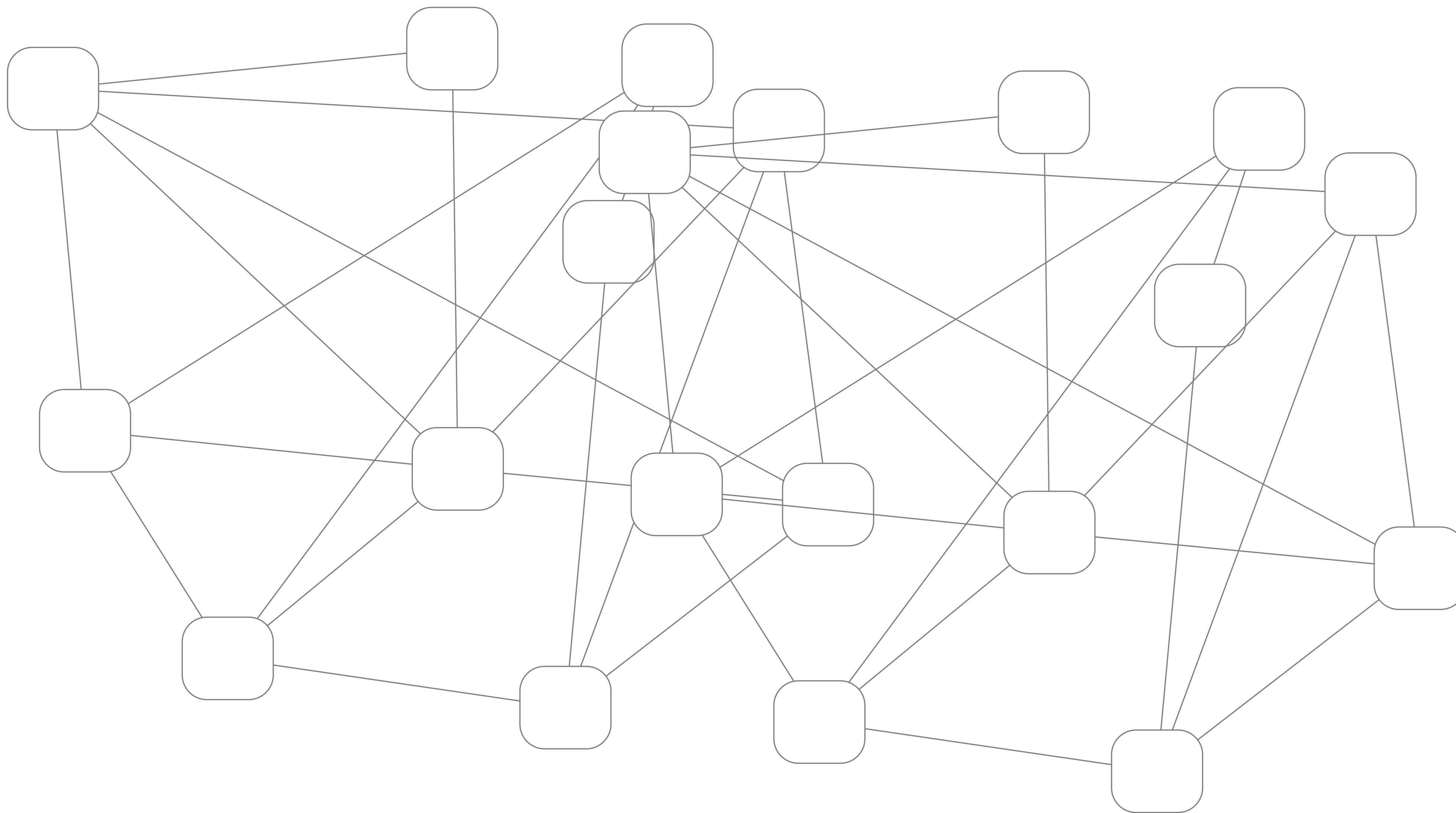


# Digital Transformation and Enterprise Architecture

Luis Daniel Benavides Navarro, Ph.D.

