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CONSTRUCTING LEADERS PROGRAMME

Leadership, Excellence, Accreditation & Development

Module 3 / Session 1 : Programming & Site Operations

CALA HOMES

keystone

CONSTRUCTING LEADERS

PROGRAMME OVERVIEW

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1. LEADERSHIP & PEOPLE MANAGEMENT

2. DIFFICULT CONVERSATIONS

3. PROGRAMMING & SITE OPERATIONS

MODULE OBJECTIVES

1. *Planning and putting team members to work on site to improve quality and team performance*

2. *Setting & managing site plans and programmes to meet CALA standards and achieve key milestones*

CONTENT OVERVIEW

DAY 1: The Programme & Planning

DAY 2: Budgets & Business Improvement

DAY 3: Quality Systems & DMAIC Lean

DAY 4: Goals & Effectiveness

DAY 5: Risk, Supply Chain & Team Challenge

SUPPORT

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WORKBOOKS

ESSENTIAL ELEMENTS

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How do we ensure we deliver a great site and programme?

- Proactive thinking and strong management of people, resources and time throughout
- The need for and importance of CALA Way documentation in the planning and programming of construction works
- The relationship between planning, monitoring and control
- Your own role within this process and the need for personal accountability and responsibility whatever the stage of build.

The programme is key to delivery success

SUCCESS FACTORS

Road Safety (CLOCS) Case Study

- What did the managers of this programme get right and why?
- What innovation was shown?
- How did the construction sector benefit from this?

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HANDOUT

Road Safety (CLOCS)

THE CALA WAY

THE PROGRAMME IS KEY…

IDENTIFY, ASSESS, REVIEW, CONTROL, MITIGATE & MONITOR

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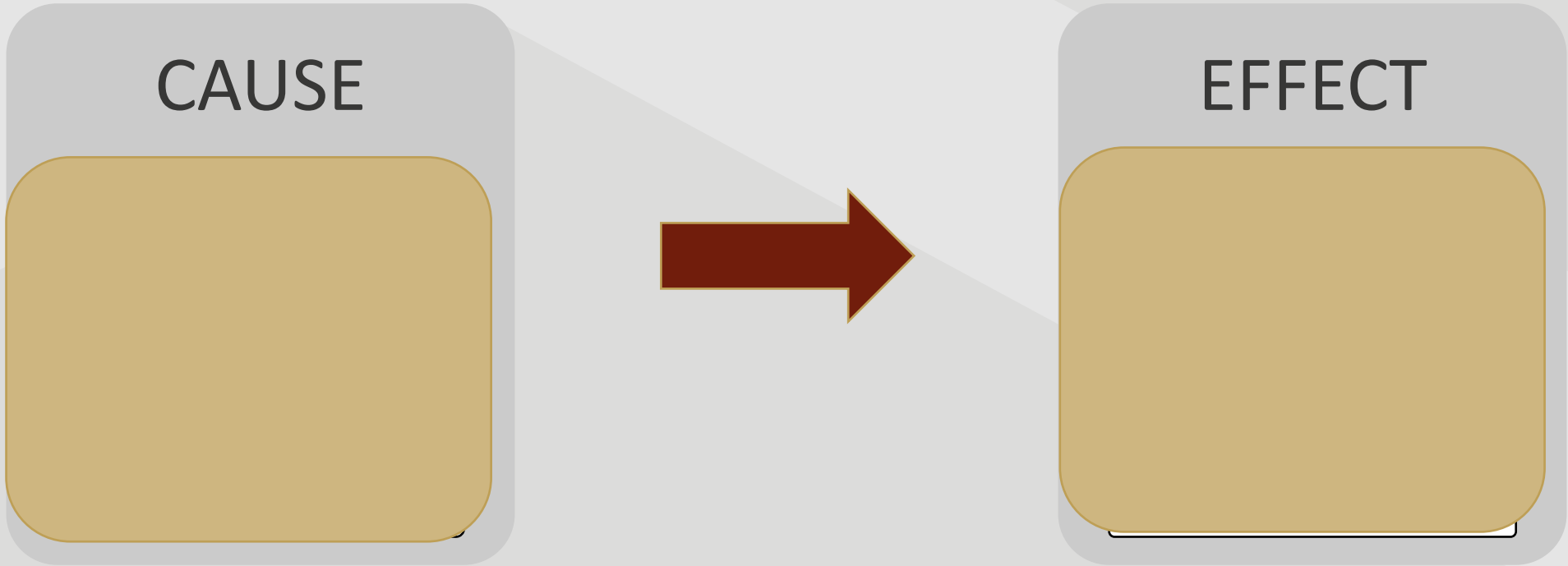
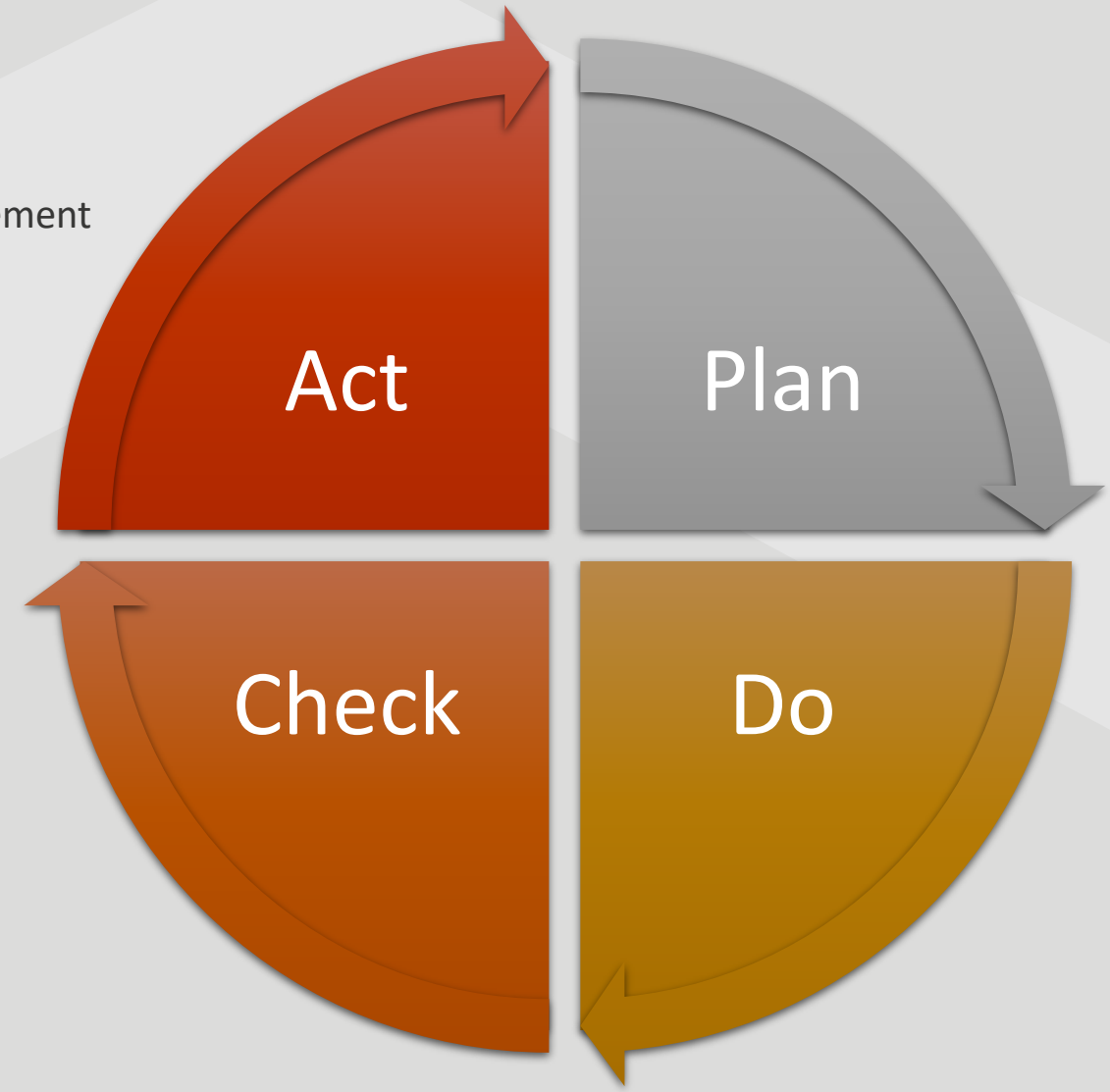


