

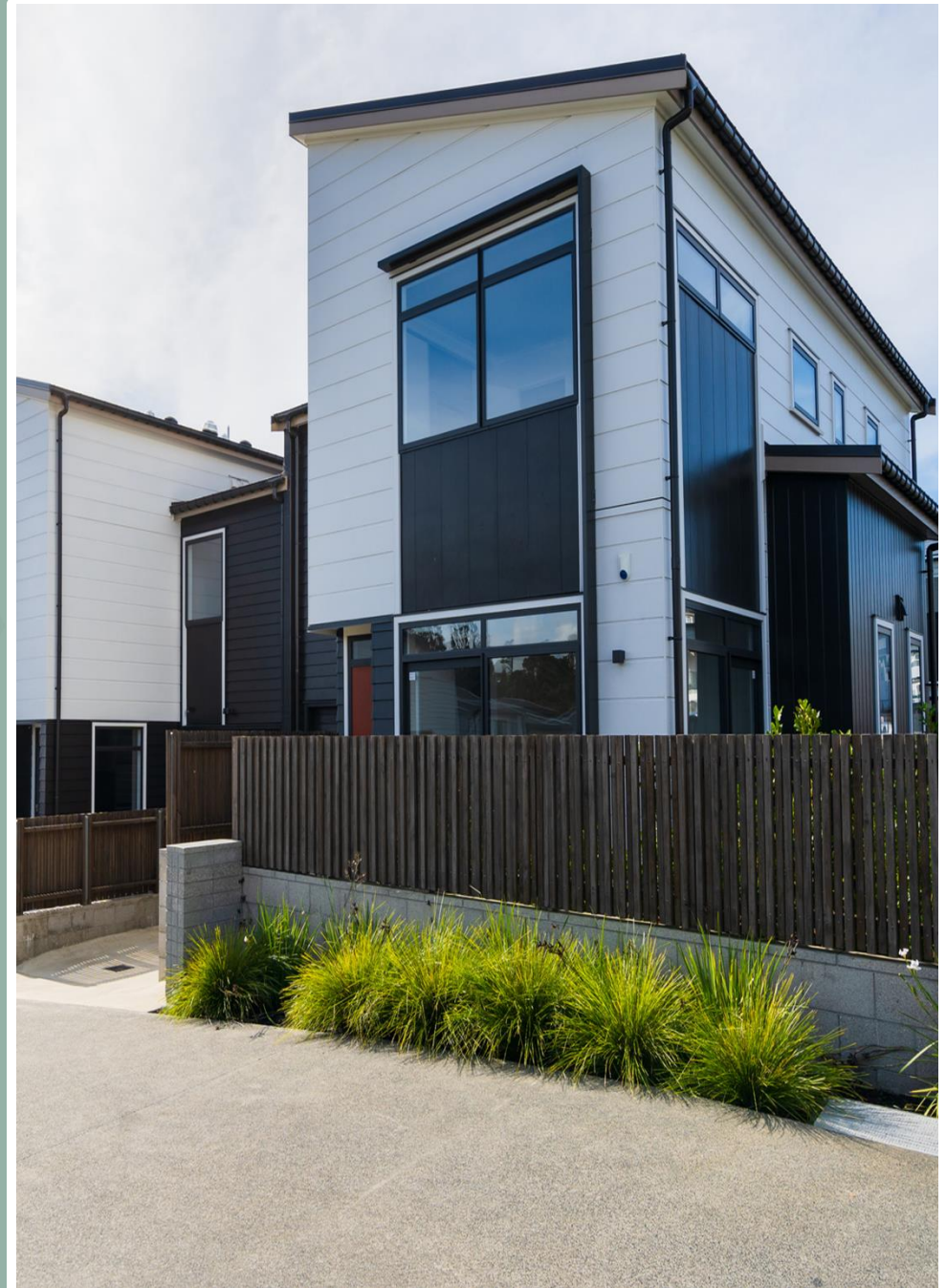
Real Estate

تجريب واستشارات

Chapter 1

Introduction to Real Estate Strategies and Requirements

مرافقة
تدريب واستشارات



Chapter 2

Real Estate Assessment, Acquisition and Disposal

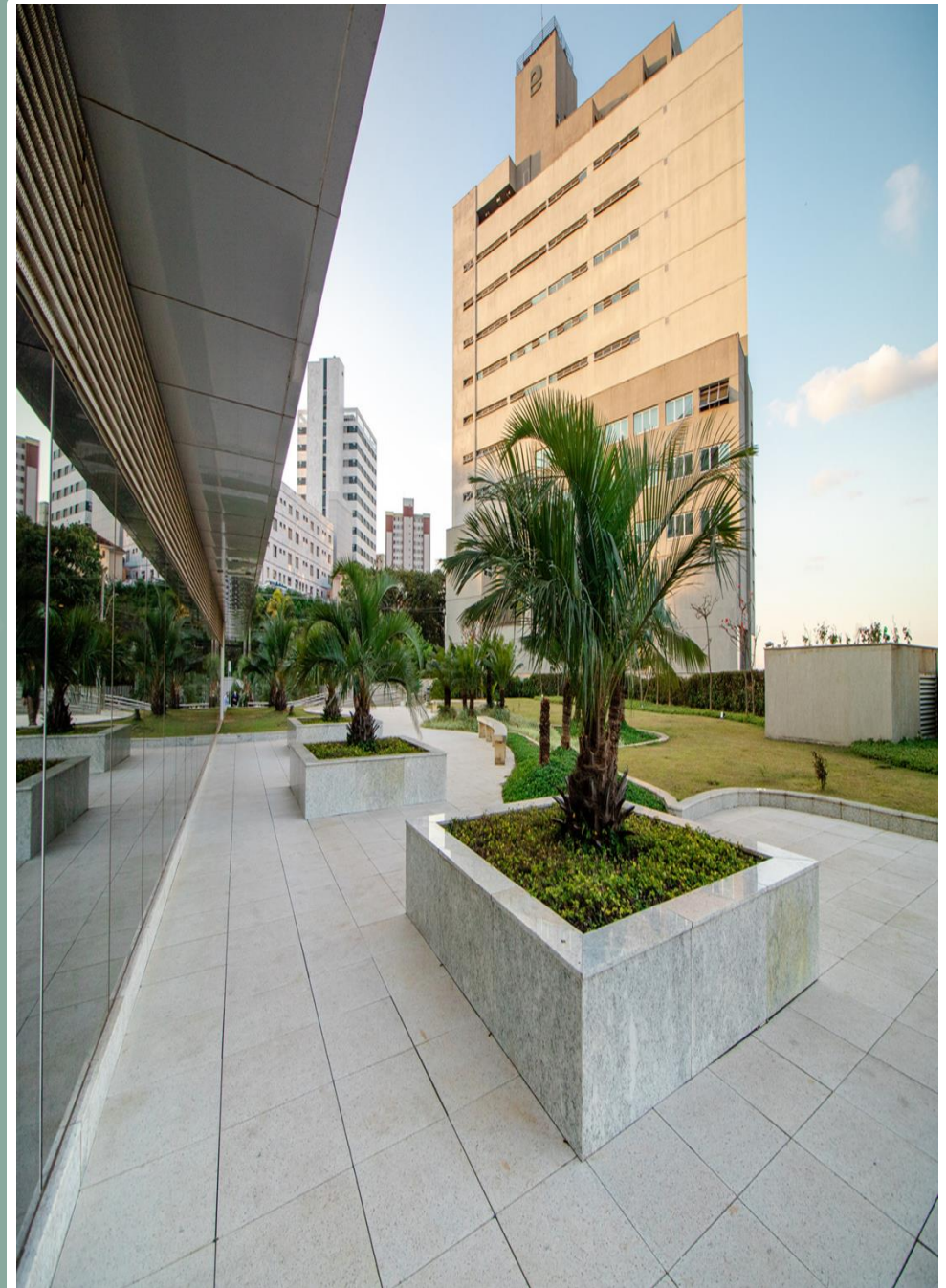
مرافق
تدريب واستشارات



Chapter 3

Real Estate Asset Management and Space

