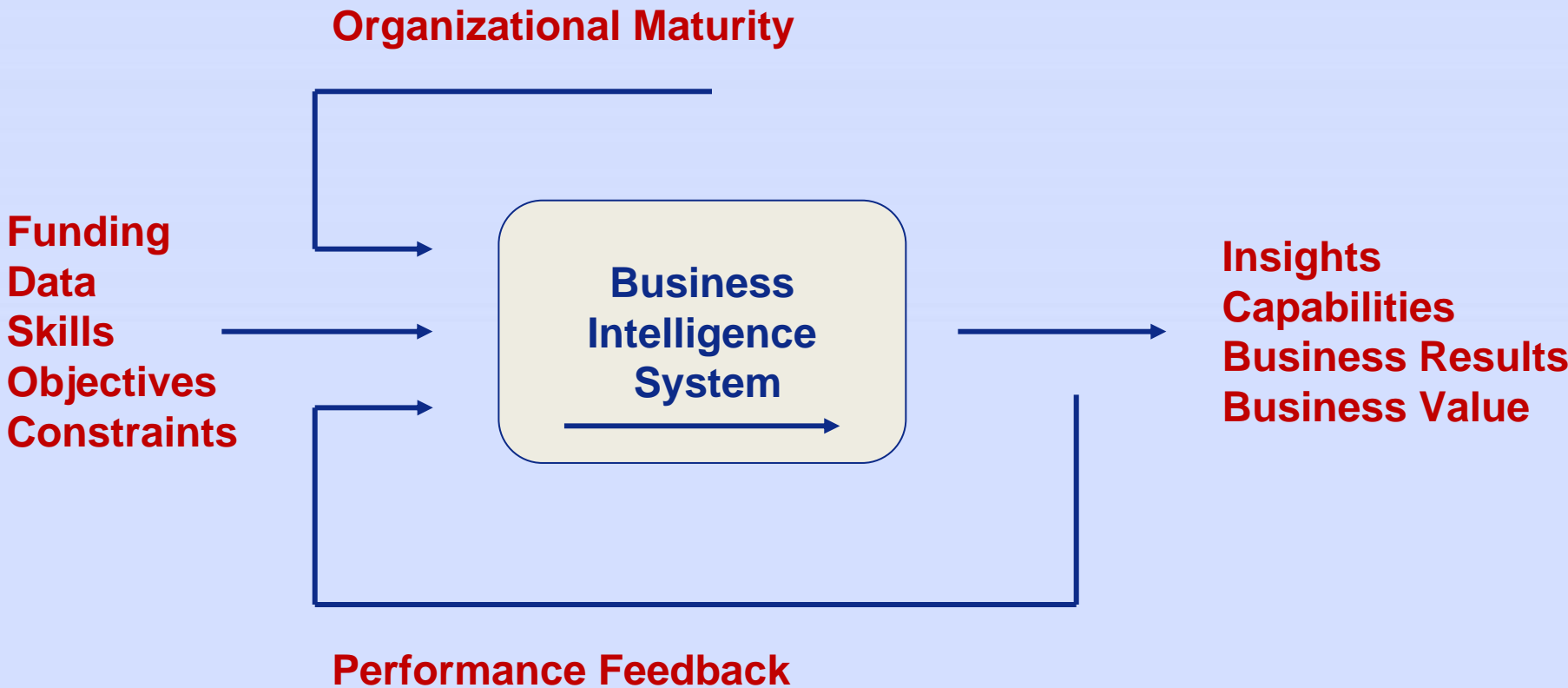
Example of Systems Thinking



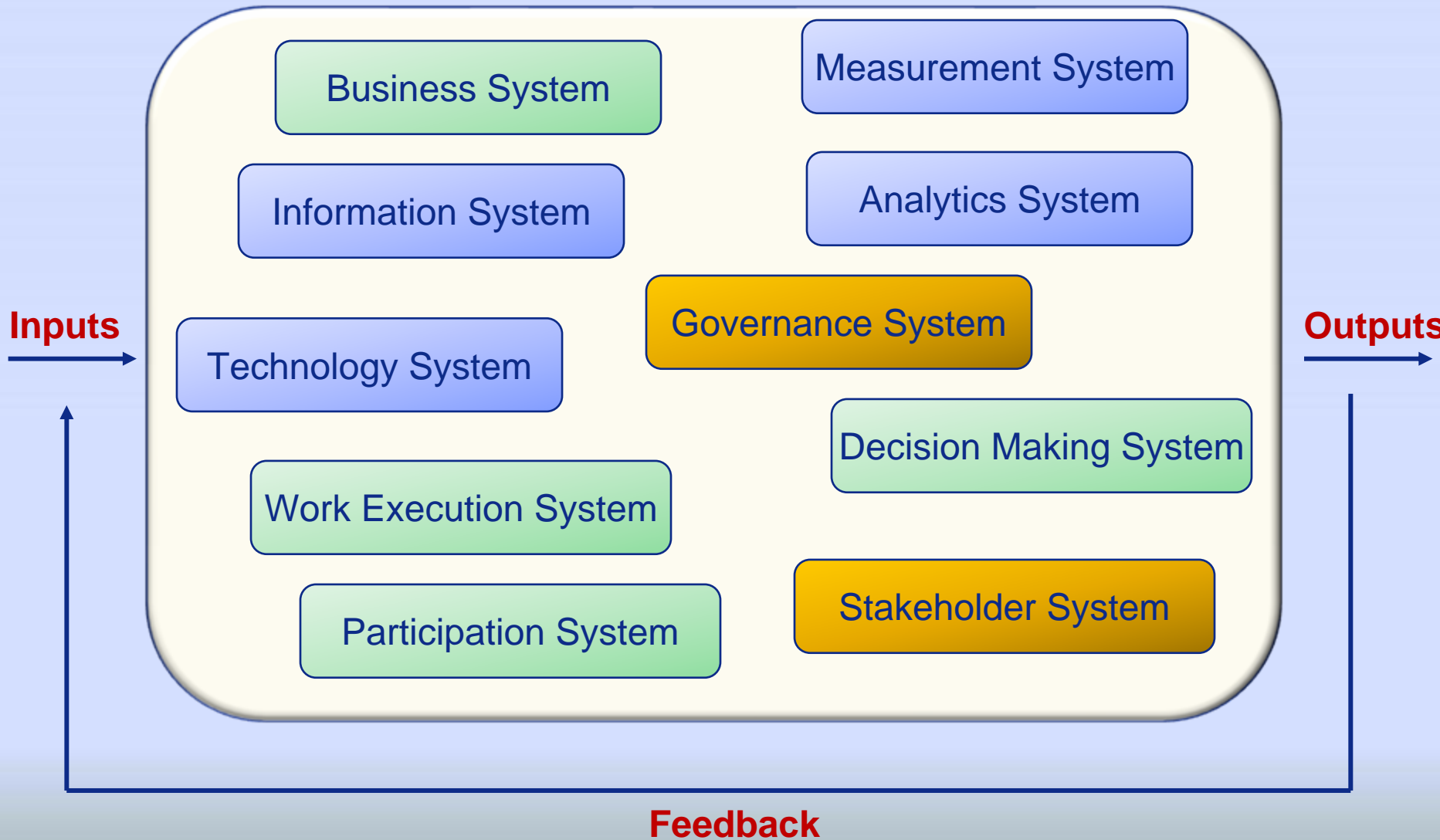
System is a synthesis of parts working together.