PLANNING ESSENTIALS

WHAT NOW?
- Review
- Project revision
- Standardisation
- Share learnings
- Further improvement



WHAT FOCUS?
- Project goals/measures
- Set up team
- Map process
- Measure process
- Identify key problems
- Find root causes
- Identify solutions
- Plan for implementation

WHAT HAPPENED?
- Measurement
- Assessment
- Analysis

WHAT ACTION?
- Prepare for implementation
- Training
- Communication
- Implement improvement
- Change management
- Project management

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HANDOUT

Plan Do Check Act

PROACTIVITY & FUTURE PROOFING SUCCESS

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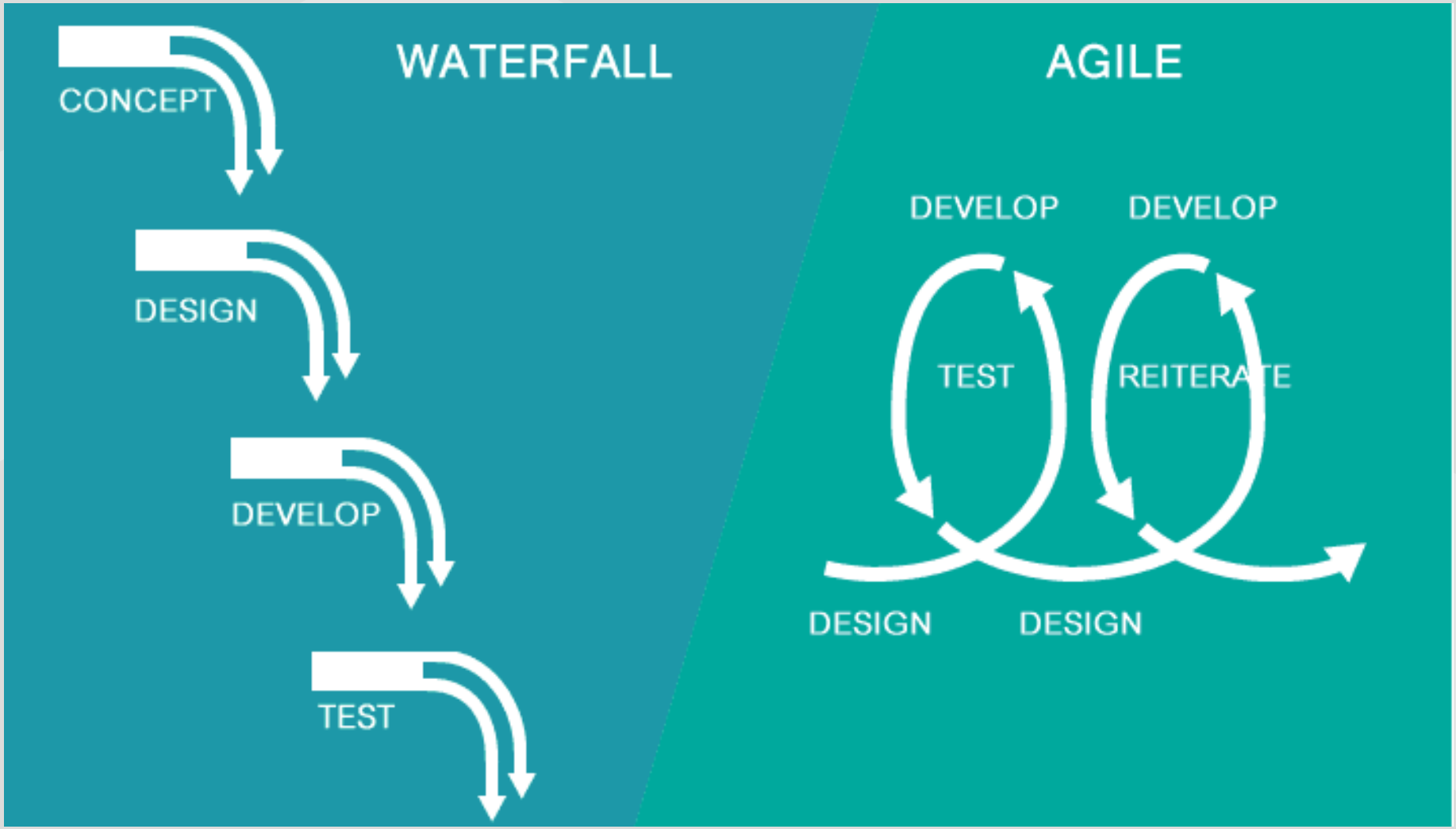
PROJECT MANAGEMENT APPROACHES



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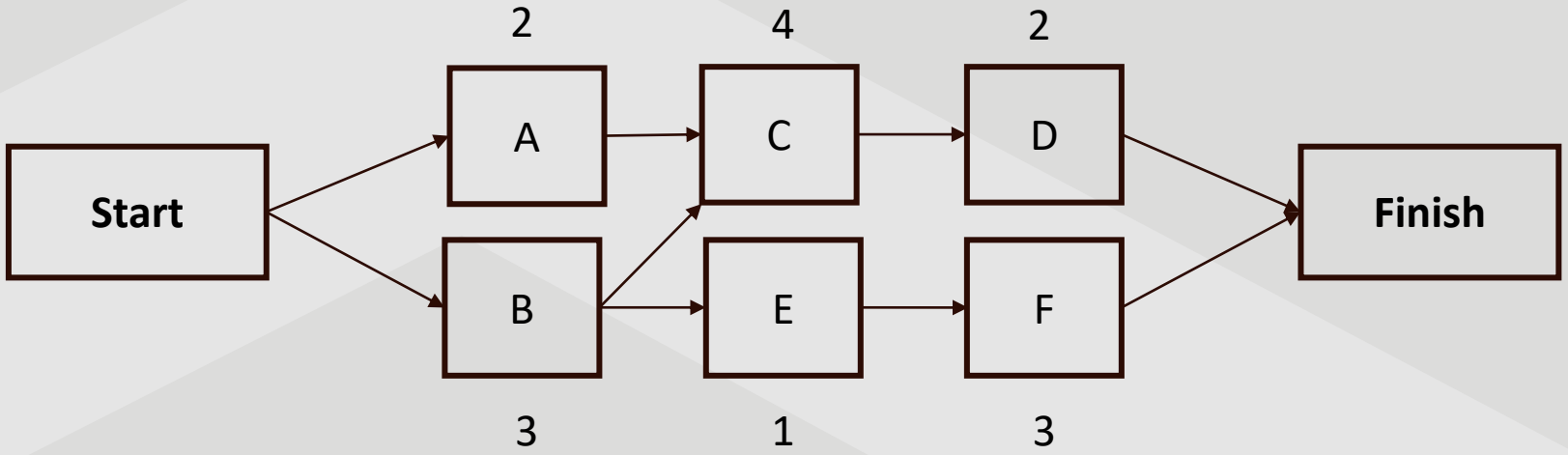
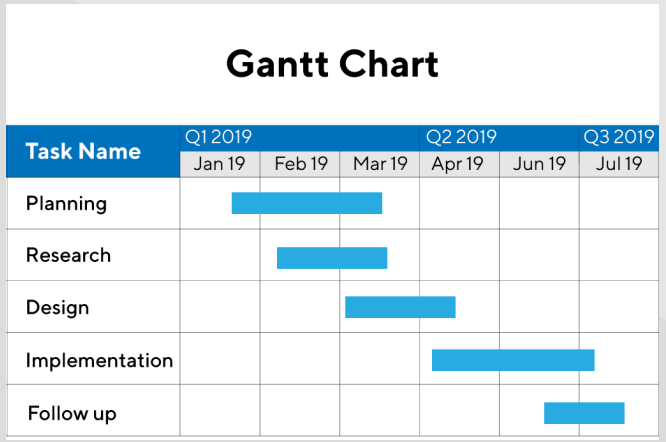
POLL

THE CRITICAL PATH, GANNT AND P.E.R.T



Early Start	Duration	Early Finish
Activity		
Late Start	Float	Late Finish



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HANDOUT

The Critical Path
& P.E.R.T

P.E.R.T DEMONSTRATION

Early Start	Duration	Early Finish
Activity		
Late Start	Float	Late Finish

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HANDOUT

The Critical Path & P.E.R.T

CRITICAL PATH EXERCISE

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Instructions

Using the list of tasks provided in the handout, create a simple Critical Path which shows us how you would plan the programme of delivering the car to the customer.