# **Objective: Digital Transformation**

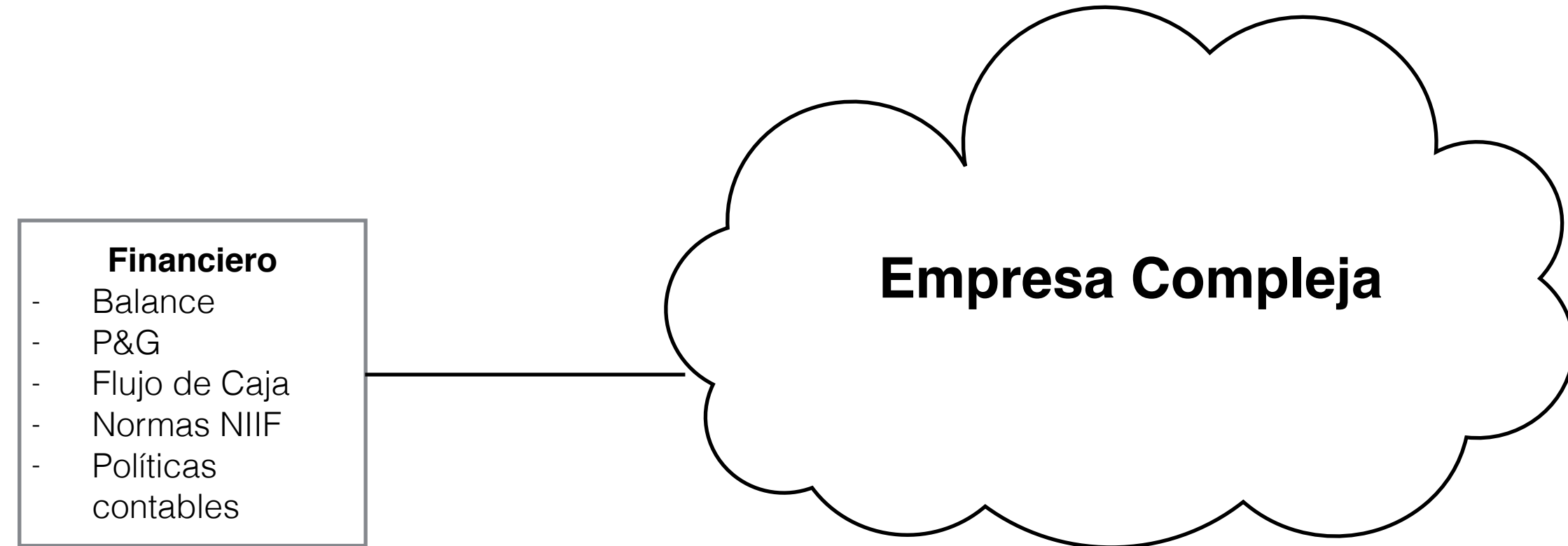
# Complex system



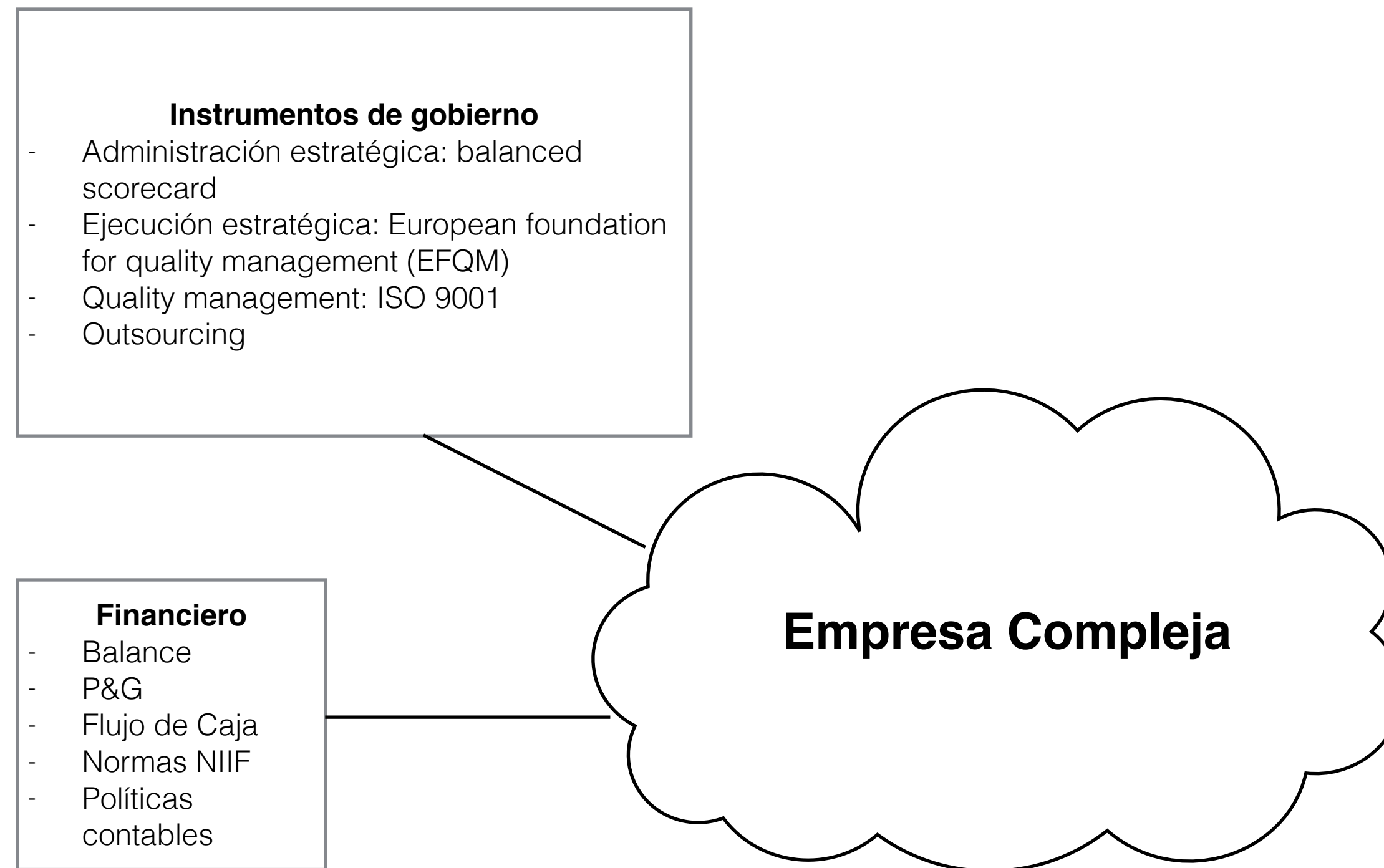
# Complex Environments



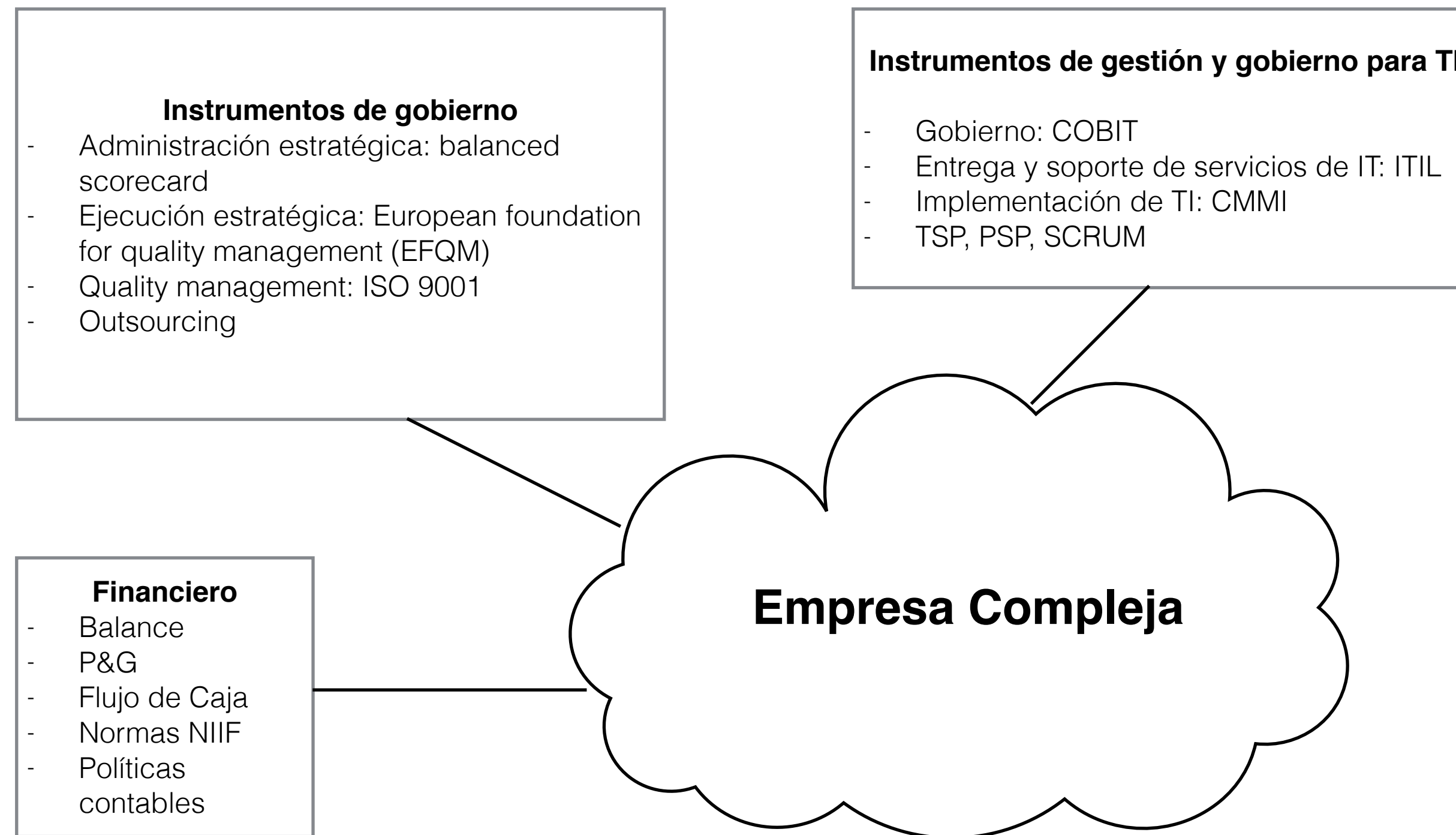
# Complex Environments



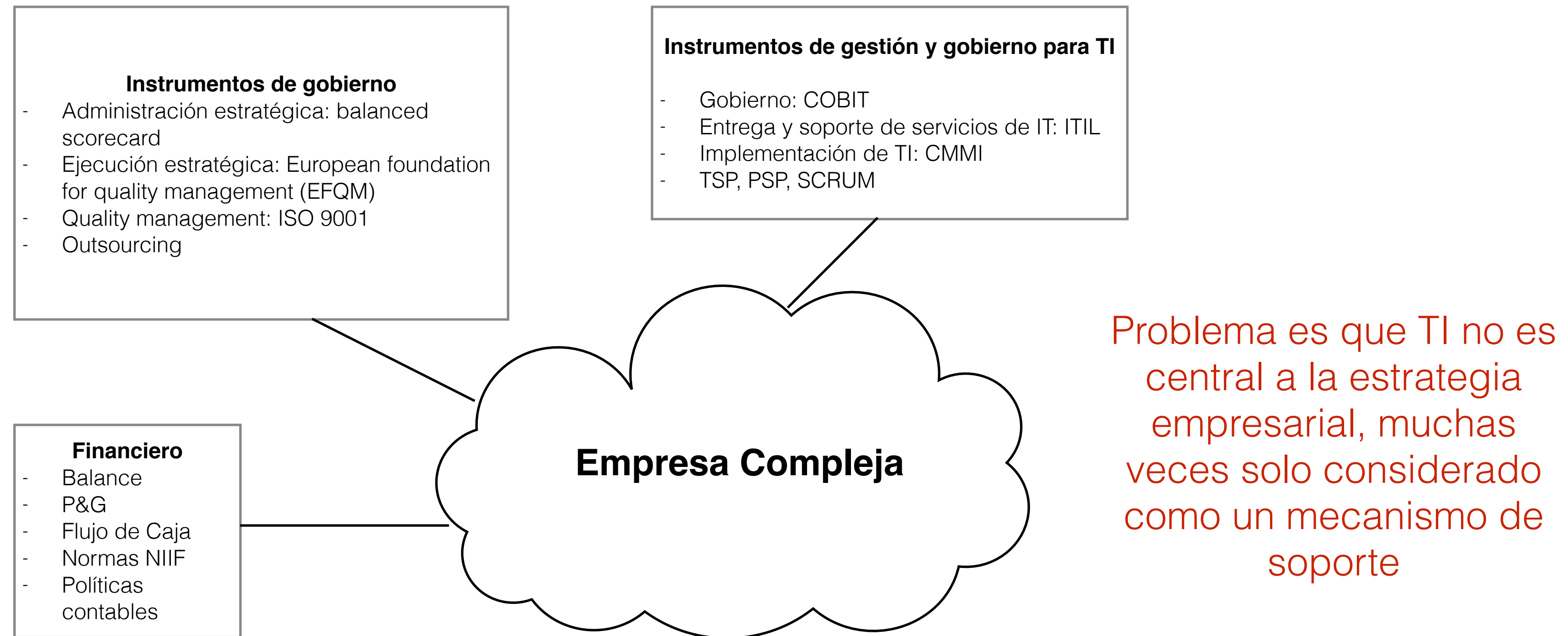
