

# Avancier Methods

## Establish the Context

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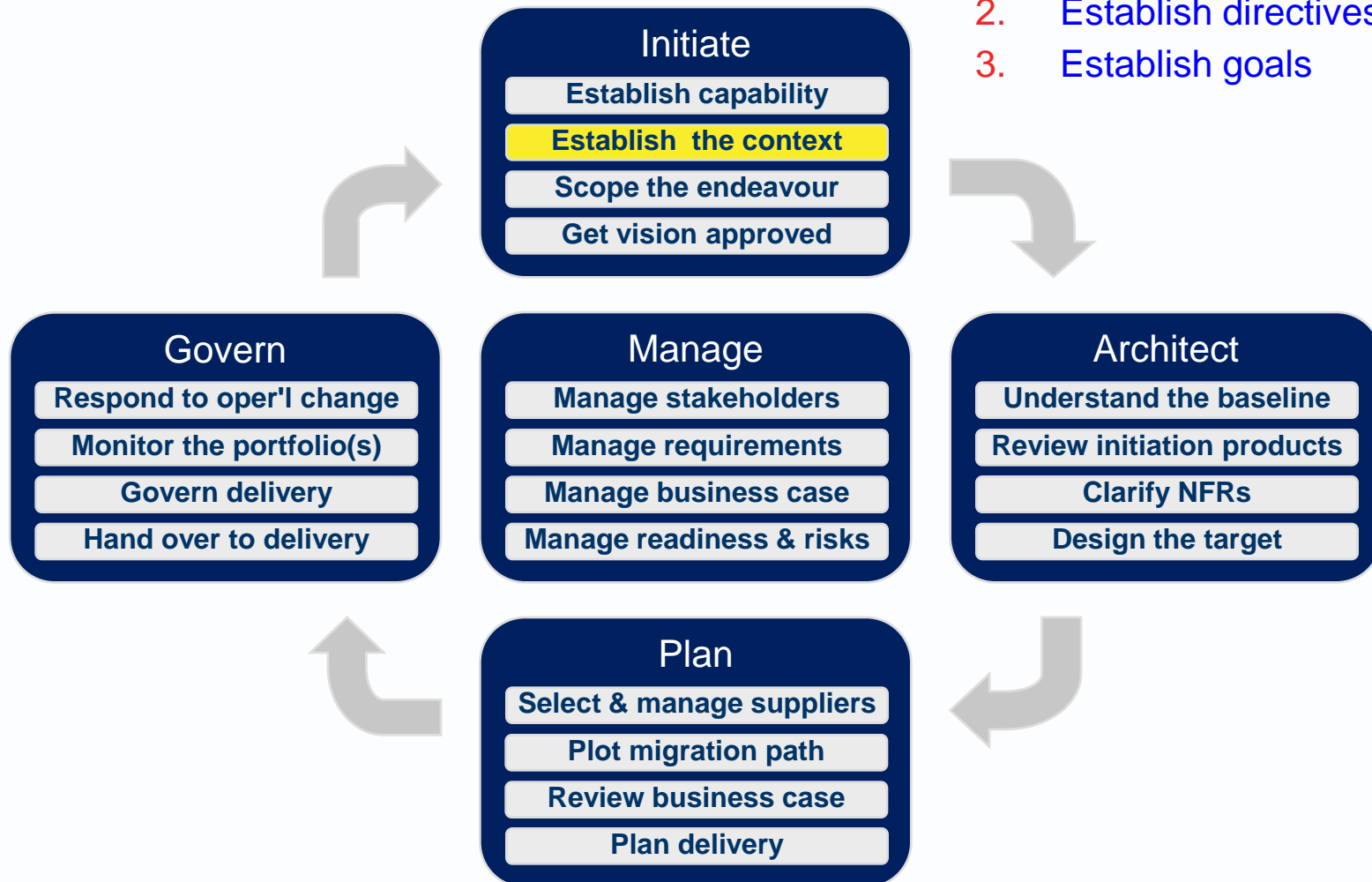
# CONTEXT

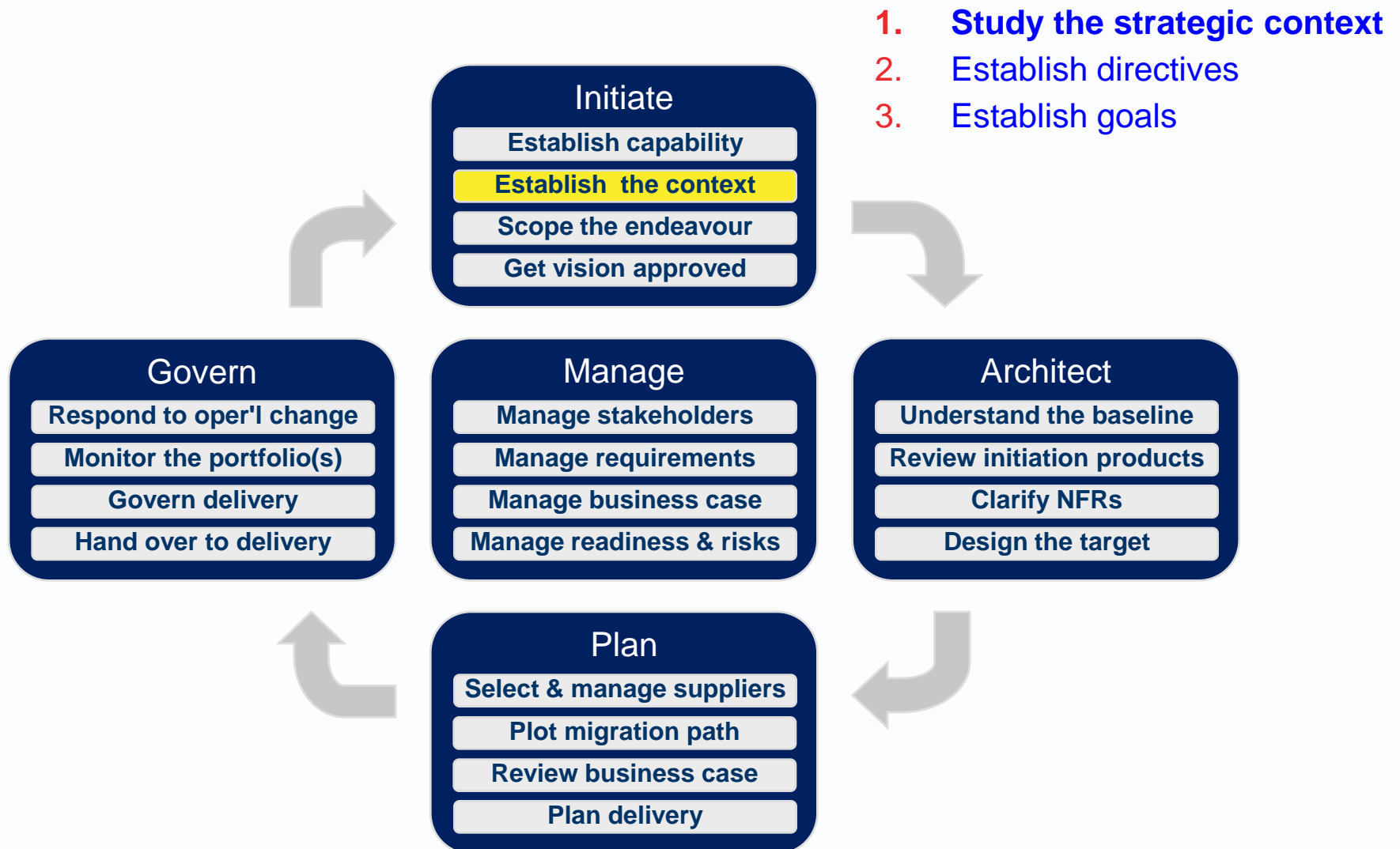


- ▶ What is the AM level 2 process?
- ▶ What is the AM level 3 process?

# AM level 2 and 3 process

1. Study the strategic context
2. Establish directives
3. Establish goals





# What EA is about?

Business planning is wider, and usually higher  
EA is about business *system* planning.