You should allow for contingent tasks, time lags and start and finish times. Please estimate the times as they are not given.

HANDOUT

BMW

BREAKOUT

SPANISH PROJECT

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HANDOUT

Spanish Project

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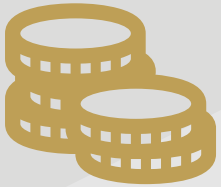
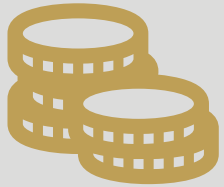
BUDGET MANAGEMENT





Roles & Responsibilities

1. Which areas of budget management are you involved in primarily day to day?

2. What means do you use to capture their budget management and who do you report it to?

3. What happens if the budget is being exceeded?

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BUDGET MANAGEMENT

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Contracts/Construction Manager

- Set objectives
- Scan environment
- Plan and make decisions

Senior Site/Project Manager

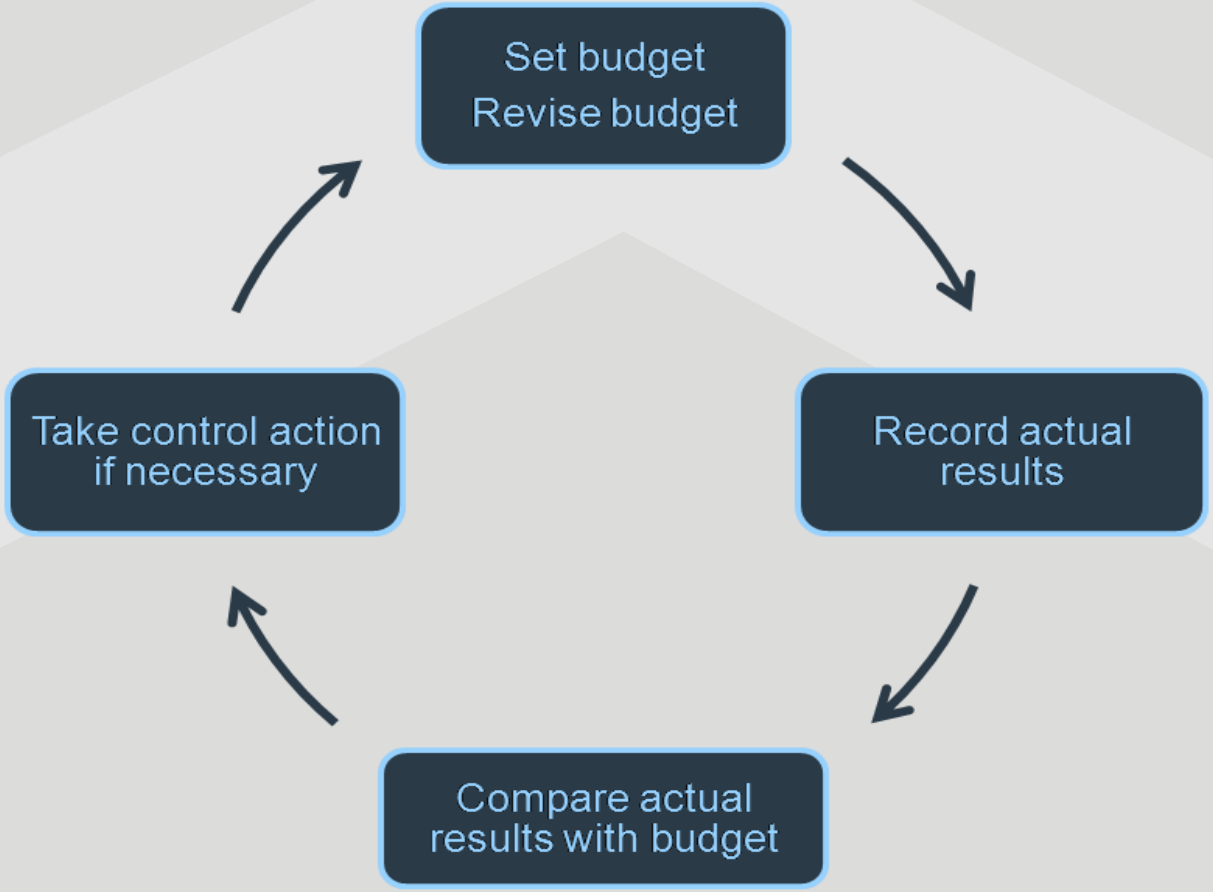
- Allocate resources
- Develop and implement activities

Assistant/Site Manager

- Coordinate activities
- Supervise trades/operatives
- Manages day to day operations

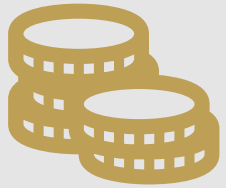
POLL

BUDGET CYCLE



Cost Benefit Analysis

Pay Back Periods



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HANDOUT

Budgeting & CBA

BUDGET CYCLE

C15 | f_x =D7/D13

Benefit- Cost Ratio = Benefits available from the project / Total value of Costs

	A	B	C	D
1				
2		**Option 2**	**Calculation**	**Total**
3		**Benefits**		
4	A)	Income from Rentals	(20 * 5 * 3000)	300000.00
5	B)	Income from Sales	(80 * 200000)	16000000.00
6	C)	Income from the Sales After Rent Period	(20*120000)	2400000.00
7	D)	**Total Benefits (A + B + C)**		**18700000.00**
8				
9		**Costs**		
10	E)	Construction Cost	(100 *150000)	15000000.00
11	F)	Sales and Staff Cost	(2*450000)	900000.00
12	G)	Financing Cost	(2000000 *1)	2000000.00
13	H)	**Total Costs (E + F + G)**		**17900000.00**
14				
15		**Benefit Cost Ratio (D /H)**	**1.04**	
16				