The Business Intelligence “System”

Systems View of Business Intelligence

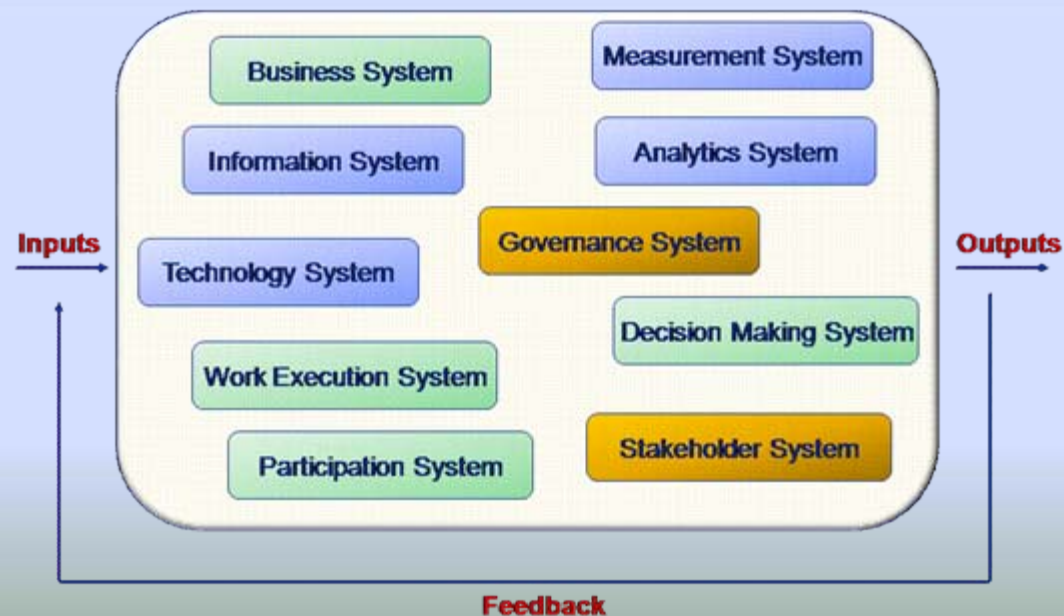


BI System Components



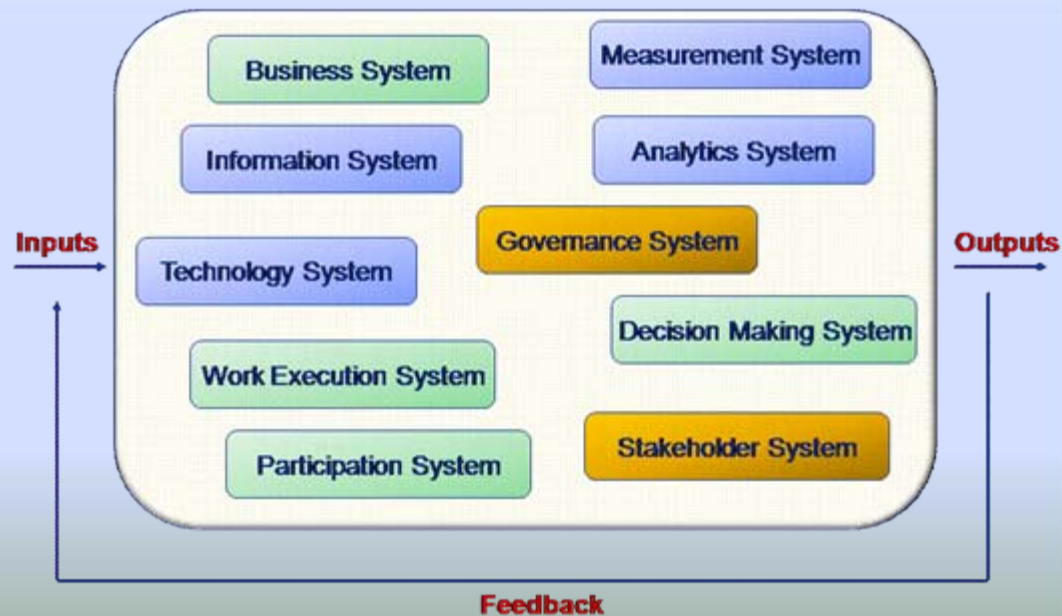
Value Creating Systems

- **Business System** generates desired levels of value for the organization's stakeholders on a sustainable basis
- **Decision Making System** provides consistent, reliable, timely and actionable decisions and recommendations
- **Work Execution System** manages and executes all required work activities necessary to attain the tactical goals and strategic objectives of the business system
- **Participation System** develops and provides the labor, knowledge, experience and skills to the other value generating systems



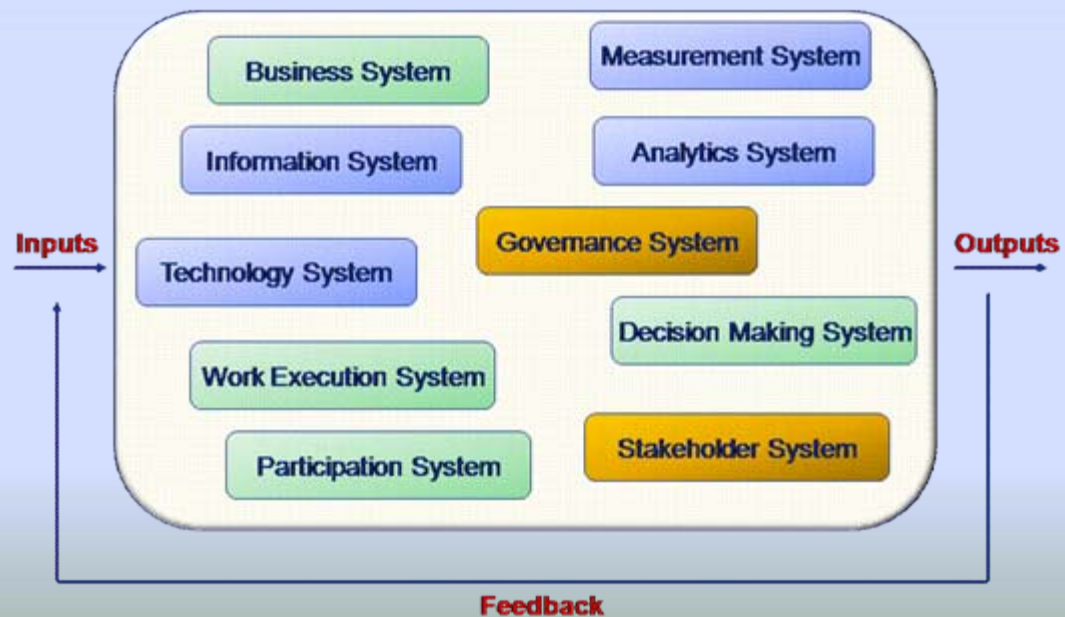
Monitoring and Learning Systems

- **Information System** generates and delivers basic information that is useful and relevant to the needs of the participants and stakeholders
- **Measurement System** quantifies the positions of key variables that impact business and organizational performance
- **Analytics System** delivers insights that can be applied to improve the organization's business results
- **Technology System** provides the physical capability to maintain and deliver the information and analytic capabilities to meet the needs of work processes and decision makers



