

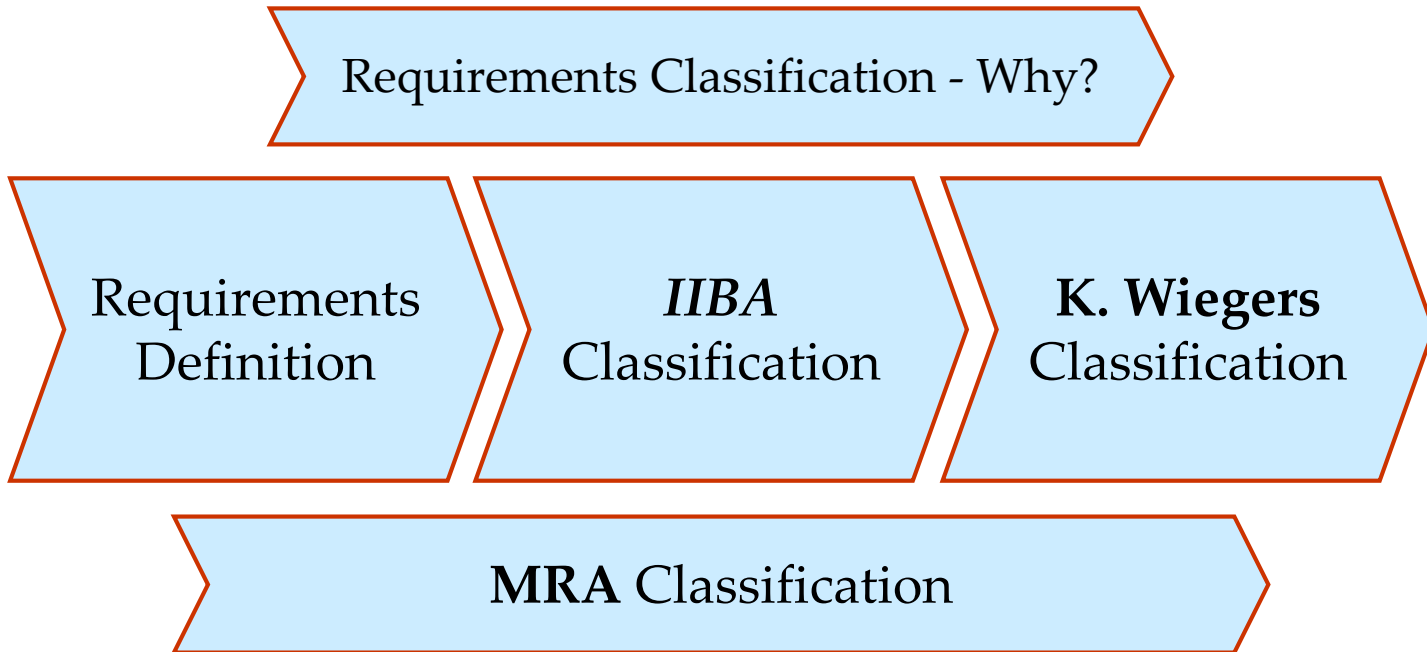
# Business Analysis

Michel Raimondo

Webinar - Nov 10, 2022

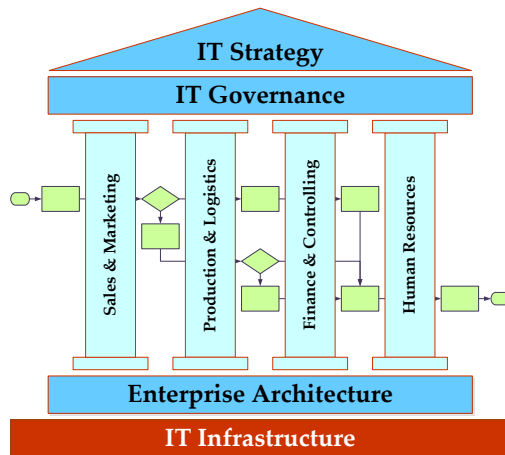
## Requirements Classification

## The Proposed Agenda



# Michel Raimondo - Managing Partner

## Senior IT Management Consultant



### Education :

- Industrial Engineer EE<sup>o</sup>
- CIO Leadership
- IT Strategic Planning
- Petroleum Foundations
- Healthcare Information Systems
- PMBOK - Project Management
- BABOK - Business Analysis
- Business Process Reengineering
- Change Management
- Activity Based Costing
- Supply Chain Management

### IT Governance and Management Consulting

- Digital Business Strategies
- Data Governance
- Program/Project Management
- BPR / Requirements Engineering
- Seminars, Workshops
- CIO Coaching

### University - Visiting Professor

- CIO - IS Management
- COBIT - IT Governance
- Project Management
- PMO 3.0
- Requirements Engineering
- Business Intelligence/Analytics

### Certifications :

- ISACA-CGEIT (2013)
- CBAP (2008 - 2014)
- CPHIMS-CA (2011 - 2014)
- ITIL v3 (2011)

### Industries:

- Petroleum Industries
- Utilities
- Engineering (Industrial risks, Power, Construction)
- Banking / Insurance
- Cement Industry
- Paper Industry
- Manufacturing Companies
- Logistics and Distribution
- Telecommunications
- Pharmaceutical Industry
- Public Transportation
- Airport Industry
- newspapers
- IT consulting companies

# Michel Raimondo - Managing Partner

## Senior IT Management Consultant

The International Institute of Business Analysis

certifies that

*Michel Raimondo*

meets the requirements established by the IIBA Certification Body for experience, education, knowledge and skill and is hereby recognized as a

**Certified Business Analysis Professional**

AS OF MAY 22, 2008



Handwritten signature of the President of the International Institute of Business Analysis.

President,  
International Institute of Business Analysis

Handwritten signature of Michel Raimondo.