مرافق
تدريب والاستشارات



Chapter 4

Major Projects and New Construction

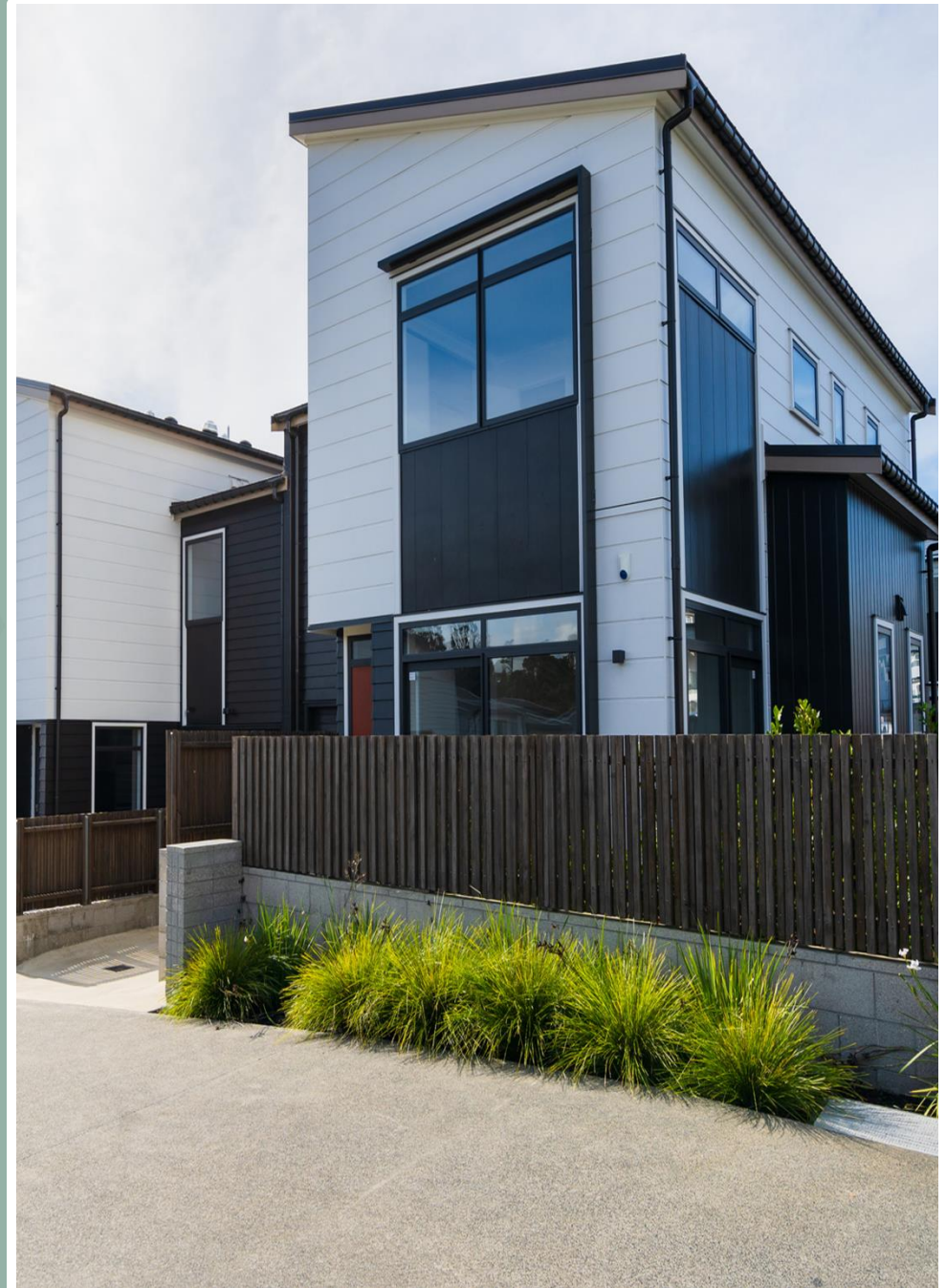
مرافق
تجريب واستشارات



Chapter 1

Introduction to Real Estate Strategies and Requirements

مرافقة
تدريب واستشارات



Contents:

1-Fundamentals

2-Business Life-Cycle

3-Life-Cycle Costing

4-Financial Concepts



Contents:

5-Investment Tools

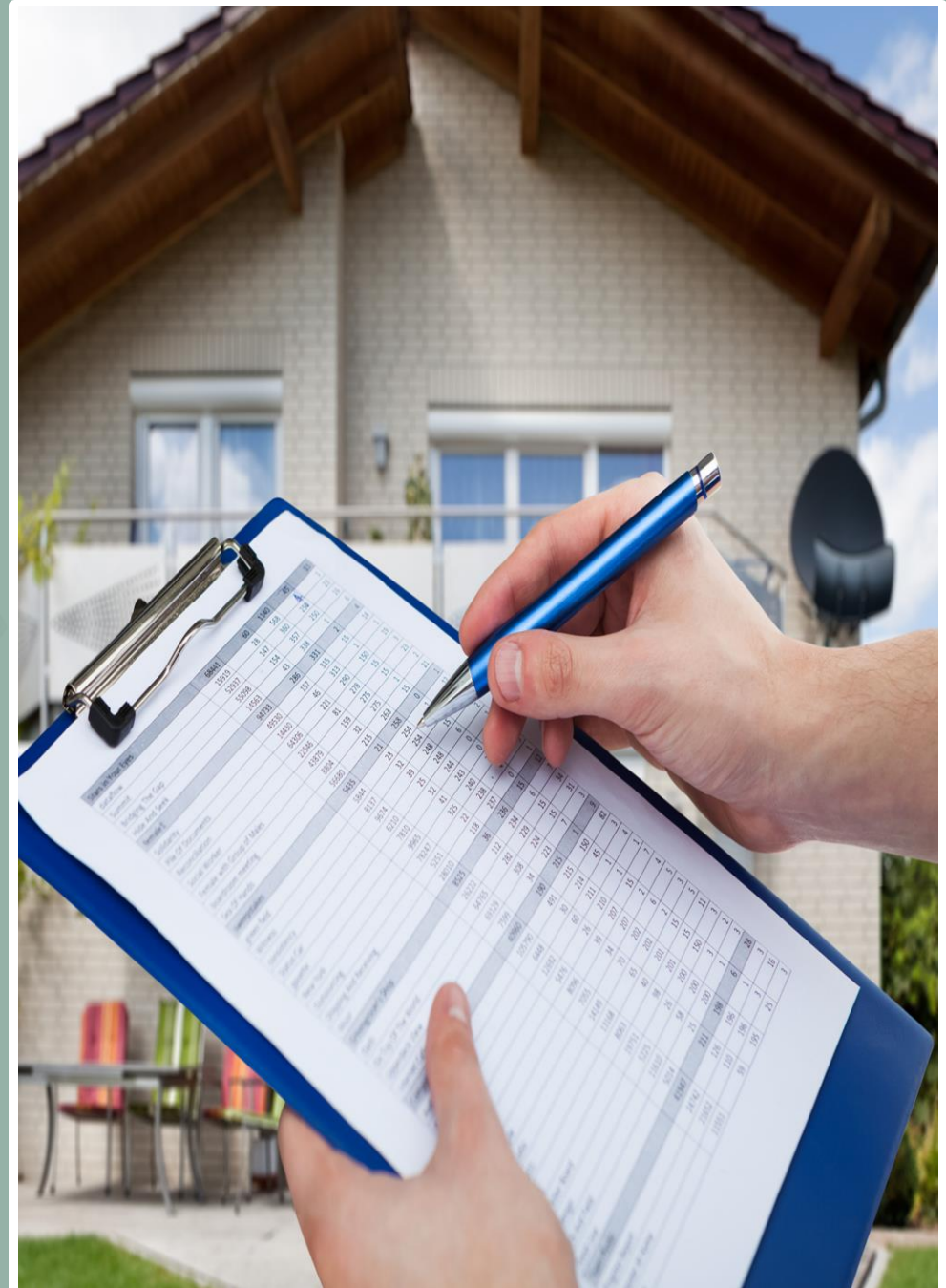
6-Intended Use

7-Regulations and Standards



1-Real Estate and Property Management Fundamentals

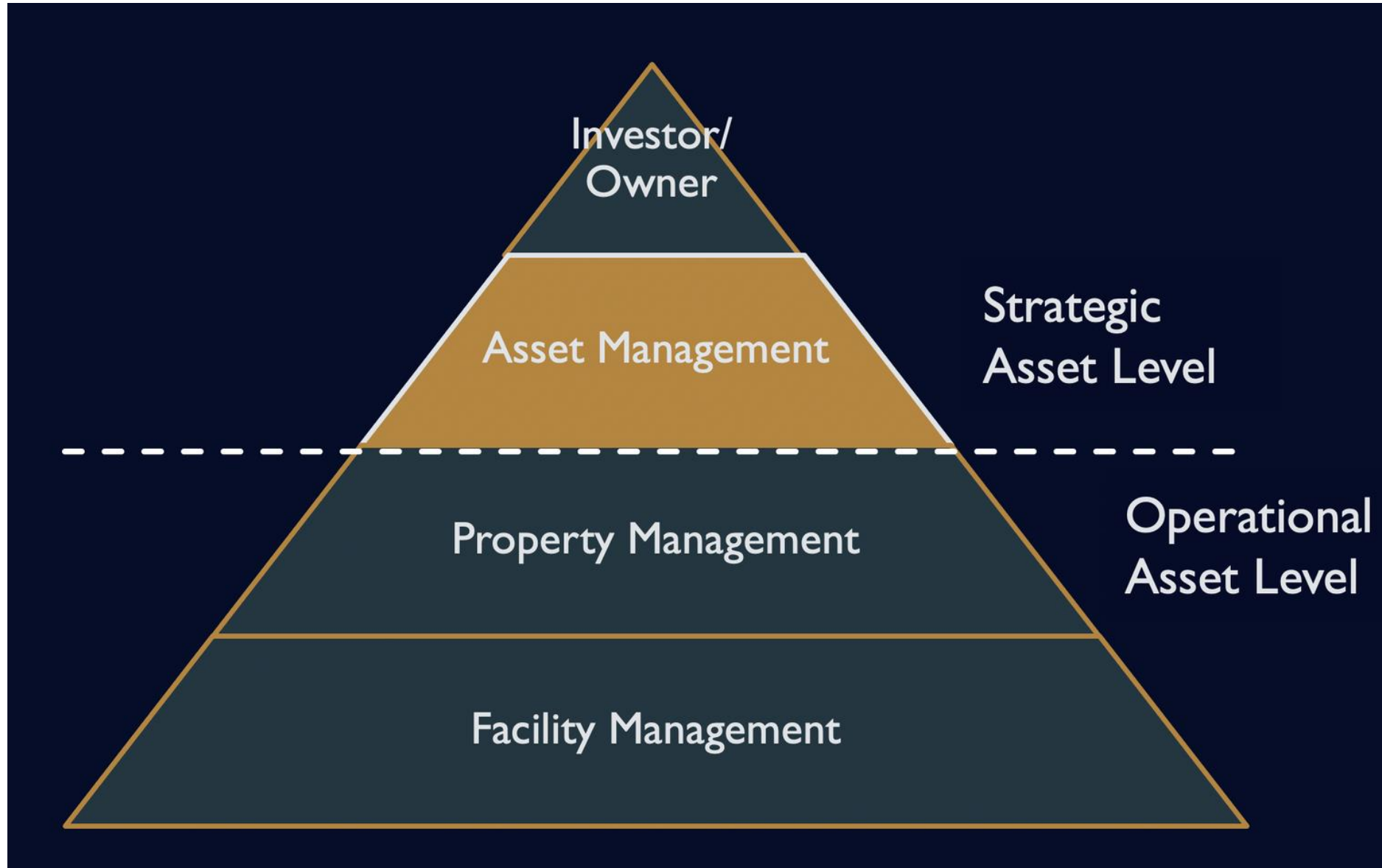
مرافق
تدريب واستشارات





Property Management

Facility Management



1-Real Estate and Property Management Fundamentals



VS



Real Estate

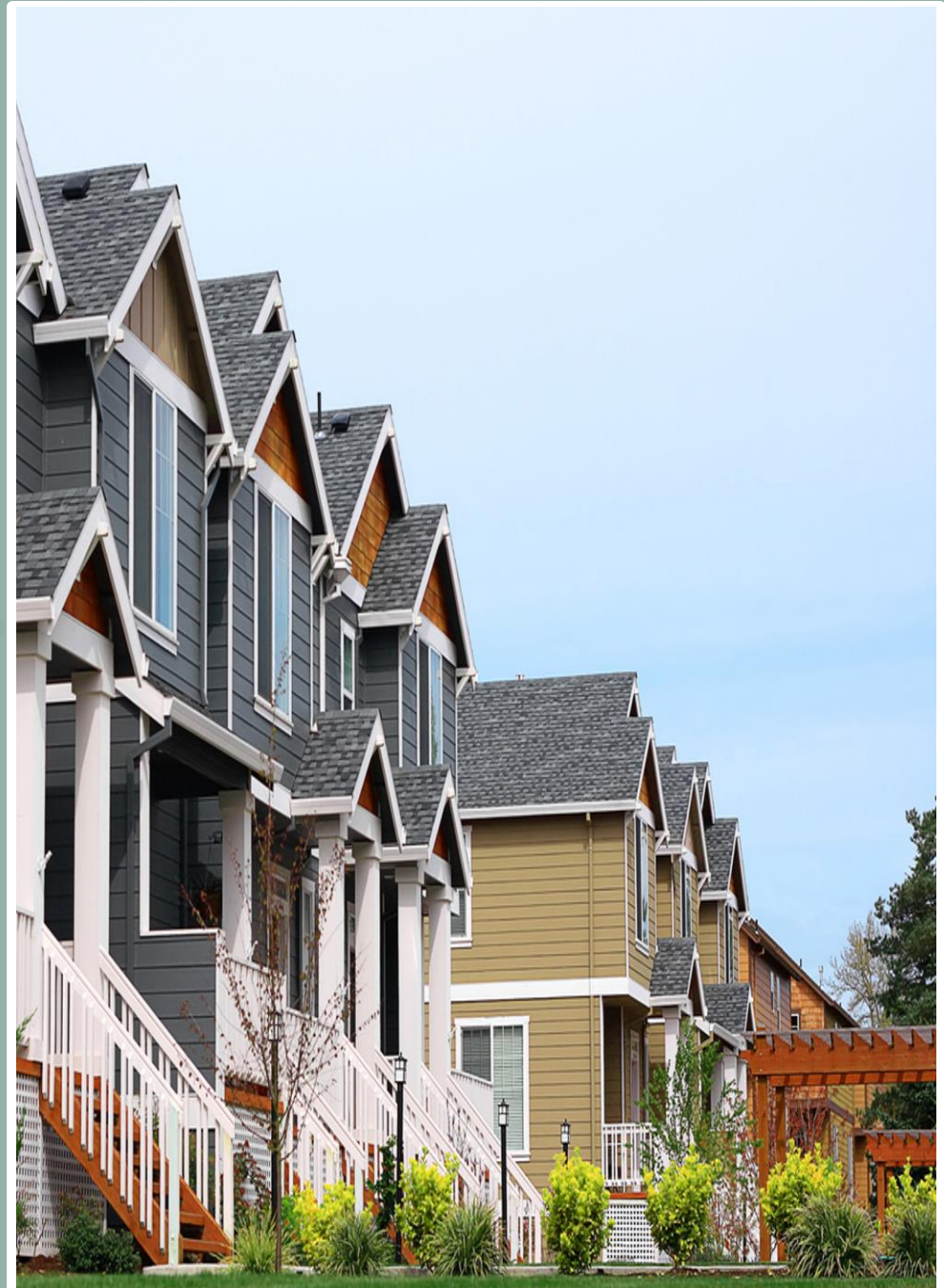
Property Management

مرافق
تدريب واستشارات

Factors Influencing Decisions

- 1-Organizational Image
- 2-Business Growth or Downsizing
- 3-Regulatory and Financial Changes

