

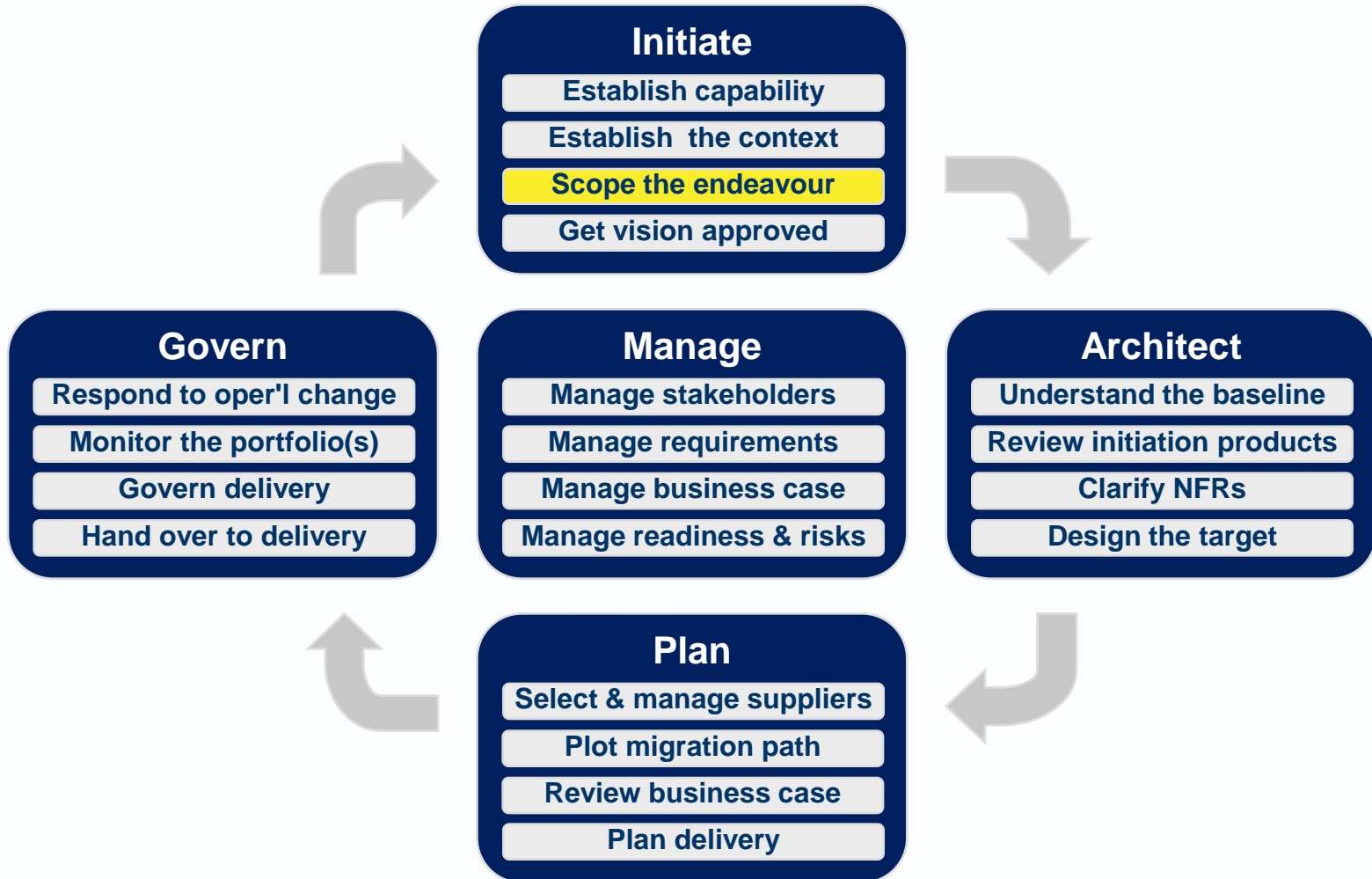
# Avancier Methods (AM)

## INITIATE

### Scope the endeavour

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# Scope the Endeavour (AM level 2)

