HYPOTHESIS-DRIVEN APPROACH FOR PROBLEM-SOLVING AND COMMUNICATION TO THE POINT

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Module objectives

In the problem-solving sessions you will learn:

- Disciplined & fast approach to problem-solving
- How to break problems down into manageable tasks
- A framework to structure your work
- How to actively participate in new engagements from the get-go
- How to apply best practices for gathering and analyzing data

In the communicating sessions you will learn how to:

- Transfer complex topics into logical communication
- Write persuasive documents
- Tell a powerful and convincing story in PowerPoint
- Transform your audience to make decisions

AGENDA (1/2)
HYPOTHESIS-BASED PROBLEM-SOLVING

01 **Problem-solving process**

02 Problem definition

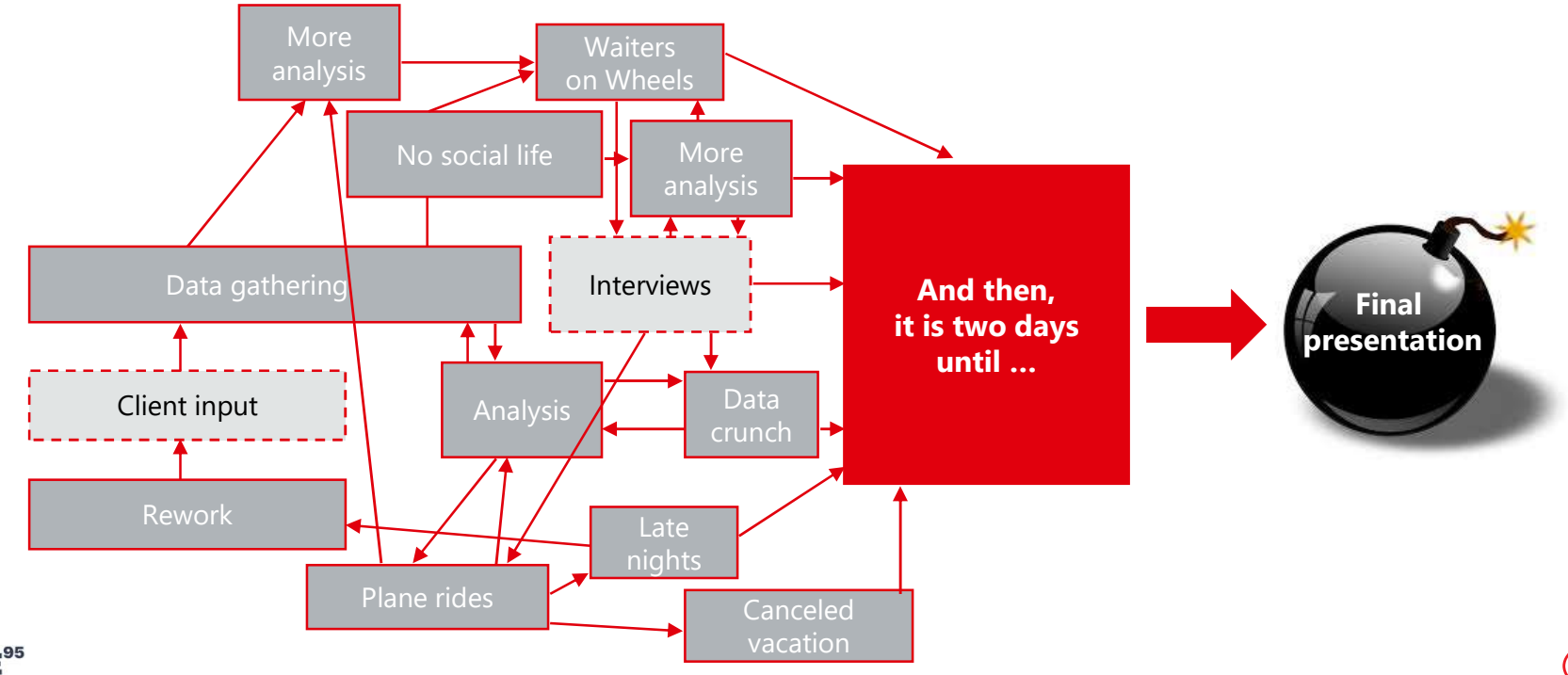
03 Problem structuring

04 Prioritization

05 Hypothesis development

06 Workplan

PROBLEM-SOLVING AND COMMUNICATION WITH THE CLIENT MIGHT GET OUT OF HAND PARTICULARLY IN COMPLEX PROJECT ENVIRONMENTS



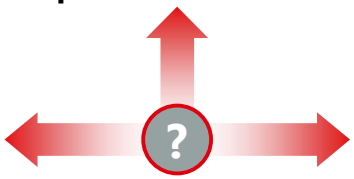
APPLYING SYSTEMATIC PROBLEM-SOLVING APPROACH HELPS TO IDENTIFY AND SOLVE PRACTICALLY ANY ILL-DEFINED OR UNIQUE BUSINESS PROBLEM