مرافق
تدريب واستشارات

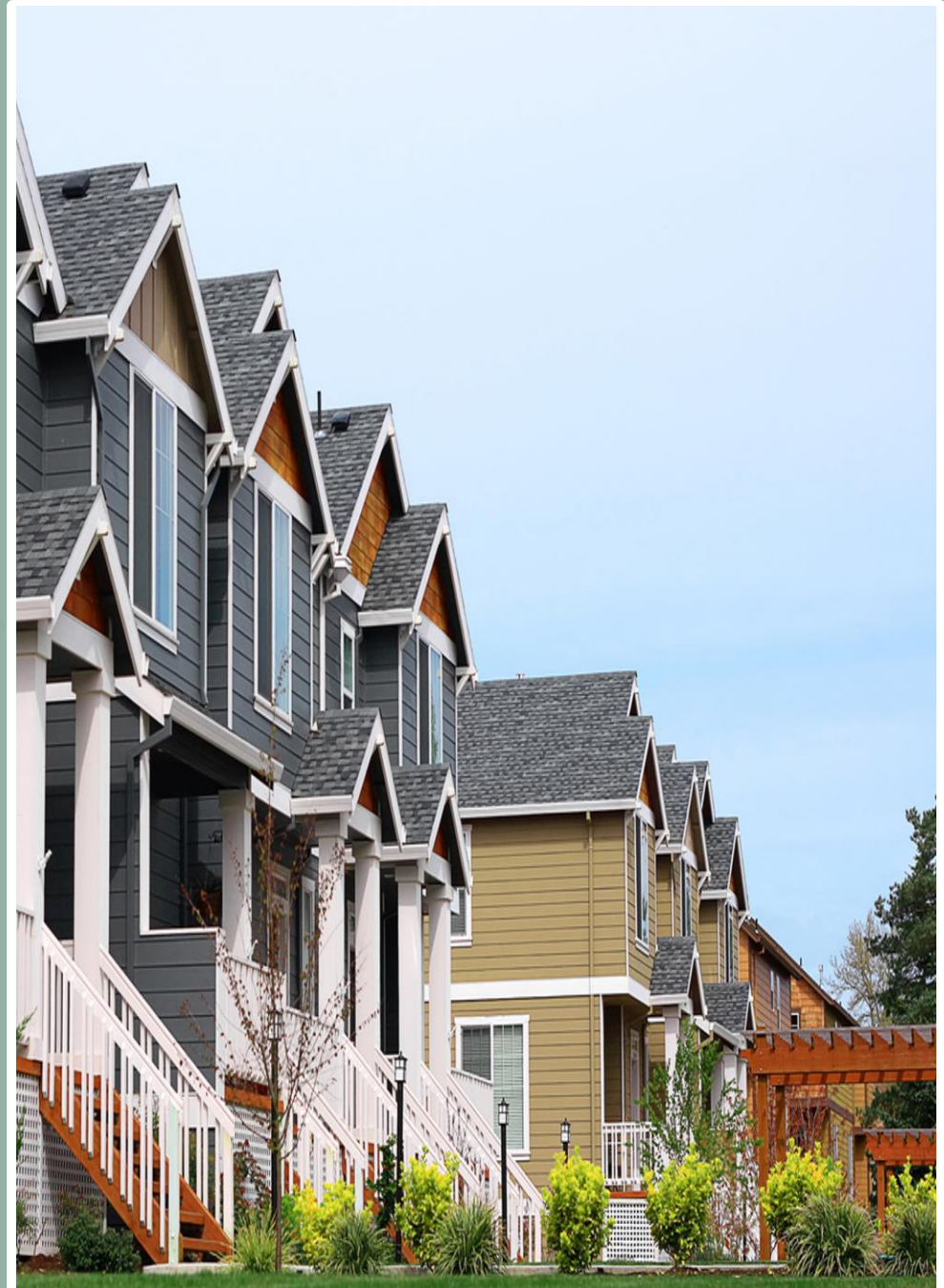


Factors Influencing Decisions

4-Employee Work Preferences

5-Technological Advancements

مرافق
تدريب واستشارات



2-Business Life-Cycle



مرافق
تدريب واستشارات

Business Life Circle



2-Business Life-Cycle

1- Start-Up

2-Growth

3-Maturity

4-Decline

5-Revival/Diversification/Disposal



مرافق
تدريب واستشارات

Business Life Circle



2-Business Life-Cycle

Business Life Cycle Model

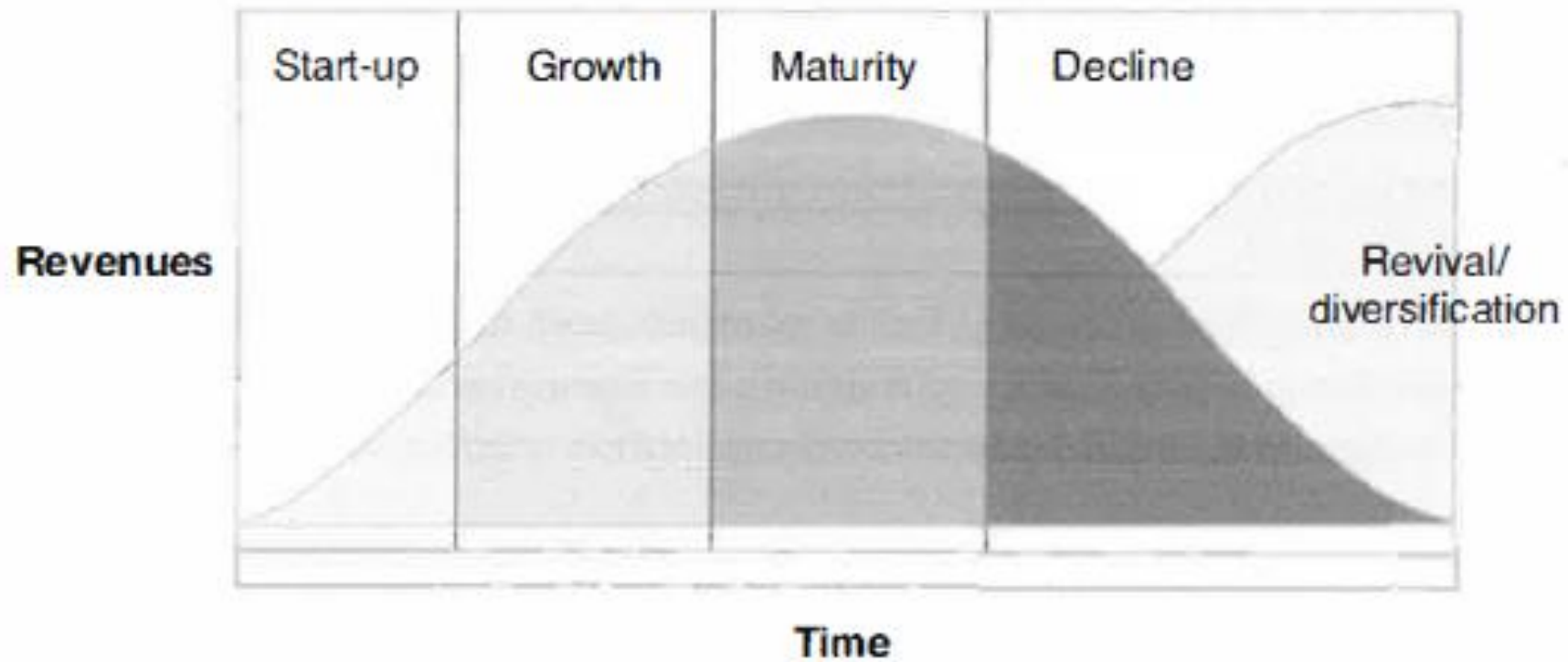
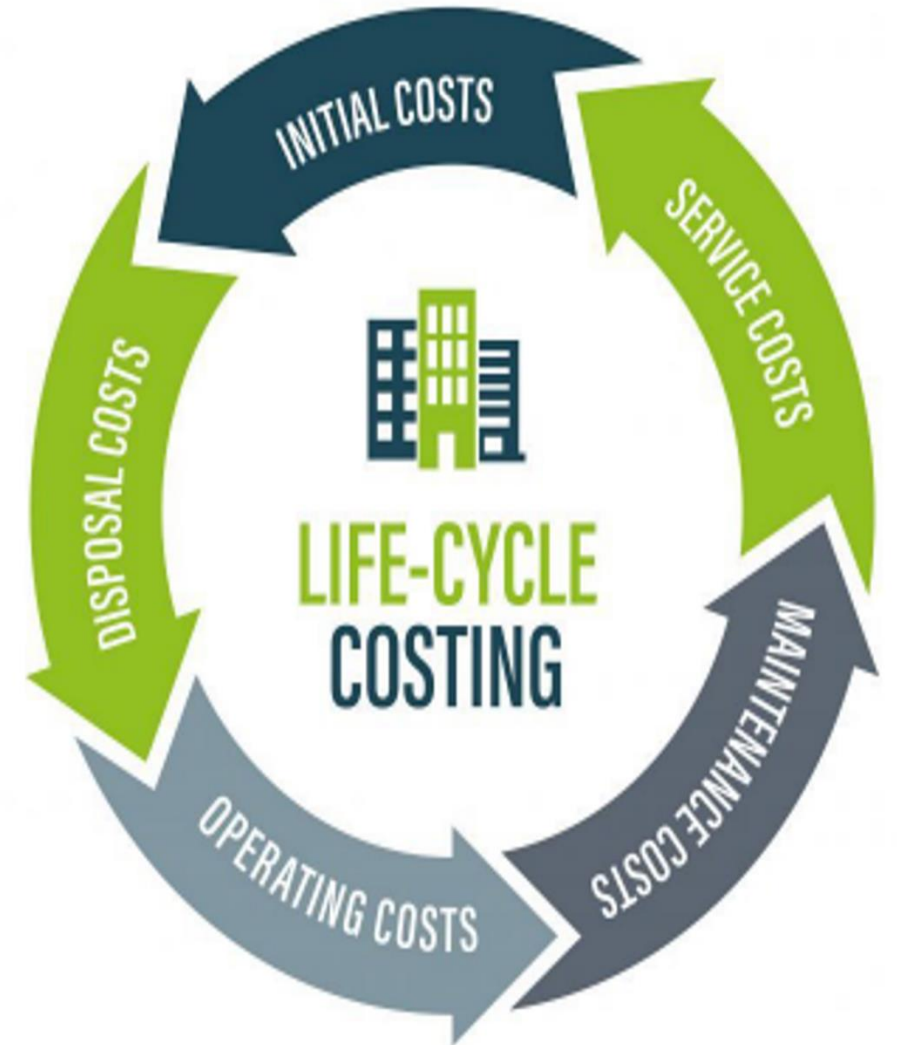