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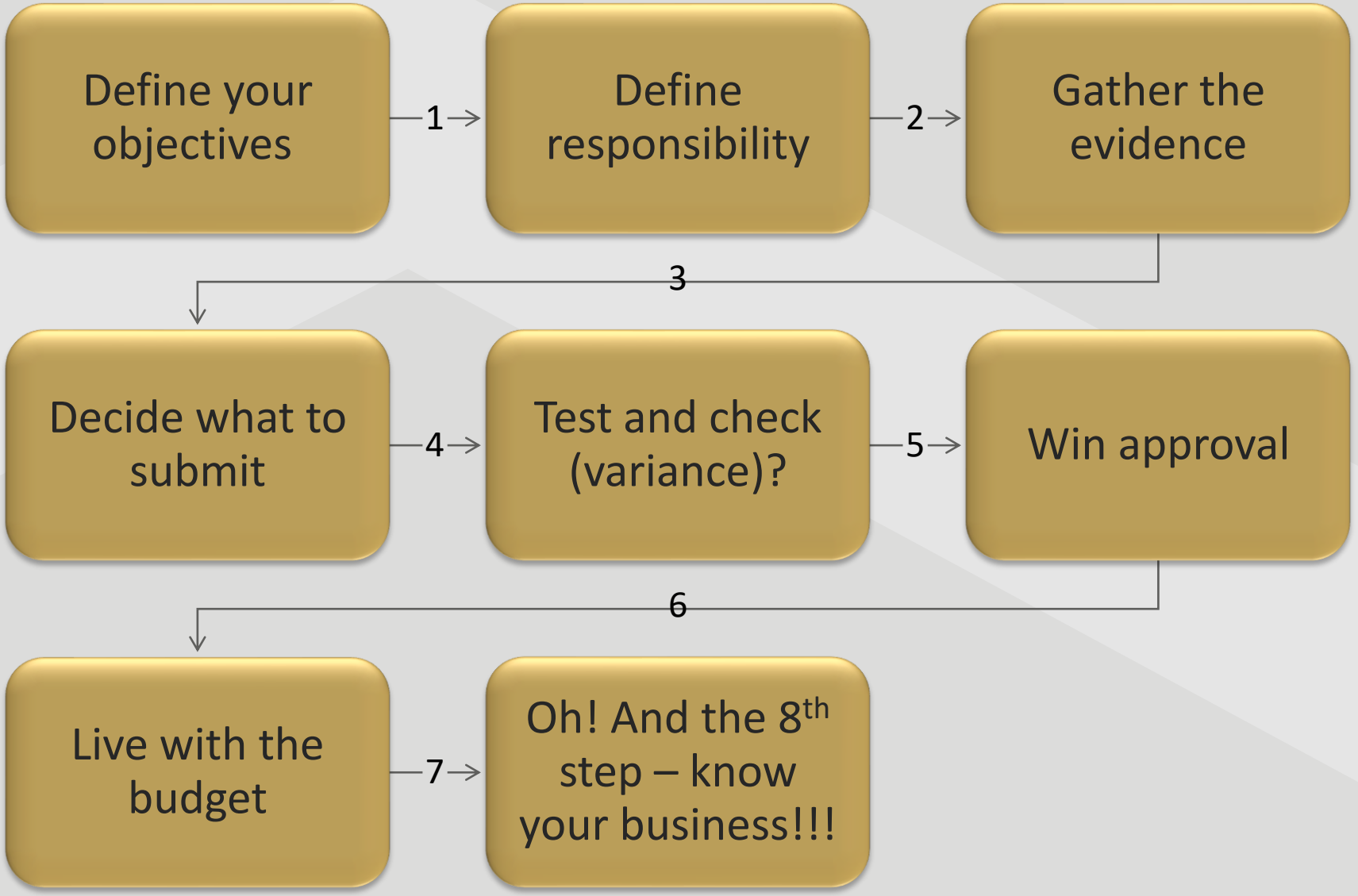
HANDOUT

Budgeting & CBA

THE 7 STEPS



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HANDOUT

Budgeting & CBA

CALA WAY - PRELIMS STANDARDS

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Each region has committed to adopting the new approach.

THE CALA WAY

Commitments include:

- PTP Budget realism ensuring a reduction of construction Prelim cost increases after site start.
- Site Staffing of all project types in line with the approach document
- Management of Hourly paid overtime in the longer term and cost control
- Reduction of the reliance on Site Operative Agency staff and to have an improved culture of CALA directly paid staff looking after our on-site interests.
- The reduction in the use of Gatemen and store man throughout developments.
- To create a targeted cost reduction in £ sq/ft terms over the next 12 months and beyond.

SCOPE OF WORKS

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1. How important is a SOW in successful programme management?

2. What should a manager be doing to ensure success in the creation and delivery of a programme using a SOW in the areas of:

   - *Deliverables*
   - *Timeline*
   - *Milestones*
   - *Reports*

HANDOUT

Scope of Works

Scope gaps are the result of committing to a project before the project requirements are complete.

LEAN SIX SIGMA USING DMAIC

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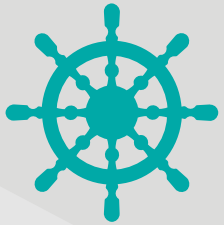
DEFINE
Define the problem

MEASURE
Quantify the problem

ANALYSE
Identify the cause of the problem

IMPROVE
Implement and verify the solution



CONTROL
Maintain the solution

LEAN & DMAIC

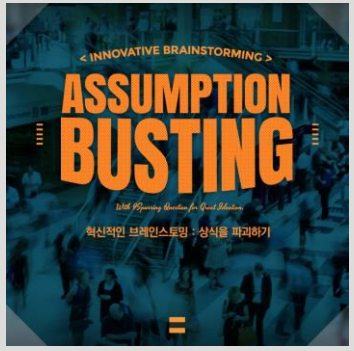
GROUP EXERCISE

1. **Define** the common sources of waste on a typical site and **Discuss** current ways of dealing with them.

2. **Use** these two models to define, analyse and suggest ways to improve current approaches to waste management

Assumption Busting

Why do we do that?



Absence Thinking

What is missing from what we do?

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HANDOUT

Creative Thinking Tools

BREAKOUT

TUTORIAL

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WORKBOOKS

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THE COST OF QUALITY

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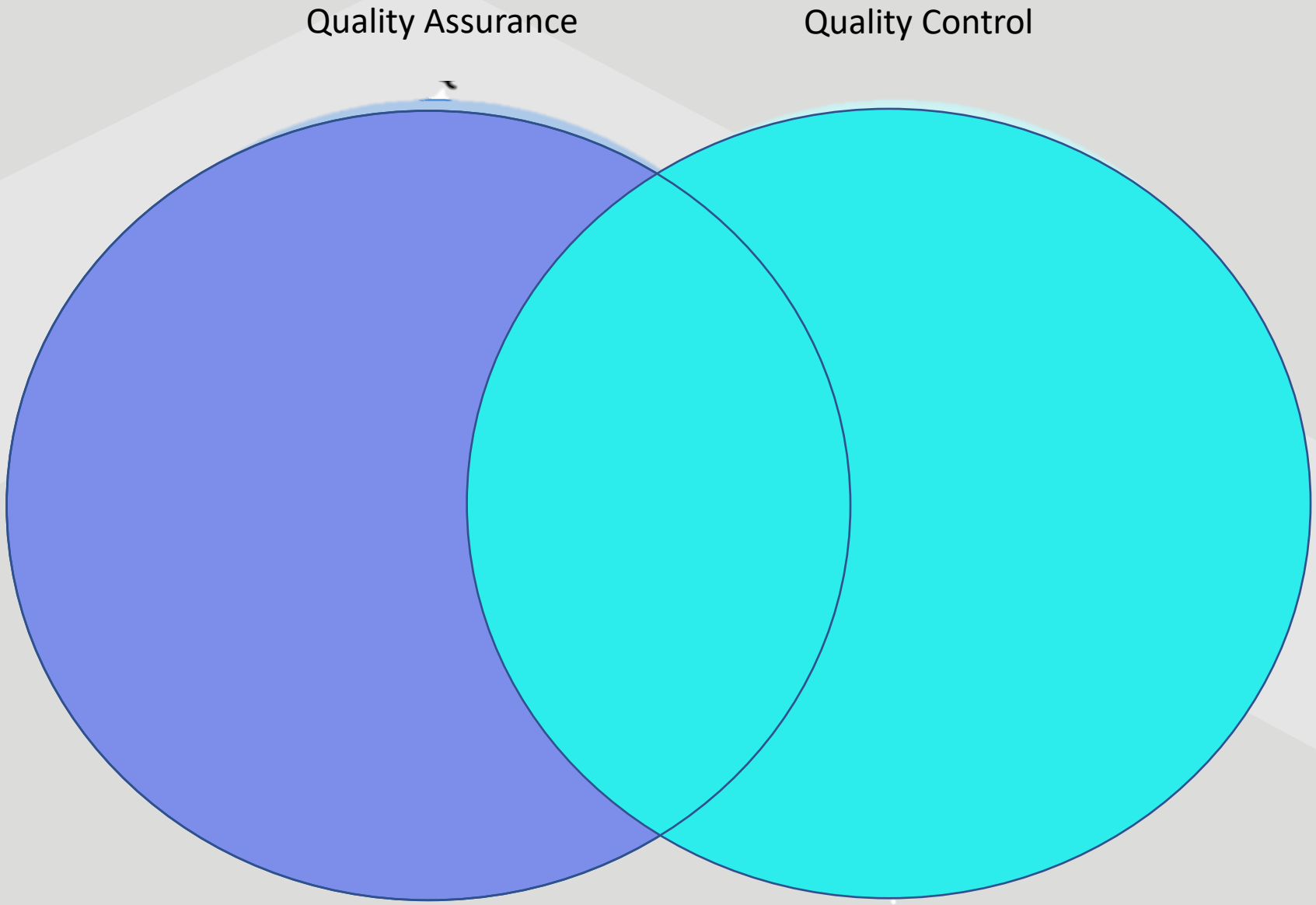
Prevention Costs	Appraisal Costs	Internal Failure Costs	External Failure Costs
• Planning • Process • Control • Quality Audits • Supplier Evaluation • Training • Design Review • Risk Assessment	• Inspection • Document Review • Quality Audits • Calibration • Test Materials • Test Product	• Scrap • Re-work • Missing Documents • Problem Solving • Sorting • Retest • Redesign • Downgrading • Variation • Unplanned downtime	• Warranty charges • Complaints • Returned Material • Late delivery penalties • Re-work after installation • Lost Opportunities

