BOSTON CONSULTING GROUP

# Problem Solving and Project Planning

## BCG approach and learnings

Aalto University School of Business

MARCH 2022

Aalto University

# Introduction: Juuso Soininen

## Partner at DigitalBCG

14 years at BCG, with 80+ projects planned and executed

Leading Business+Tech client projects across all industries

M.Sc. in Industrial Engineering and Management from the Helsinki University of Technology

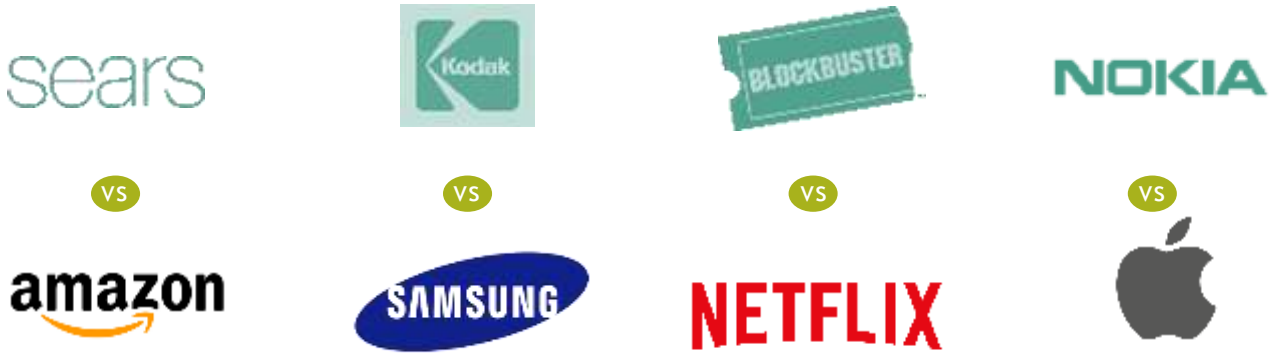
# Agenda

- Problem solving in a client project setting
- Planning projects in practice
- Team exercise (~20min)