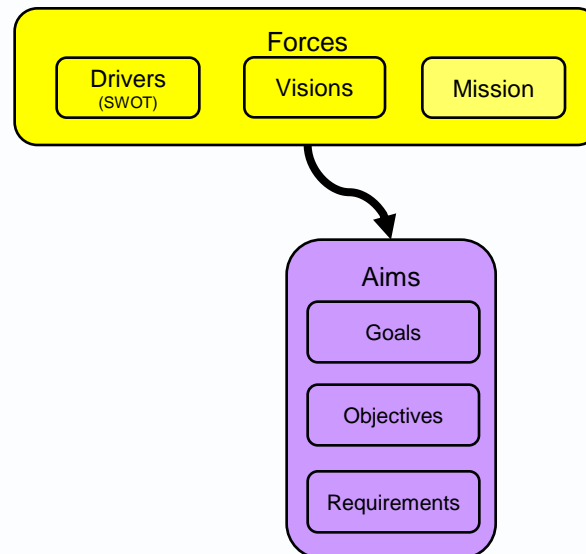


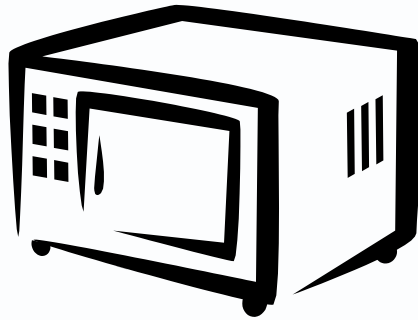
## Scope the Endeavour (AM level 3)



1. Identify stakeholders (see stakeholder management)
2. Identify aims
3. Identify constraints
4. Agree a solution vision
5. Scope in several ways
6. Plan the “architecture project”

- ▶ Enterprise leaders respond to drivers by defining aims
  - e.g. define expansion goals to ward off competition.
- ▶ As they cascade downwards, broad and high level aims are hierarchically decomposed into narrower and more detailed aims.
  - A lower level aim can support more than one higher level aim – so it is not a strict hierarchy.





## 1 Increase microwave oven market share by end of this year

1.1 Design a microwave oven priced < 60% of the competition.

1.1.1 Undercut current cost of parts by 30%

1.1.1.1 Reduce the number of controls used

1.1.2 Undercut current cost of assembly by 30%

1.1.3...

1.2 Increase production capacity

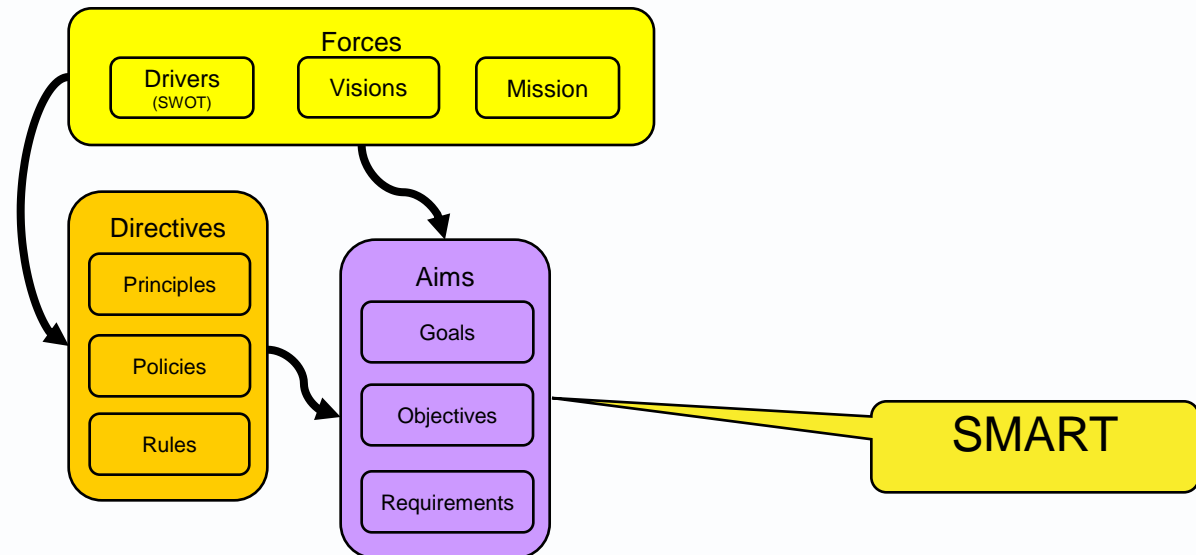
1.3...

## 2 Increase profit margin on market leading products by end of this quarter

3...

## ► Some goals may derive from principles

- Principle – data security is paramount
  - Goal – in the next year, we shall have 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.