Vice President,  
Certification

**IIBA™ CBAP™**

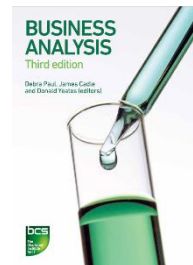
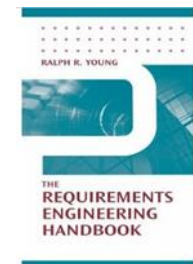
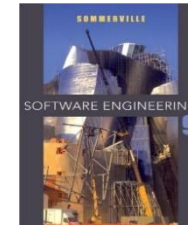
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**MATRICIEL**  
Inspire. Influence. Innovate.

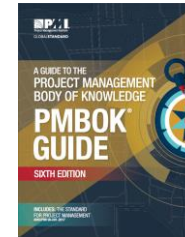
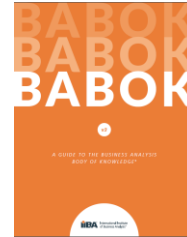
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- Software Requirements, 9th Edition 2011  
Addison-Wesley, by Ian Sommerville
- The Requirements Engineering Handbook, 2004  
Artech House, by Ralph Young
- The Business Analyst's Handbook, 2009  
Course Technology, by Howard Podeswa
- Business Analysis, 3rd Edition 2014  
BCS, The Chartered Institute for IT, by Debra Paul/James Cadle