“We didn’t do anything wrong, but somehow, we lost

Stephen Elop, Nokia

## Battles fought and lost



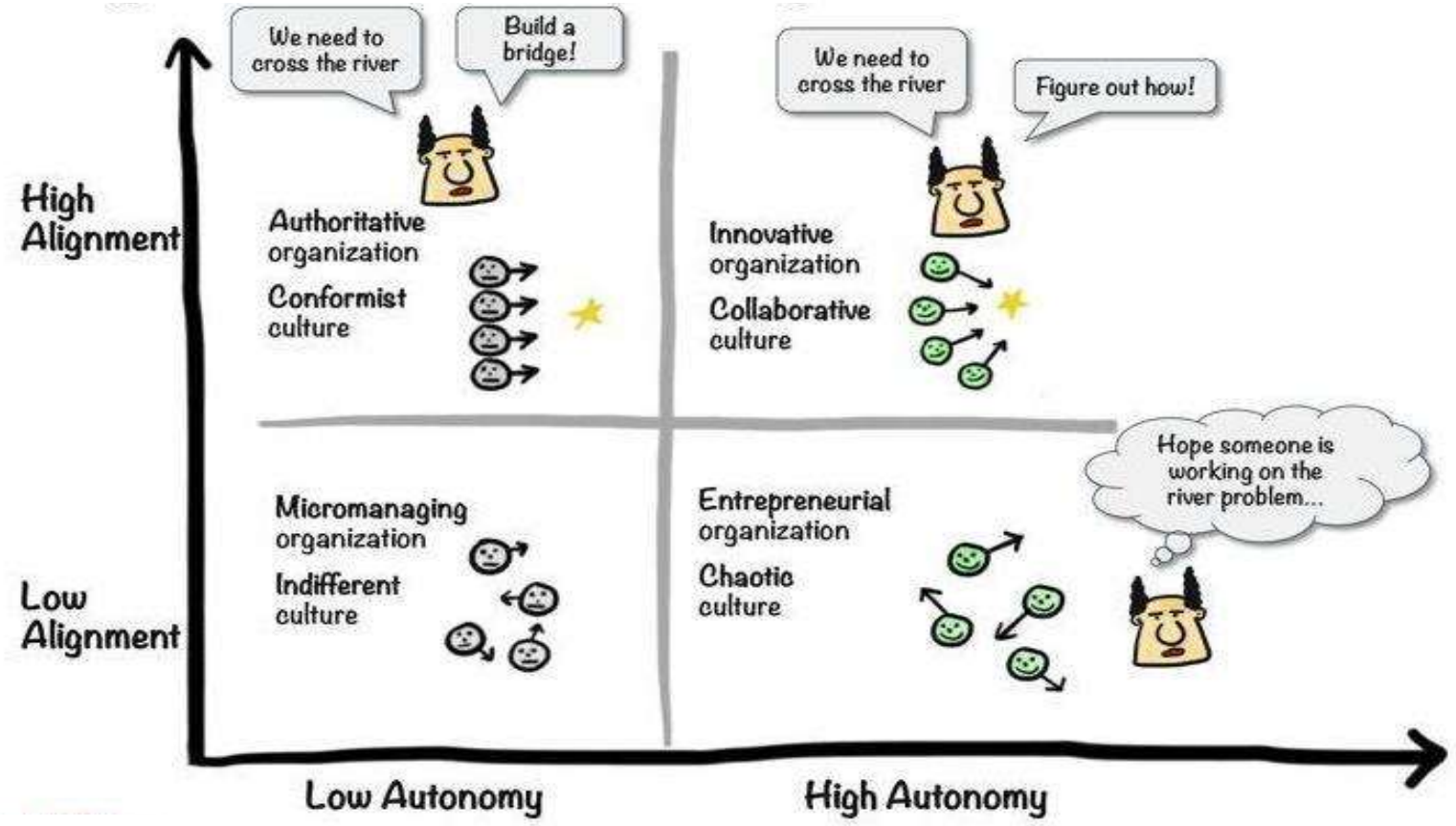

## Battles still being fought


Traditional approaches designed to with-stand disruption waves …
… time for a new approach
… in the 21st century's new normal, need to ride disruptive waves and adapt

# Agility is a function of high autonomy and high alignment

## Alignment

Teams are united around shared objectives, purpose, and vision




## Autonomy

Individuals and teams are responsible for ideas and decision making

Source: Henrik Kniberg

# The Five Key BCG Success Factors for Structured Problem Solving

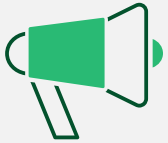
**Define and understand the real problem**
(often need to understand "baseline" before solving the problem)

Your client might not (fully) know it or might not be able to articulate it without your help