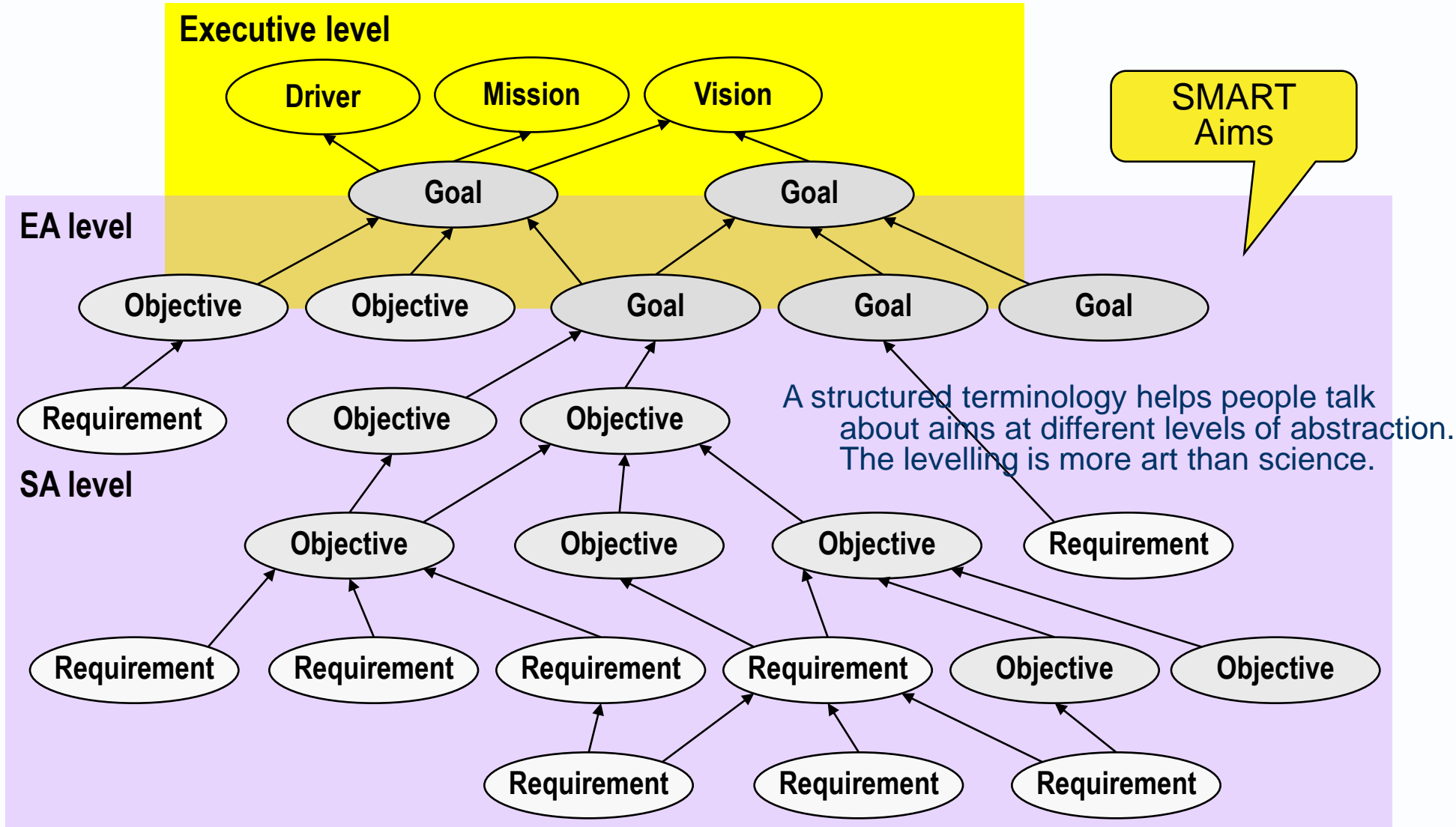


- ▶ There is a loosely structured hierarchy of aims.



- ▶ The terms can be used to differentiate levels within a given aim hierarchy.
- ▶ But there is no sharp or universally agreed distinction between aims at different levels.