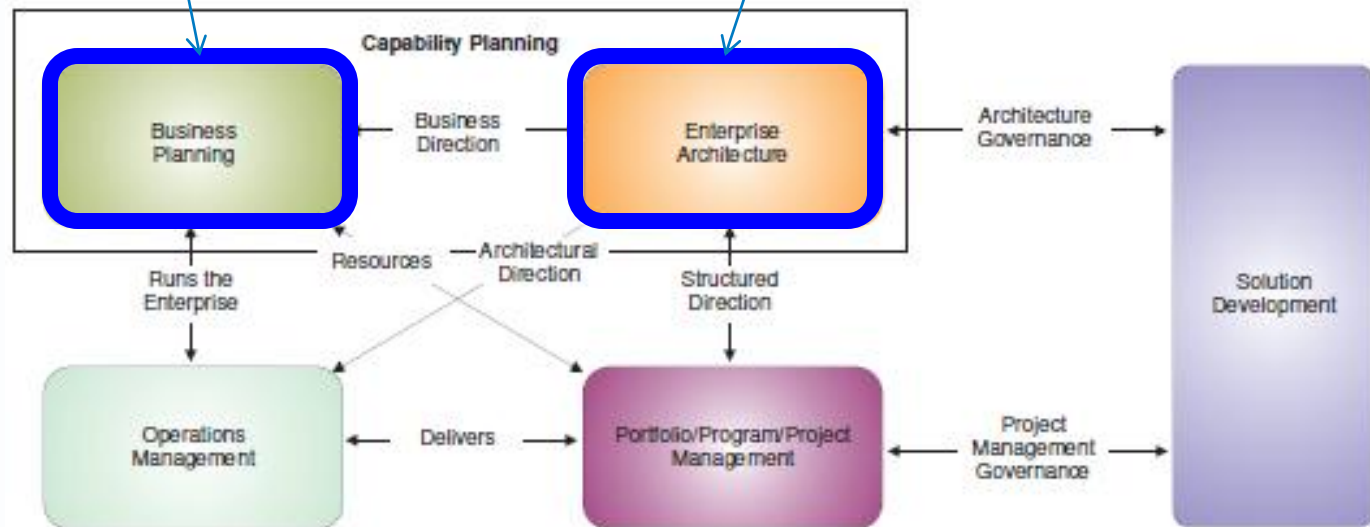


Figure 5-3 Interoperability and Relationships between Management Frameworks

# Business Planning inputs to the Preliminary Phase

- ▶ “Business planning at the strategy level provides the initial direction to Enterprise Architecture.” TOGAF 9.2

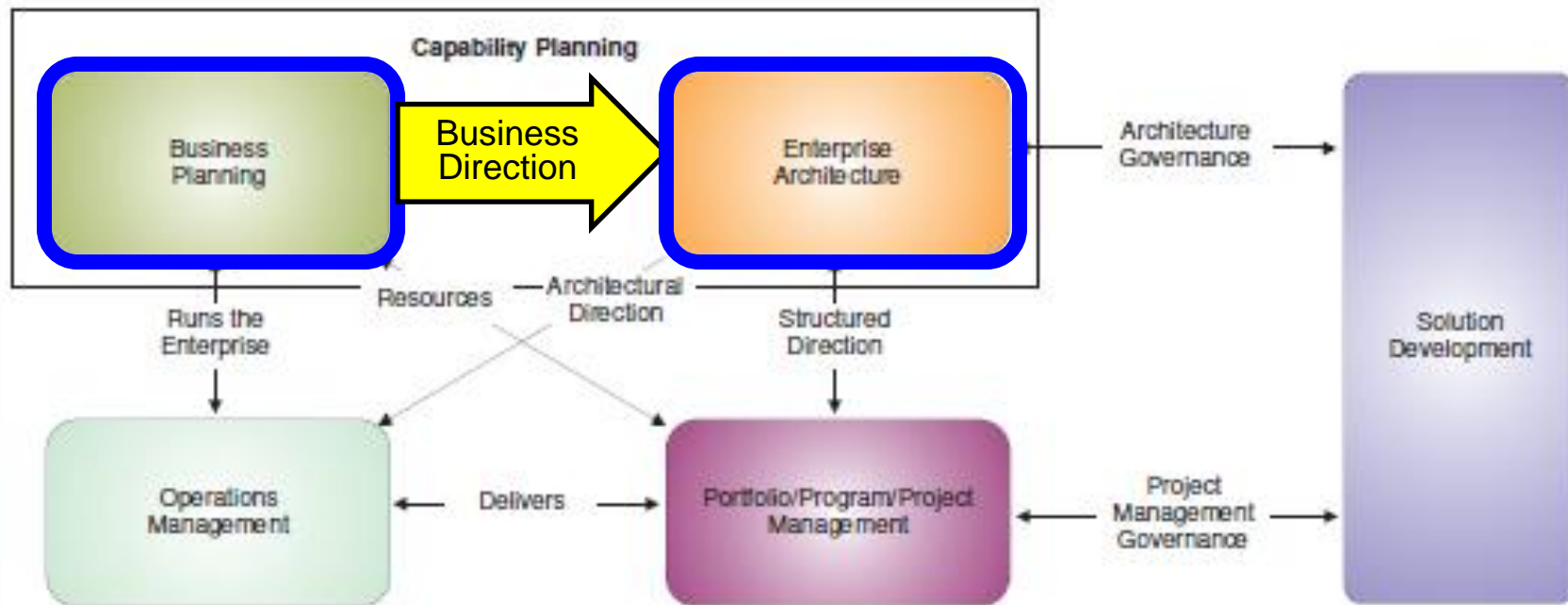
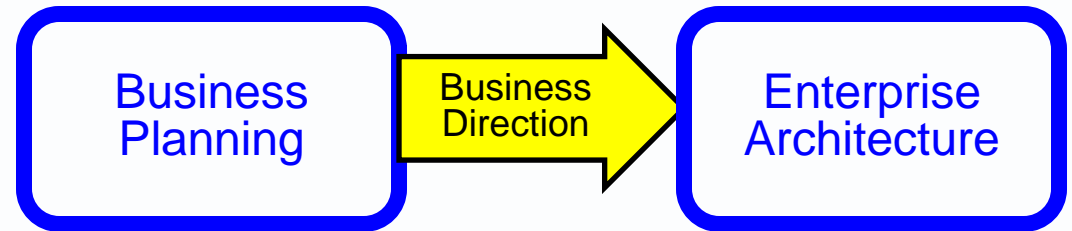


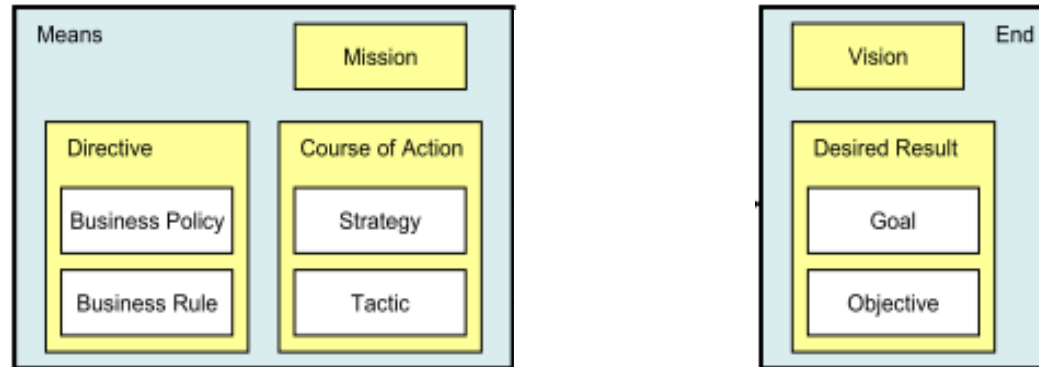
Figure 5-3 Interoperability and Relationships between Management Frameworks

TOGAF uses these words

- ▶ Business mission statement
- ▶ Business drivers
- ▶ Business vision
- ▶ Business strategy
- ▶ Business principles & policies
- ▶ Business goals & objectives
- ▶ Architecture requirements (implicitly, subordinate to objectives)