QUALITY APPROACHES



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HANDOUT

Quality

COST PRODUCTION QUALITY TRIANGLE

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HANDOUT

Quality

QUALITY SYSTEMS AND METHODS

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HANDOUT

Quality

QUALITY SYSTEMS AND METHODS

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HANDOUT

Quality

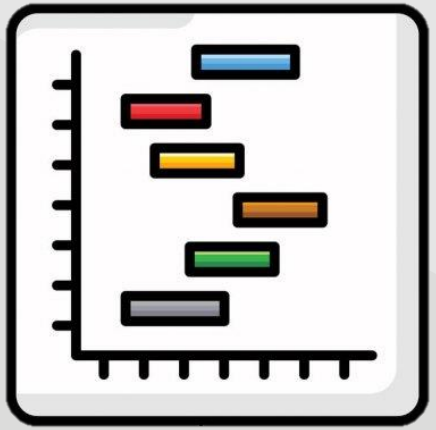
STANDARD OPERATING PROCEDURES (SOP)

What SOPs (work methods) are used to deliver quality and/or H&S?

Instructions

Create a short SOP using the template provided which analyses an approach to work quality.

Set it out clearly using the 7 stages.



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HANDOUT

SOP

BREAKOUT

FMEA THINKING

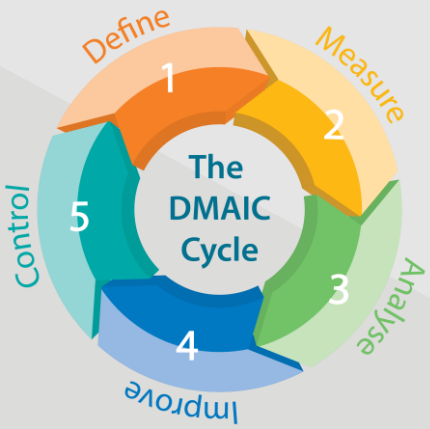
ID Failure Modes

- Brainstorm possible ways failure can happen
- Identify causes

Assess Risk

- Rate 1 to 10 for:
  - Severity
  - Probability
  - Detection

Prioritise & Act



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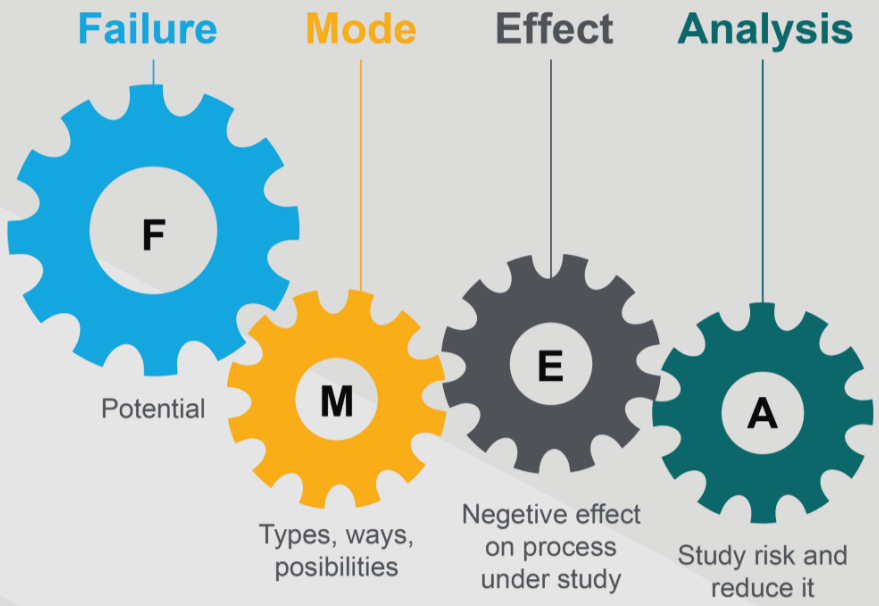
HANDOUT

FMEA

FMEA THINKING

Consider the following scenarios and apply FMEA thinking to them.

- *What do you do to analyse and resolve?*
- *What do you do to recover the time lost*
- *Who pays?*
- *What are the contingencies?*
- *Is the tone and reaction different for each of the scenarios and why?*



Scenario 1
Trades have been booked to attend on site but have not arrived.

Scenario 2
Trades are present but materials have not been ordered in sufficient quantities/allocations.

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HANDOUT

FMEA

BREAKOUT

TUTORIAL

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SETTING TARGETS & OBJECTIVES

What's the difference between strategic and operational targets?

How do we know we are on track to meet both areas?