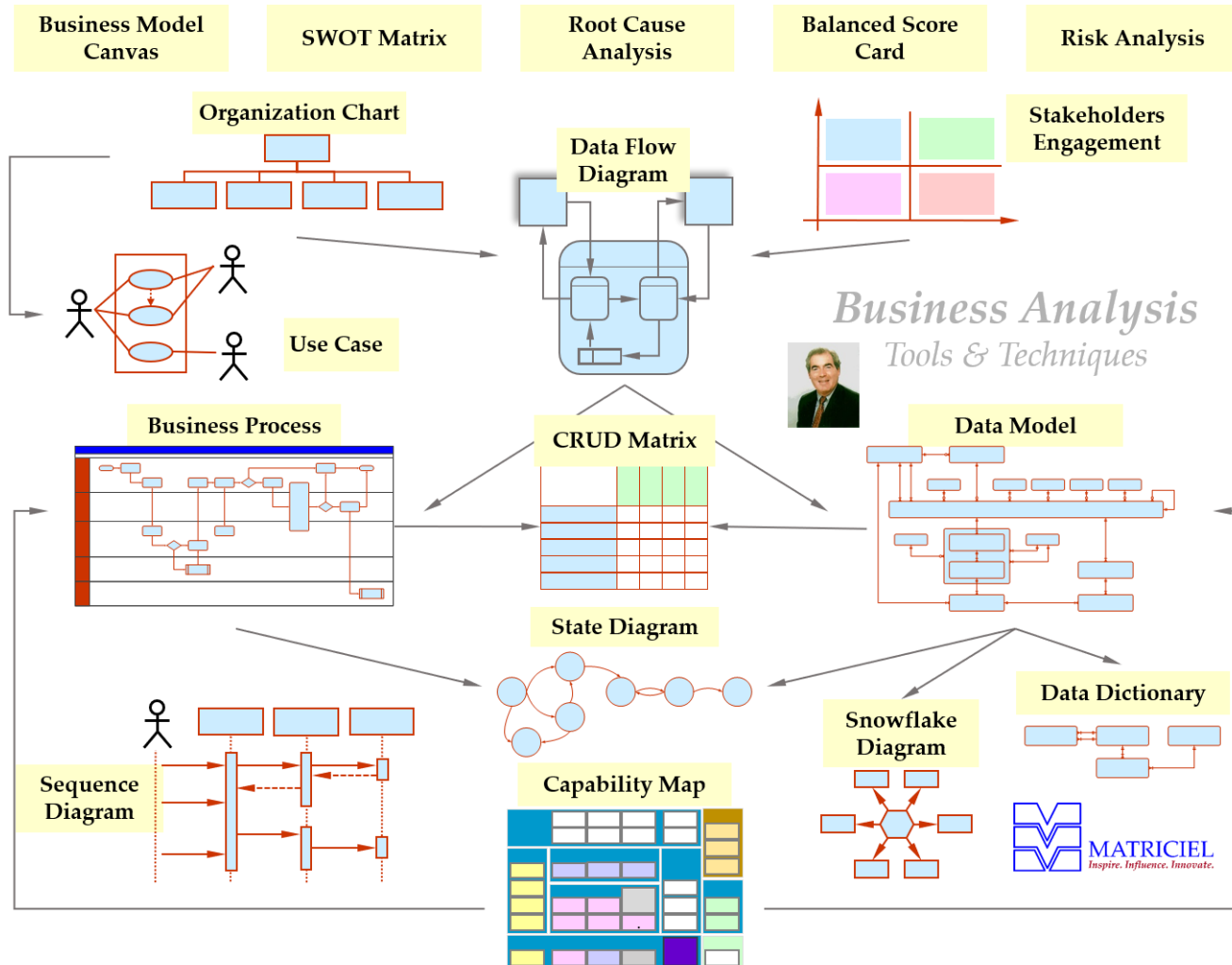


## Bibliography

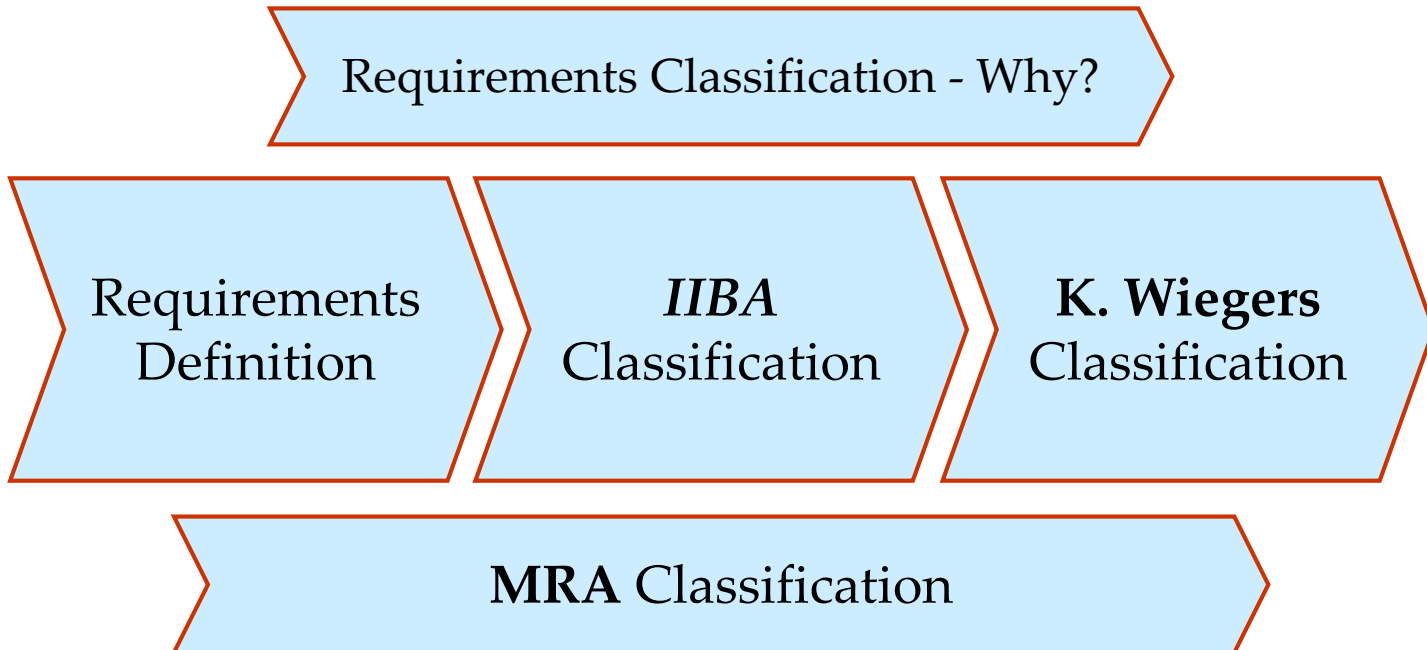
- *BABOK® Guide 3<sup>rd</sup> Edition*
- *PMBOK® Guide 6<sup>th</sup> Edition*
- *The PMI Guide to Business Analysis*
- *IREB Guides*
- ISO Norms : ISO 29148, ISO 9126, IEEE 830, etc.
- COBIT 5, ITIL v3 Foundations
- Personal documents



## BA Toolbox Map



## The Proposed Agenda

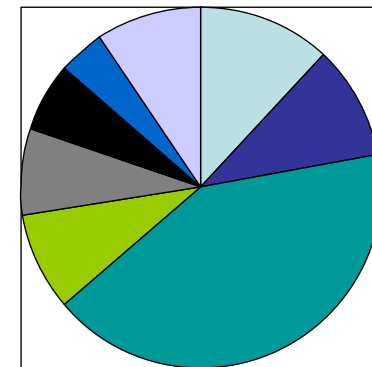




## Why Do Projects (Still) Fail?

- Incomplete Requirements 13.1%
- Lack of User Involvement 12.4%
- Lack of Resources 10.6%
- Unrealistic Expectations 9.9%
- Lack of Executive Support 9.3%
- Changing Requirements 8.7%
- Lack of Planning 8.1%
- Didn't Need It Any Longer 7.5%
- Lack of IT Management 6.2%
- Technology Illiteracy 4.3%
- Other 9.9%

Lack of good –  
Bad Requirements  
43.2%



## Why Do Projects (Still) Fail?

- Scope creep/requirements changes often come from a lack of proper analysis of originally stated requirements
- Do requirements volatility result more of evolving understanding of user needs, than of changes in them?
- Most of the time do they represent only a first look at the “problem domain”?
- Are business requirements always unclear at the beginning of a project?
- Do we manage requirements outside of projects?

## Where Do Requirements Come From?

This is the biggest misconception of BA's that requirements come from business. They usually don't.