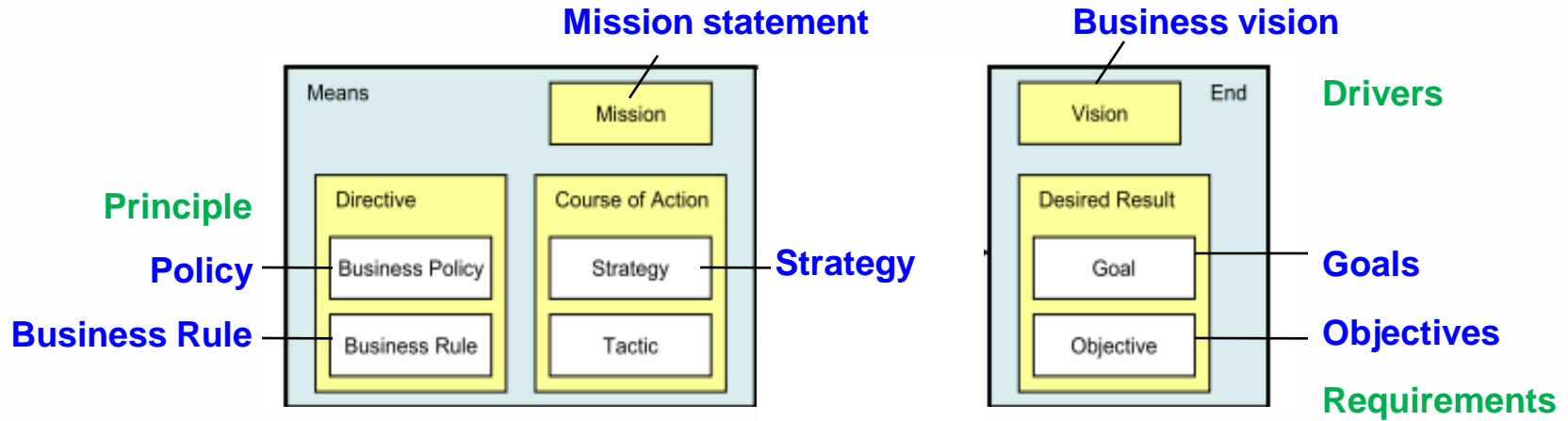
# The OMG's Business Motivation Model (BMM)



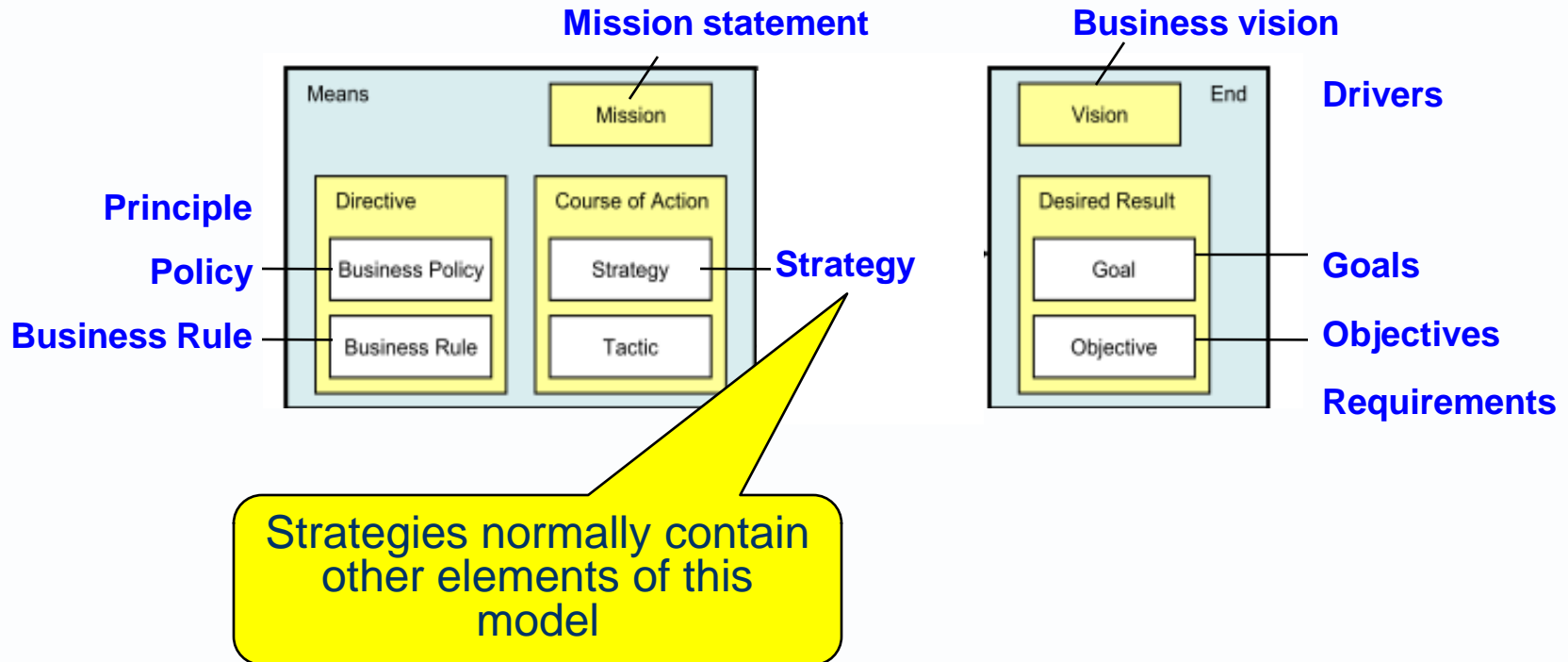
Desired Result = a generalisation of **Goal** and **Objective**  
Course of Action = a generalisation of Plan?



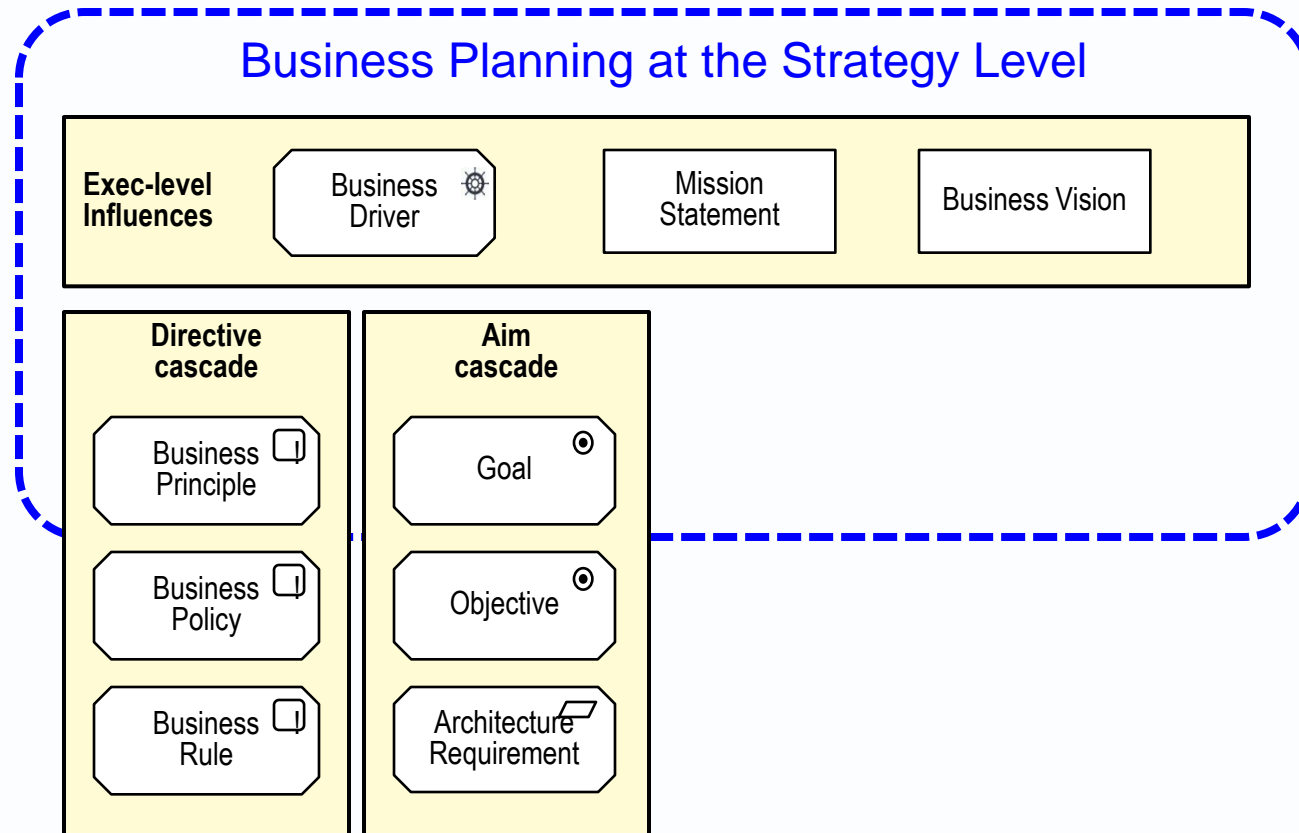
# TOGAF Business Direction words aligned with words in the BMM