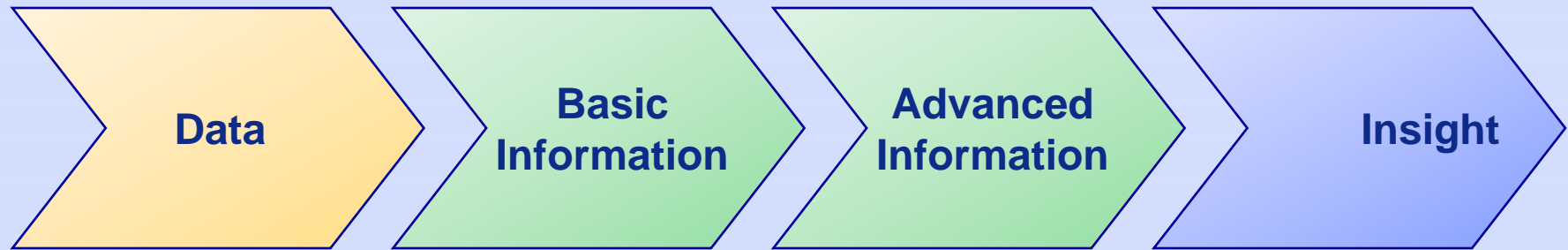
Leadership and Control Systems

- **Stakeholder System** clearly defines who the stakeholders of the BI System are and characterizes their expectations, motivations and success criteria
- **Governance System** provides vision, policies, direction, decisions and enforcement across the full scope of the BI System to ensure the Stakeholder System produces an acceptable satisfaction level and ongoing investment and sponsorship support



Information and its Building Blocks

Information Building Blocks



- Facts
- Qualifiers
- Observations
- Descriptors
- Labels

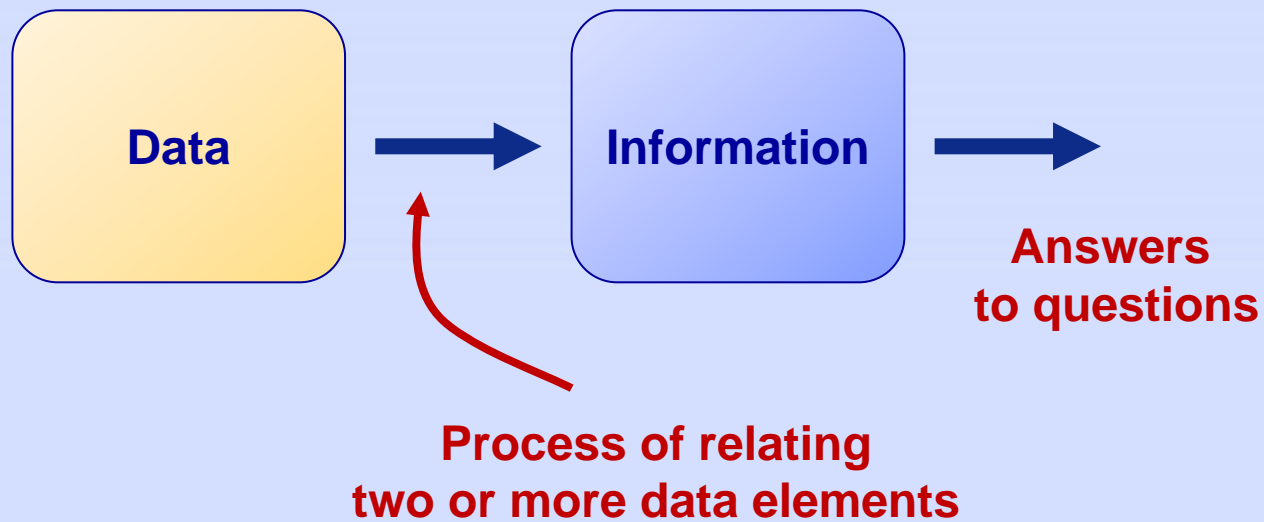
Useful combinations of related data to create context and meaning

Basic information answers...
“What, When, Where and Who”

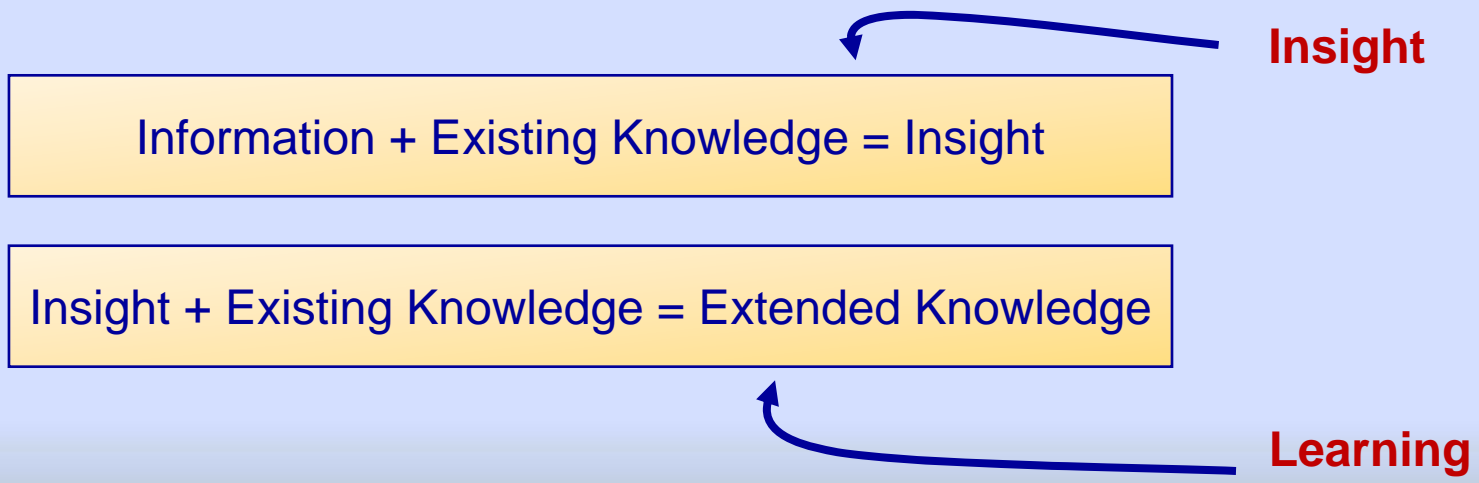
Advanced Information answers...
“Why, How to and What if”