**Form hypotheses and solve top-down**

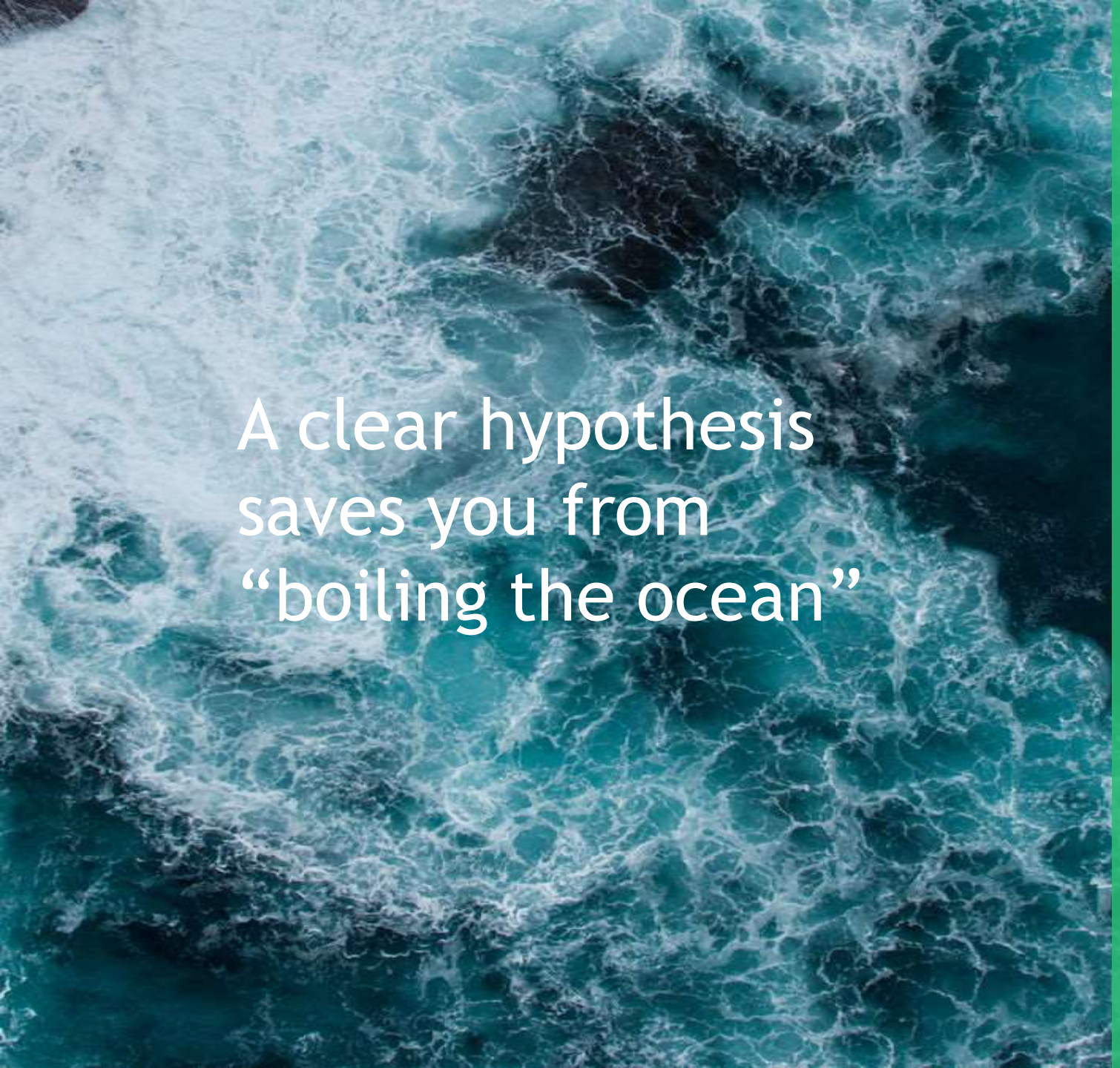
**Plan your work to the end-product**

**Focus your work (=prioritize)**



**Always have an answer & communicate frequently**

Source: BCG experience and expertise. References to SCQ and Pyramid Principle: Barbara Minto, The Pyramid Principle



A clear hypothesis saves you from “boiling the ocean”

…but forming a good hypothesis requires expertise, effort and iteration

# Generate and structure hypotheses - helps with focus

**Attempts to formulate the possible result of the project**

**Hypotheses help to be specific and focused**

- Forces you to be explicit about what you expect to achieve

**Hypotheses are allowed to be wrong**

- Their use is to structure and focus the project
- No preclusion of the results

**The hypothesis will be adapted to the findings during the project**

- More and more specific
- Changing as the evidence evolves

# When determining the time needed for your analyses, make sure you understand the burden of proof required

## Step 1: Determine what **proof** is required

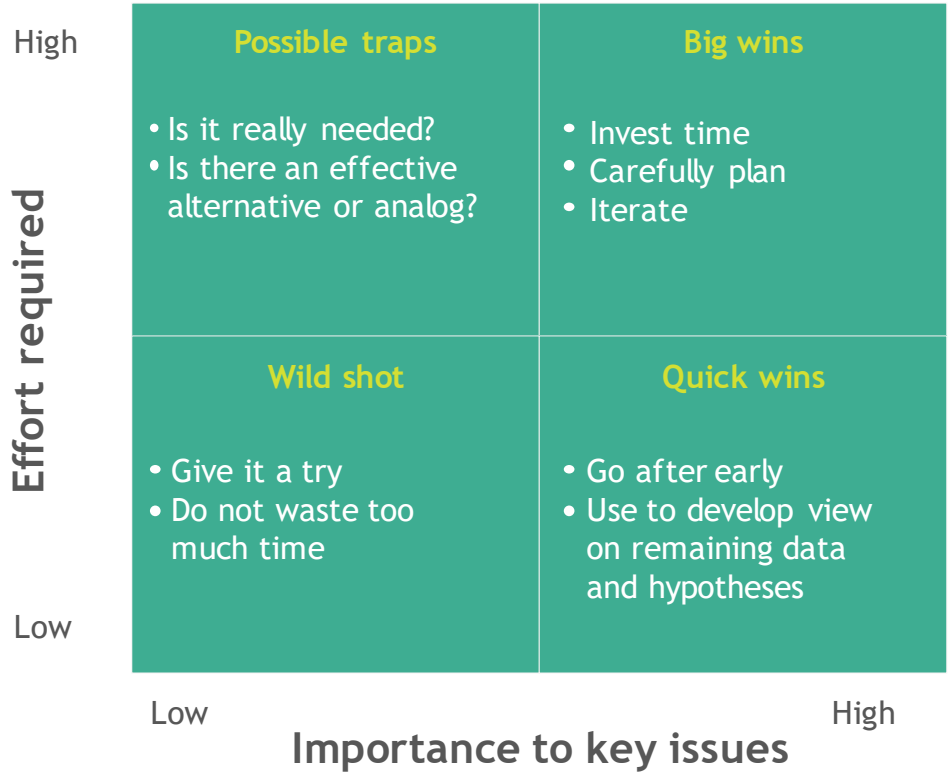
**Gain alignment to the level you intend to provide supporting evidence for your recommendation**