	Need for "Expertise-based" approach	Need for "Consulting-based" approach
The nature of the problem	• Well-defined • Repetitive • Fairly standardized • Solution more or less clear from the start • Rather in the implementation phase of a project	• **Unstructured problem** • **Not obvious solution** • **To a large extent unique; some common themes** • **Solution unclear / not known**
Source of solution	• Technical expertise • Experience	• **Systematic problem-solving approach**
Core skills	• Expertise	• **Problem-solving skills**

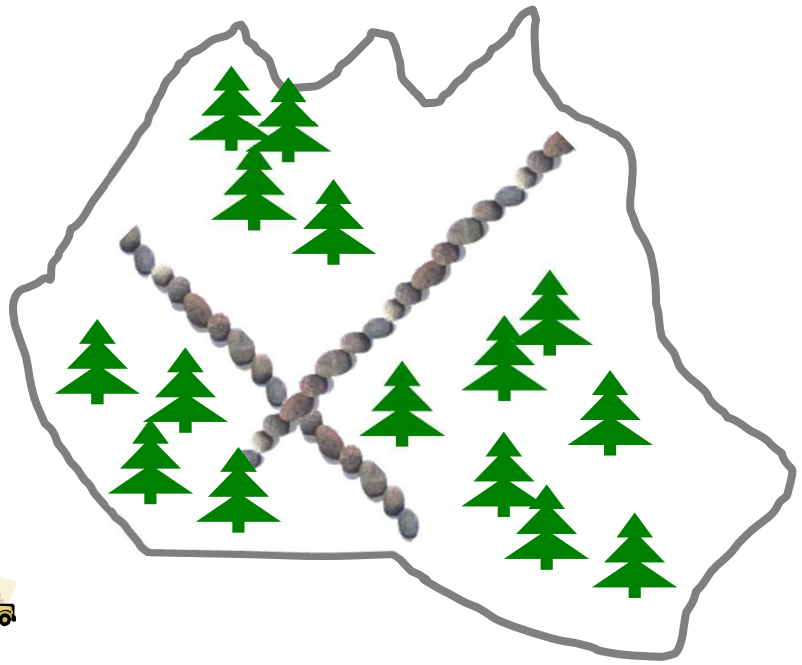
Applicability of hypothesis-based problem-solving approach

FUNDAMENTAL PROBLEM-SOLVING APPROACH BASED ON "COMMON SENSE"…

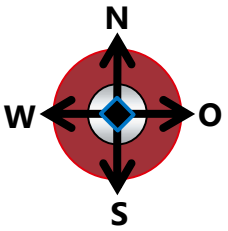
4 **Which**
path to take?



3 **How**
do I get there?



1 **Where**
am I?



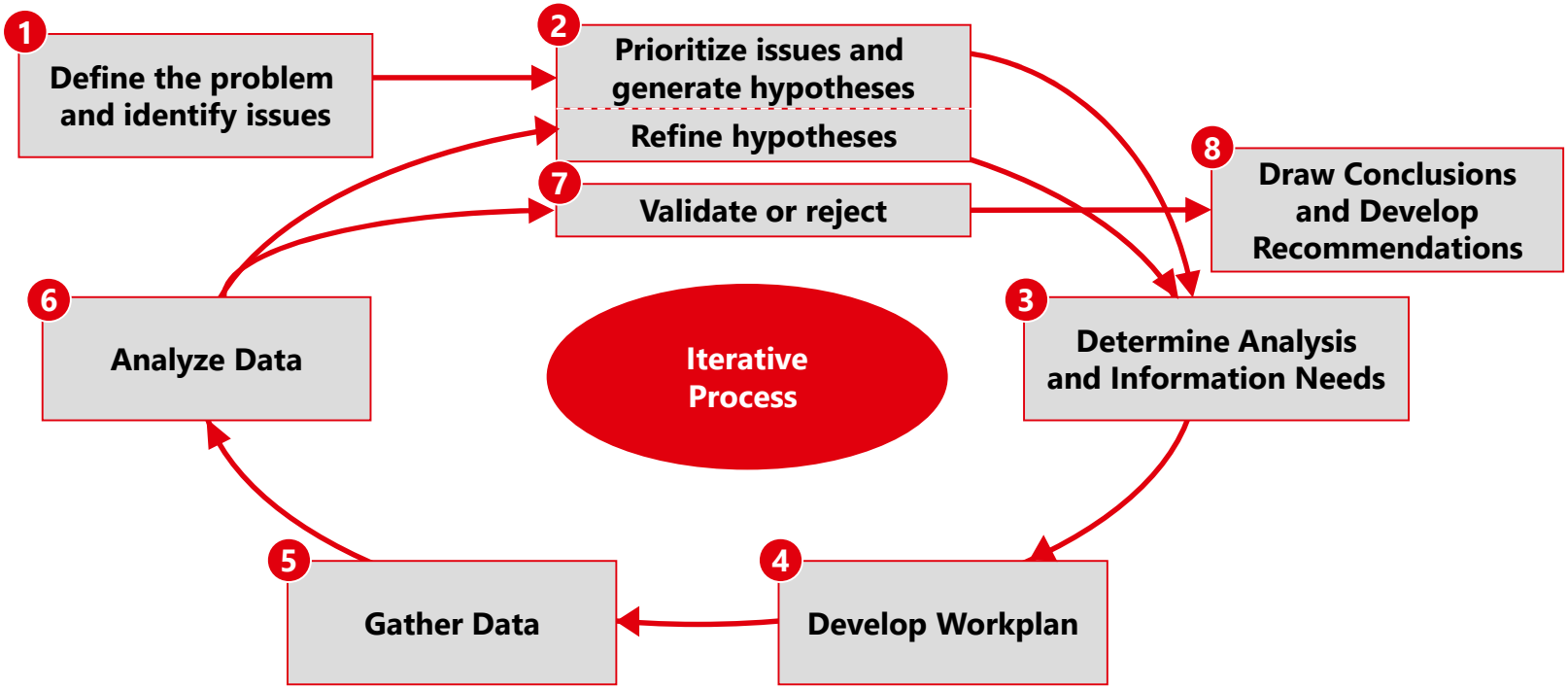
2 **Where**
do I want to go?