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HANDOUT

Goal Setting & Planning

S. T. O. P. PERSONAL PLANNING

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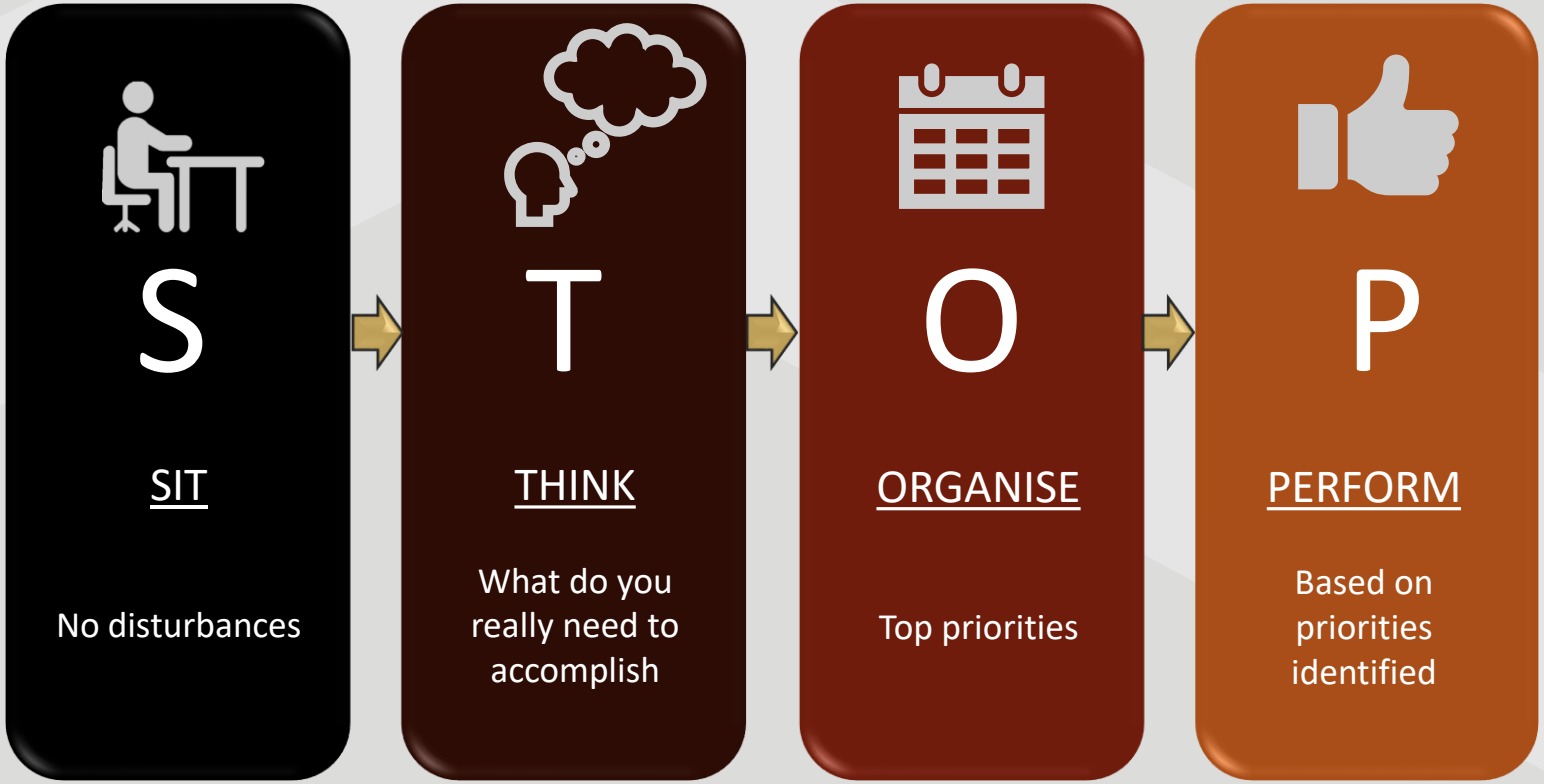

HANDOUT

Goal Setting & Planning

Planning 20 mins per day is only 5% of the working day

PERSONAL EFFECTIVENESS

Agree 10 daily tasks, position them in the matrix

IMPORTANCE \ URGENCY	HIGH	LOW
HIGH	DO IT NOW!	PLAN TO DO IT
LOW	DELEGATE IT	DITCH IT!

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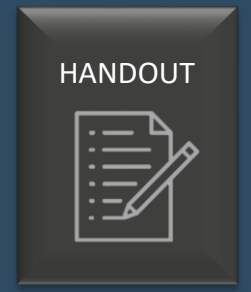

Eisenhower Matrix

MANAGING POOR PERFORMANCE

CAPABILITY (Can't)	CONDUCT (Won't)
Making an effort but not achieving the required improvement	Is not making enough effort
Received the relevant training but has not acquired the relevant skills	Is not applying the skills they have
Admits they are not achieving the required standard	Does not agree on the problem identified
Cannot obtain the relevant qualifications	Is not interested in obtaining the relevant qualifications
Does not seem **able** to get there	Is not **willing** to get there
Low output of work	Does not seem interested in improving
Takes long-term sickness	Takes unauthorised absences

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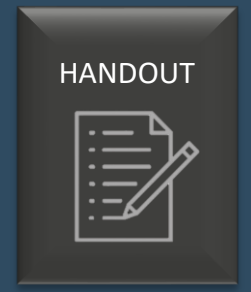

Can't /Won't

RATING TEAM AND SITE EFFECTIVENESS

Discuss and assess *the ways you monitor this on site and how you set team goals linked to them.*

How can you demonstrate you are meeting your targets in the RATER areas?

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HANDOUT

Service Quality Scale

BREAKOUT

TUTORIAL

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WORKBOOKS

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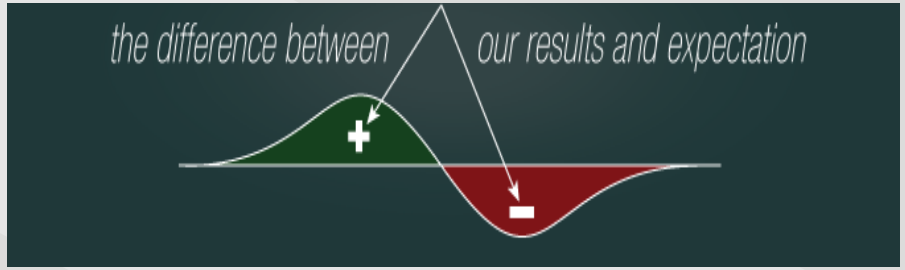
CAUSES OF VARIANCE

- Risks (known and unknown)
- Environmental Factors
- Financial and Supply Chain
- Labour Supply
- Buildability Gaps
- MySite record keeping
- Skills Gap (performance)
- Customer Expectation
- Sub Contractor relationships
- Other?



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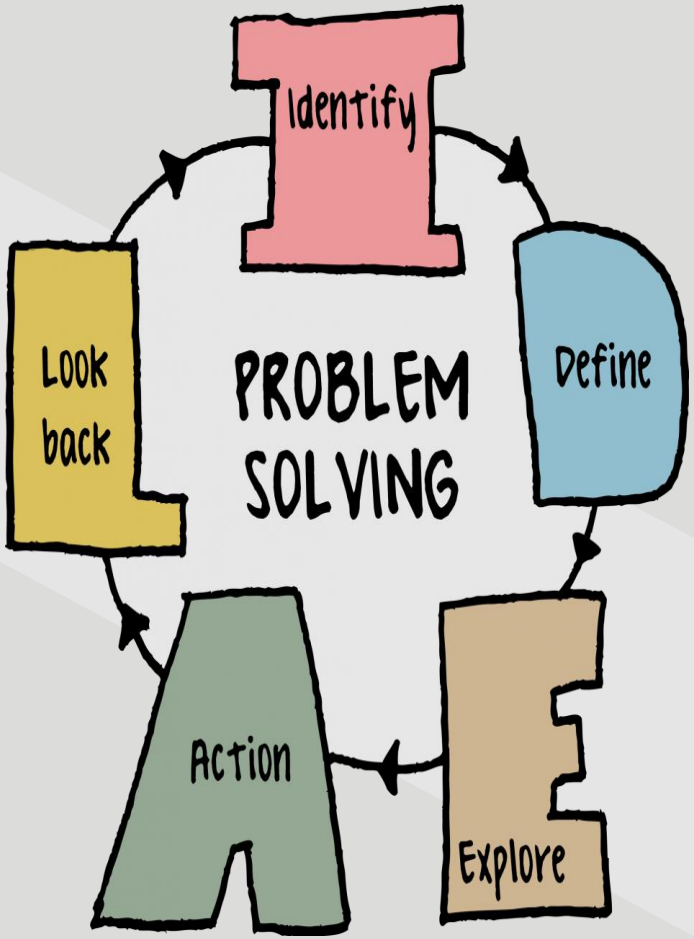
POLL

PROBLEM DEFINITIONS

Using the handout, discuss in groups each of the problem areas and be prepared to feedback a list of problems assigned to these areas.