# Our aims hierarchy



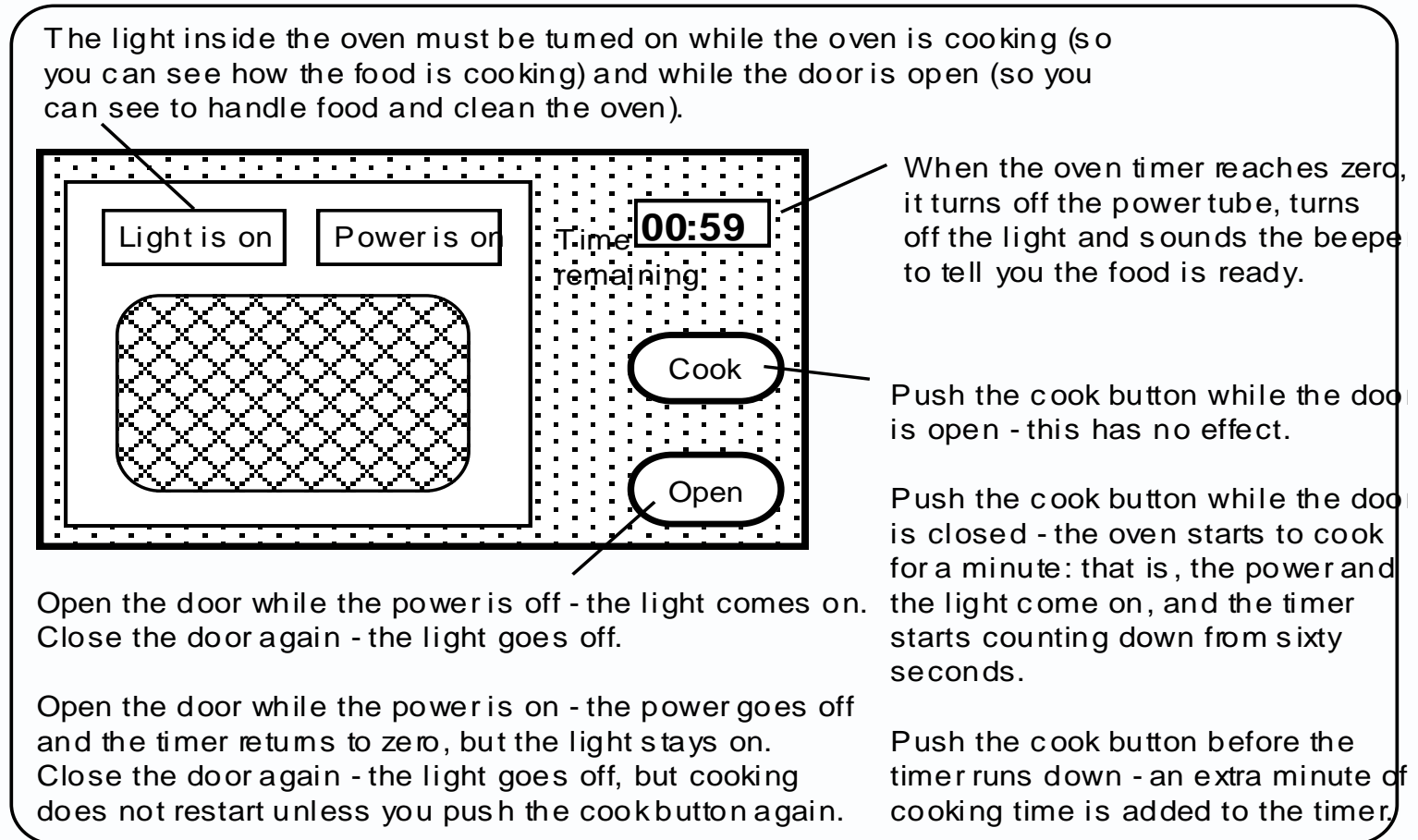


# Identify constraints

- ▶ Identify the constraints on work to be done:
  - ▶ Time
  - ▶ Budgets
  - ▶ Resources
  - ▶ Standards
  - ▶ Regulations