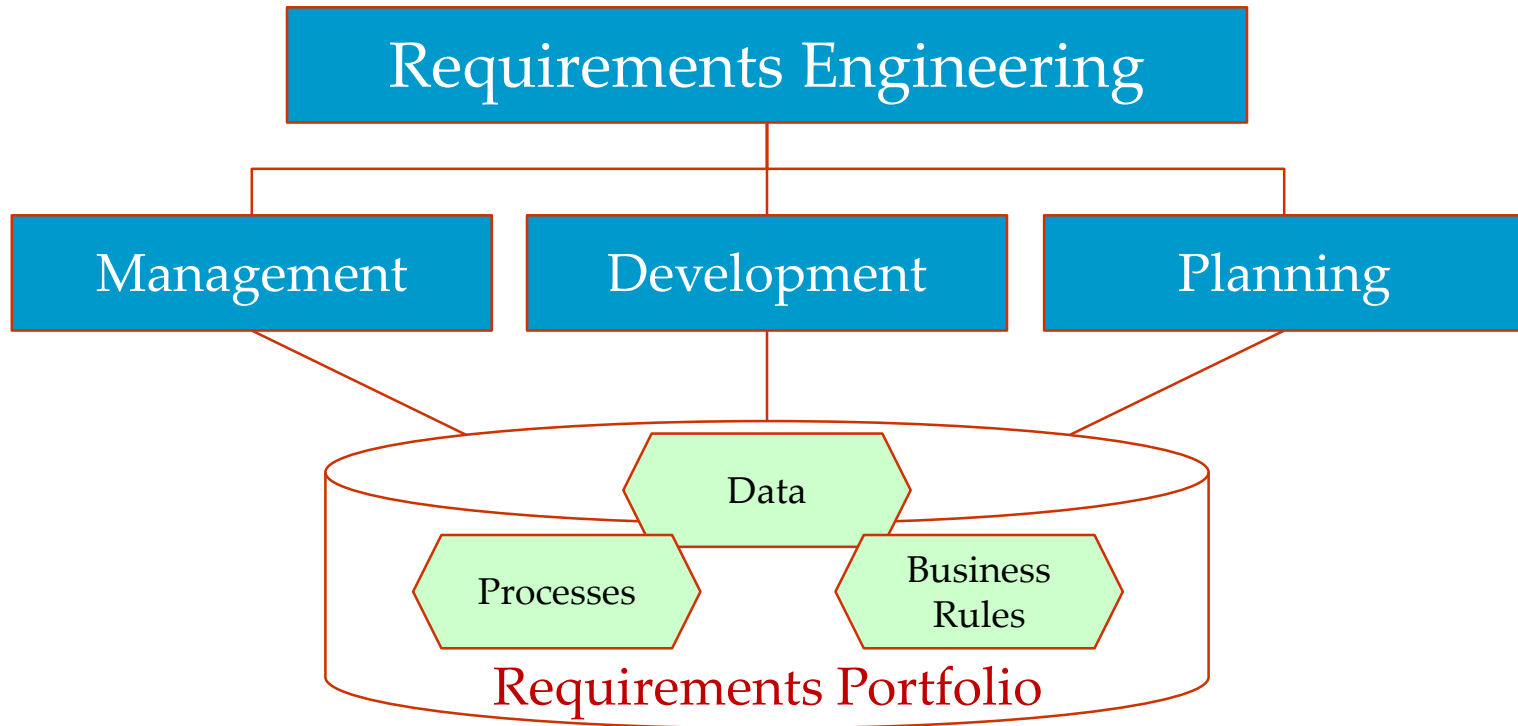
### Business stakeholders have:

- Needs
- Wants
- Problems
- Pain points

**They provide information**  
(and sometimes requirements)

**Requirements don't come from business  
they come from business analysis**

## Requirements Engineering



## Objectives of a Requirements Classification

Quality requirements mainly induces the acceptance and success of a system, and the related development projects

- Traceability
- Prioritization
- Consistency
- Common terminology between stakeholders
- Increase requirements development process efficiency
- Increase requirements quality, makes automated requirements classification more error-prone

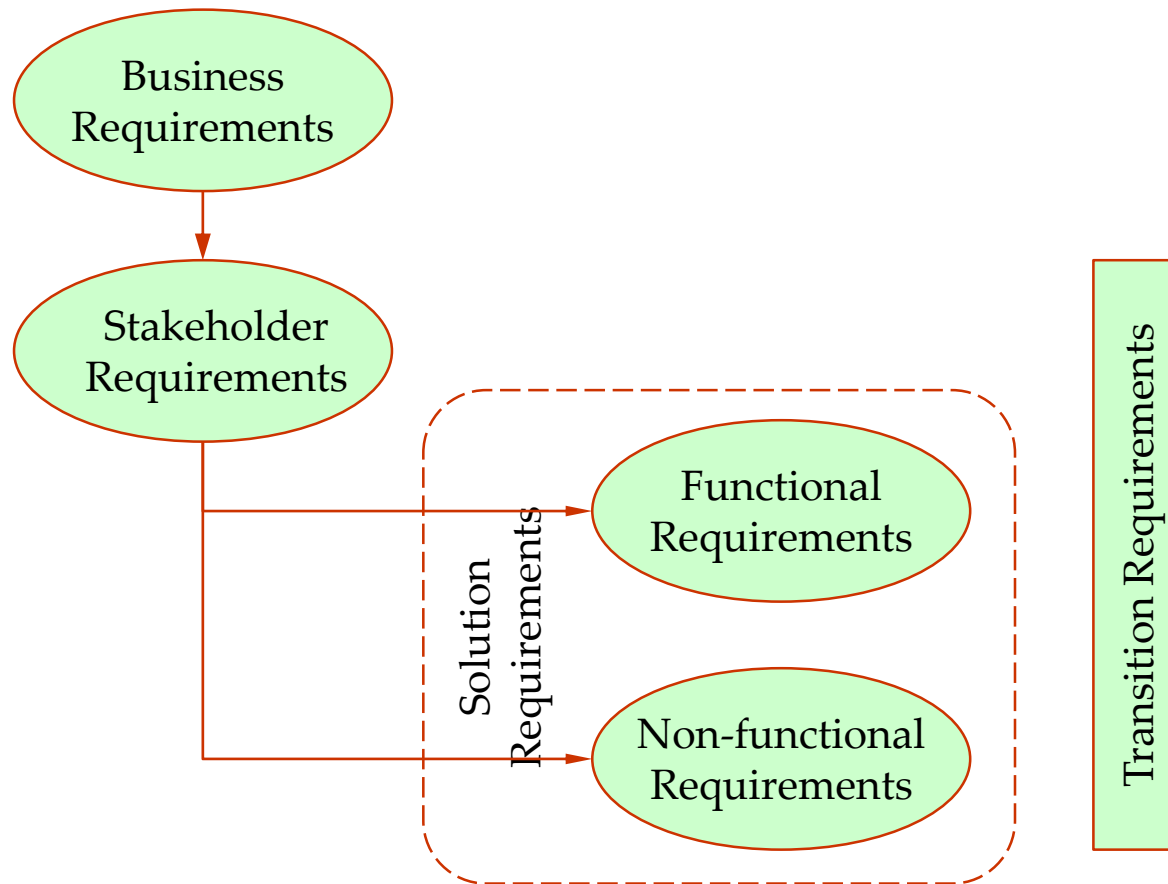
## Objectives of a Requirements Classification