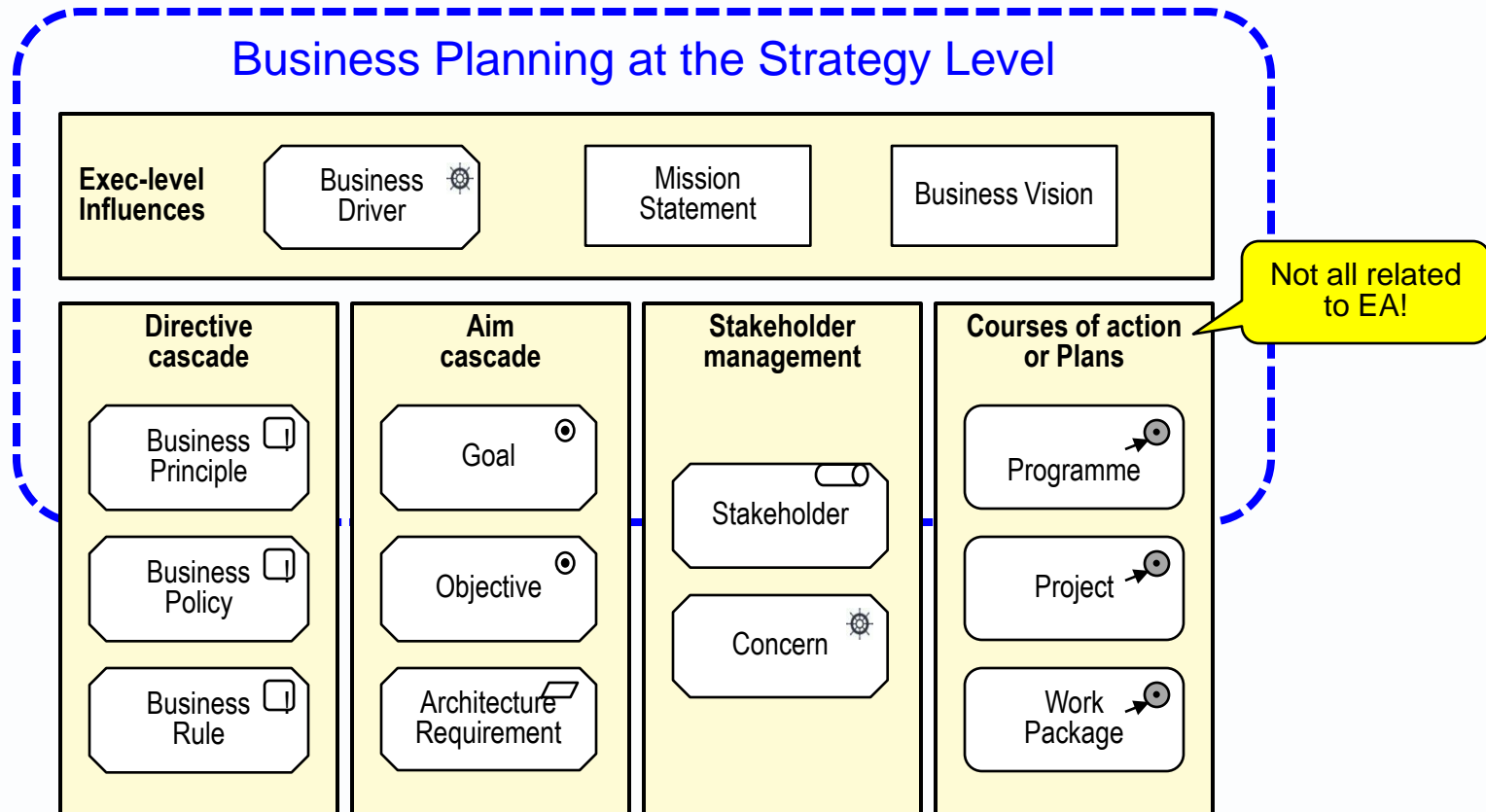
# What is a Strategy?



# “Business planning at the strategy level provides the initial direction to Enterprise Architecture.” TOGAF 9.2

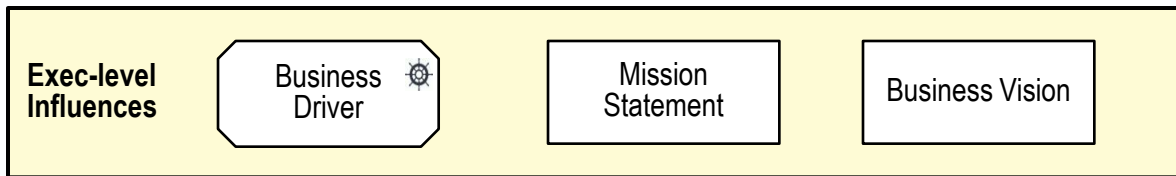


# Adding TOGAF terms related to “Courses of Action”



## Study the strategic context (AM level 4)

- ▶ Mission – what we do
- ▶ Vision - what we aim to become
- ▶ (variously interpreted, often combined or confused)

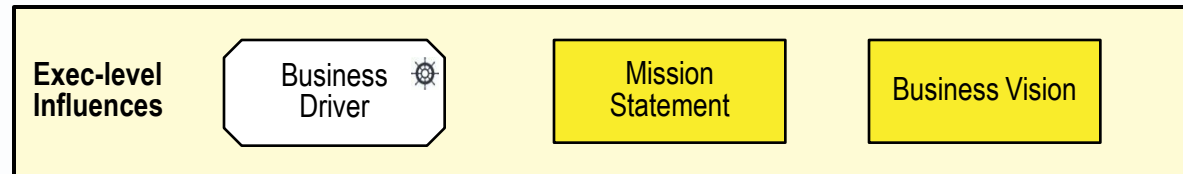


## ▶ Mission

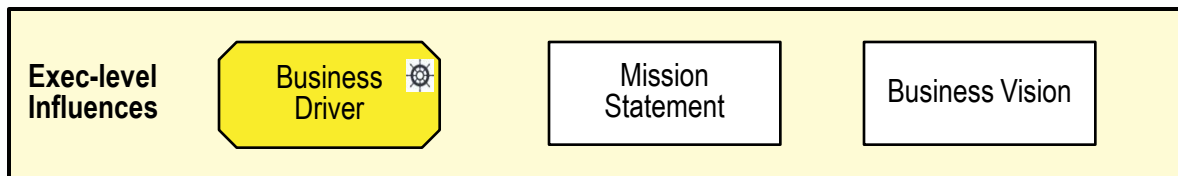
- what an enterprise, business or organisation is about;
- its reasons for being;
- the essential products and services it offers customers.

## ▶ Vision

- what an organisation wants to be or become



- ▶ An influence, recognised by managers, that shapes the directives and aims of a business.