# Agree the Solution Vision, using a diagram if possible

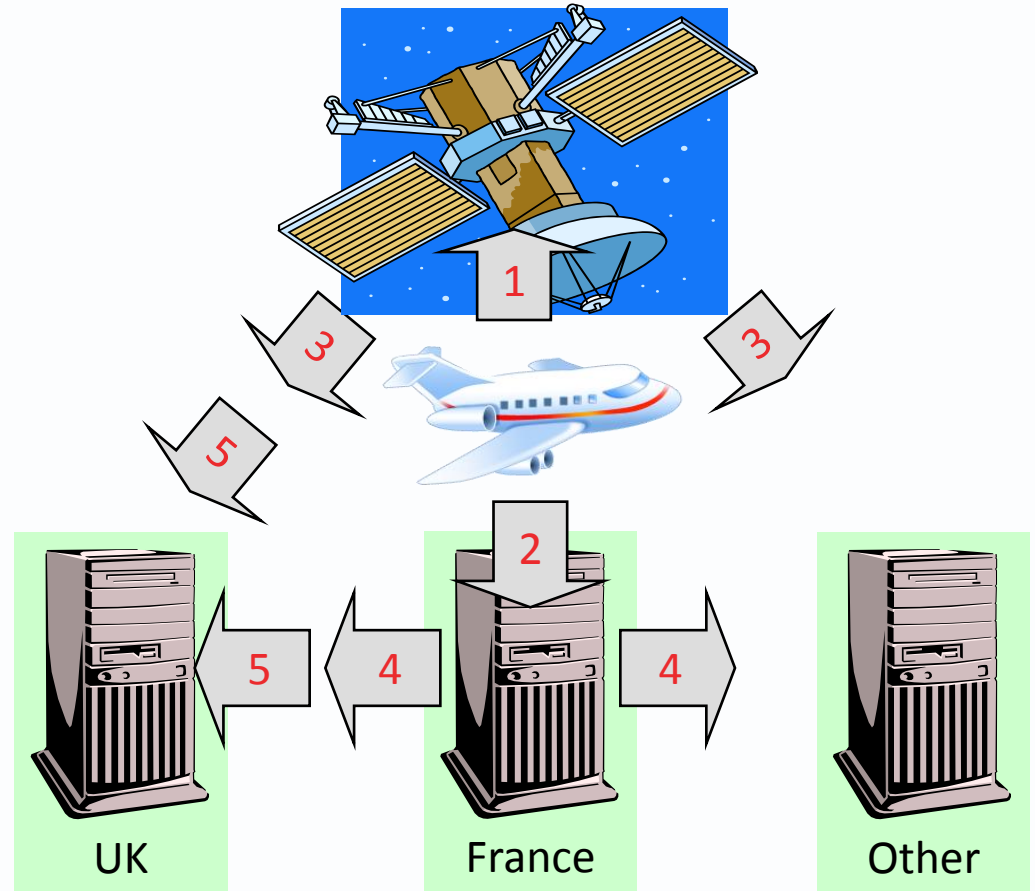
- ▶ Problem: Make a cheaper microwave oven
- ▶ Solution: The “one minute microwaver” (after Schlaer and Mellor)



# Solution Concept/ Vision diagram: an illustration

## Problem: how to maintain integrity of airplane position data?

1. Airplane sends time-stamped airplane/position message to satellite
2. Airplane also sends time-stamped airplane/position message to data centre (e.g. France) of controller responsible for current air space
3. Satellite forwards the airplane/position message to UK and others
4. France forwards the airplane/position message to UK and others
5. UK receives messages
6. UK replaces airplane/position record *if time stamp of message is later than time stamp of message last processed*