Extend or modify the current knowledge by adding and applying new information

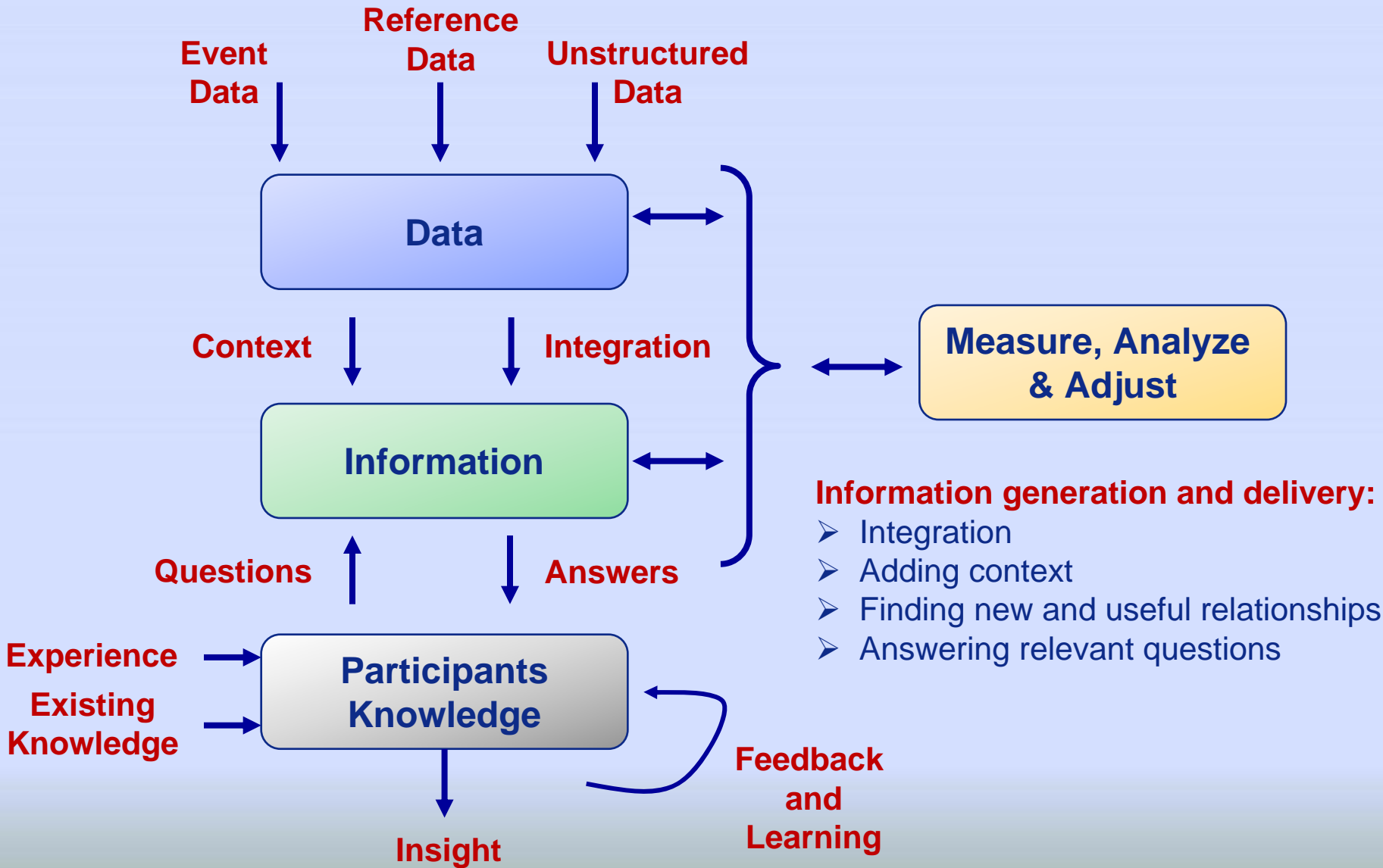
Generating Information



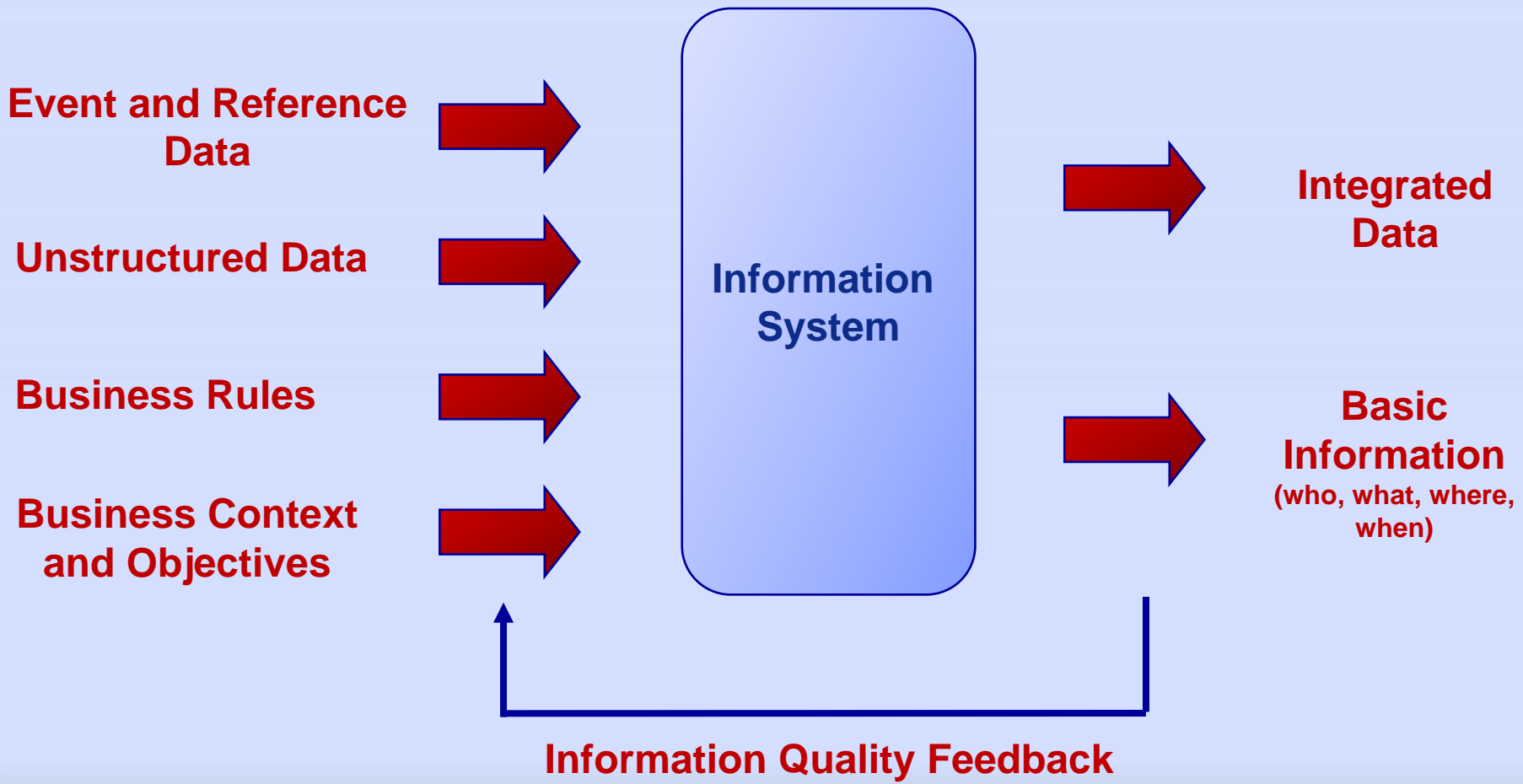