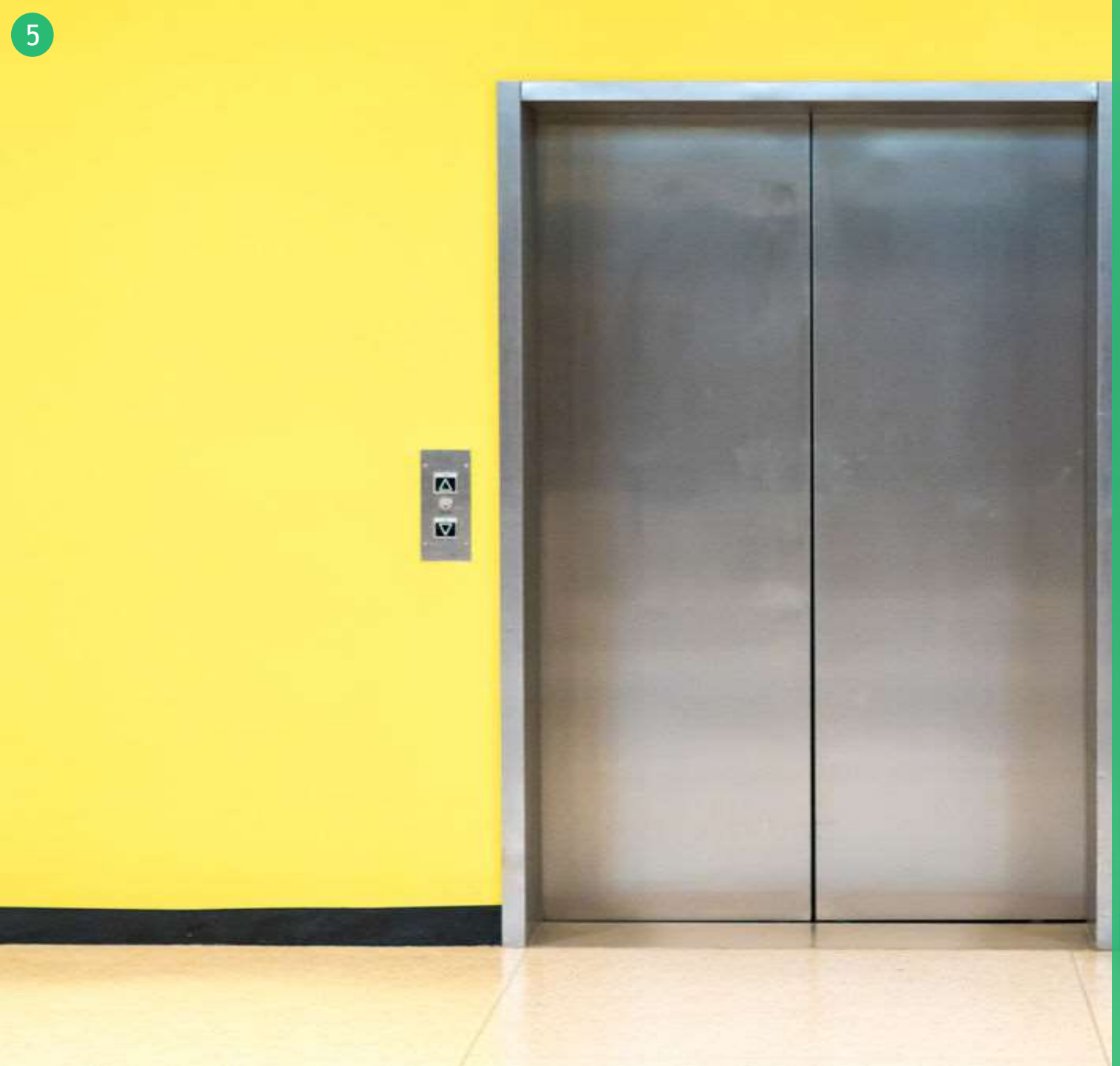
- Expert opinions
- Case studies and examples
- Samples (not significant)
- Statistics (t-test)
- Correlation ($R^2$)
- Analytic relationships (model)

**Think what burden of proof you will have to provide**

- How accepting will the audience be of findings?
- Will our findings be controversial?