# Complex Environments



# Complex Environments

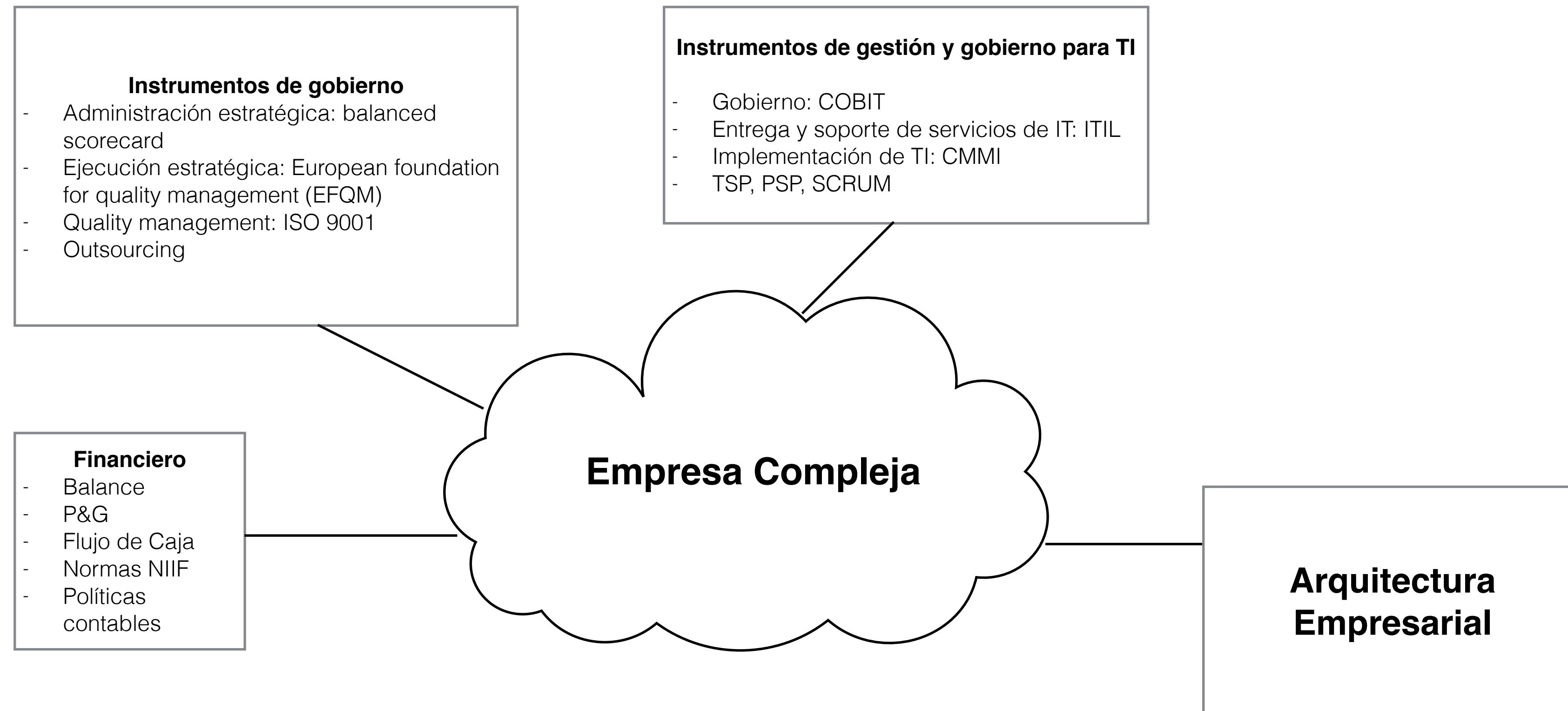


# Complex Environments

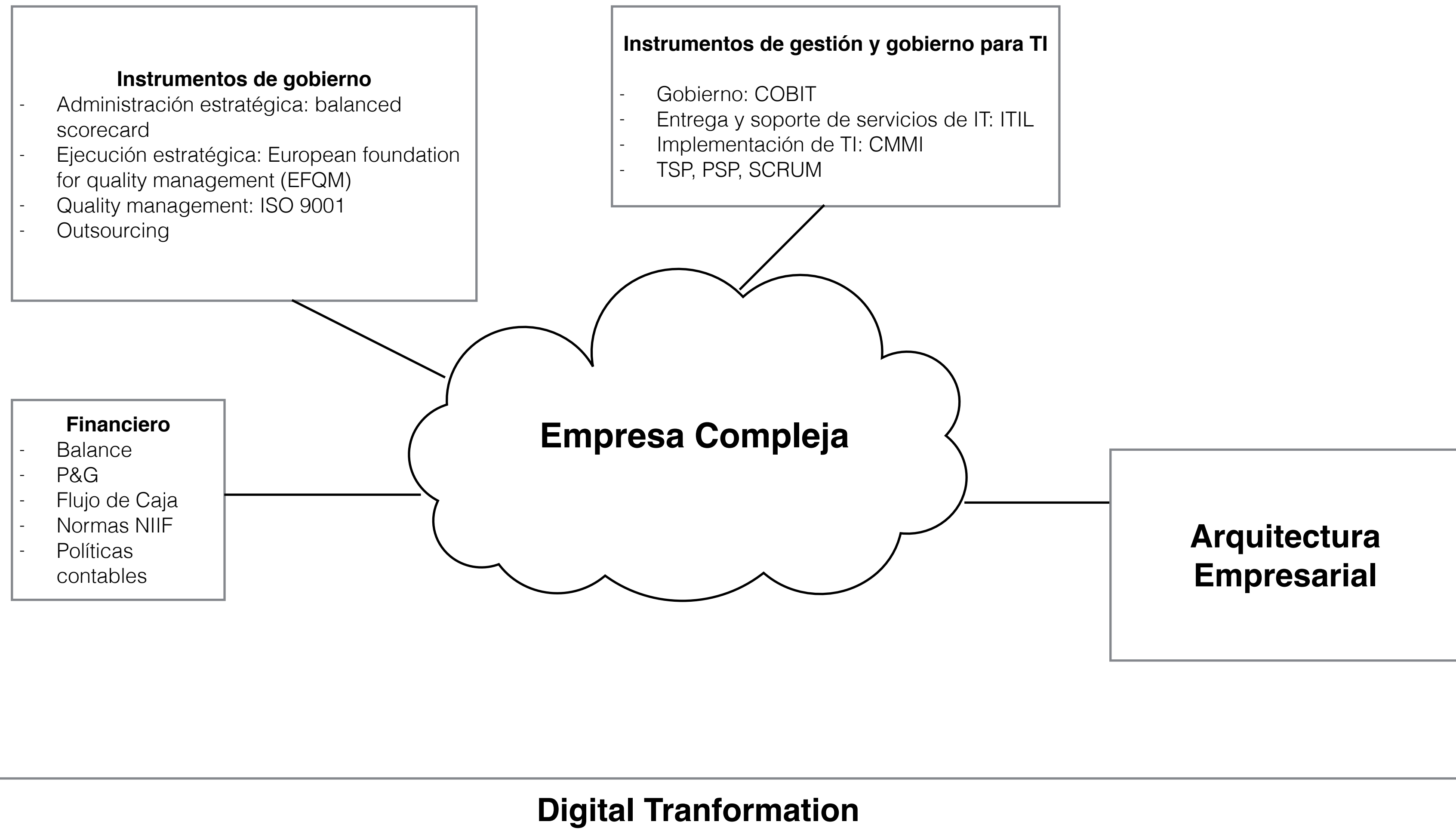




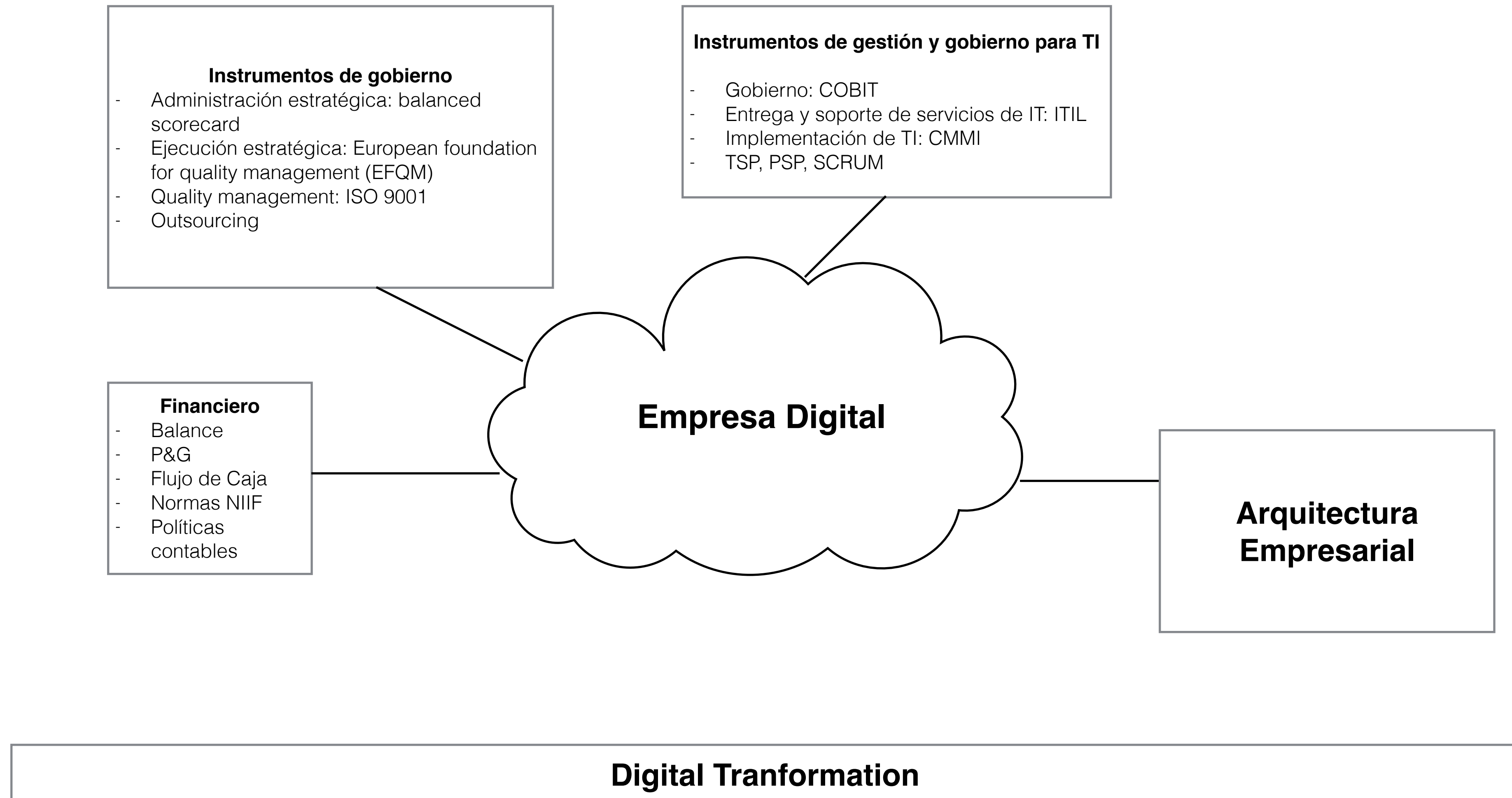
# Complex Environments



# Complex Environments



# Complex Environments