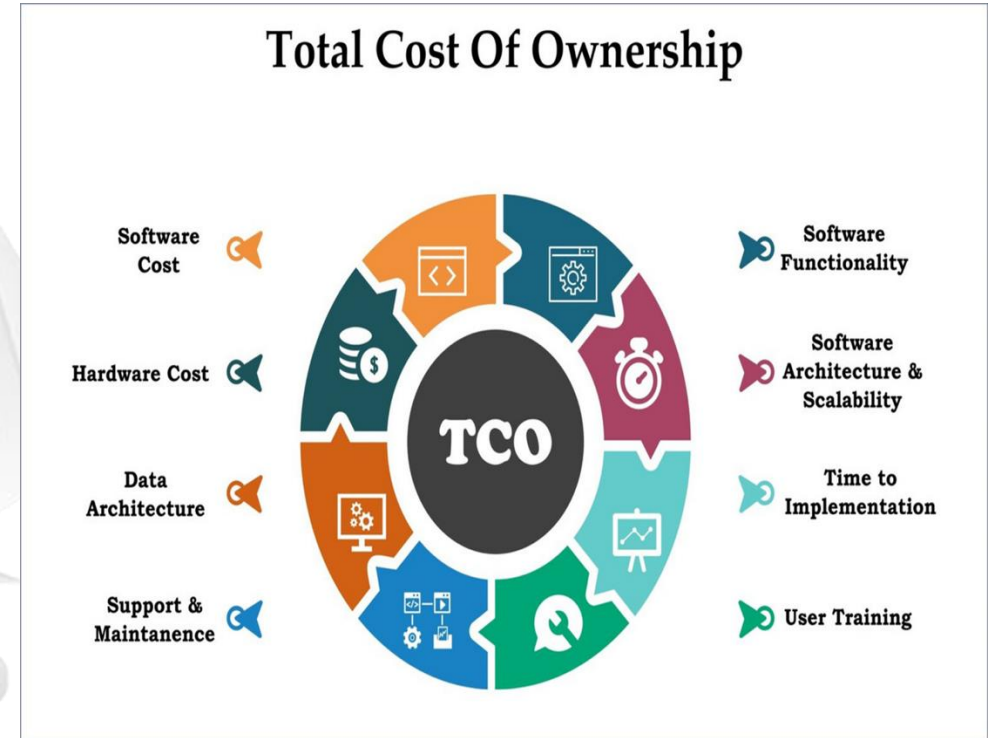
Figure 1 Business Life-Cycle Model

3-Life-Cycle Costing





**Life-Cycle Costing
(LCC)**



**Total Cost of Ownership
(TCO)**

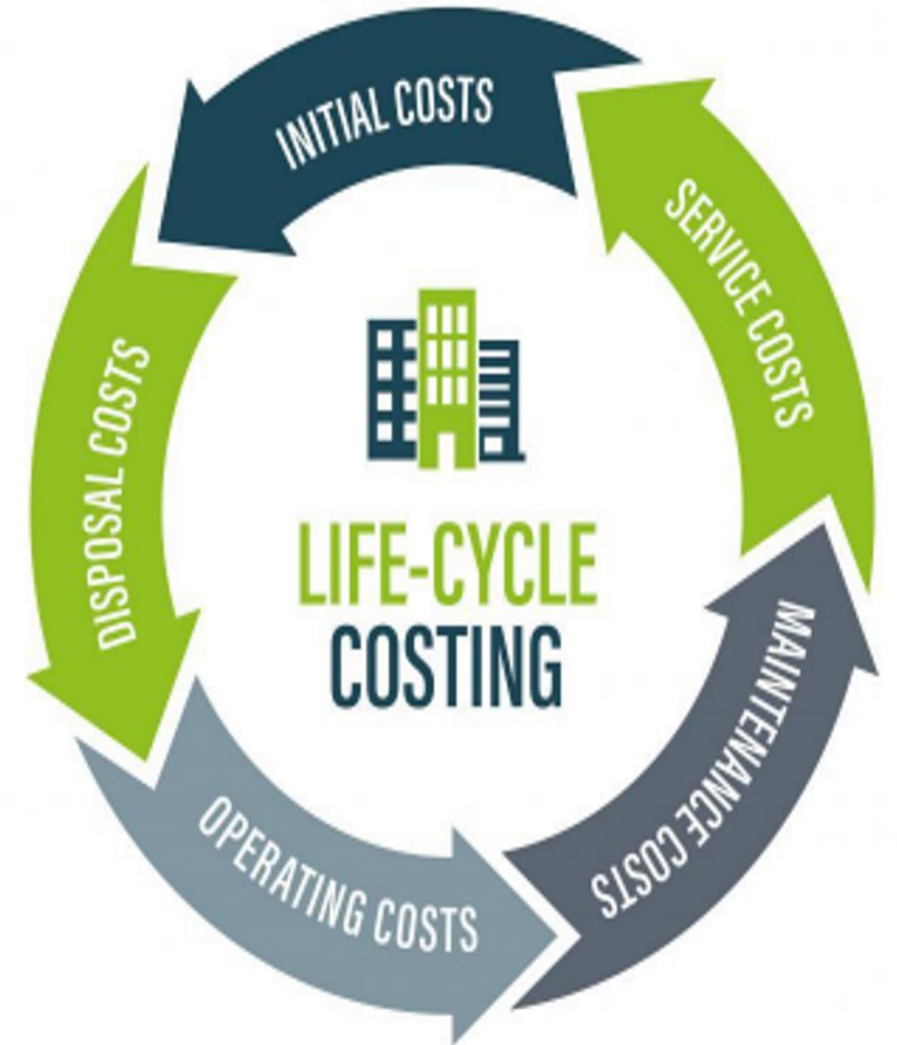
LCC Include

1-Planning and Design Costs

2-Construction Costs

3-Restoration and Preservation

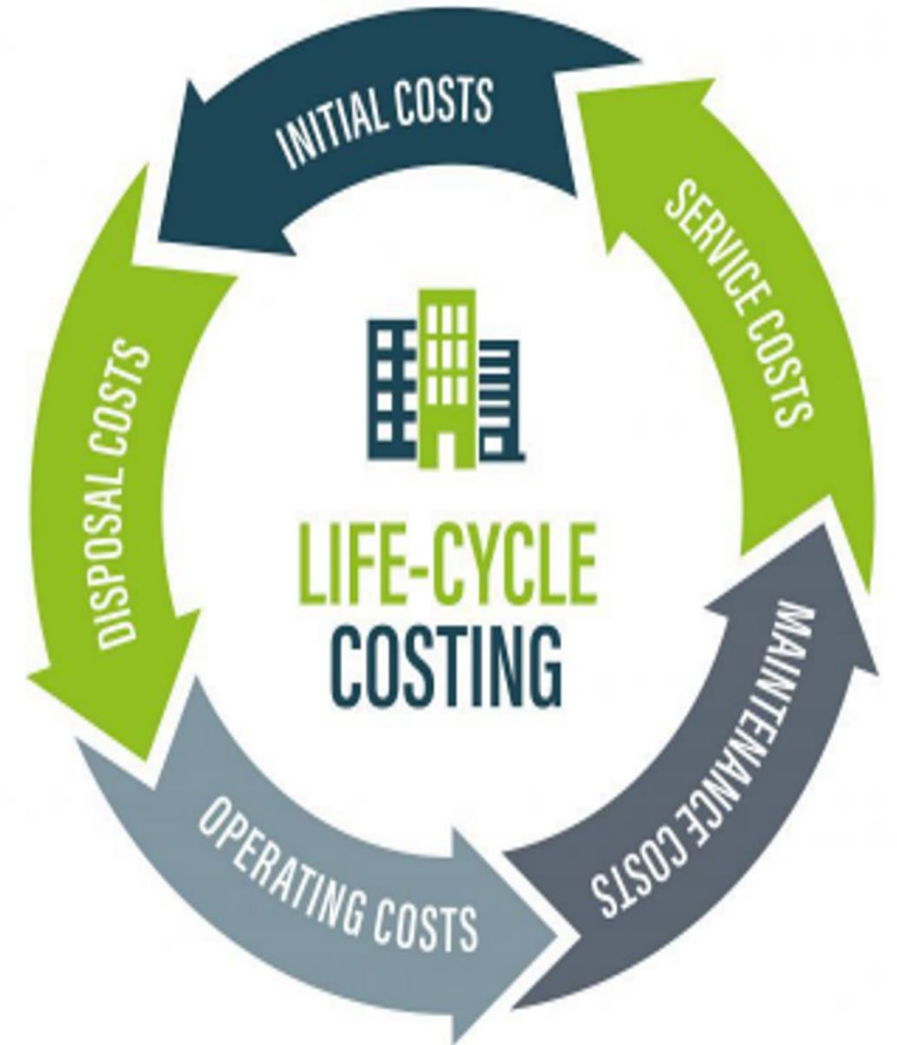
Expenses



LCC Include

4-Operation and Maintenance Costs

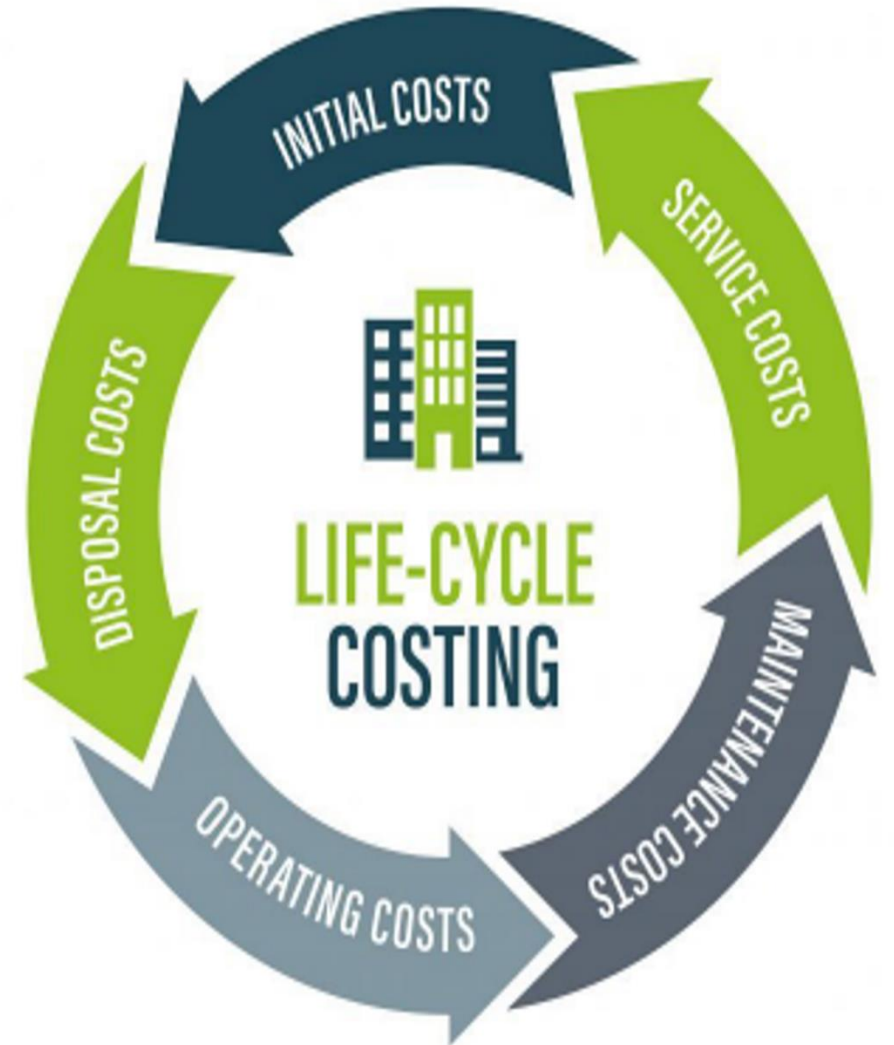
5-Final Disposal Costs



Excluded from LCC

1-Furnishings and equipment not specific to the facility

2-Land values