## Step 2: Prioritize your analyses based on **effort** and **importance**





“

# Always have your elevator speech ready

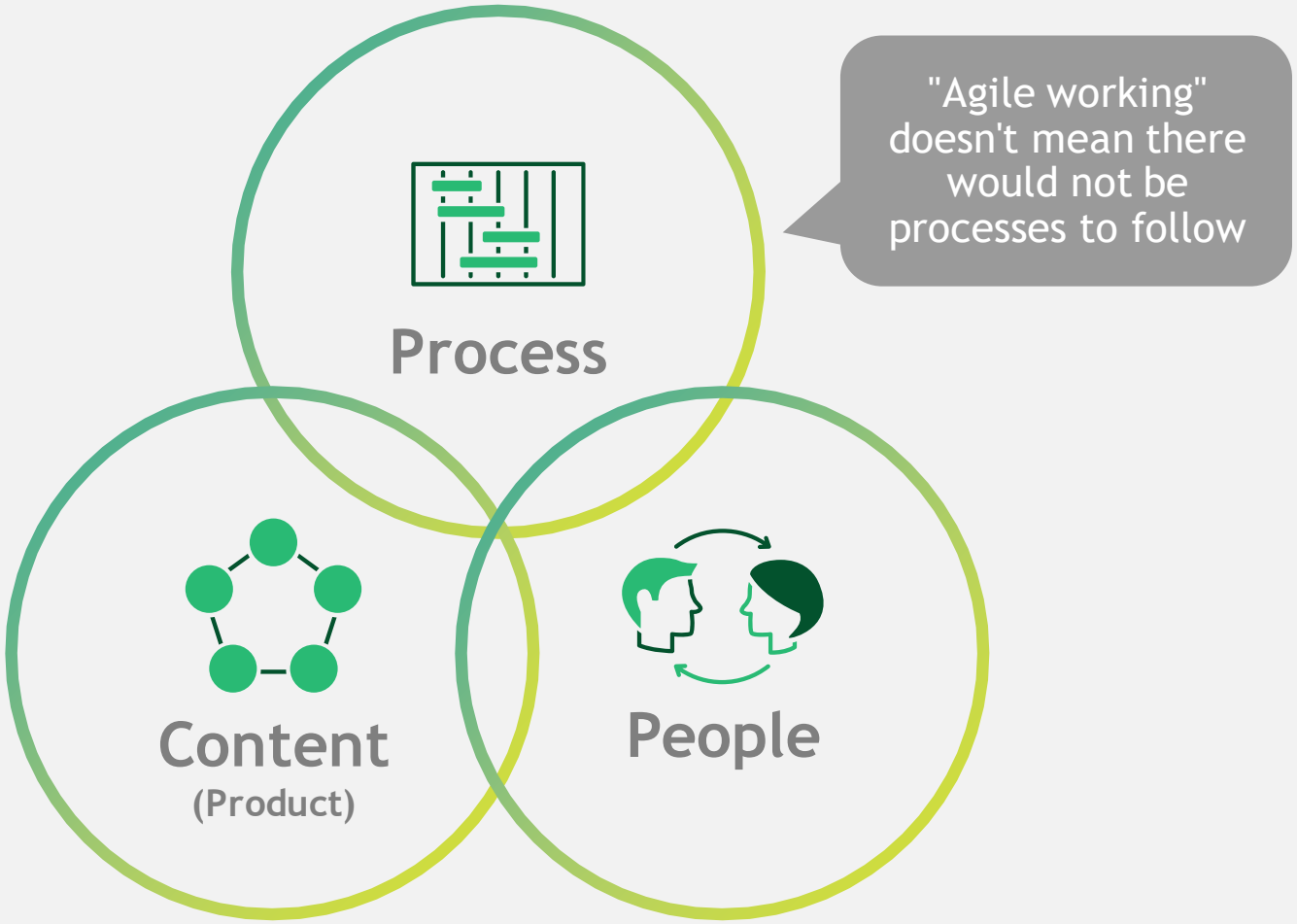
# Agenda

- Problem solving in a client project setting
- **Planning projects in practice**
- Team exercise (~20min)

"The best generals are those who arrive at the results of planning without being tied to plans"

Winston Churchill

# Successful project management means managing content, process, and people




…and you and your team members can have different preferences/values on what is the most important…

# Practical tips for planning the project

Overinvest in **engaging with the client stakeholders**, understand their perspectives, visions and hypothesis

Create the "**strawman deck**" during week 1 to visualize the key elements of output… and then iterate/fill

Draft upfront the "**1-slide**" you will have in the end – What does my main deliverable look in practice

**Plan your analyses end-to-end** (who, what data, how to analyze, what output, …), and anticipate the results

Reserve time to **iterate and anchor** the final output with stakeholders (i.e. plan for 1-2 weeks in the end)

# Overinvest in **engaging with the client stakeholders**, understand their perspectives, visions and hypothesis

- Schedule **1-on-1 interviews** with key stakeholders to understand their individual perspectives and differences of opinions
- Request walk-through sessions of **existing analyses** and work that already has been done
- **Leverage external experts** to challenge and pressure test client thinking
- *…ok to refine/adjust the project questions and hypothesis after the above*

# Draft the "strawman deck" and the "final 1-slide" you will need to have in the end of the project (MVP thinking)

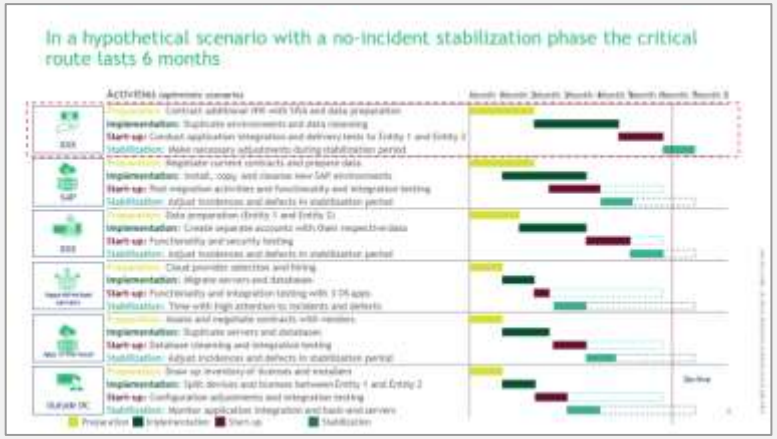
## Examples of core output slides for different types of projects


### EBITDA bridge

- EBITDA bridge identifying all main value creation levers and impacts


### Target operating model description

- Visualization explaining how organization could better deliver value through its operating model




### Implementation timeline

- Detailed roll-out plan of recommended activities

# Engineering mindset

Outcomes are a result of deliberate strategy and plans, clear governance, effective organization & lean processes