## PESTLE

Political  
Economic  
Social  
Technological  
Legal  
Environment

## 5-forces analysis

Buyers  
Suppliers  
Competitors  
New entrants  
Substitute products

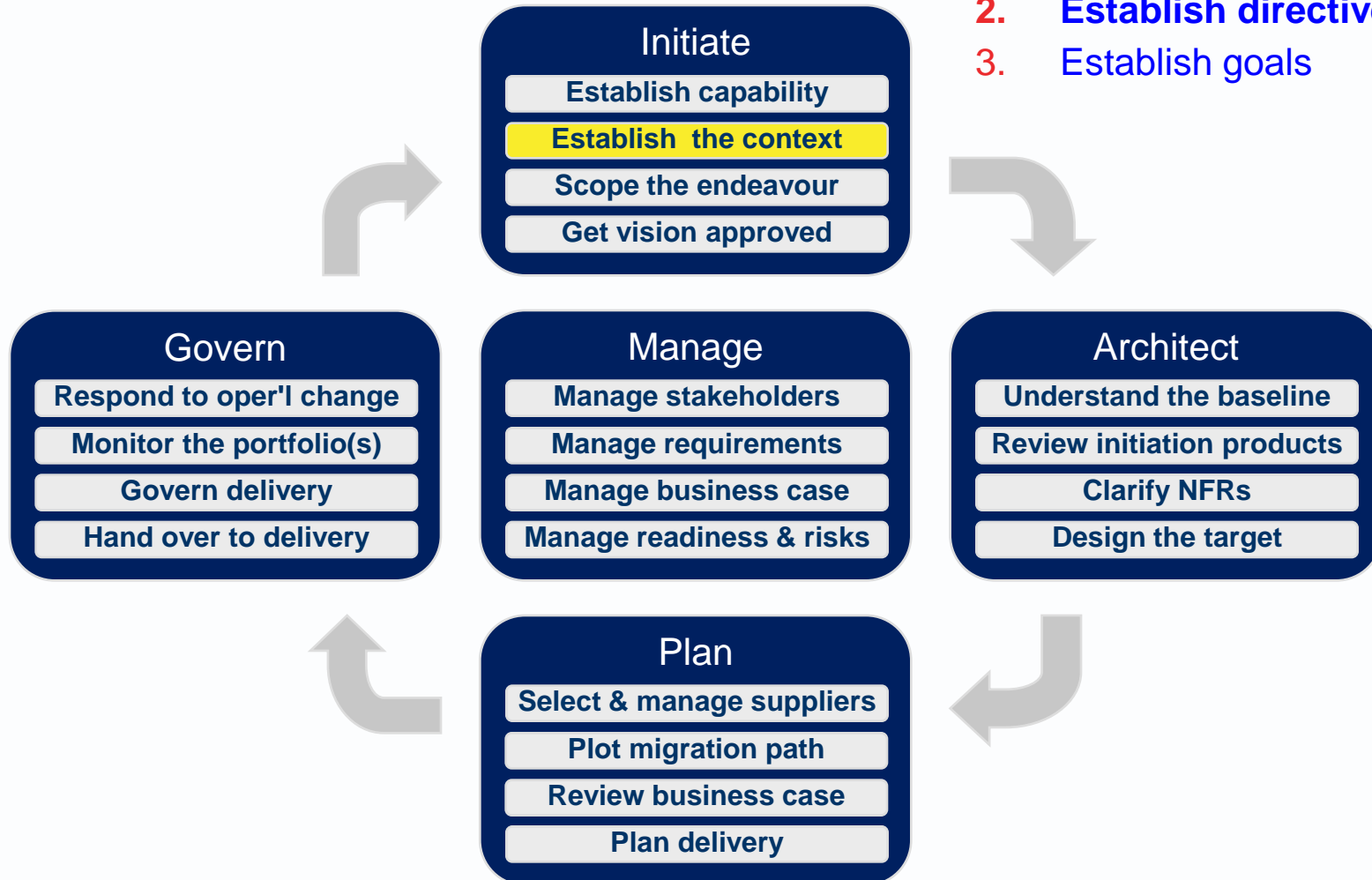
## SWOT

Strengths (internal)  
Weaknesses (internal)  
Opportunities (external)  
Threats (external)

- ▶ changes in **customer behaviour or interest**
- ▶ the threat of **increased competition** from a new entrant to the market.
- ▶ **high turnover** of staff, with negative reports in leaving interviews.
- ▶ increased media attention to **embarrassing** “loss” of citizen data.
  
- ▶ Drivers stimulate enterprise leaders to define aims and directives for activity.

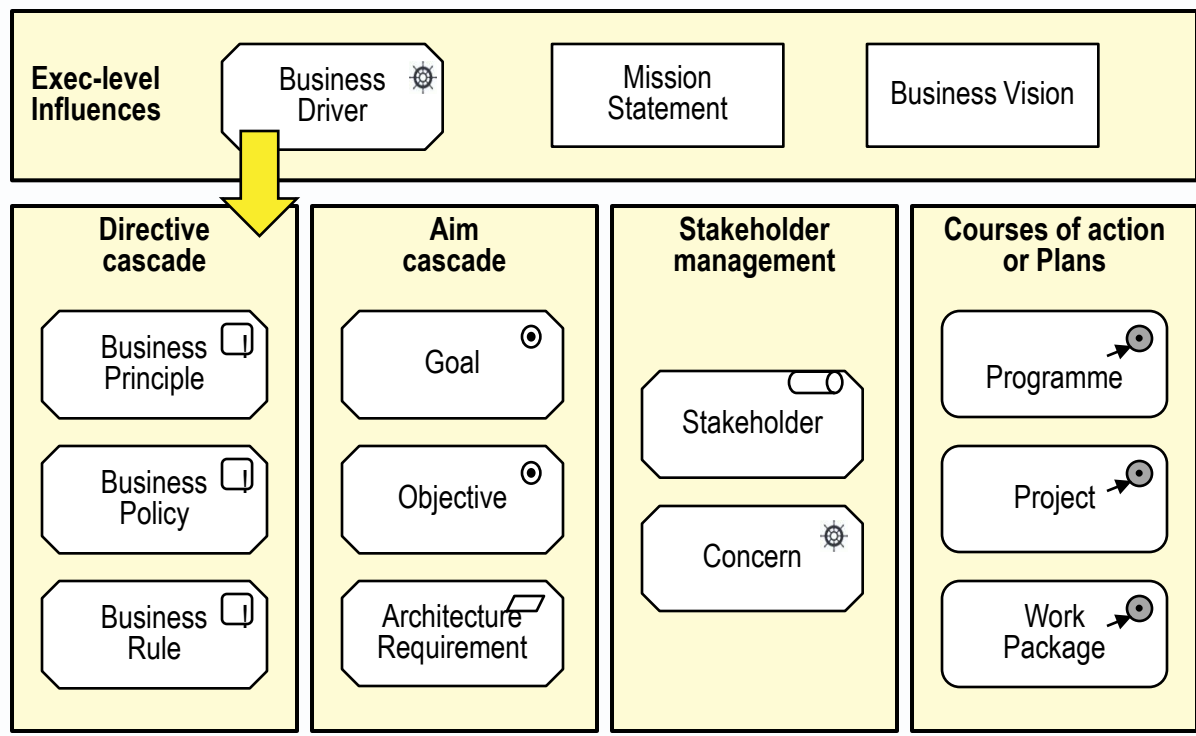


1. Study the strategic context
2. **Establish directives**
3. Establish goals



# From drivers to directives

- ▶ Driver = high turnover of staff, with negative reports in leaving interviews.
  - Principle = “We value our people.”
- ▶ Driver = increased media attention to embarrassing “loss” of citizen data.
  - Principle = “Data security is paramount”.



- ▶ The practitioner manual has a menu of c80 principles.
- ▶ Including this example from one enterprise
  
- ▶ E.g. a Telco's IT principles
  1. Buy rather than Build
  2. Adopt a multi-tier systems architecture
  3. Minimise and manage duplication of data and system functionality
  4. Maximise the re-use and sharing of information, as far as possible
  5. Ensure clarity of systems, processes and data ownership
  6. Adopt scalable, proven technology
  7. Extend the existing application portfolio as far as possible
  8. Use point solutions only when necessary
  9. Avoid point-to-point integration by adopting a bus integration architecture
  10. Follow a component based approach to shared IT solutions
  11. Ensure a consistent user experience across multiple channels
  12. Ensure that IT initiatives are guided by business needs and priorities
  13. Ensure conformity of IT solutions to IT standards and architecture
  14. Use selective sourcing where appropriate

## Business Principles

- ▶ 1: Primacy of Principles
- ▶ 2: Maximize Benefit to the Enterprise
- ▶ 3: Information Management is Everybody's Business
- ▶ 4: Business Continuity
- ▶ 5: Common Use Applications
- ▶ 6: Compliance with Law
- ▶ 7: IT Responsibility
- ▶ 8: Protection of Intellectual Property

## Data

- ▶ 9: Data is an Asset
- ▶ 10: Data is Shared
- ▶ 11: Data is Accessible
- ▶ 12: Data Trustee
- ▶ 13: Common Vocabulary & Data Definitions
- ▶ 14: Data Security

## Apps

- ▶ 15: Technology Independence
- ▶ 16: Ease-of-Use

## Technology

- ▶ 17: Requirements-Based Change
- ▶ 18: Responsive Change Management
- ▶ 19: Control Technical Diversity
- ▶ 20: Interoperability

## Principles example 3 – a global organisation

1. **Separate concerns** (for flexibility and maintainability)
2. Build for competitive advantage / Buy for competitive parity
3. **Encapsulate components** (for CBD and SOA)
4. Use **open APIs** for inter-component communication
5. **Loosely couple** components (for flexibility and availability)
6. Use **Event-Driven Architecture** for broadcast updates
7. Maintain a **single source of truth**
8. Design for response time / latency
9. Design for graceful failure – informing users
10. Web first: design for browser and client device independence

- ▶ are a tool of **governance**
- ▶ are simple statements (even aphorisms)
- ▶ define the way an organisation does or wants to operate
- ▶ reflect the goals of the organisation and the intentions of the governance board
- ▶ **reflect strengths and weaknesses**
- ▶ steer an organisation in directions compatible with strategic business and technical goals and objectives
- ▶ **are more abstract than goals; qualitative rather than quantitative**
- ▶ both aid and constrain decision making
- ▶ are useful as dispute resolvers
- ▶ **facilitate choices between design options**
- ▶ often conflict with each other, so trade-offs must be addressed.

# Principles are not goals!

- ▶ There are always trade offs.
- ▶ Principles are a judgement call
- ▶ A matter for the governance <> lobbying feedback loop.
  
- ▶ E.g. Principle: Buy before build.
  - But bespoke solutions are better where they sufficiently increase business efficiency and effectiveness.
  