Generating Insights from Information



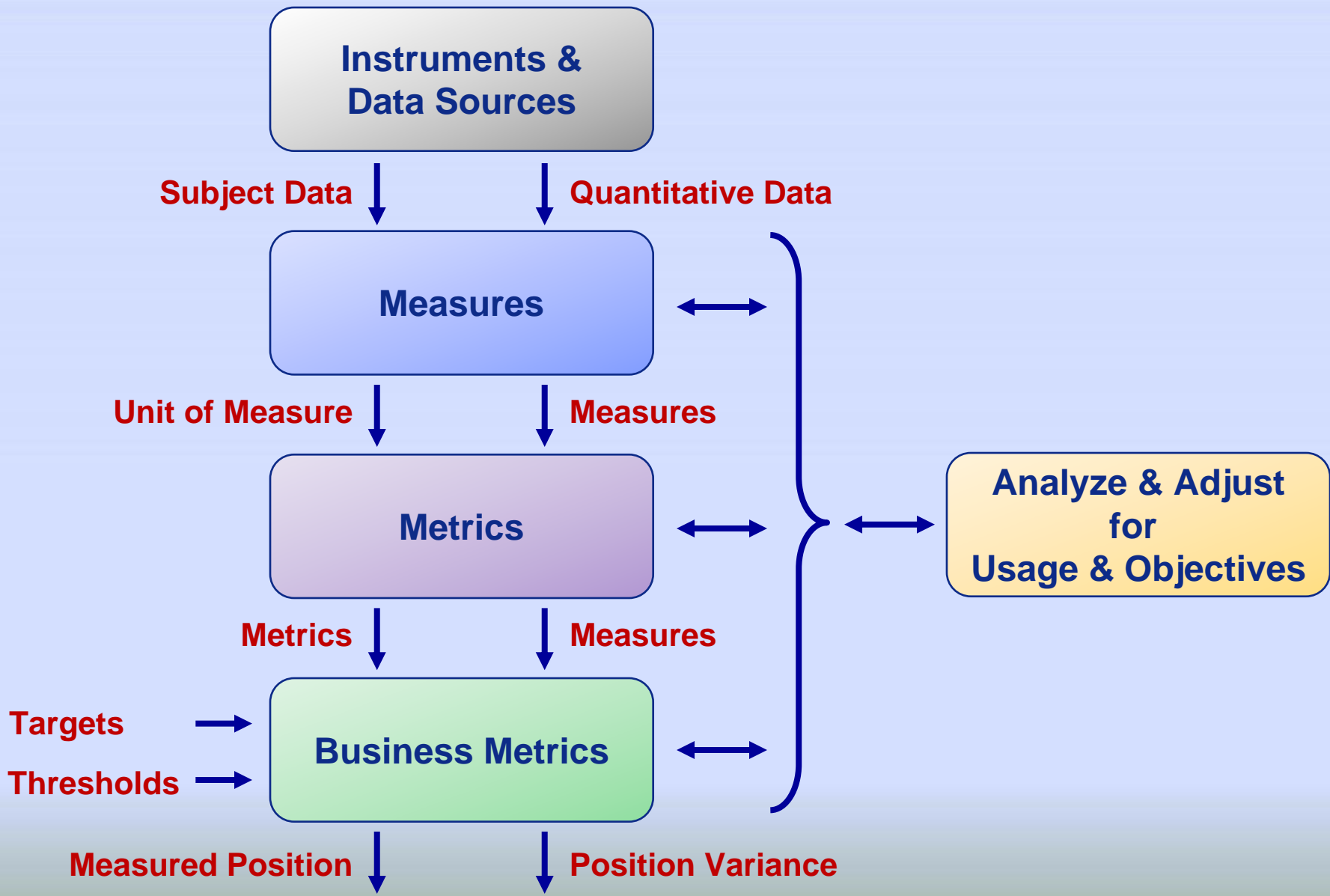
Components of the Information System



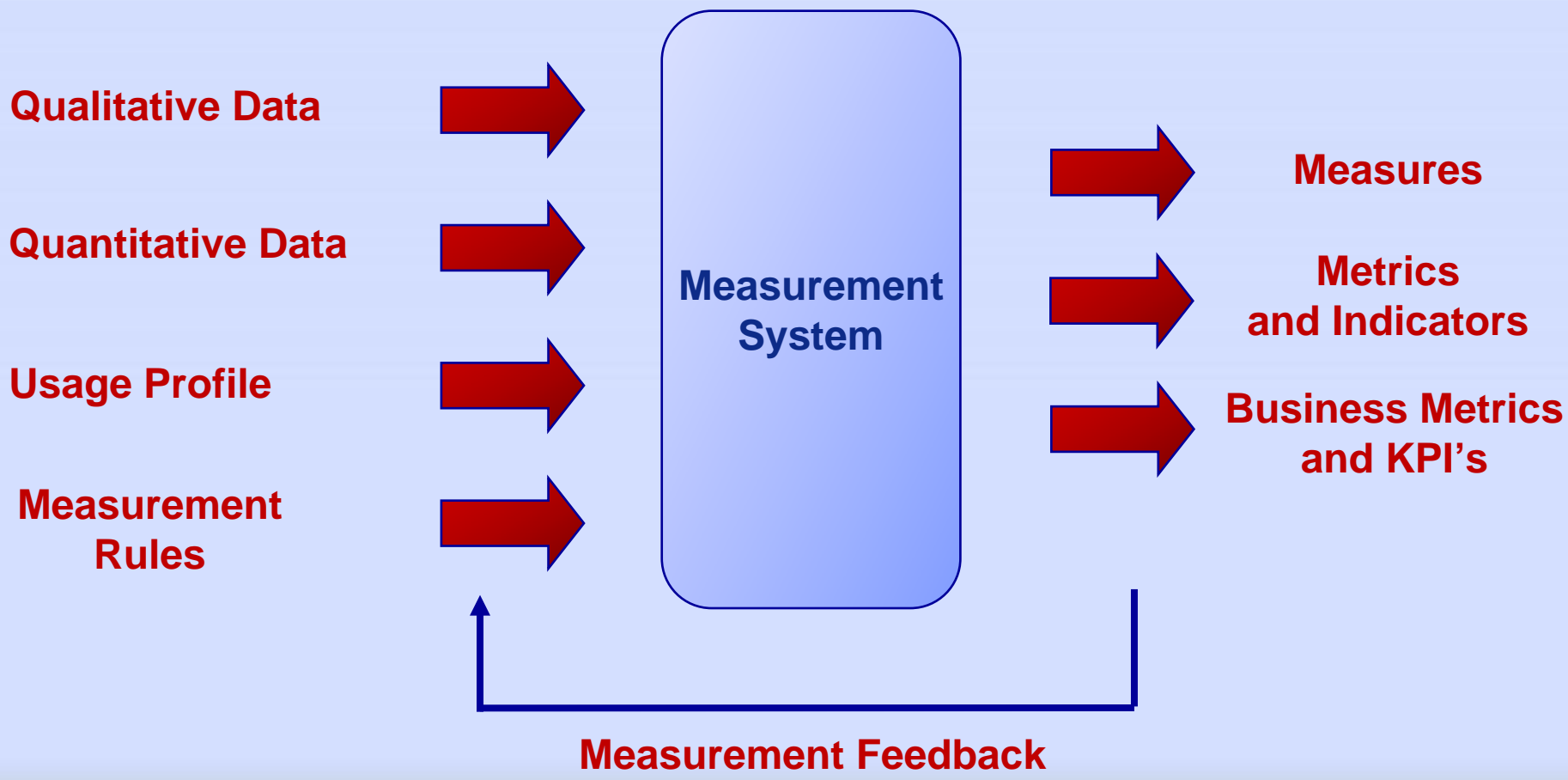
Inputs and Outputs of the Information System