- Capitalize on the capabilities of business analysts
- Improve outcomes by strengthening business analysis capabilities, practices, skills, and knowledge
- Increase the efficiency of project delivery using a standard toolbox and through a common language
- Strengthen relationships between project stakeholders
- Harness the energy and enthusiasm of the organization's business analyst community

## IEEE 610.12-1990 Definition

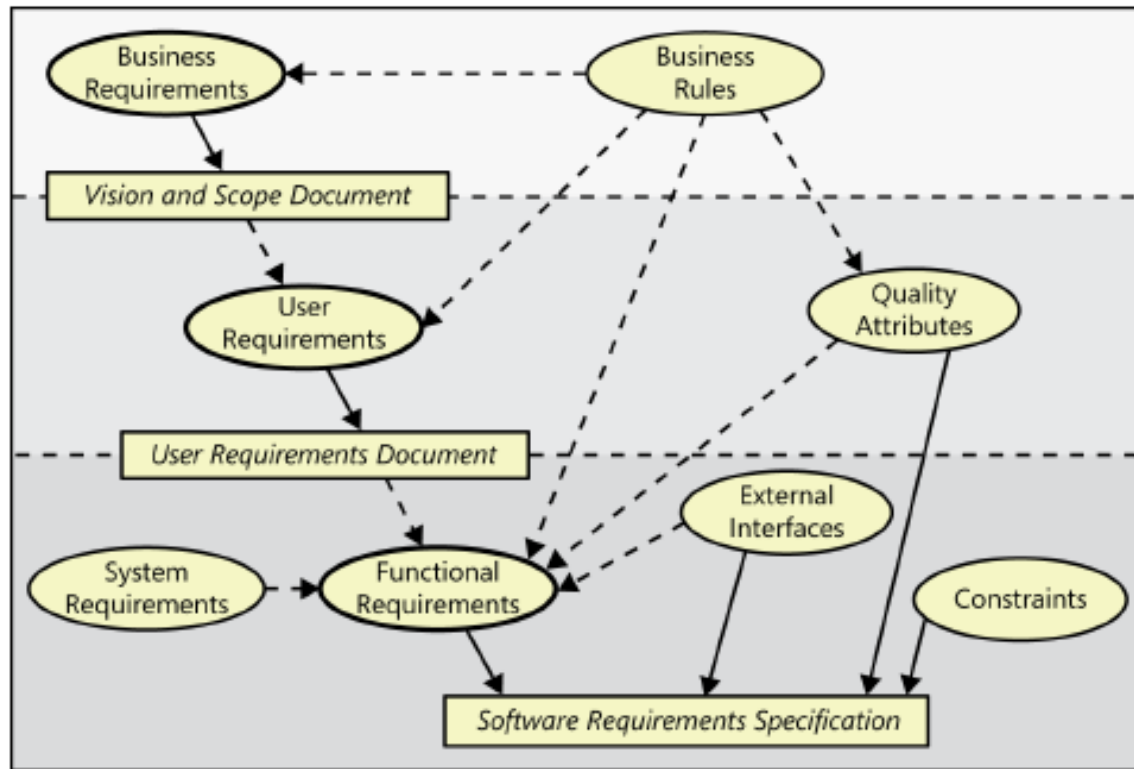
1. A condition or capability needed by a user to solve a problem or achieve an objective
2. A condition or capability that must be met or possessed by a system or system component to satisfy a contract, standard, specification, or other formally imposed document
3. A documented representation of a condition or capability as in (1) or (2)

## BABOK 3.0 (and BABOK 2.0)





## Classes - Levels - Results

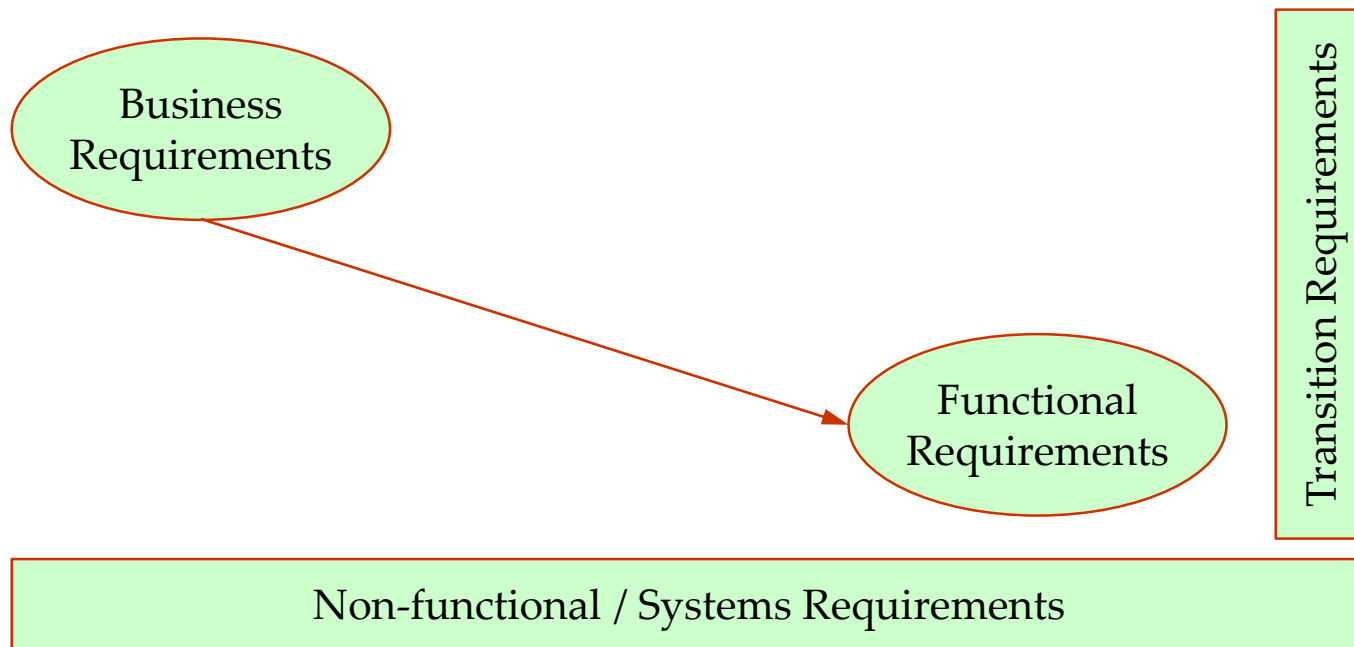


Solid arrows mean "are stored in".