Clear, quantified ambition

Stage gates

Clear cut governance

Competing on learning

Scope overlays

Asymmetric bets

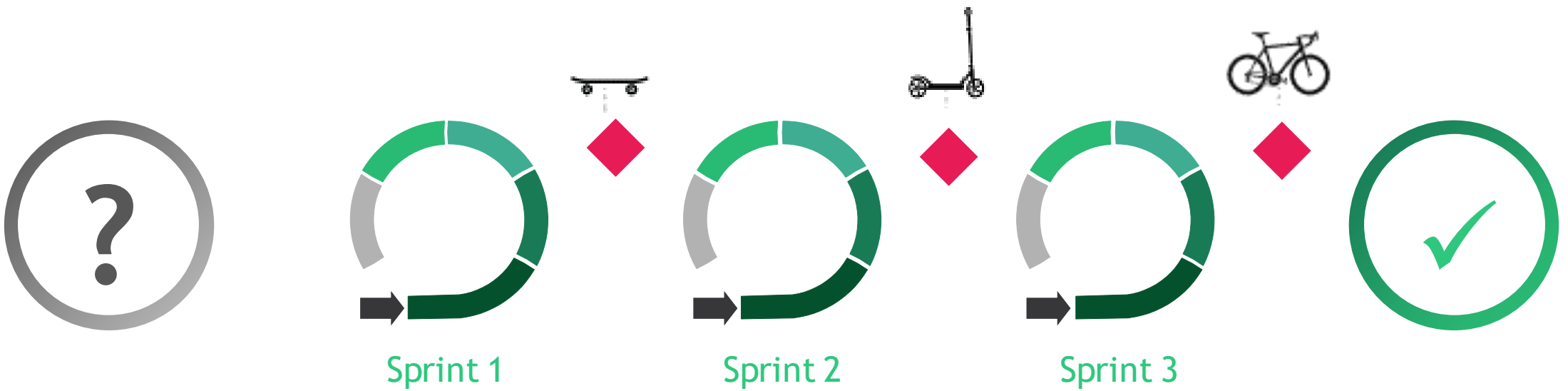
# Biological perspective

Outcomes are successful adaptation of a complex adaptive system to changes in its environment

# Example of a typical project sequence (waterfall)

| Phase | 1 Scoping and setup | 2 Diagnostics | 3 Solution development | 4 Validation & recommendations |
|---|---|---|---|---|
| Content | • Define objectives/scope<br>• Form initial hypothesis<br>• Identify key stakeholders<br>• Collect baseline data<br>• Detail the workplan and schedule key meetings<br>• Draft output structure | • Expert interviews, stakeholder belief audits<br>• Further data collection<br>• Perform analysis<br>• Synthesize diagnostic findings | • Continue analysis in high-priority topics<br>• Create the solutions, e.g. in workshops<br>• Iterate and adjust solution with stakeholders | • Get buy-in<br>• Present project conclusions and recommendations<br>• Plan and align on the next steps |
| | Manage stakeholder expectations and involve them, obtain buy-in, actively communicate progress/actions | | | |
| Output | • Detailed/realistic project plan designed<br>• Team assembled<br>• Hypotheses aligned | • Diagnostics findings<br>• Prioritization for solution development | • Full output report prepared<br>• Project recommendations | • Stakeholder buy-in<br>• Next phase mobilized |
| Duration | 1-2 weeks | 3-4 weeks | 3-4 weeks | 1-2 weeks |

# The Agile approach is based on iterations – A "version" of the final product exists after each iteration and gets improved/refined after each sprint




Client doesn't really know what he/she wants

In each sprint, team completes an iteration towards an MVP (Minimum Viable Product)

Product is delivered on time and client gets what he/she needs

# With Agile approach it would look different

| Phase | 1 Sprint 1 | 2 Sprint 2 | 3 Sprint 3 | 4 Sprint 4 |
|---|---|---|---|---|
| Content | • Define objectives/scope<br>• Form initial hypothesis<br>• Identify key stakeholders<br>• Collect baseline data<br>• Create sprint plan and schedule key meetings<br>• Draft output structure | • Refine output based on new information<br>• E.g. Expert interviews, stakeholder belief audits, new data, …<br>• Synthesize and plan next sprint | • Refine output based on new information<br>• E.g. Expert interviews, stakeholder belief audits, new data, …<br>• Synthesize and plan next sprint | • Refine output based on new information<br>• E.g. Expert interviews, stakeholder belief audits, new data, …<br>• Synthesize the final product |
| | Manage stakeholder expectations and involve them, obtain buy-in, actively communicate progress/actions | | | |
| Output | • **First output** based on initial hypothesis created<br>• Plan and prioritization for sprint 2 | • **2nd version of output**<br>• Plan and prioritization for sprint 3 | • **3rd version of output**<br>• Plan and prioritization for sprint 4 | • **Final version of output** |
| Duration | 2-3 weeks | 2-3 weeks | 2-3 weeks | 2-3 weeks |

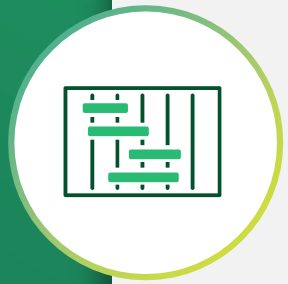
# Three practical topics to plan and align early in the project