## However

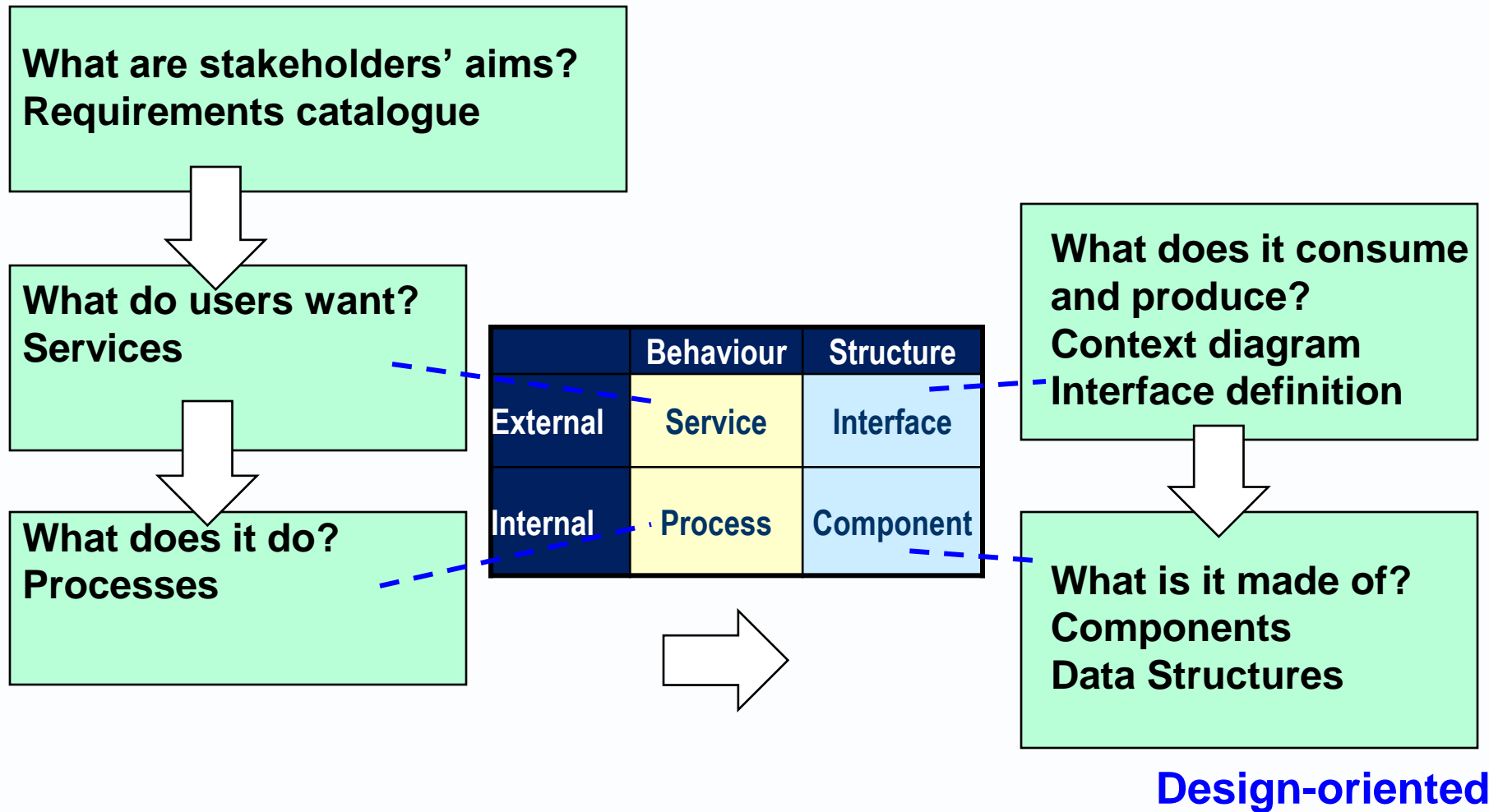
- ▶ A Solution Vision may be a relatively elaborate document.
- ▶ In effect, a first-cut Solution Outline.

► Define three dimensions

<b>Breadth</b>	<b>Constraints</b>	<b>Depth</b>
<b>Size &amp; complexity of System/project</b> Large / Medium / Small	<b>Time/resources to describe the system/project</b> Little / Moderate / Lots	<b>Level of detail reachable in descriptions/plans</b>
<b>Large</b>	<b>Little</b>	<b>Vacuous</b>
<b>Medium</b>	<b>Little</b>	<b>Sketchy</b>
<b>Large</b>	<b>Moderate</b>	<b>Sketchy</b>
<b>Medium</b>	<b>Moderate</b>	<b>Elaborate</b>
<b>Small</b>	<b>Little</b>	<b>Elaborate</b>
<b>Large</b>	<b>Lots</b>	<b>Elaborate</b>
<b>Small</b>	<b>Moderate</b>	<b>Fulsome</b>
<b>Medium</b>	<b>Lots</b>	<b>Fulsome</b>
<b>Small</b>	<b>Lots</b>	<b>Complete</b>

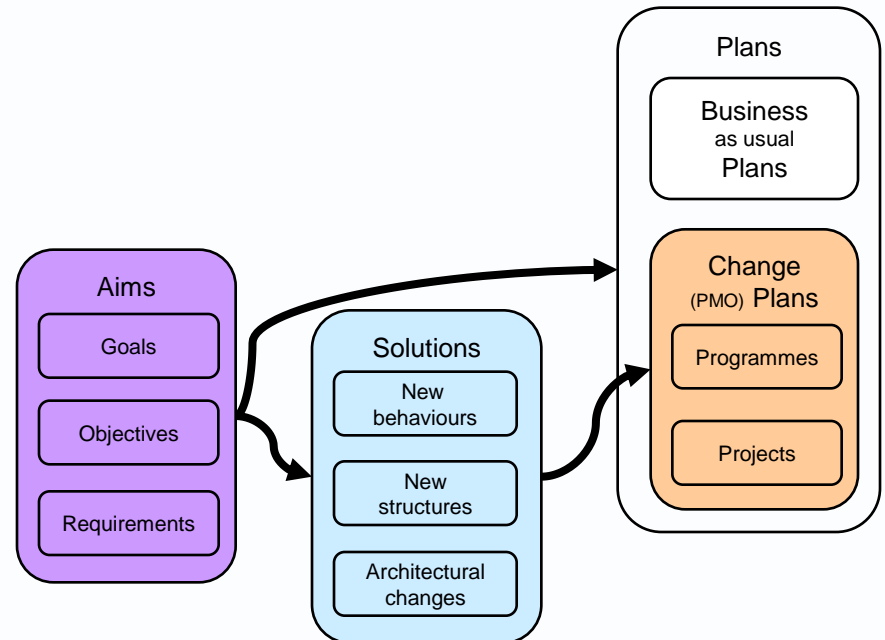
# Several ways to look at system breadth