$$LCC=I+Repl-Res+E+W+OM\&R+O$$

I:Initial investment cost

Repl: Present value of capital
replacement costs

Res :Present value of residual value

E = Present value of energy costs



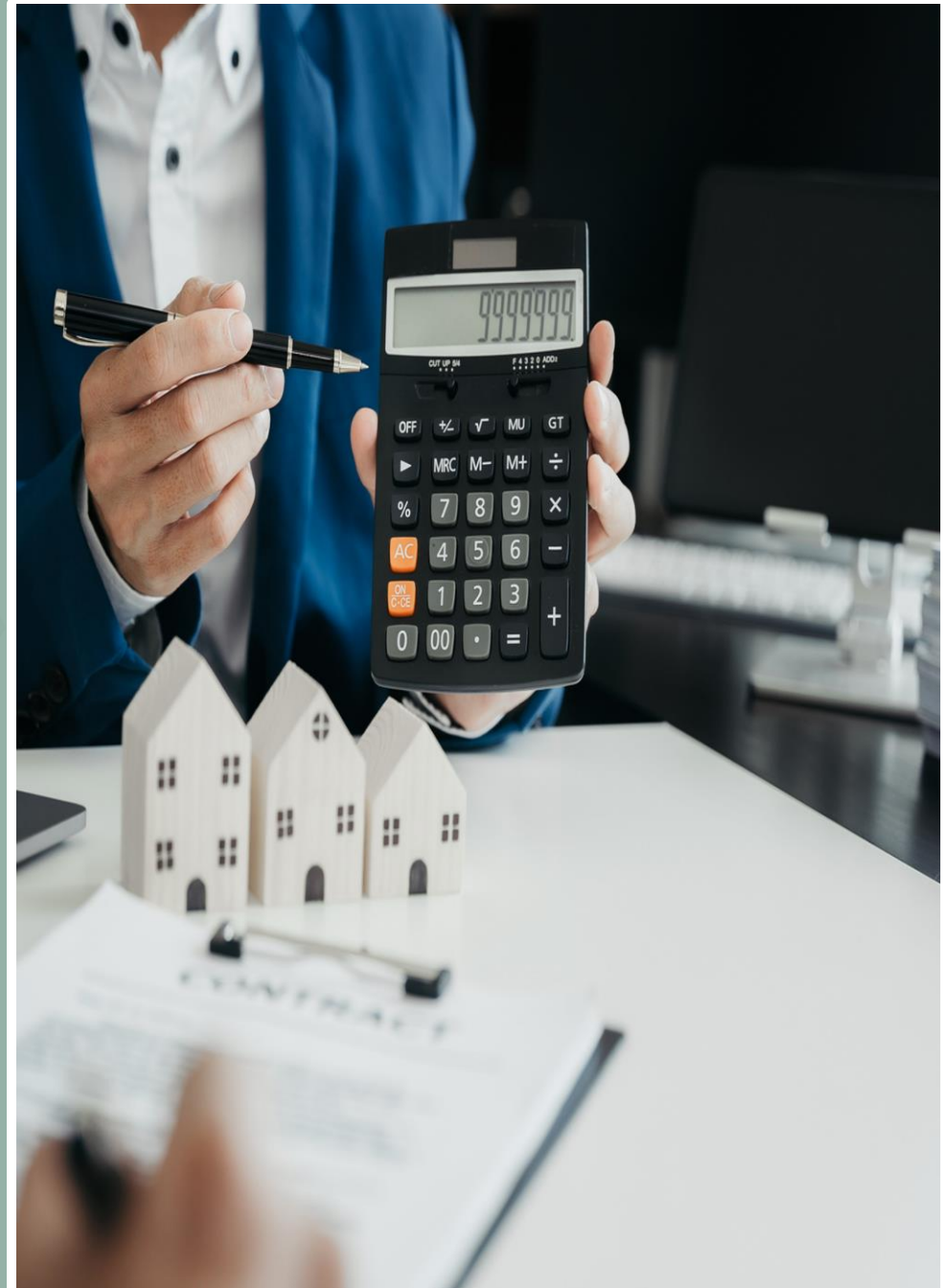
$$LCC=I+Repl-Res+E+W+OM\&R+O$$

W = Present value of water costs

OM&R = Present value of OM&R Cost

O = Present value of other costs

مرافق
تدريب واستشارات



Example



Ways to Reduces (LCC) in Real Estate

- 1- Early Involvement in Design and Planning
- 2-Optimizing Operational Efficiencies in Construction
- 3-Tenant Improvement Planning