- ▶ E.g. Principle: Integrate systems
  - ▶ But integrated systems are harder to maintain, change and replace.
  
- ▶ E.g. Principle: Loosely couple systems.
  - But this slows things down
  - And it is not tight coupling that is the problem, it is tight coupling of volatile elements.

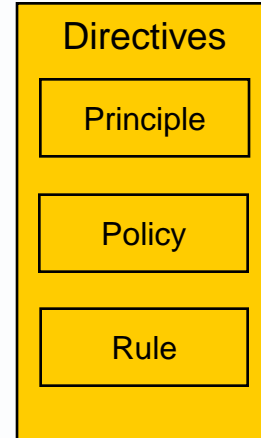
## E.g. “Reduce technical debt now”

- ▶ It isn't debt; it is *risk*
- ▶ Not all risks become issues
- ▶ There is always a judgement call
- ▶ How far to mitigate a future risk by paying for insurance now?
  
- ▶ E.g.
  - The out-of-support OS runs fine
    - There is no “increased cost to support”
    - There is no “interest payment” to pay.
  - It turns out the skipping one or two OS versions is cheaper.
  
- ▶ In practice
  - Requirements disappear, principles change, no reuse need emerges
  - The “debt” may go down, may never need to be paid off.

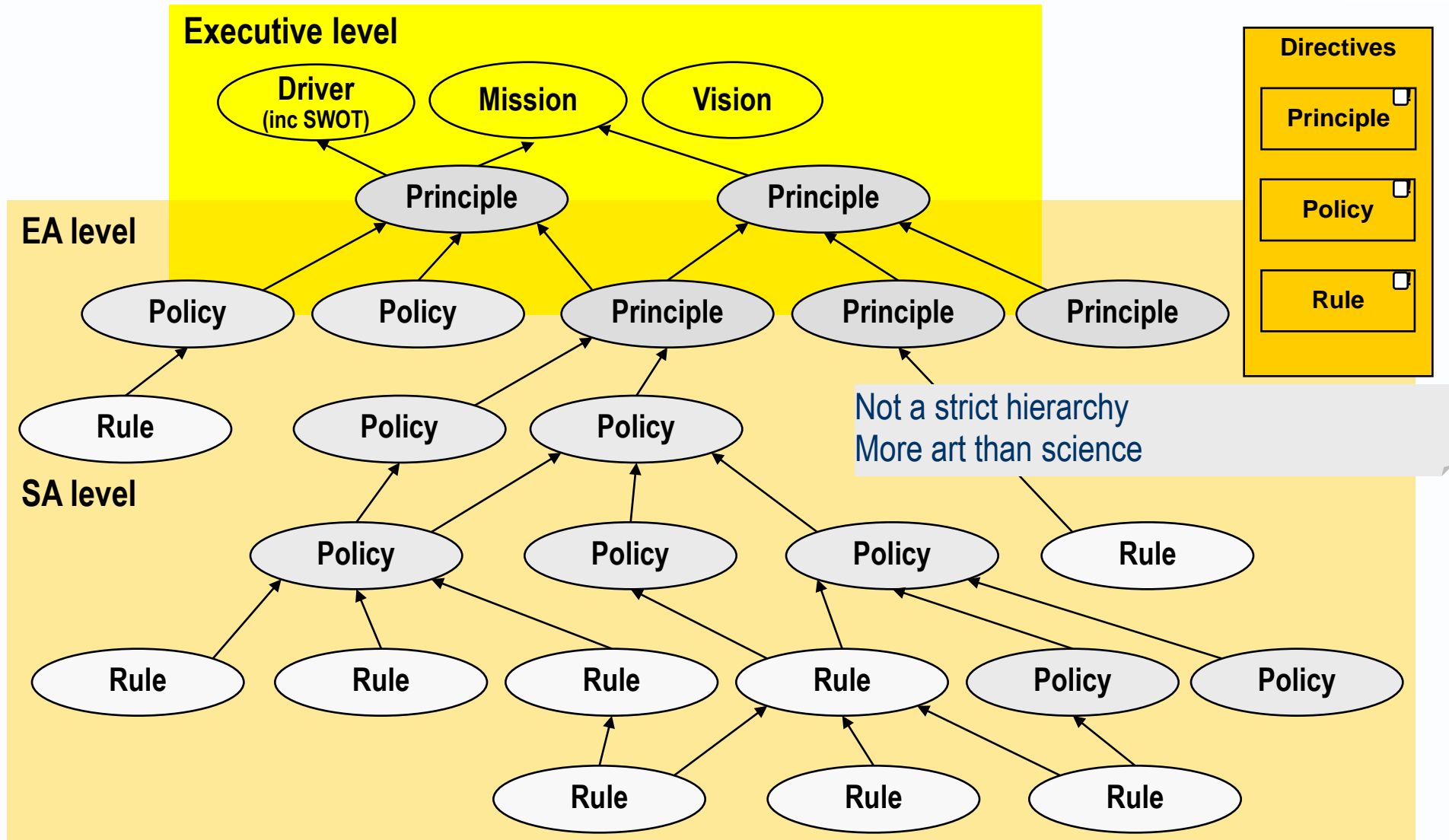


- ▶ The practitioner manual has a menu of c80 principles.
- ▶ Some are contradictory
  
- ▶ You may select contradictory principles provided you include in them guidance on how to choose one over another – e.g.
  - what kind of data must be secure
  - what kind of data must be accessible.

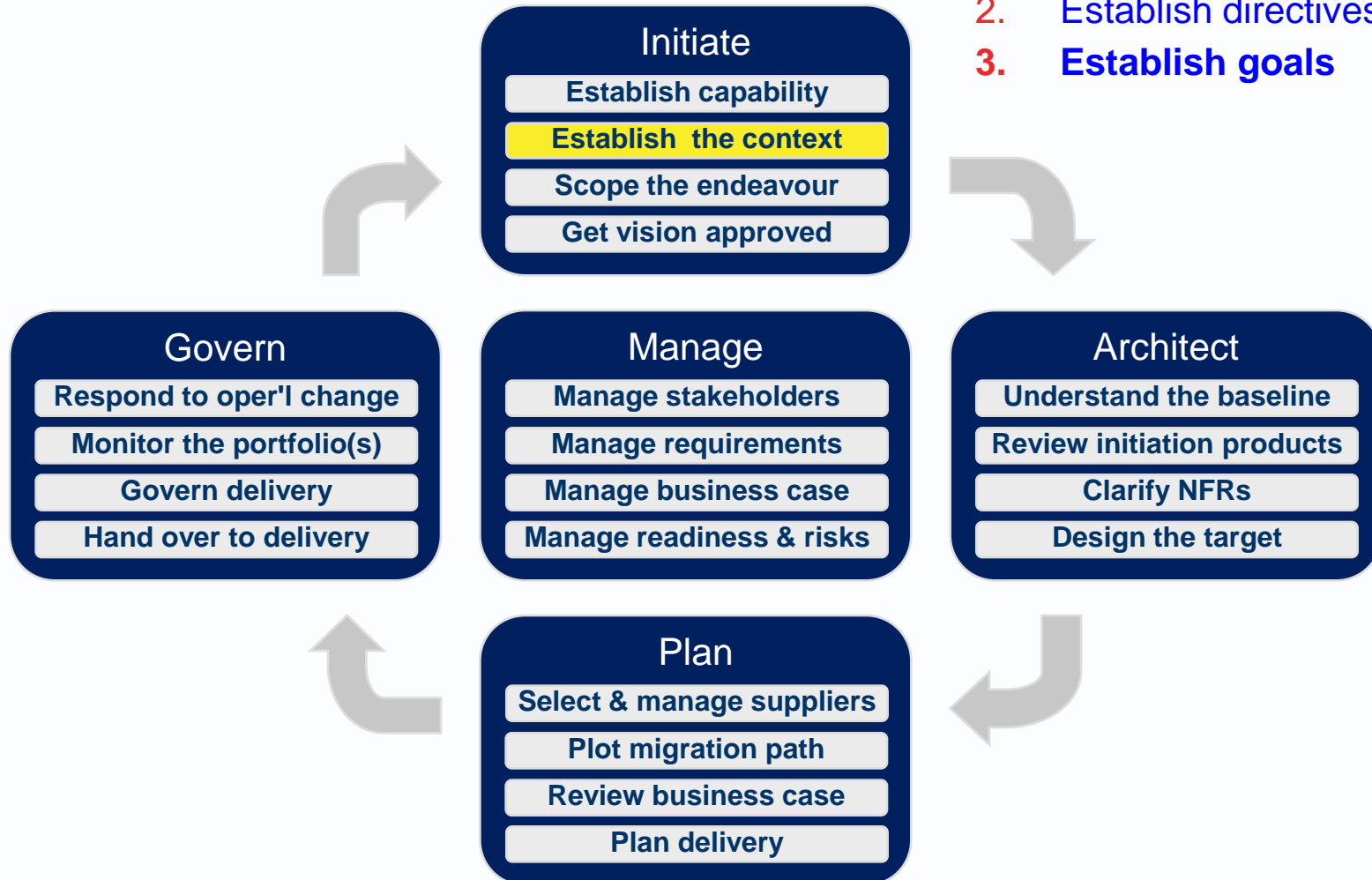
- ▶ **Directive** an influence or guideline, enduring and seldom amended, that steers or constrains behaviour or choices.
- ▶ Directives may be arranged in a hierarchical structure
  - **Principle** [a directive] that is strategic and not-directly-actionable.
    - E.g. Waste should be minimised.
    - Data security is paramount.
  - **Policy** [a directive] that supports a principle.
    - E.g. The public have minimal access to business data.
    - USB ports are disabled.
    - Messages at security level 3 are encrypted.
  - **Business Rule** [a directive] that implements a policy in data processing.
    - E.g. Access Level = Low if User Type = Public.