Dotted arrows mean "are the origin of" or "influence."

## Aligning Strategic Goals and Requirements

*Even before aligning projects*



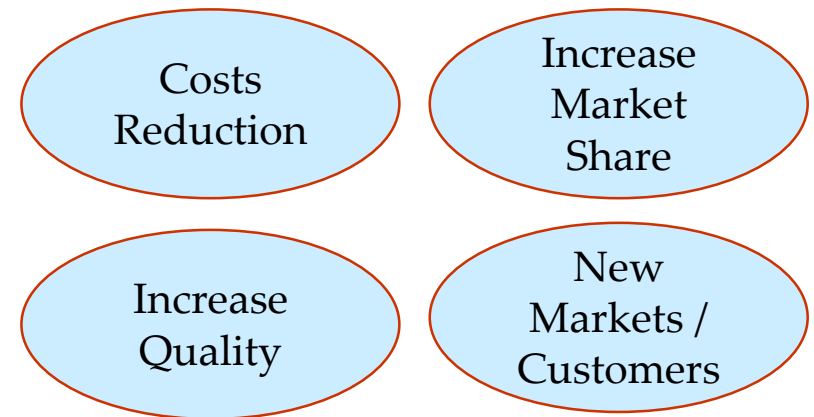
## Classes of Requirements

### Business Requirements

- Business Requirements describe *why* the organization is developing and/or implementing the solution
- Business Requirements are usually described in guiding documents such as:

- A Business Case
- The Project Charter

- Business requirements are the inputs to define the solution scope



## Classes of Requirements

### Functional Requirements

- Functional Requirements describe:
  - The needs of stakeholders that must be met in order to achieve the business requirements
  - The capabilities that a solution must have in terms of the behaviour and information that the solution will manage
  - The solution capabilities and qualities providing the appropriate level of detail to allow for the development and implementation of the solution
- Functional Requirements describe *what* must be implemented to enable users to accomplish their tasks, thereby satisfying the business requirements

## Classes of Requirements

### Non-functional/Systems Requirements

- Non-functional requirements or quality of service requirements: do not relate directly to the behaviour of functionality of the solution, but rather describe conditions under which a solution must remain effective or qualities that a solution must have

## Classes of Requirements

### The 'IEEE-Std 830 - 1993' lists 13 NFR to be included in a Software Requirements Document

- Performance requirements
- Interface requirements
- Operational requirements
- Resource requirements
- Verification requirements
- Acceptance requirements
- Documentation requirements
- Security requirements
- Portability requirements
- Quality requirements
- Reliability requirements
- Maintainability requirements
- Safety requirements

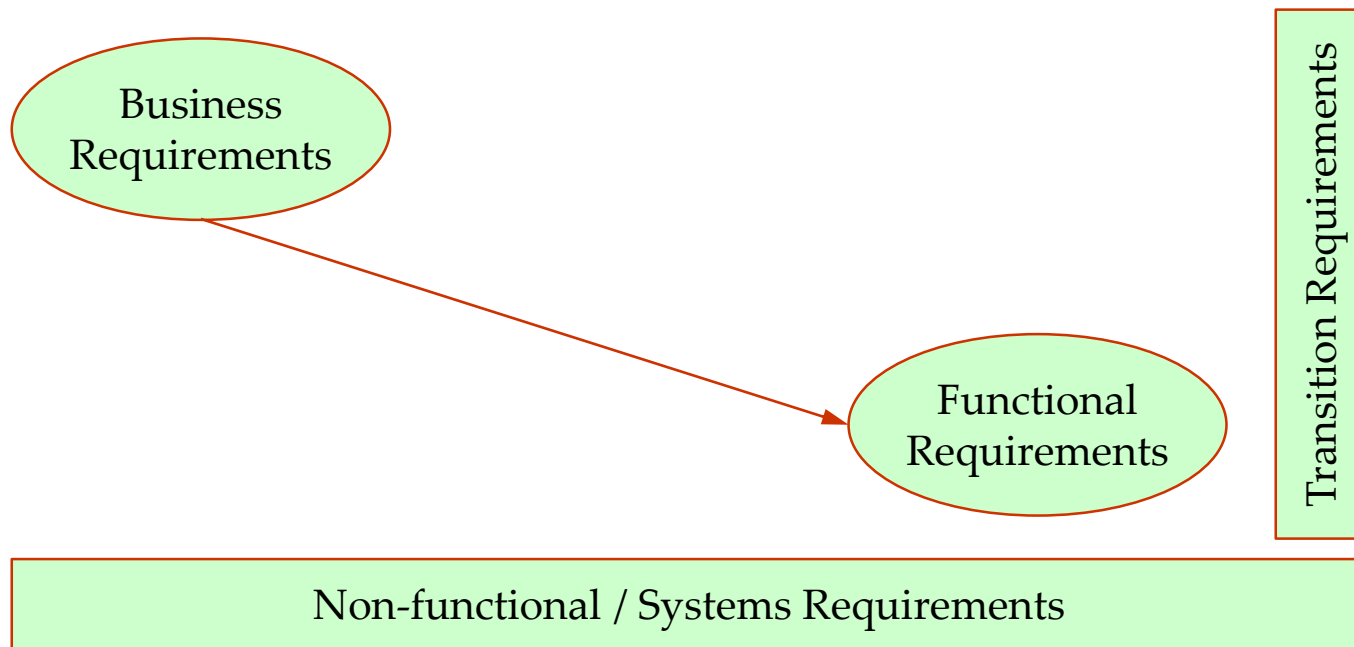
## Classes of Requirements

### Transition Requirements

- Transition requirements: describe the capabilities that the solution must have and the conditions the solution must meet to facilitate transition from the current state to the future state, but which are not needed once the change is complete
- They are differentiated from other requirements types because they are of a temporary nature
- Transition requirements address topics such as data conversion, training, and business continuity