Ways to Reduces (LCC) in Real Estate

4- Sustainable and Energy-Efficient Design

5-Preventive Maintenance Planning

3-Life-Cycle Costing

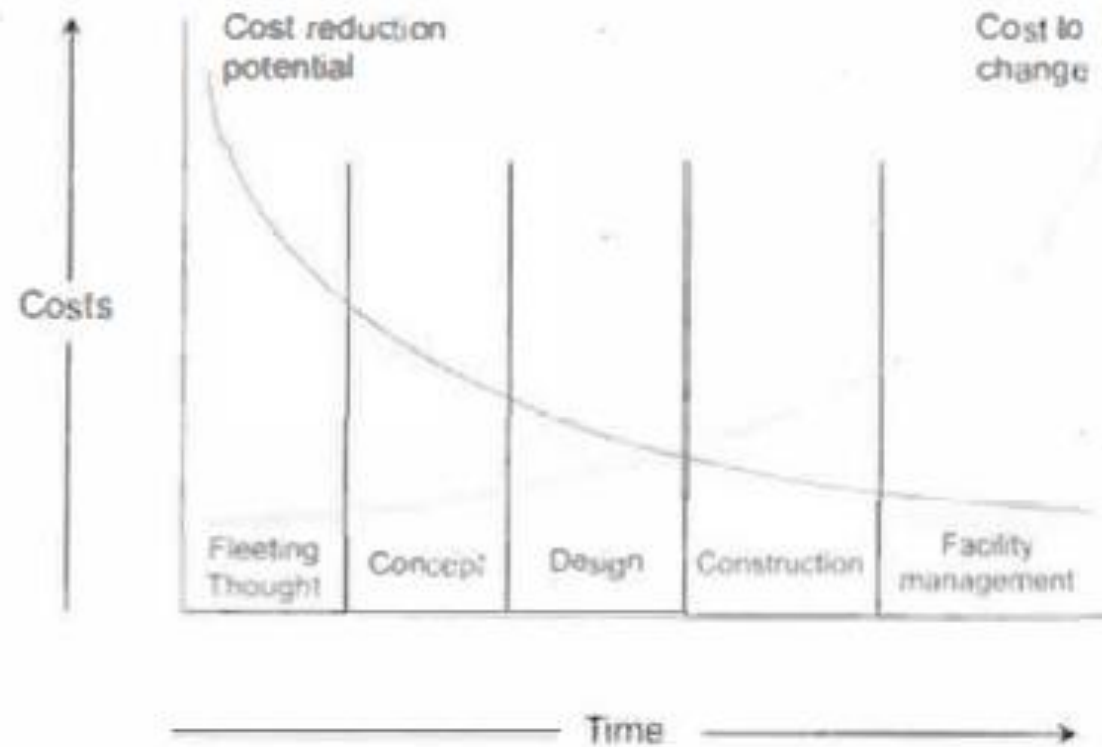


Figure 2 Ways to reduce life-cycle costs

Basic Steps to Conduct (LCC) Analysis

1-Estimate Costs

2-Compute Life-Cycle Costs

3-Conduct Risk and Uncertainty Assessments

4-Identify and Compare Alternatives

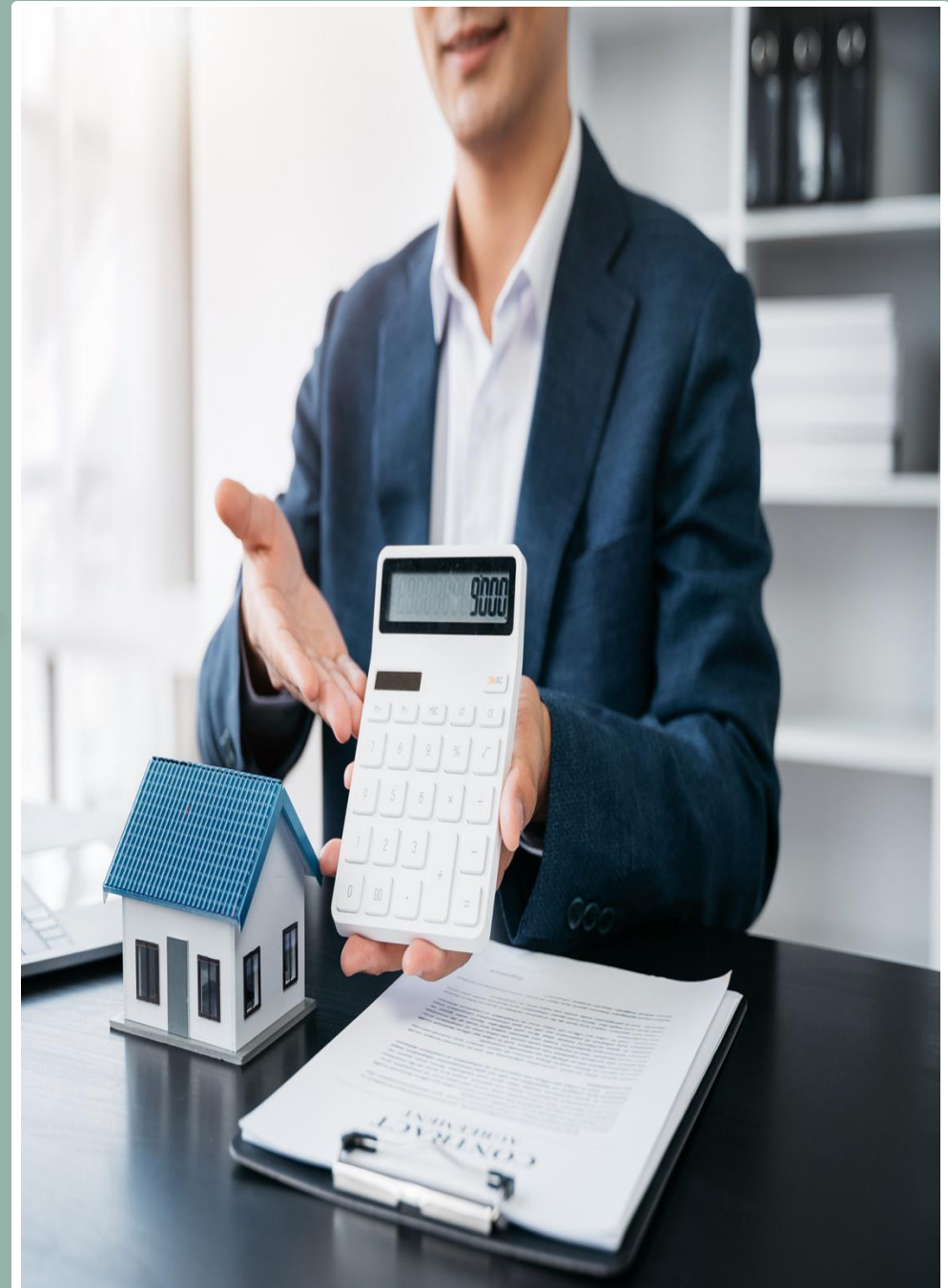
Considerations for Doing Analysis

1-Test Assumptions

2-Ensure Fair Comparisons

3-Assess Hidden Costs

4-Risk and Sensitivity Analysis



4-Baseline Financial Concepts and Terms

مرافق
تدريب واستشارات



Time value of Money

$$FV = PV(1+r)^n$$

FV = Future Value

PV = Present Value

r = Annual Interest Rate

n = Number of Periods



Independent Options

One option not impact others

No opportunity cost



Mutually Exclusive Options

One option limits to choose another
Opportunity cost exists



When deciding consider

Net Present Value (NPV)

Internal Rate of Return (IRR)