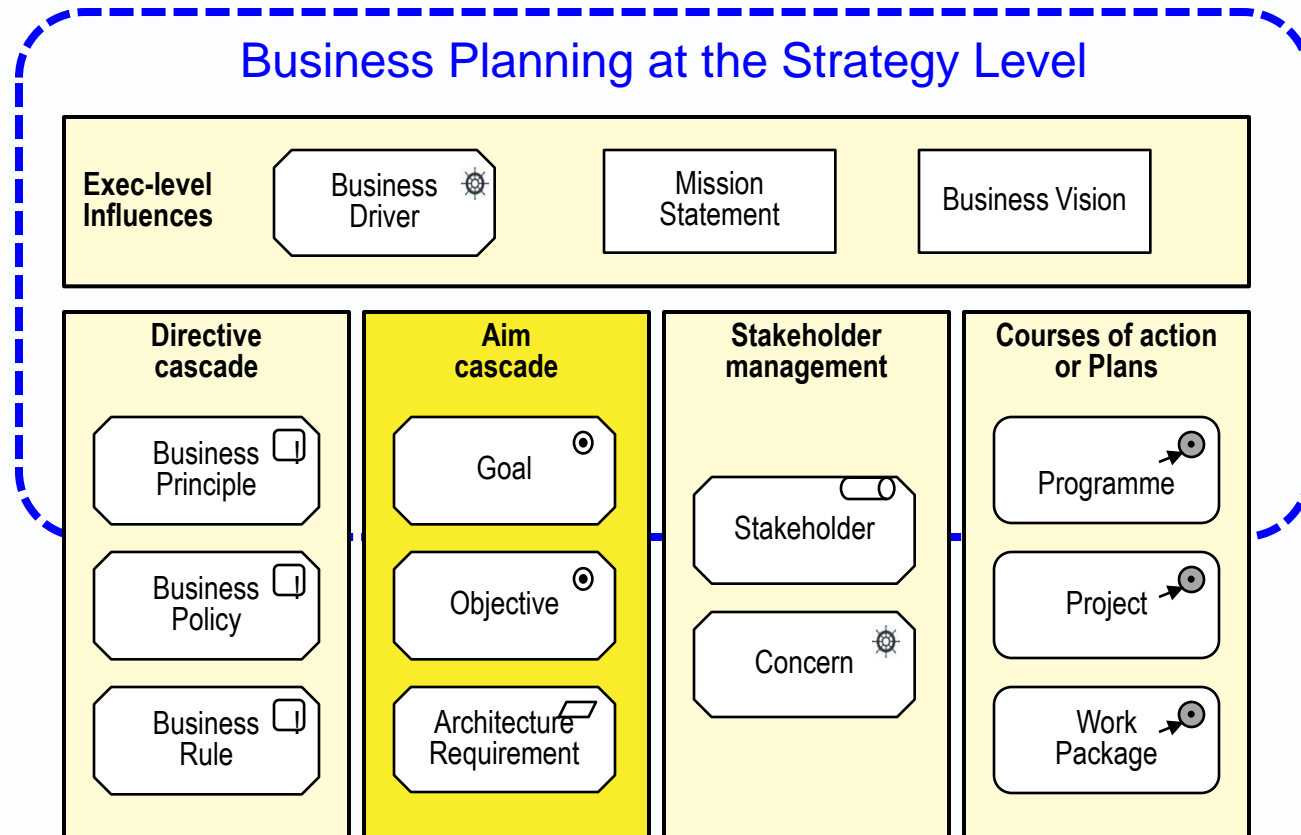


# A structured terminology helps people discuss directives at different levels



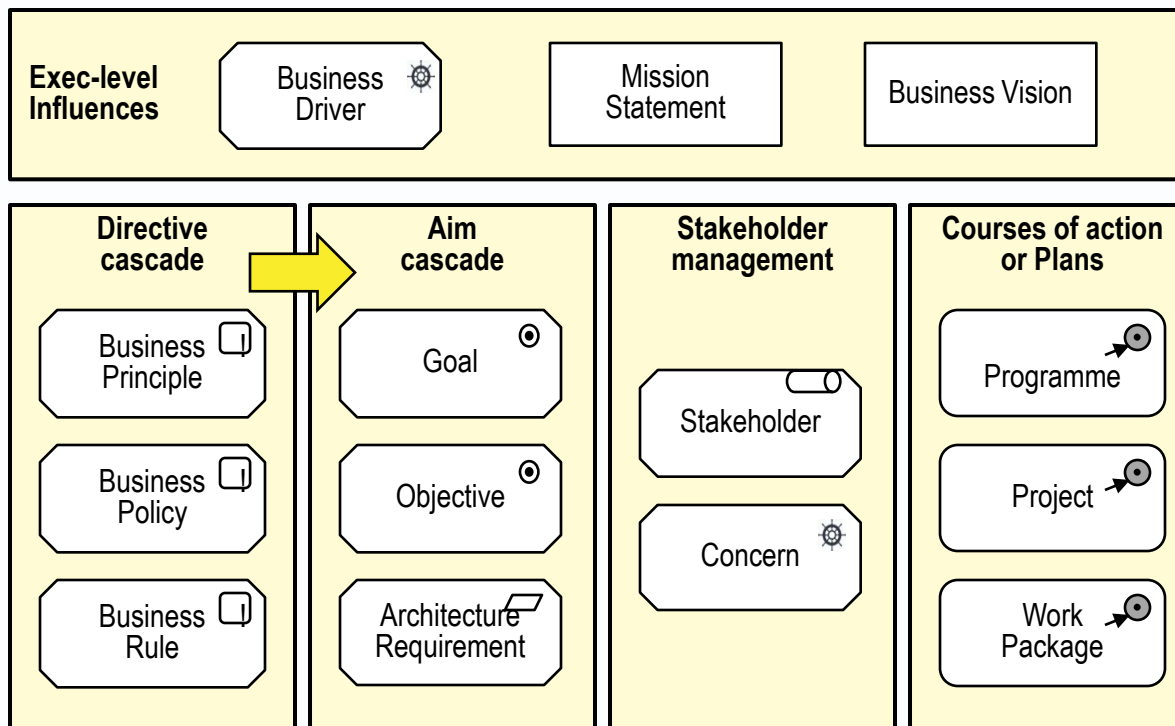
1. Study the strategic context
2. Establish directives
3. **Establish goals**