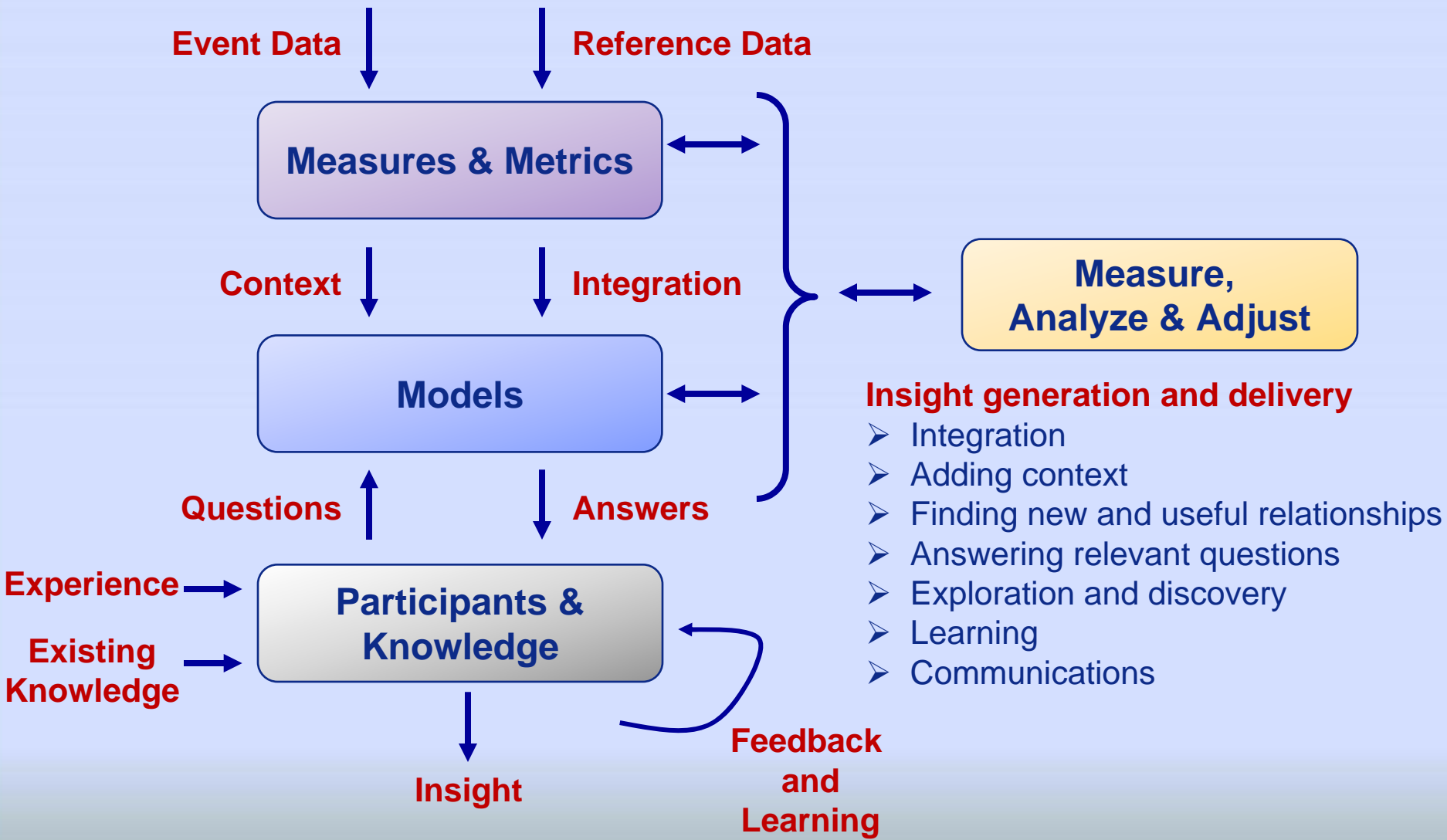
Components of the Measurement System



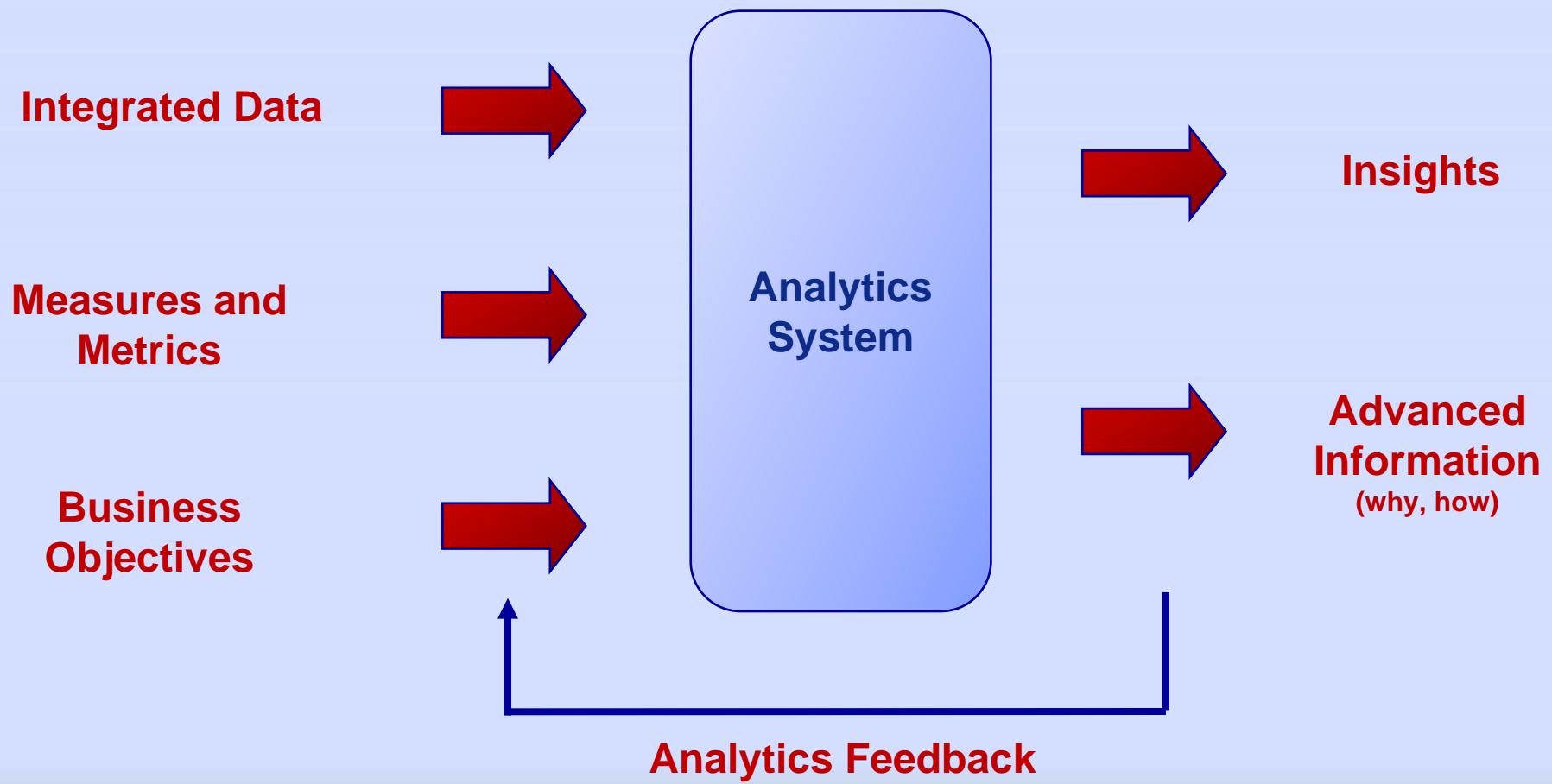
Inputs and Outputs of the Measurement System