Problem Types

- Deviation
- Efficiency
- Variation
- Innovation



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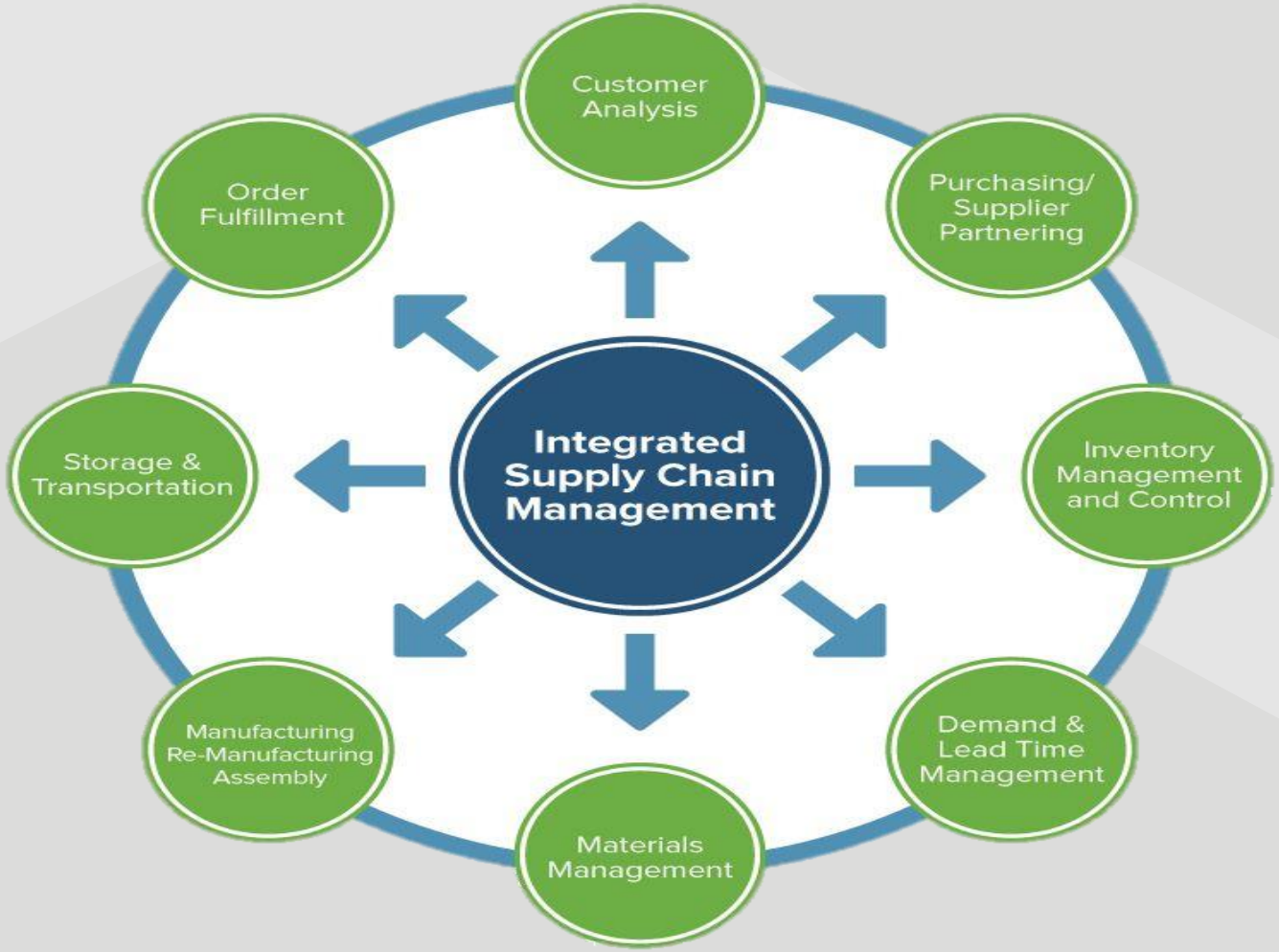
HANDOUT

Problem Solving

BREAKOUT

SUPPLY CHAIN MANAGEMENT

I personally have the most influence in the process...



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HANDOUT

Supply Chain

RISK MAPPING

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HANDOUT

Risk Mapping

Using the risk template and feedback, select TWO environmental issues CALA/you might encounter in planning to build.

Explain how they could impact upon the delivery of a site and how CALA could make sure their impact is managed.

BREAKOUT

SITE ENVIRONMENTAL TEAM ROADMAP

PROGRESSION

TARGET

Quarter 1

- Environmental management system (EMS) - appoint a consultant to help us develop an ISO 14001 compliant EMS.
- Waste - set up a waste minimisation team to review standard house types.
- Waste - set up a waste reduction review based on early data and start regional specific target areas.
- Energy - implement carbon offsetting of telehandler fleet.

Quarter 2

- Water - review existing data/capture methods for water use on site.
- Energy - review all existing data to confirm accuracy and to determine suitable energy reduction targets.
- Energy - carry out a review of use of PRV's or similar technology on site cabins and determine viability.
- Energy - determine viability of increasing use of green/renewable electricity supply to site compounds.

Quarter 3

- EMS - develop an ISO 14001 compliant environmental management system.
- Water run-off - Standard Water Management Plan template to be in place across all sites.
- Spill control - develop standardised Emergency Response Plan (environment).
- Waste - review all existing waste data to determine suitable waste reduction targets.
- Waste - review suitability of existing waste management Group deal – identify additional cost savings and, or opportunities to increase waste re-use/recycling.

Quarter 4

- EMS - develop a suitable environmental audit and inspection format.
- Training - environmental awareness training to be rolled out for all employees.
- Training - roll out suitable environmental course for construction/site managers.
- Water use on site – agree % reduction target for 2022.
- Waste – agree % reduction target for 2022.
- Waste - carry out a waste management audit to ensure that all required waste documentation is readily available on site.
- Energy – develop a plan to detail an 'off grid' approach to site compounds.

Water use on site – research to be carried out into use of more water efficient mortar product.