# Digital Transformation

- Set of initiatives that seek to use digital technologies to create new products, processes, business cultures, and user experiences that adapt to changing market conditions.

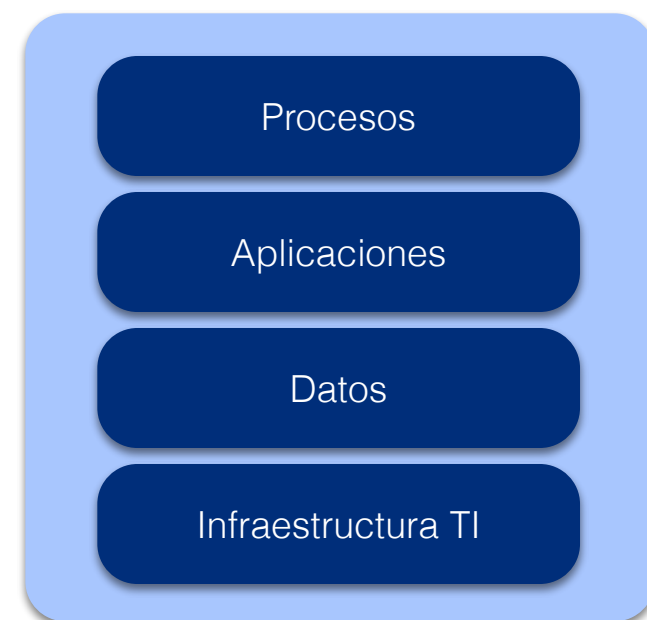
# Enterprise Architecture

- Set of theories, methods, practices, tools, artifacts and heuristics that seek to leverage the digital transformation of a company by integrating in a scalable, safe and harmonious way the organization's strategy, the company's processes, and the technologies that support them.