## Team roles and structure

- Project leader role / team roles
- Module/analysis split with single point ownership
- Roles towards client stakeholders

## Analysis plan

- **What** = What questions we answer
- **How** = e.g. who to interview, what data or prerequisites should be understood, previous research, how do we analyze it
- **Who** = Single point ownership of deliverables



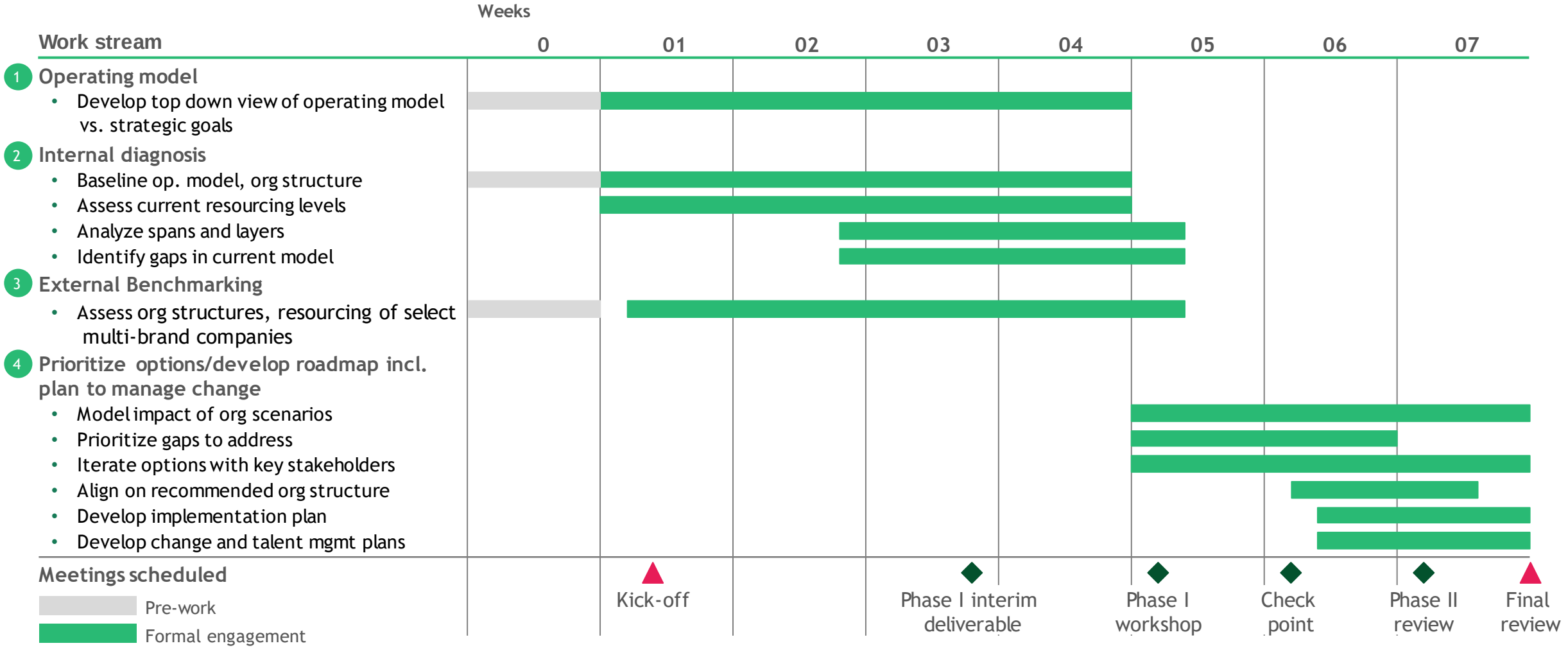
## Key milestones and meetings

- Key milestones for deliverables
- Realistic schedule and timeline (incl. lead times e.g. data)
- Schedule client meetings and workshops