## Aligning Strategic Goals and Requirements

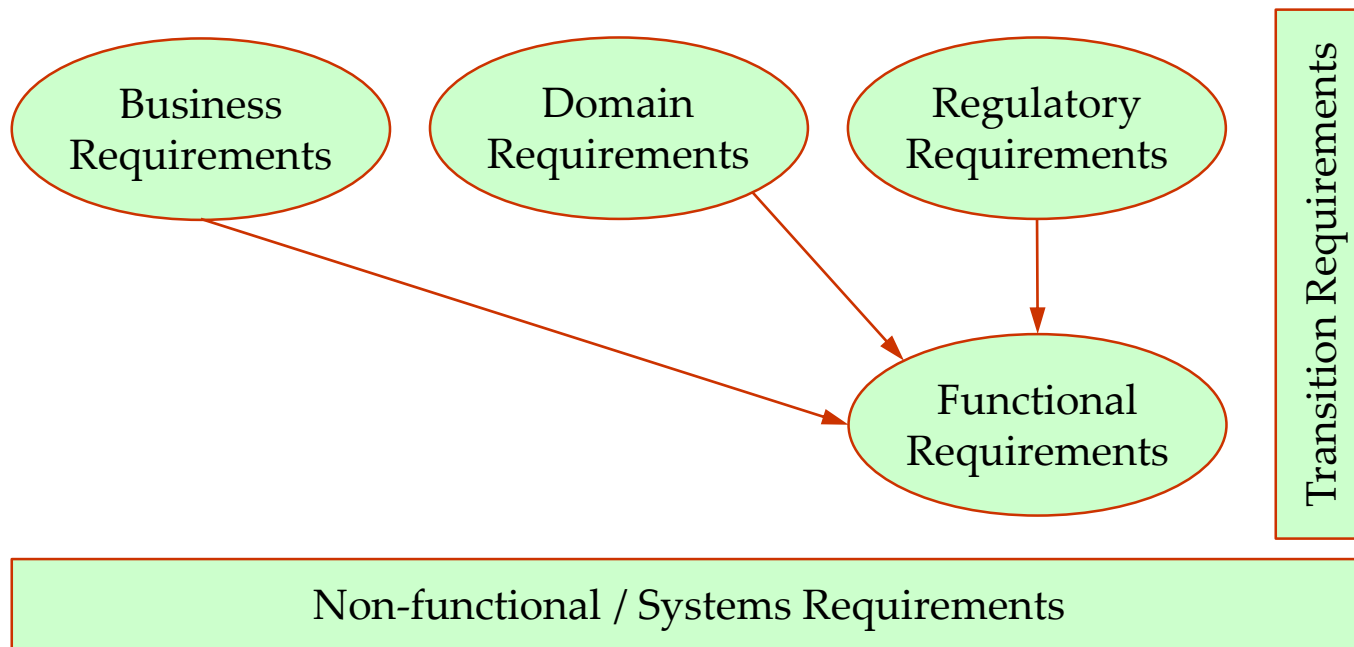
*Even before aligning projects*





## Aligning Strategic Goals and Requirements

*Even before aligning projects*



## Classes of Requirements

### Domain Requirements

By a domain, or, more precisely an application domain, we shall understand:

- A suitably delineated area of human activity
- A universe of discourse, something for which we have what we will call a domain-specific terminology
- Such that this domain has reasonably clear interfaces to other such domains

## Classes of Requirements

### Domain Requirements

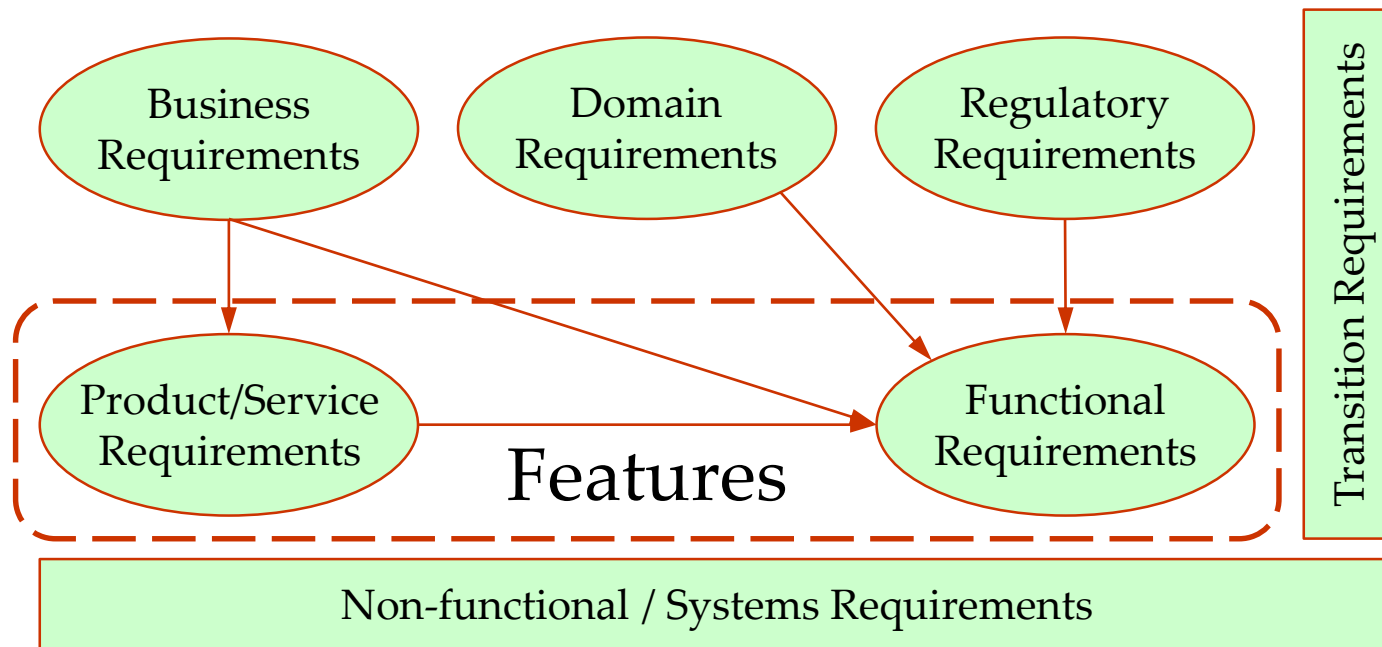
- Air traffic
- Banking
- Healthcare
- Retail
- Insurance
- Oil industry, Manufacturing industries
- Etc.

