

# Course of Digital Management Consulting

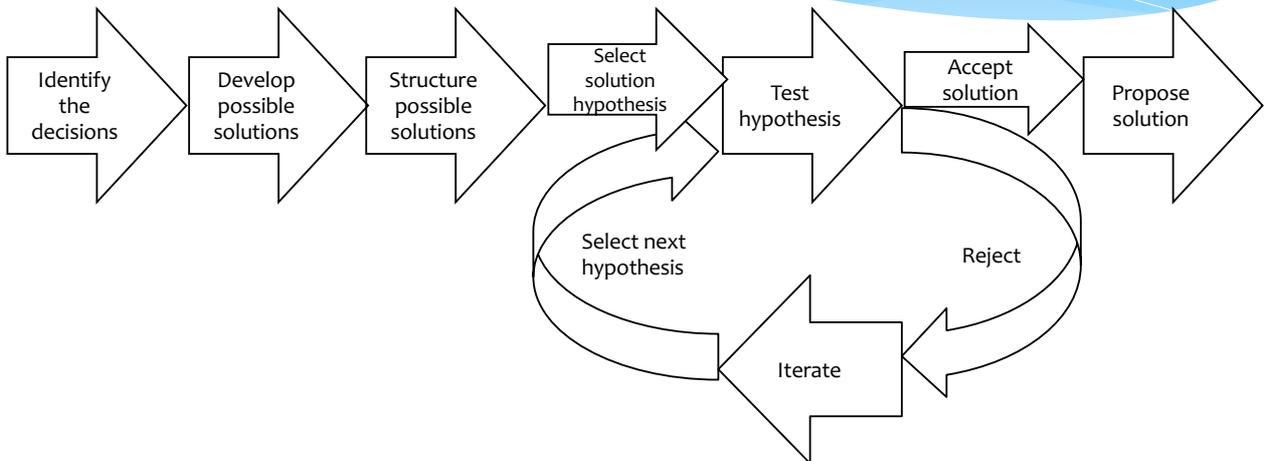
## *Structured solution development*

**Prof. Corrado Cerruti**

### **Agenda**

- The process;
- Identify the decisions;
- Develop possible solutions;
- Structure possible solutions and select hypothesis;
- Test a hypothesis; Collect the data; Analyse the assumptions;
- Uncertainty;
- Evaluate solutions options;
- Make decision about the solution
- Plan for implementation.

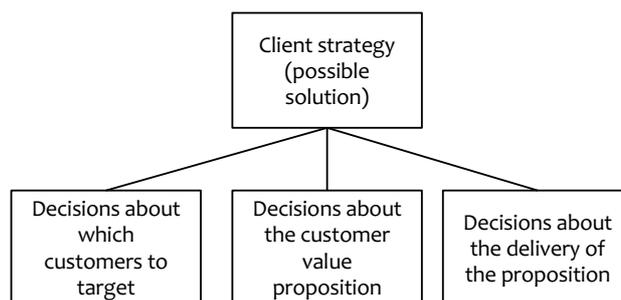
## The structured solution development approach



Without this approach some or all assumptions may remain hidden and will not be put to the test. The **solution** is the *answer* of the key question: if the consultants have to reject a hypothesis, they have to develop an alternative hypothesis.

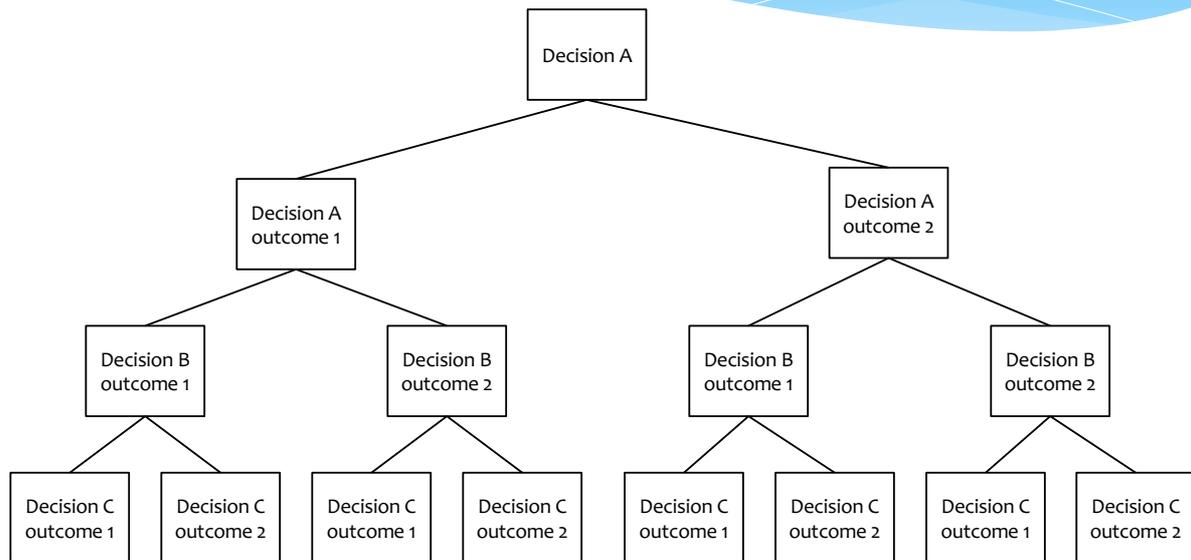
The approach actions should lead to *closure of the result gap*.