## Requirements-oriented



# Plan the “architecture project”

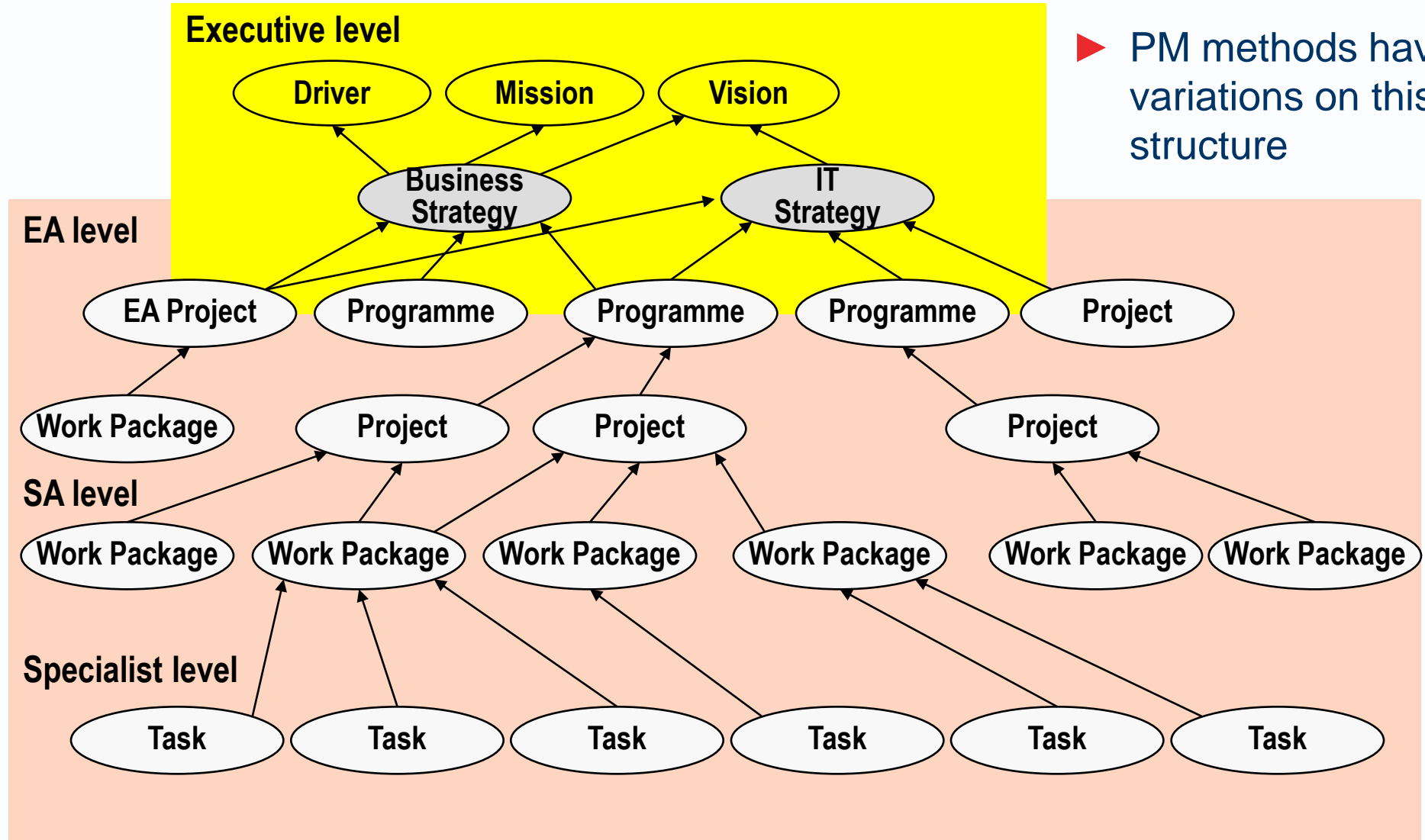
- ▶ Business-as-usual aims cascade down the management structure, as in a balanced score card approach.
- ▶ By contrast, the aims for a one off transformation travel a different route down the organisation via some kind of business change, strategy or enterprise architecture function.