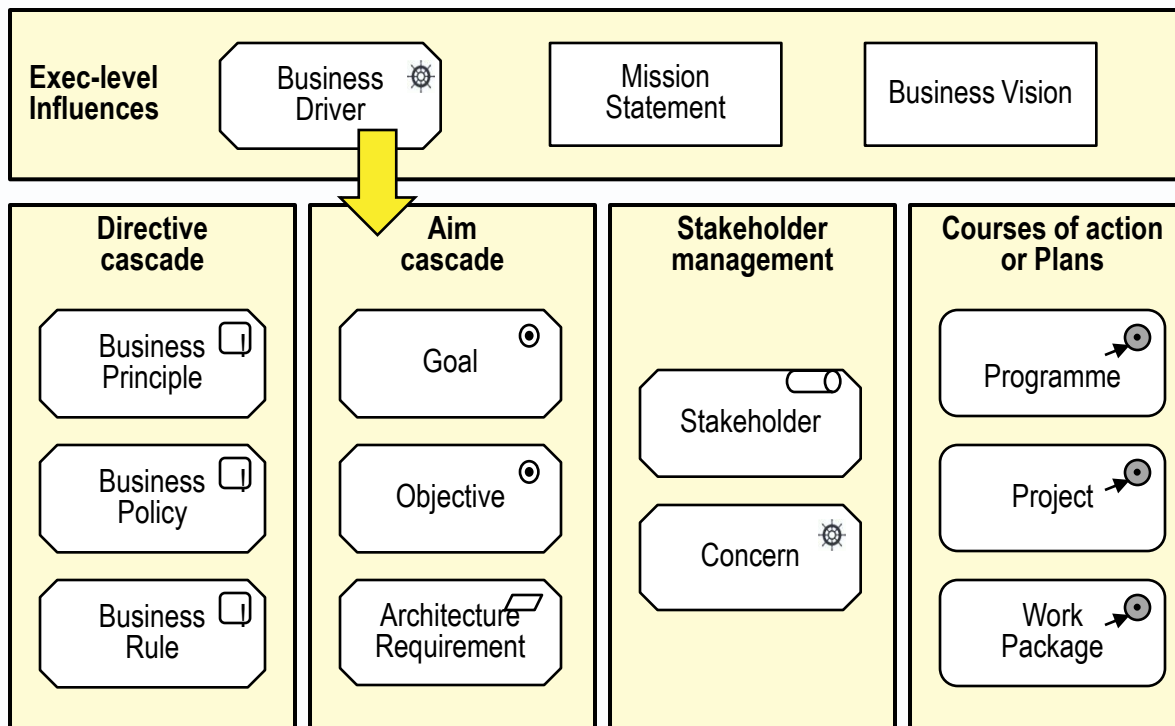
# From principles to goals

- ▶ Principle - security is paramount
  - Goal – in the next year, no more than 2 top-level security incidents.
- ▶ Principle – buy rather than build.
  - Goal – in the next year – at least 75% of our new application systems will be packages rather than bespoke.



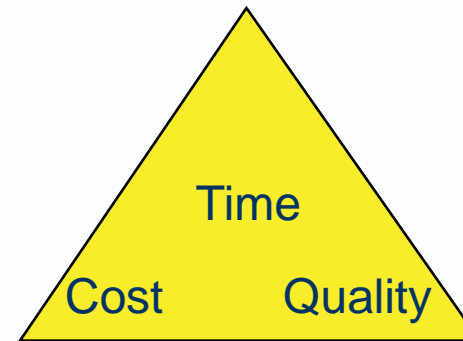
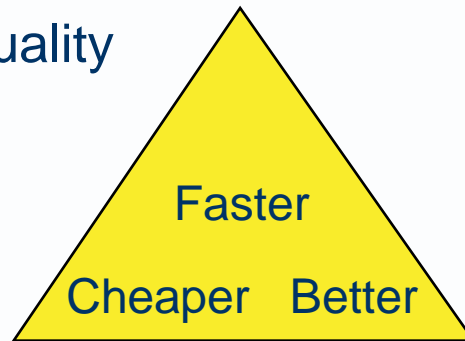
# From drivers to goals

- ▶ Enterprise leaders respond to drivers by defining aims
  - e.g. define expansion goals to ward off competition.



## The 'iron triangle' of project management

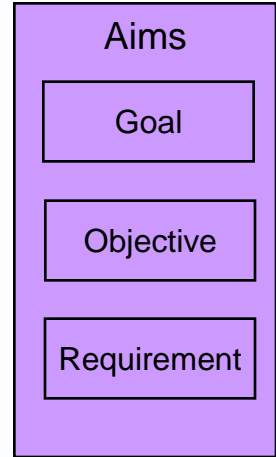
- ▶ Faster: Deliver sooner or faster
- ▶ Cheaper: Reduce cost
- ▶ Better: Improve quality



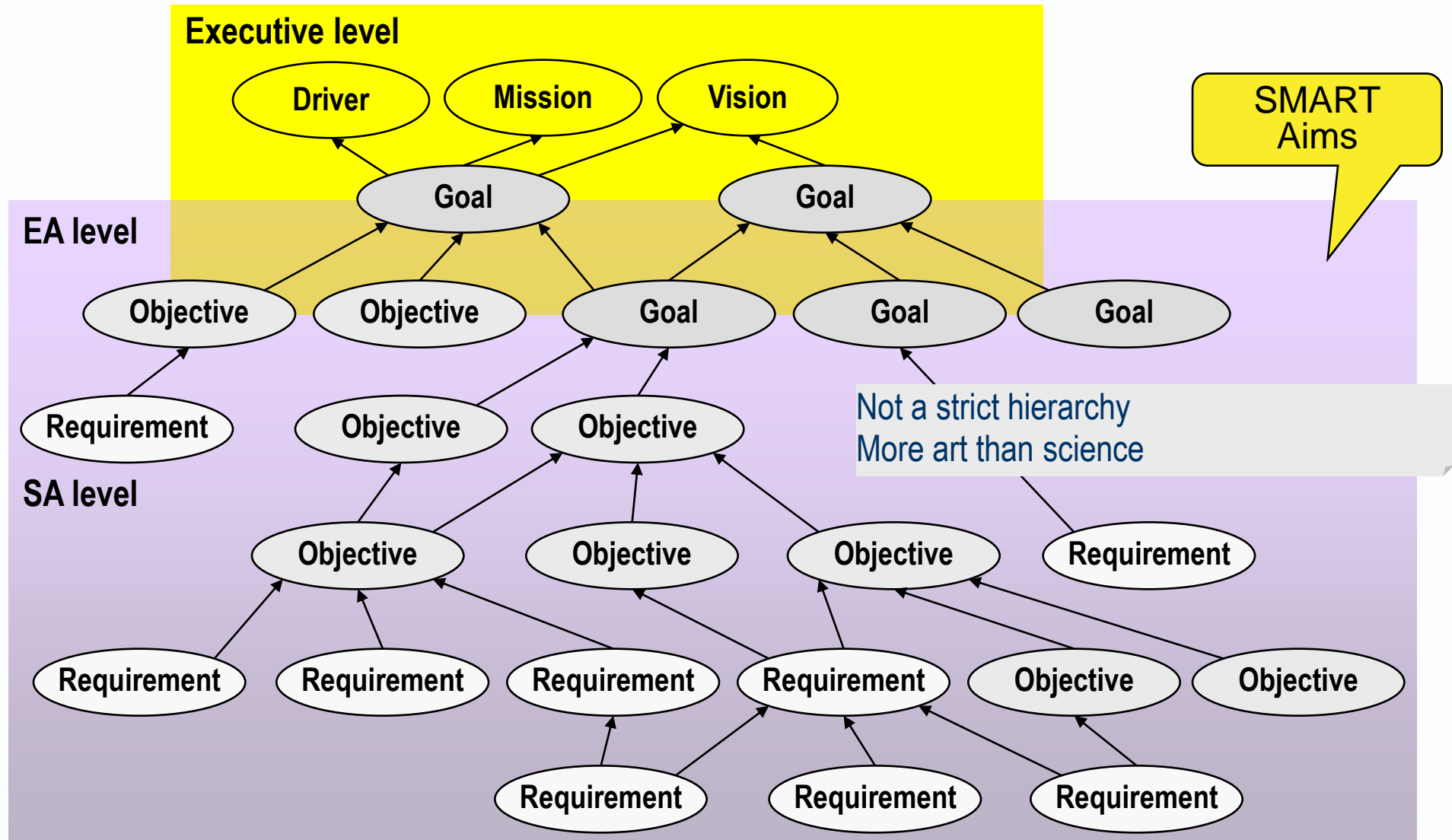
- ▶ A useful completeness check
- ▶ Have we covered the three angles?



- ▶ **Aim** [an influence] a desired result or outcome declared or recognised by business managers, or a requirement for a particular endeavour or system. It should be SMART (Specific, Measurable, Actionable, Realistic and Time-bound.).
  - **Goal** [an aim] that is strategic.
    - It may be quantified using **Key Goal Indicators**.
    - It may be decomposed into lower level goals or objectives.
  - **Objective** [an aim] that is more tactical than a goal.
    - It may support one or more higher-level goals.
    - It should be quantified using **Key Performance Indicators**.
    - It may be decomposed into lower level objectives or seen as a high-level requirement.
  - **Requirement** [an aim] a statement of need with which compliance can be demonstrated in a specific solution or project.
    - It should have **acceptance tests and an acceptance authority**.
    - It may be captured in a requirements catalogue or in the text of a service contract or use case.
    - It should be traceable to higher level concerns, aims, directives or strategies.



# A structured terminology for aims helps people talk about aims at different levels of abstraction



- ▶ AM provides more guidance on the elements in this graphi