# Example analysis work plan:
# Definition of analysis work streams – who does what and how

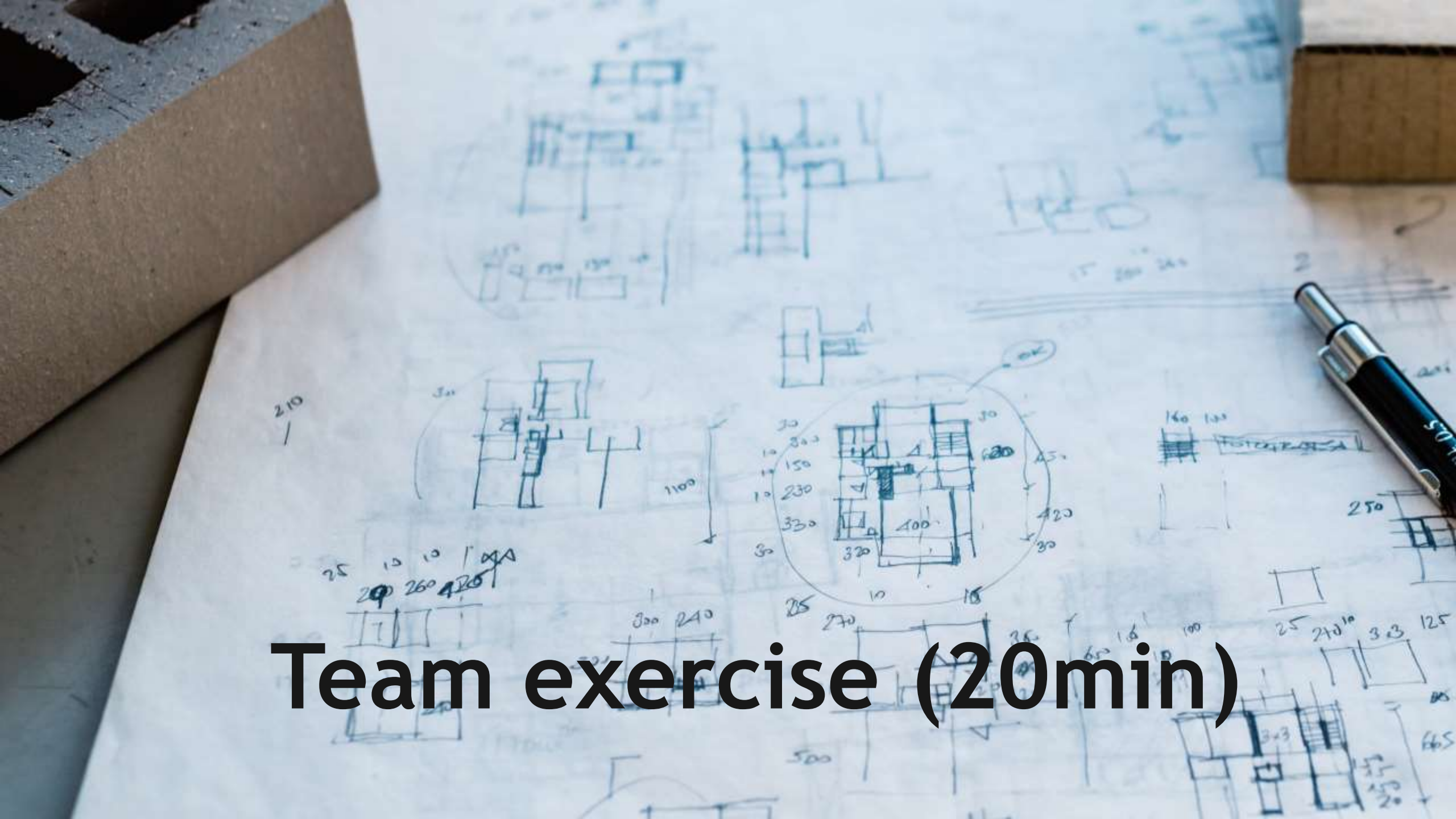
| WHO? | WHAT? | HOW? | | |
|---|---|---|---|---|
| Workstream | Key questions | Activities | Data (source) | Timing |
| **Current funding** (Don, Dennis, Pete) | • How is each program and center funded?<br>• How has funding changed over the past five years? | • Compare restricted with unrestricted funds over time<br>• Examine FFS and grants by duration/size over time<br>• Explore personal giving consistency/pareto<br>• Analyze future guarantee funding | • Funding by program and center (Don, Dennis)<br>• Contrast durations (Pete) | • Weeks 1-2 |
| **Outlook** (Laura) | • What is the outlook for current funding sources? | • Compare health insurance provider funding trends with peers<br>• Examine trends at national, state, local levels<br>• Expert interviews and lit review on likely areas for gov't/grant cuts | • Historical funding (gov't funding)<br>• Peer financials<br>• Qual research (gov't releases, desk research) | • Weeks 2-4 |
| **Health care reform** (Brianna) | • How will HCR impact health insurance provider? | • Expert interviews/lit review on mental health funding/relationship to primary care | • Qualitative research (BCG experts, desk research) | • Weeks 2-4 |

# Example work sequencing:
## Project timeline and key meetings defined



# Agenda

- Problem solving in a client project setting
- Planning projects in practice
- Team exercise (~20min)



# Team exercise (20min)

# Start planning your project:

1. Make inventory of the tasks you have identified already with your clients
2. Discuss if the identified tasks will be sufficient to solve the case?
3. Discuss next steps to form a plan and allocate responsibilities among the team

# Debriefing

# (Highly recommended) next steps

1. Interact with clients and experts to gain understanding of the task
   - Understand the problem and key questions – ask questions, rephrase the client ask
   - Map who are the key people to align with and acquire buy-in for the output
   - *…if possible, meet clients a 2nd and 3rd time if needed to refine the thinking*

2. Create your output 'strawman & 1-pager' based on first discussions

3. Develop a detailed project plan
   - Team roles and structure
   - Analysis work plan and requirements
   - Schedule key meetings

4. Do something fun together as a team to get to know each other!


BCG