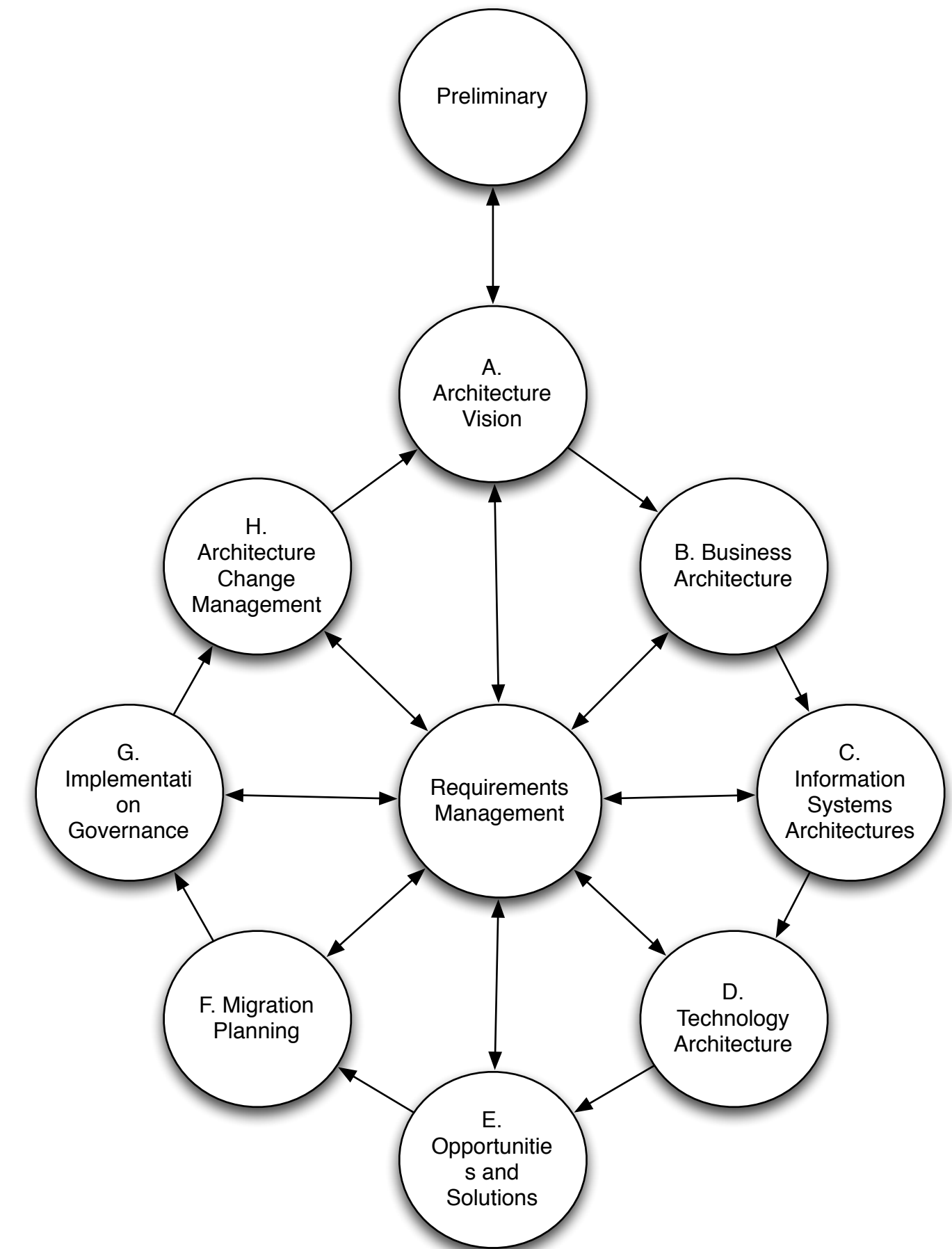
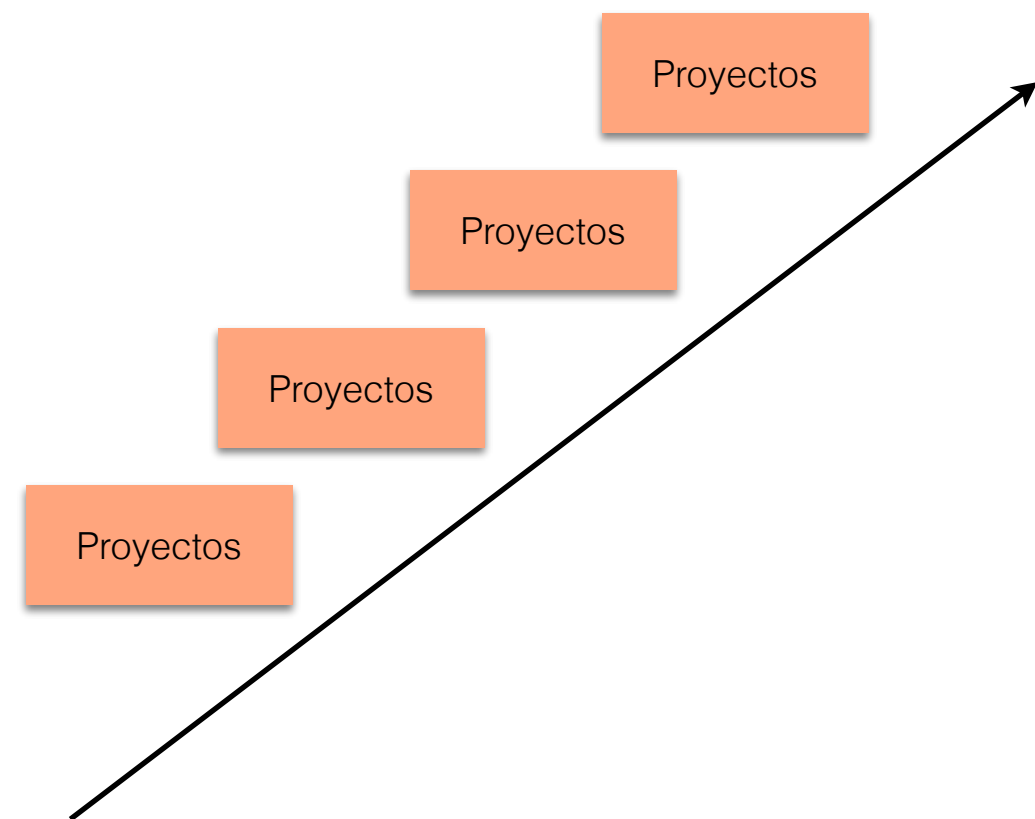
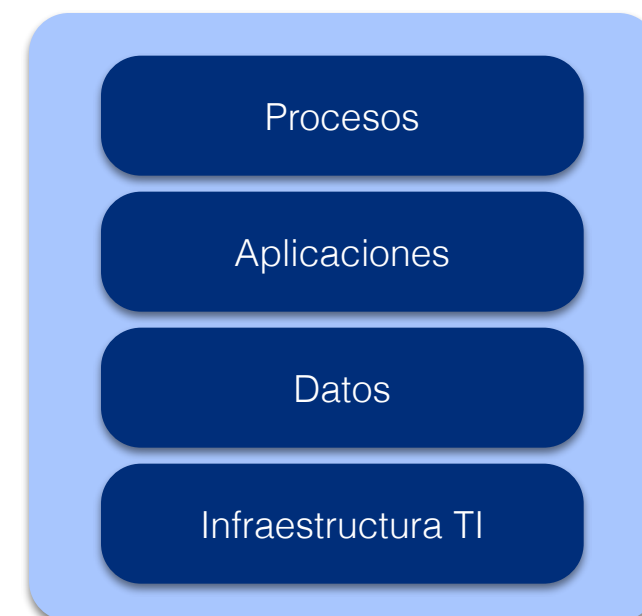
# Prevailing (Deprecated) Method