…TRANSLATED IN A "FORMALIZED" HYPOTHESIS-DRIVEN APPROACH (HDA) FOR PROBLEM-SOLVING

HDA typical steps	Definition	Related Framework
Describe situation	… a succinct description of the current circumstances (internal and external)	Problem Statement sheet
Define the problem/ project objective	… precise, comprehensive, well-articulated definition of the **real** problem that needs to be solved = project objective	
Structure the problem by identifying issues	…3-5 MECE[1] issues/drivers/sub-questions that (once answered) solve the problem and will be tested through a series of testable hypotheses	Issue tree Mindmapping
Prioritize problem issues	…selection of problem issues with the highest impact for solving the problem	Prioritization matrix
Develop Hypothesis	… declarative statement or tentative answers (multiple answers) to the questions which point to required analysis	Brainstorming, Hypothesis tree
Create workplan	… analyses to be conducted to prove the hypothetical questions	Hypothesis diagram Workplan
Validated Hypothesis	… the result of the analysis & basis for the recommendation	

[1] Mutually Exclusive and Collectively Exhaustive

HDA IS NOT A LINEAR STEP-BY-STEP BUT AN ITERATIVE PROCESS



HOW DOES ITERATION AND COMMUNICATION ALONG THE HDA WORK?

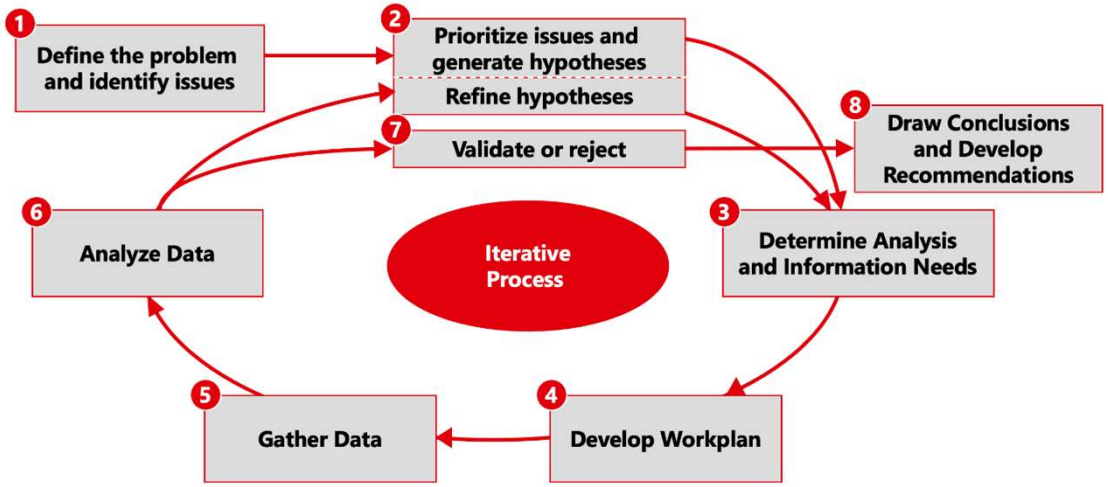
HDA – Basic principles and premises

- How to really make it iterative?
  - Develop an early solution and approach: "Day 1" or "Week 1" draft storyline
  - Iterate the early hypothesis-driven solution (answer and approach) – testing and adjusting in communication with all relevant stakeholders at each phase of the process, e.g., weekly
  - Make relevant stakeholders to co-creators by involving them into single iteration cycles
- Process serves as a guideline for team-work and is not meant to be "filled in" by team leader
- Regular, thoughtful iteration saves time and produces a more robust solution

TAKE-AWAYS FOR HDA FOR PROBLEM-SOLVING

1. HDA is a multi-stage process starting with problem definition and yielding in a couple of validated hypothesis as basis for the final recommendation

2. HDA is an iterative process! Develop early the "Day 1-Solution" and sharpen/complement/ adjust it through all stages of the HDA involving all relevant stakeholder (co-creation)!



THANK YOU