## The process - Identify the decisions



When thinking about the solutions, consultants should identify *what decisions the client may take*. These decisions provide a foundation on which to generate ideas for solutions.

## The process - Identify the decisions



The set of decisions may lead to numerous options. It is important to consider the **tree of possible decisions outcomes**. It provides a complete overview of all possible solutions.

## The process – Develop possible solutions

Instead of «*boiling the ocean*» of possible decision outcomes, the consultants will develop a selection of possible solutions. We can distinguish *three ways*:

1. **Exploit the consultancy firm's collective experience:** the problem may not be new to the consultancy, for this reason it is important an efficient knowledge management within the MC firm.
2. **Exploit the public domain knowledge:** The consultants may tap into the public domain knowledge (distributed over business school curricula, print media and internet) to develop possible solutions (choose a general framework that needs to be customized).
3. **Explore new solutions:** consultants need to use creative techniques if the client's problem is new to the world.

## The process – Structure possible solutions and select hypothesis

After generating possible solutions, consultants need to filter the ideas and it is reasonable that the remaining solutions will be **mutually exclusive**, and specially they need not to be **collectively exhaustive**.

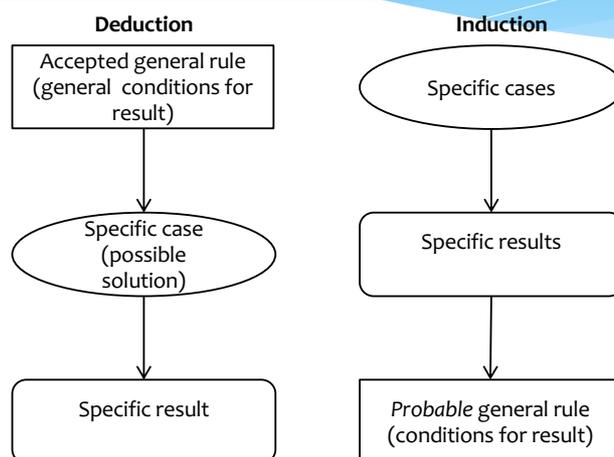
Consultants have to balance the *trade off* between the *time opportunity costs of trying to exhaust the number of solutions* and the *value of additional solutions*.

To select a possible solution from the solution structure to use as their initial hypothesis, consultants may use the problem statement as a guide.

The consultants **need to know what solution characteristics determine client satisfaction**. E.g. *how does the client compare and evaluate alternative solutions?* The experience of the consultants plays an important role.

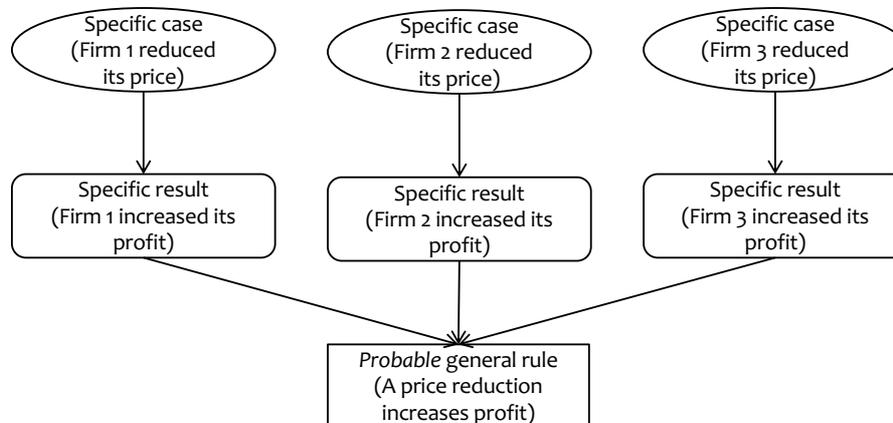
Subsequently the consultants formulate their initial hypothesis (it is a possible answer to the question).

## The process – Test a hypothesis



Before recommending a solution, consultants need to verify this solution. The consultant's hypothesis is an untested solution. To test hypothesis consultants can use a **Deduction** or an **Induction** process.