## Classes of Requirements

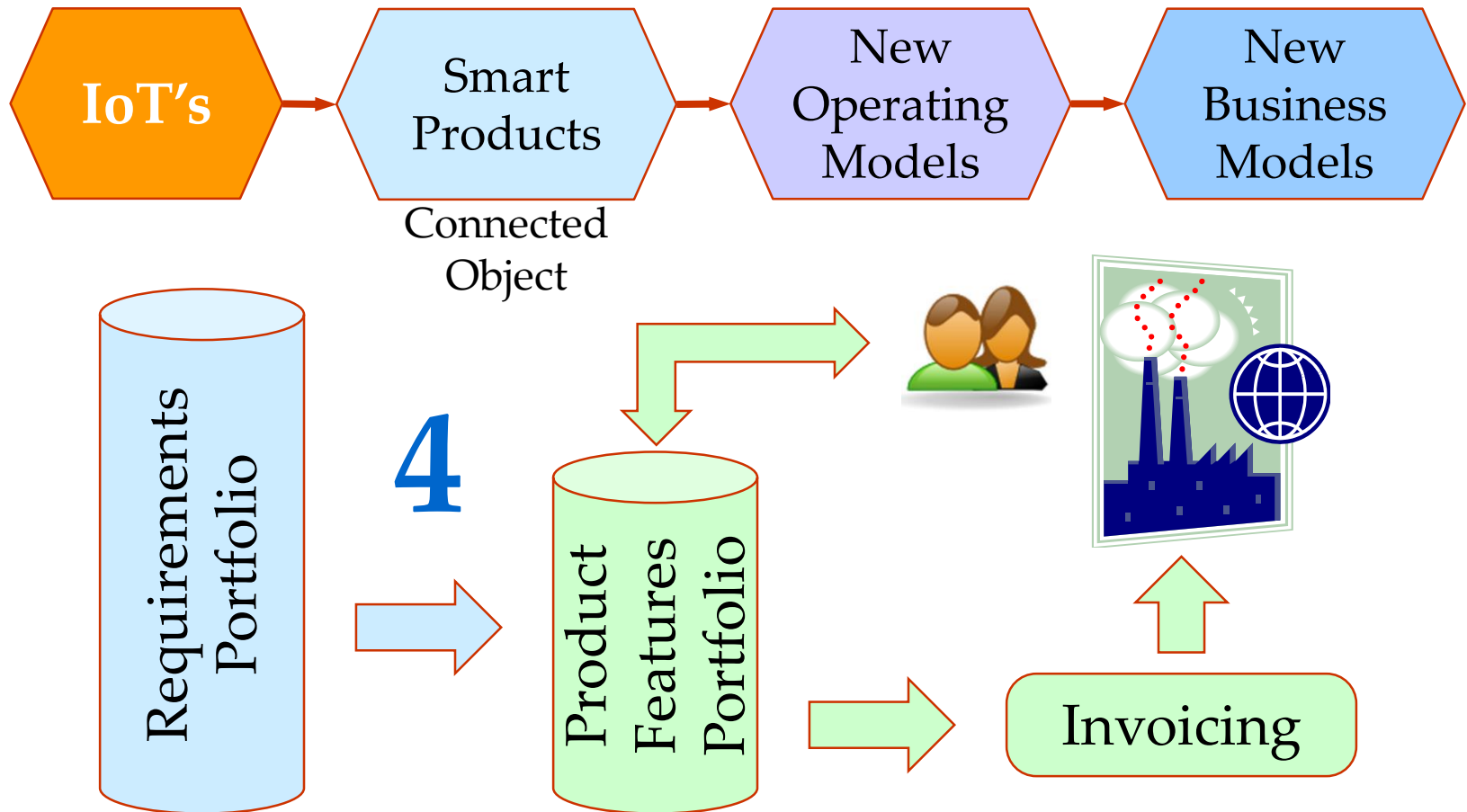
### Regulatory Requirements

- Regulatory requirements include corporate policies, government regulations, industry standards, computational algorithms
- Regulatory requirements are not themselves software requirements because they have an existence beyond the boundaries of any specific software application
- However, they often dictate that the system must contain functionality to comply with the pertinent rules

## Product Servicization - Features/Functionality



## Product Servicization - Features/Functionality



**Thank you for your attention**

Michel Raimondo

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**« Change did not begin and will never end »**

(Chinese quote)