2022

2021

EMS Development, Data Verification & Target Setting

REMEMBER...THE PROGRAMME IS KEY

IDENTIFY, ASSESS, REVIEW, CONTROL, MITIGATE AND MONITOR

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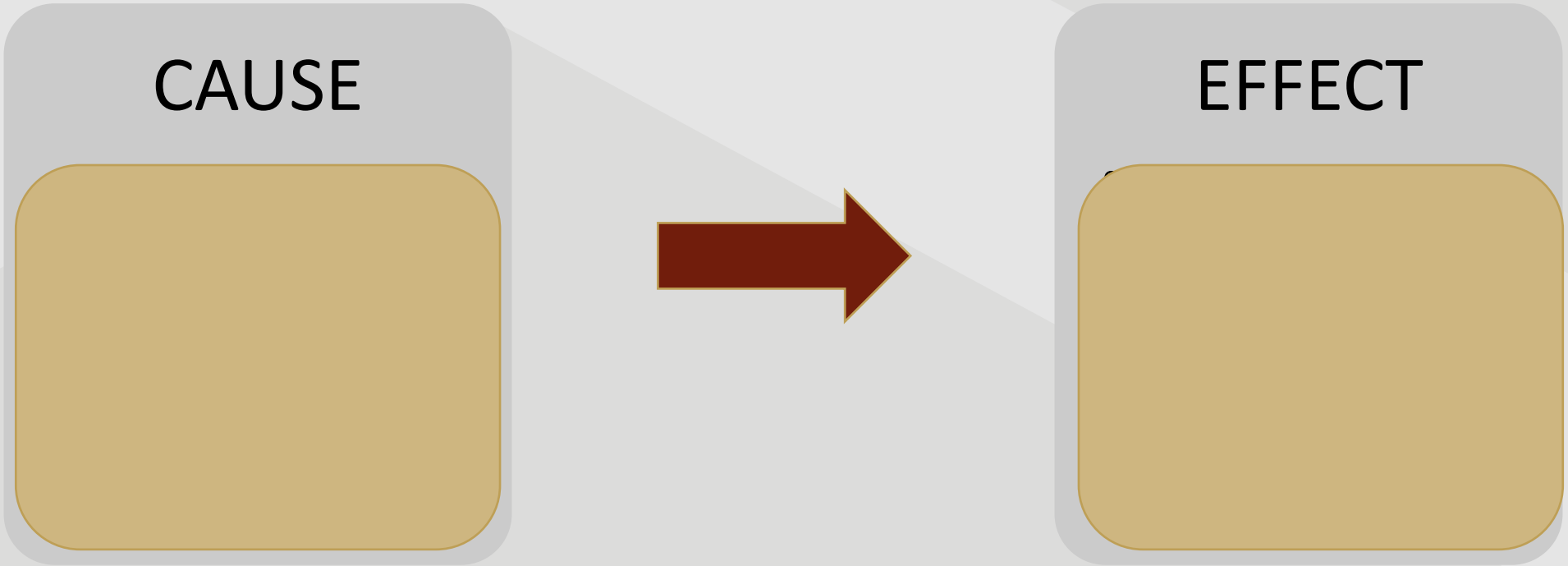
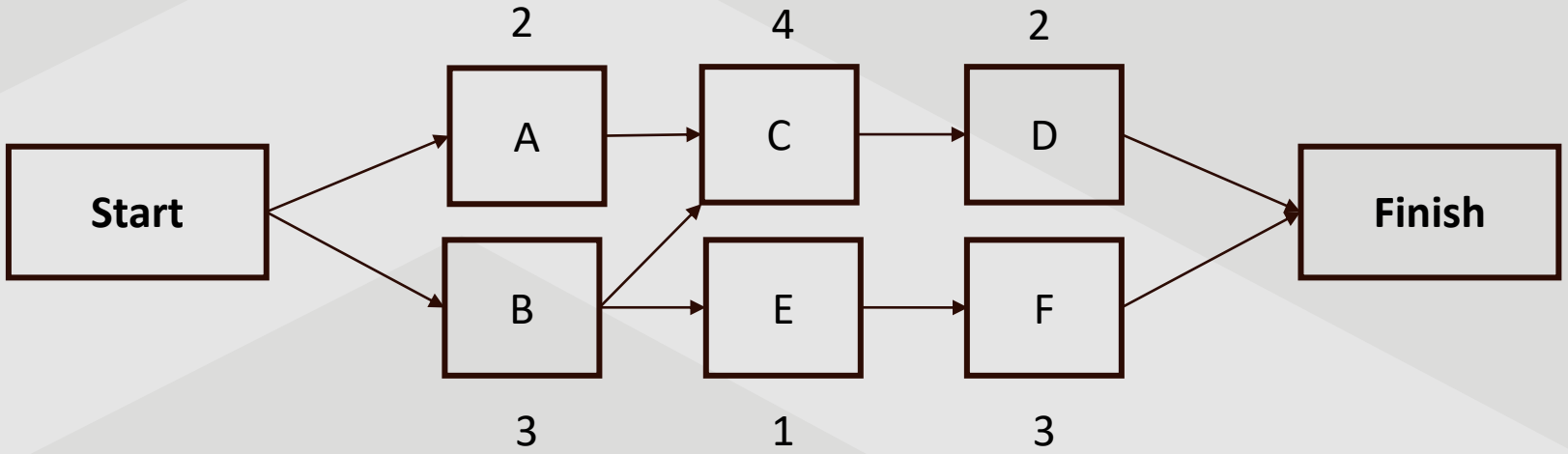
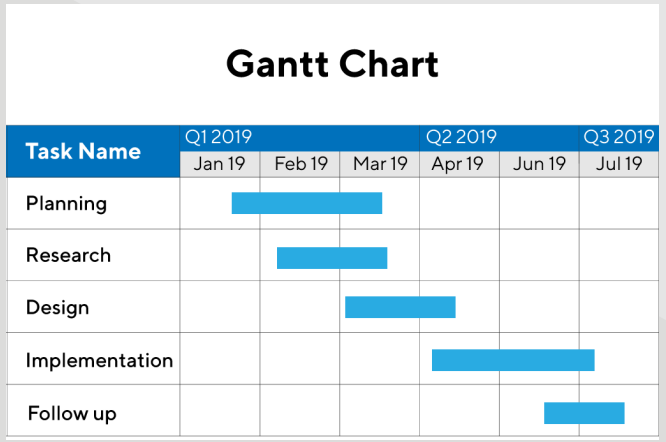


THE CRITICAL PATH



Early Start	Duration	Early Finish
Activity		
Late Start	Float	Late Finish



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THE SCOPE OF WORKS/BUDGETS

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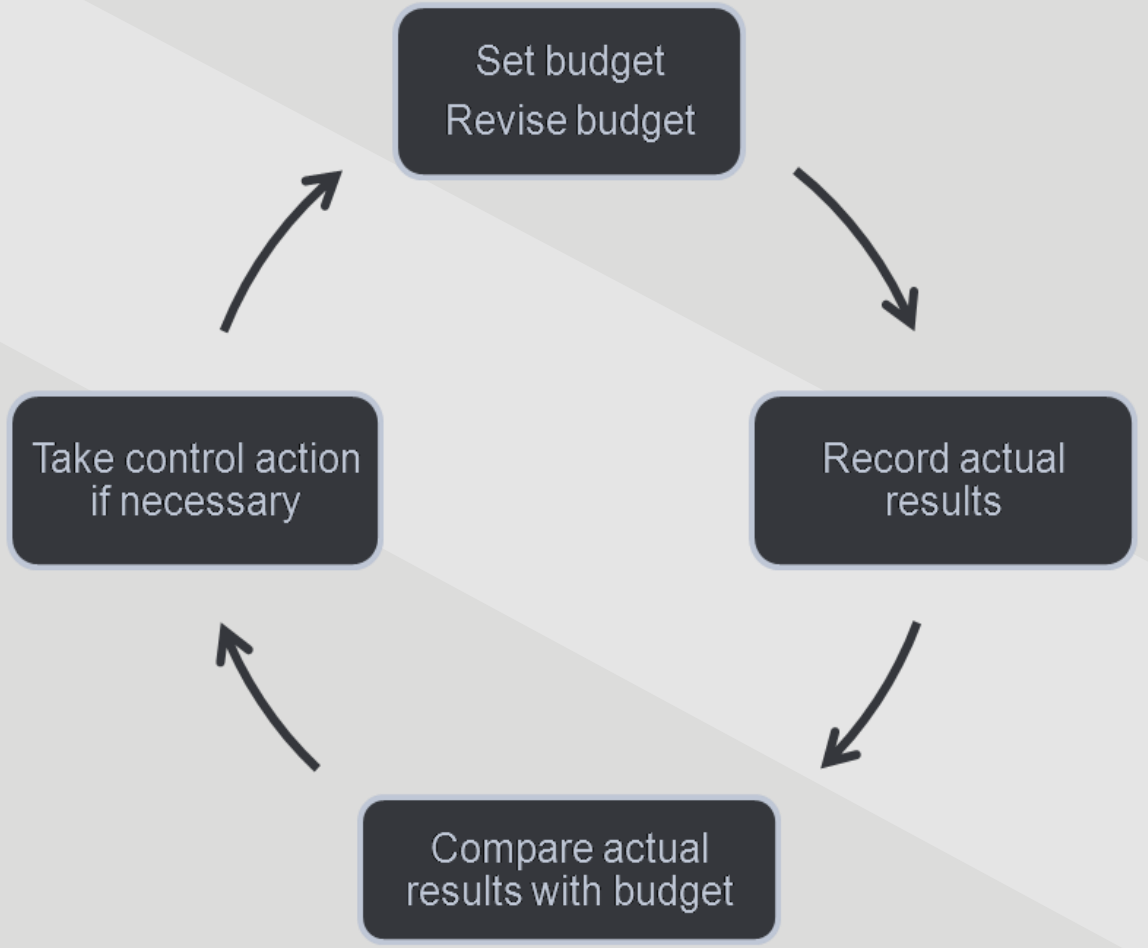

TARGETS AND RISK MAPPING

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TEAM CHALLENGE

- **Read and Discuss** the case study in the handout
- **Create** a simple risk map and contingencies
- **Complete** a simple budget analysis to ensure solvency
- **Write** a critical path which shows milestones within the 20 weeks
- **Report** back, choose whiteboard/GANNT/Excel or Word (group choice)

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HANDOUT

Spanish Project

BREAKOUT

TUTORIAL

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WORKBOOKS

CONSTRUCTING LEADERS PROGRAMME

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Andy Lee MSC MBA ILM Lv. 7 Coach & Mentor