# TOGAF

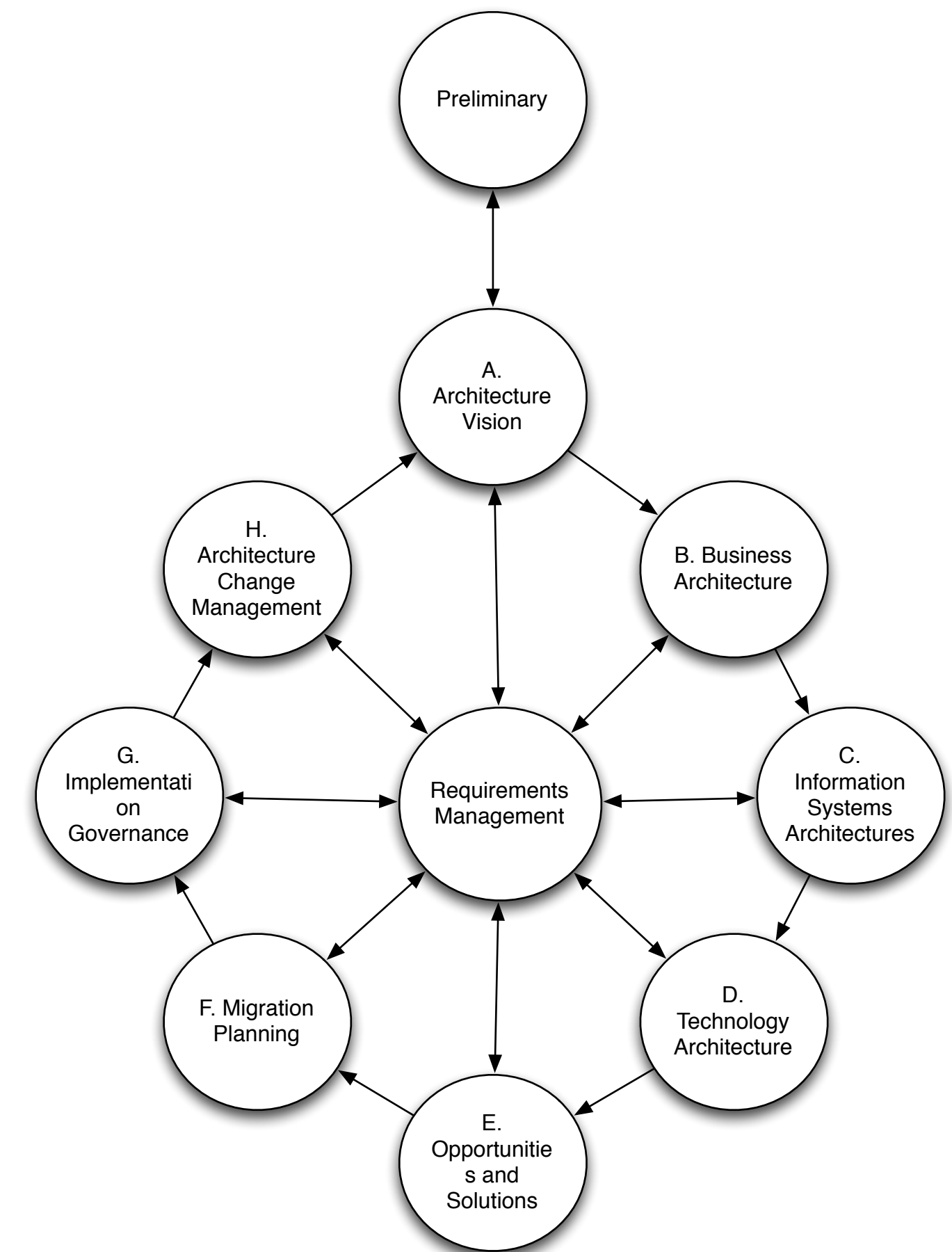
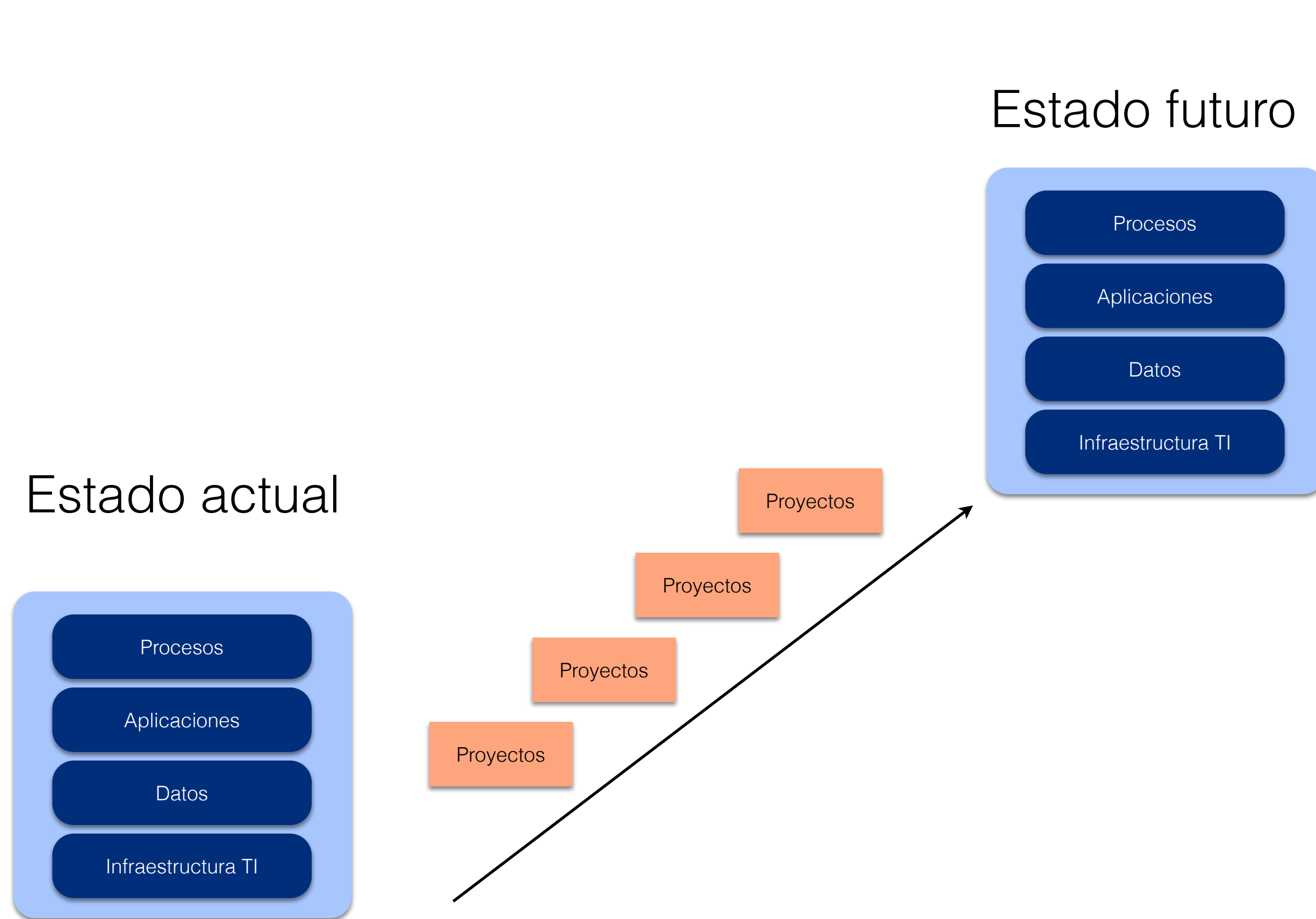
Estado actual