## E.g. Induction

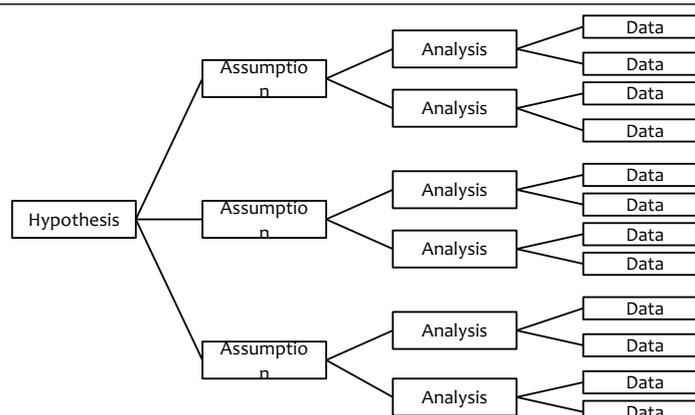


## The process – Collect the data

To test an assumption, the consultants may use standard or they may design or use a customized approach. One popular analytical design is the driver analysis; consultants measure a subject through its **drivers**.

**Benchmarking** is another popular analysis design among consultants, specially for competitive analysis. Consultants may combine this two types of analysis.

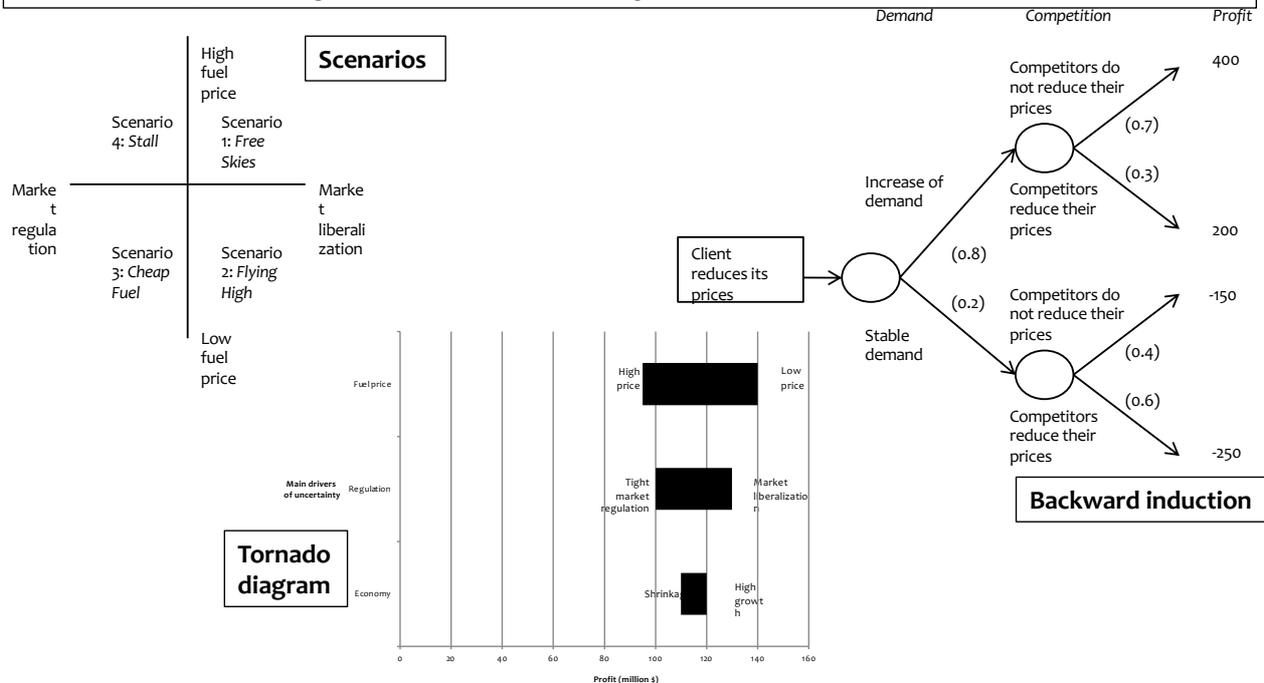
All data may seem relevant. With their hypothesis, consultants will know exactly what data they need to test the hypothesis. Without data, consultants cannot test their hypothesis.





## The process - Uncertainty

Data are by definition about the past. The consultants' recommendation instead are about the future. The level on uncertainty may vary by the type of client problem or opportunity. To deal with uncertainty, consultants use **2 techniques**: 1) *Scenarios*; 2) *Sensitivity analysis* (using *backward induction* and presenting results with *Tornado diagram*).