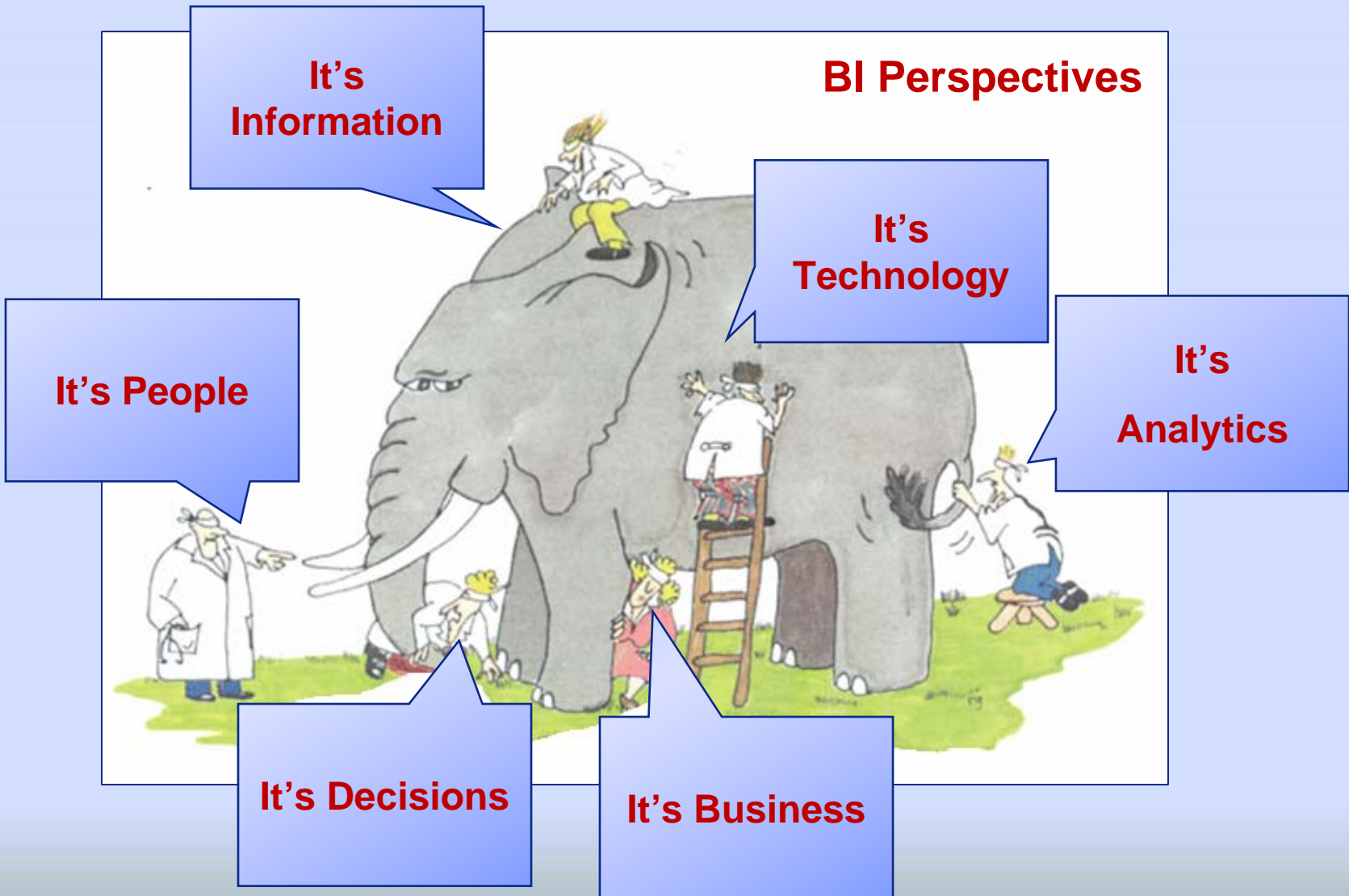
Components of the Analytics System



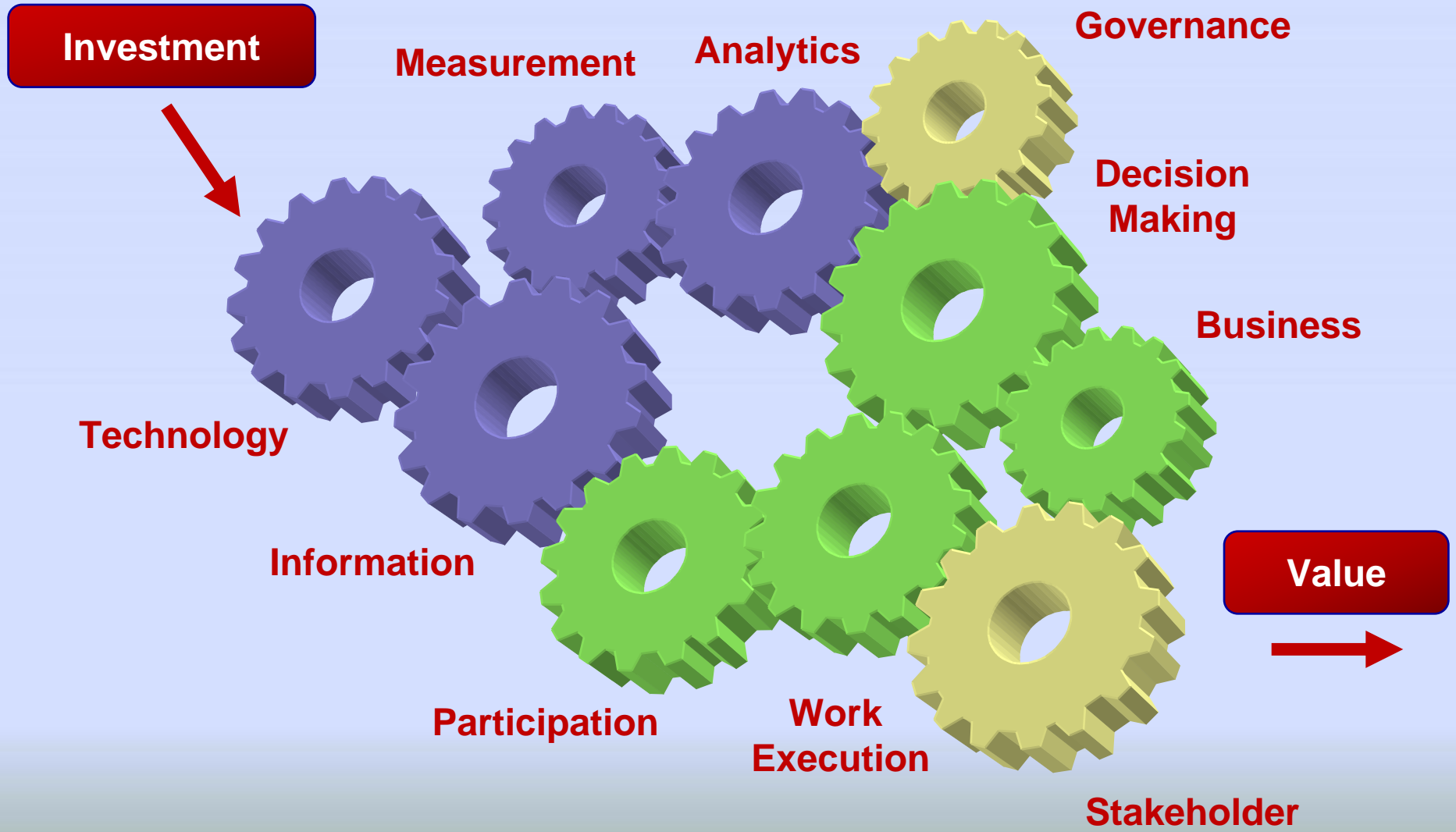
Inputs and Outputs of the Analytics System



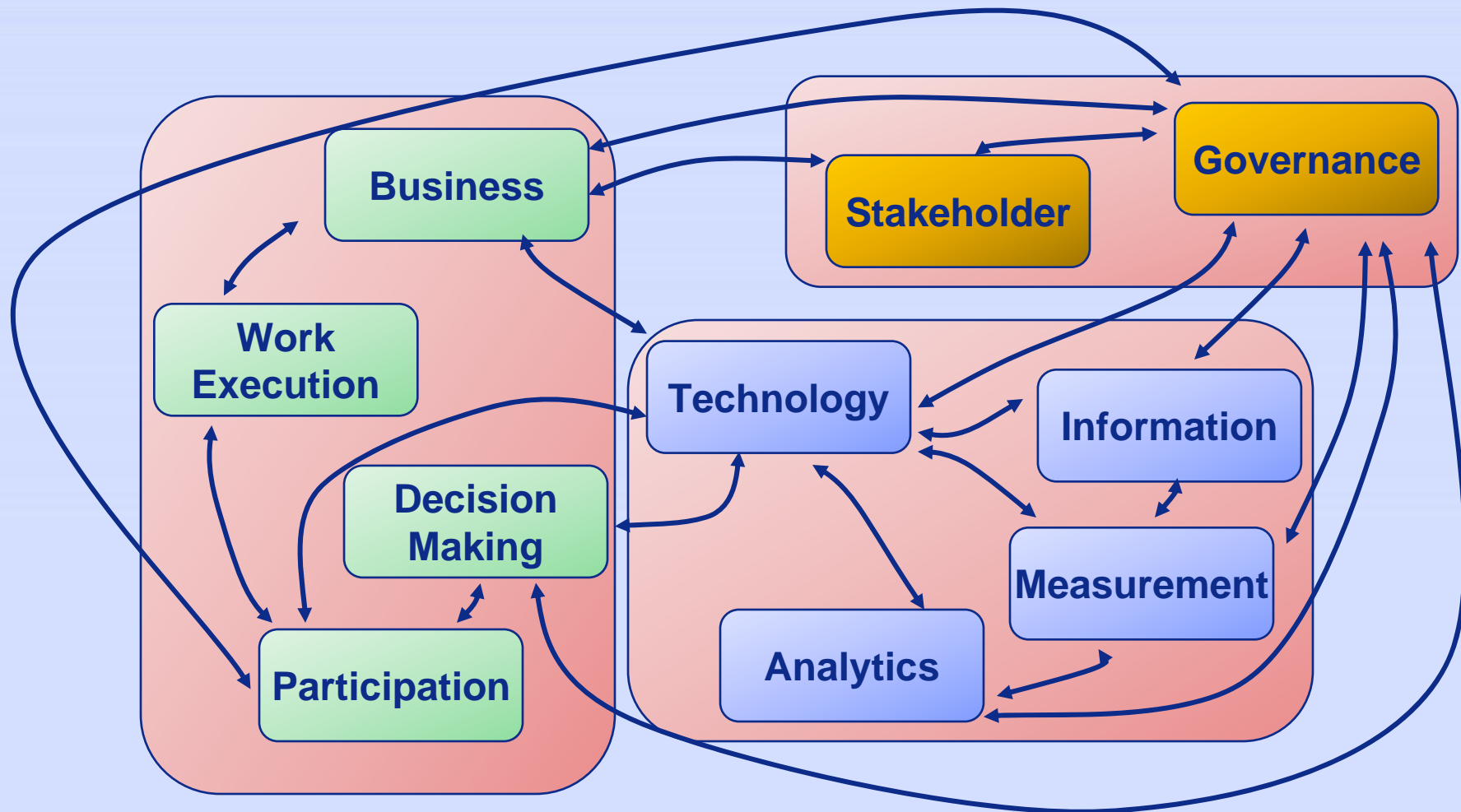
Example of the BI Elephant



Components and Alignment



The Business Intelligence System



- Different “things” can flow between BI sub systems: information, funds control commands, energy, feedback, etc
- Governance System has overall influence over other systems
- Challenge for Governance is to fit horizontally into vertical organizations

Purpose and Objectives

Summary for Today

- + How do BI and Analytics become related to the organization's vision and objectives? – **Applying Holistic or Systems Thinking**
- + What exactly is Analytics? – **The Pursuit of Insights and Generation of Advanced Information**
- + Do the terms “BI” and “Analytics” mean the same thing? - **No**
- + Can “Reporting” and “Analytics” be used interchangeably? - **No**
- + How do Business Measurement and Continuous Improvement fit it? – **Form Part of the BI Systems**
- + How do you create alignment across these different initiatives? – **Manage Holistically and Horizontally**

Thank You



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