Estado futuro



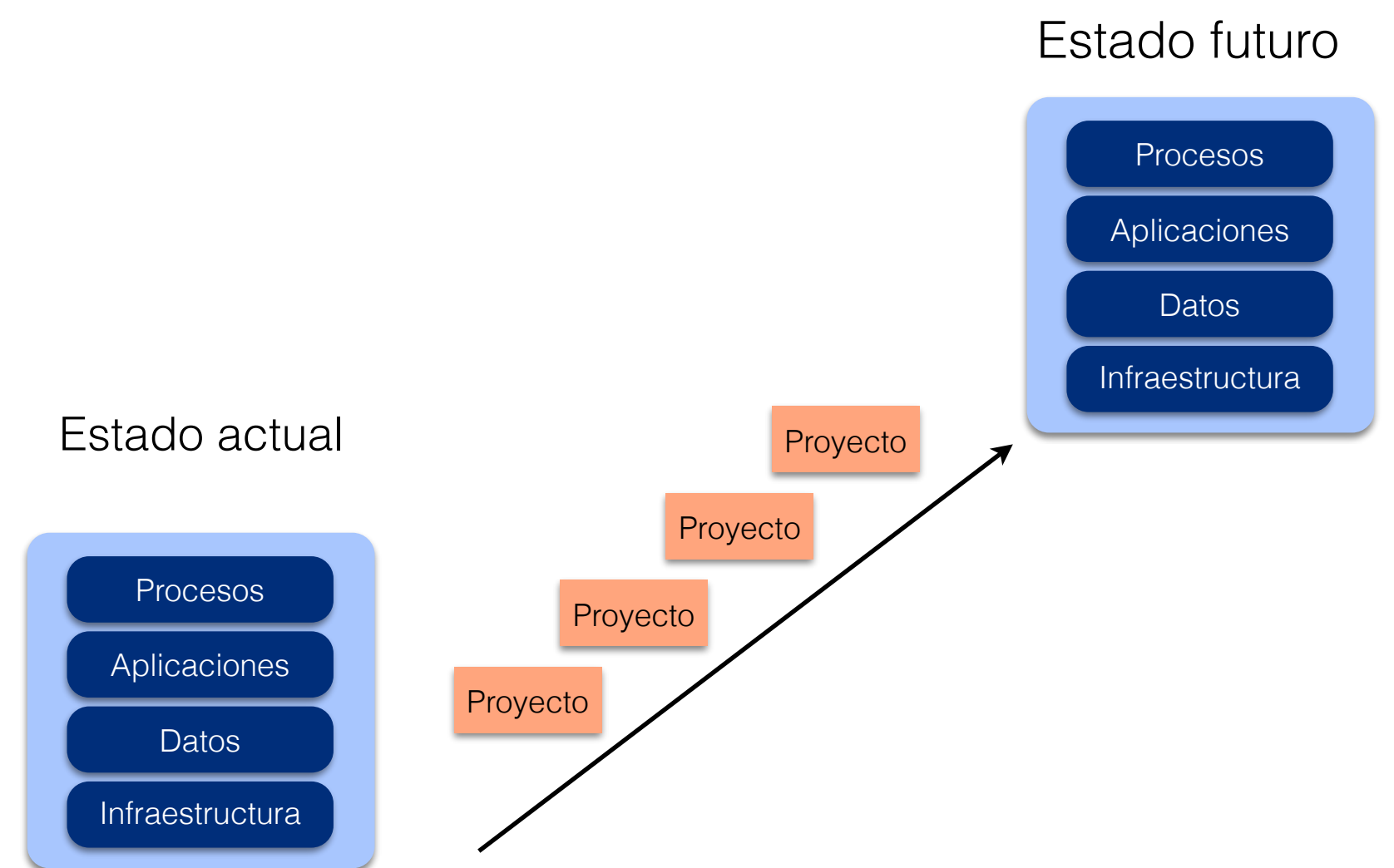
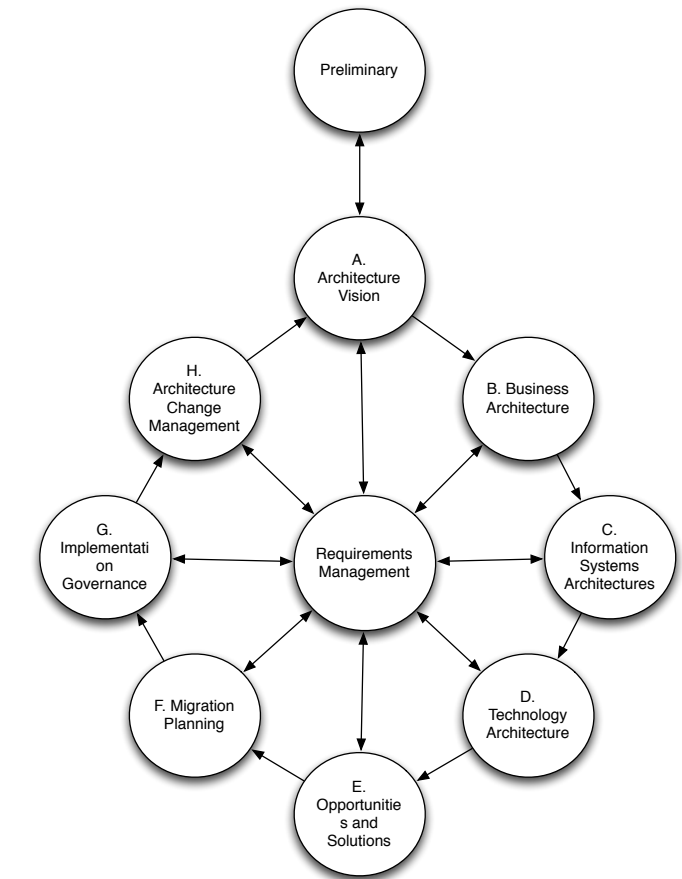
# What is wrong with TOGAF and the prevailing theory of EA?





# What is wrong with TOGAF and the prevailing theory of EA?

- Bad Theories of Software Design
- Design = Documentation
- Design = justificationism
- Bad- Philosophies
- Knowledge = Inductivism
- Projects are expensive and inefficient
- Experience shows that it does not Work
- Theory explains why it does not work



# A new Theory of Design

# Principles

- Design is a creative activity
- Software designs and architecture is better recorded in programming languages
- Other recording media are very useful but they get deprecated
- Architecture emerges from creative teams
- It may be influenced but never controlled (no authorities)
- Institutions may prepare teams and organizations for conjecture, criticism and error correction
- Knowledge = Fallibilism
- Creativity and knowledge creation

# The good Architect

Technical Leader: State-of-the-art distributed systems

Organizational Leader:  
Government, finance  
projects and Heuristics



Great communicator and  
negotiator

# Architecting

- Architecture is a science
- Architecture is an art
- It involves many disciplines
- It is a continuous activity
- It is influenced by many stakeholders
- You have to make tradeoffs
- Acknowledge the experience
- It is done from top to bottom as from bottom to top
- Promotes design, innovation, and creativity

# Examples

- Colombia Digital strategy
- Smart Cities: Bogota
- Colombia Compra eficiente
- Education

**The End.**