A structured terminology helps people talk about plans at different levels of abstraction. The levelling is more art than science.

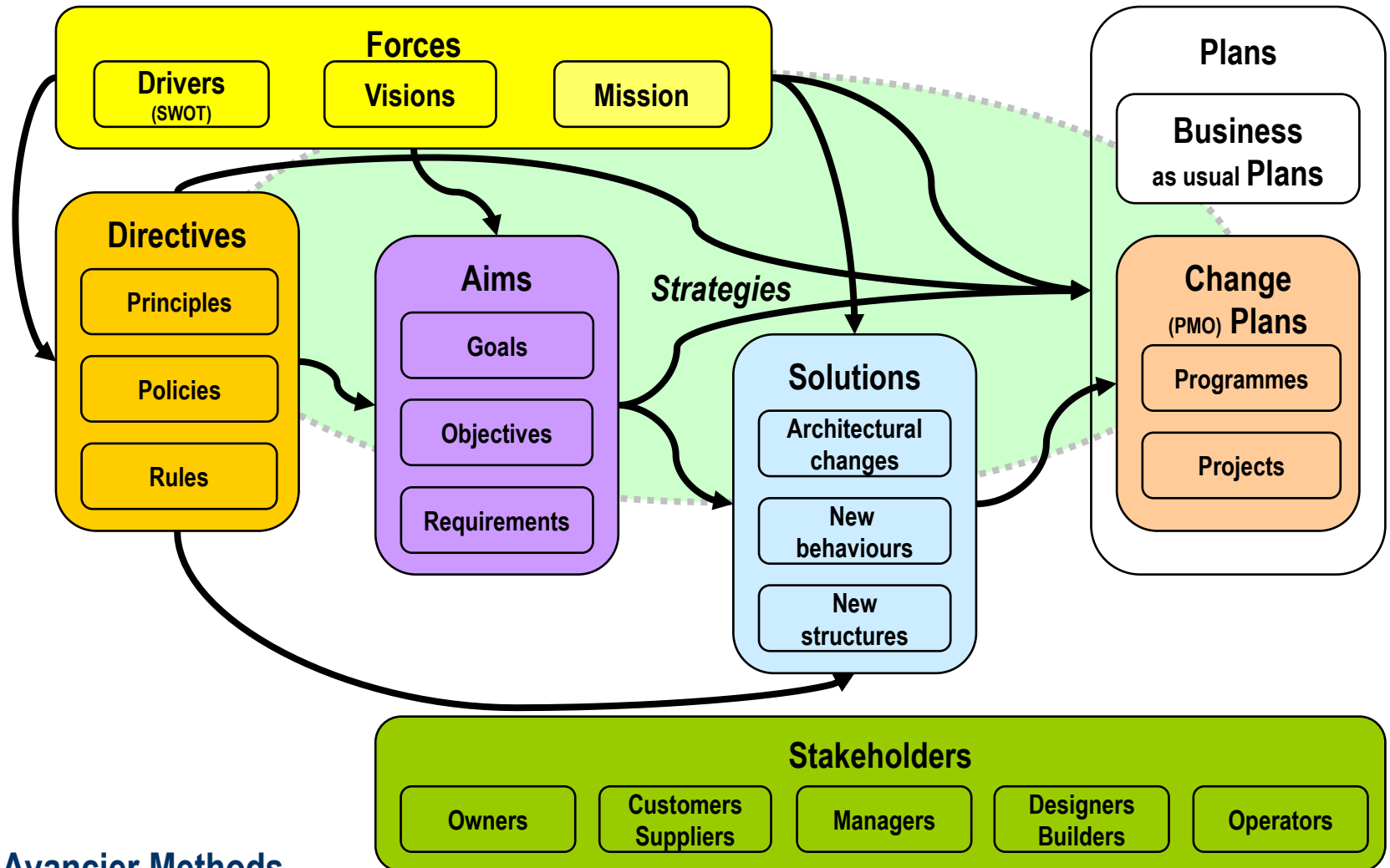
# A plan hierarchy

► PM methods have variations on this structure





More in other presentations



# Scope the Endeavour (AM level 2)