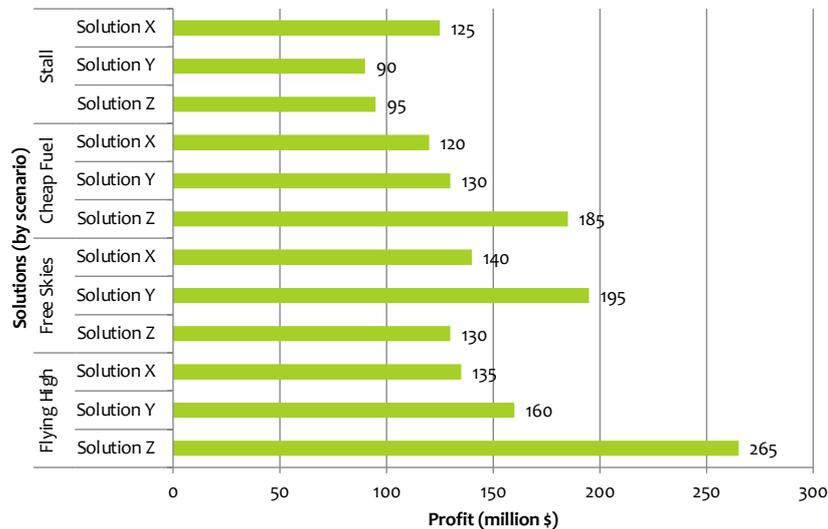
## The process - Uncertainty

To deal with uncertainty, consultants may develop:

- Multiple solutions for different futures:** for different scenarios they may develop different solutions. They will recommend a solution for the most probable scenario.
- One solution that is robust enough:** to deliver acceptable results for the client under different scenarios.
- A solution that postpones commitment until uncertainty diminishes to an acceptable level.** E.g. the stage-gate approach to innovation projects in which there is a limited initial investment in a first stage development of the technology.
- A real option plan.**

## The process – Evaluate solutions options

There may not be a single solution that outperforms the other solutions under all scenarios. The relative performance of individual solutions varies with the circumstances. It could be used a *profit under different scenarios diagram*.



## The process – Make decision about the solution

The consultants recommend the solution but the client decides on the solution. There could be **2 situations**:

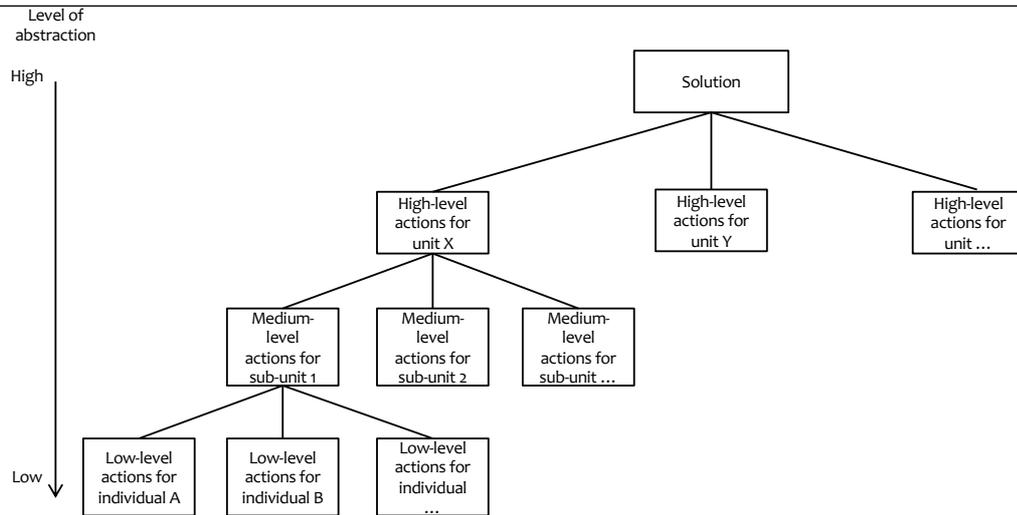
- 1. Consultants recommend a single best solution** that outperforms any alternative ones on each one of the client's selection criteria.
- 2. Consultants have identified alternative solutions without a clear winner.** Different solution will win according to different criteria of the client. Deciding among these solutions is the responsibility of the client. In this case, consultants can facilitate the decision process assess the solution under criteria that the client show.

Moreover, *some solutions are non-competing* and may be combined. No single solution is able to close the result gap and the client need to combine several non-competing solution.

## Plan for implementation

To realize this result improvement, the client needs to **implement the solution**; that means *concrete actions*. Actions take place at the level of individual actors inside or outside the client organization. To realize the result, the individual actors need concrete instructions at a low level of abstraction.

Consultants may *break-up the solution into high-level actions for each unit*. Next, the consultants may *translate these into lower-level actions for sub-units*. Finally, the consultants *translate the actions for sub-units into concrete actions for individual employees with these sub units*.



## Summary