Cash flow Pattern

1-Cash flow Pattern

2-Payment Duration

3-Investment Strategy



4-Forms of Payment

Lump Sum: One-time payment

Annuity (Installments)



5-Investment Analysis

Tools



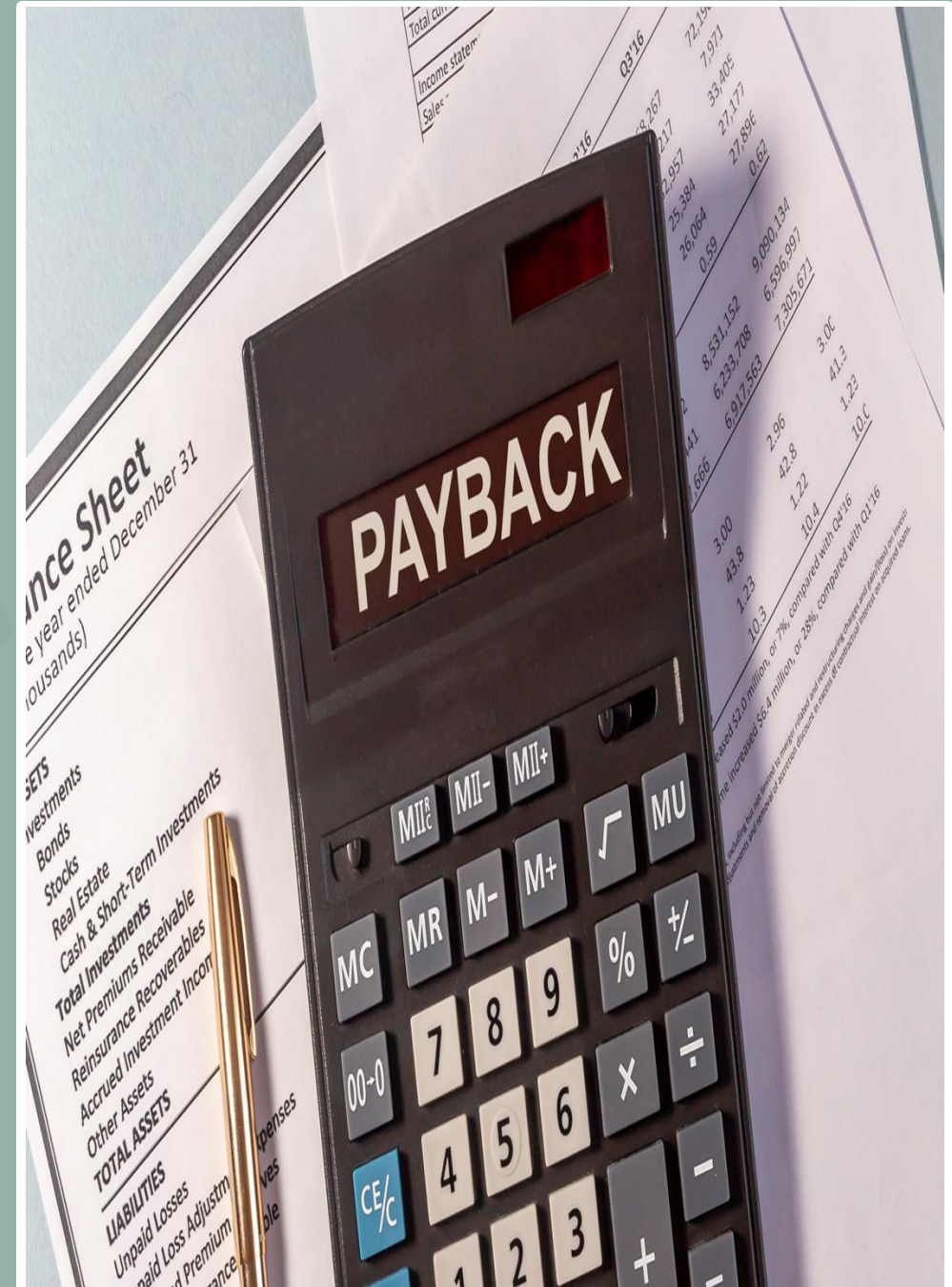
مرافق
تدريب واستشارات



1-Payback Period

2-Discounted Cash Flow Analysis

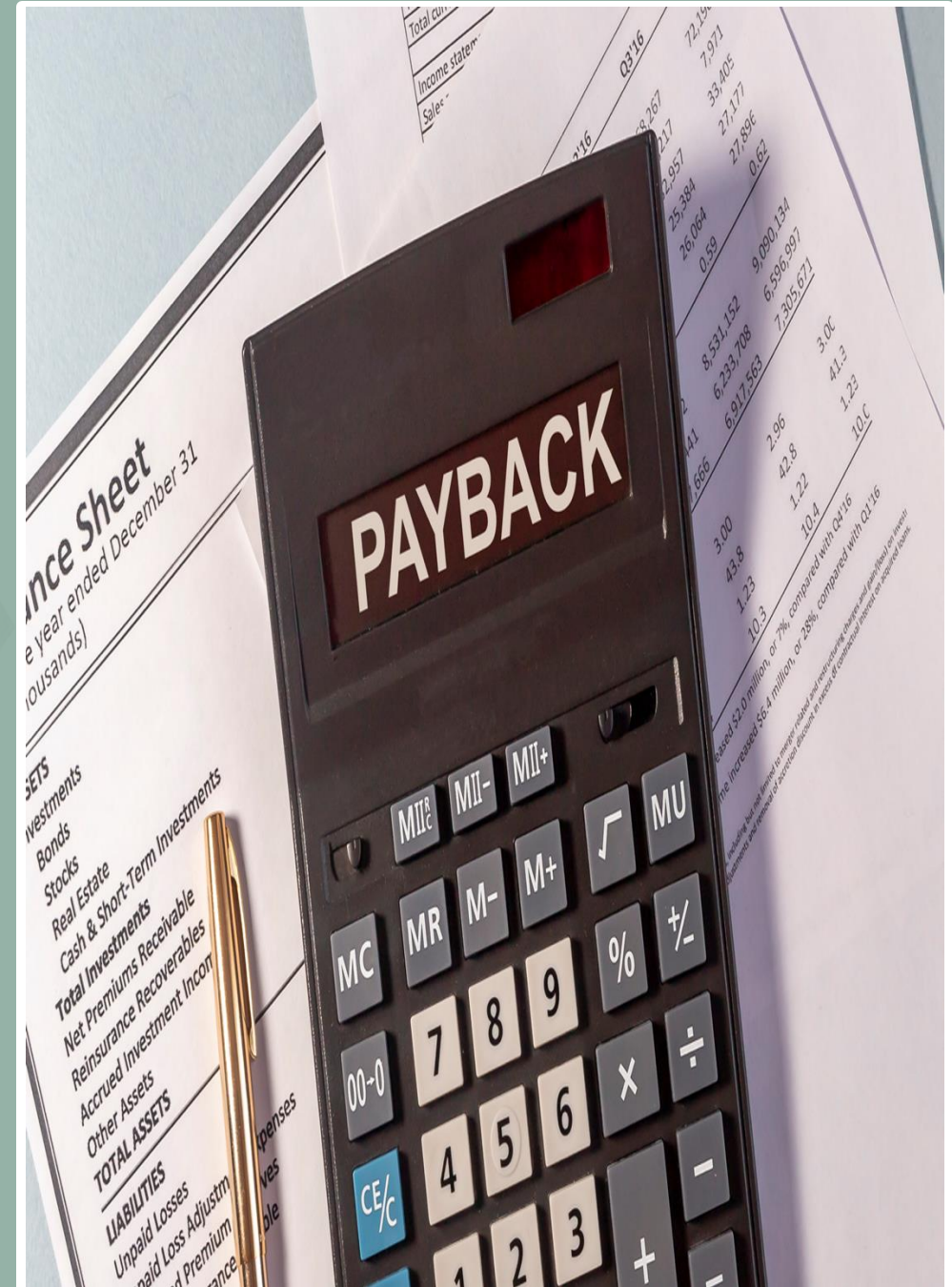
3-Risk Analysis Models



1-Payback Period

Payback Period=
Initial Investment / Annual Net Cash Flow

مرافق
تدريب واستشارات



2-Discounted Cash Flow Analysis

Net Present Value (NPV)

Internal Rate of Return (IRR)



3-Risk Analysis Models

1- Sensitivity Analysis

2-Scenario Analysis



6-Intended Use



مرافق
تدريب واستشارات

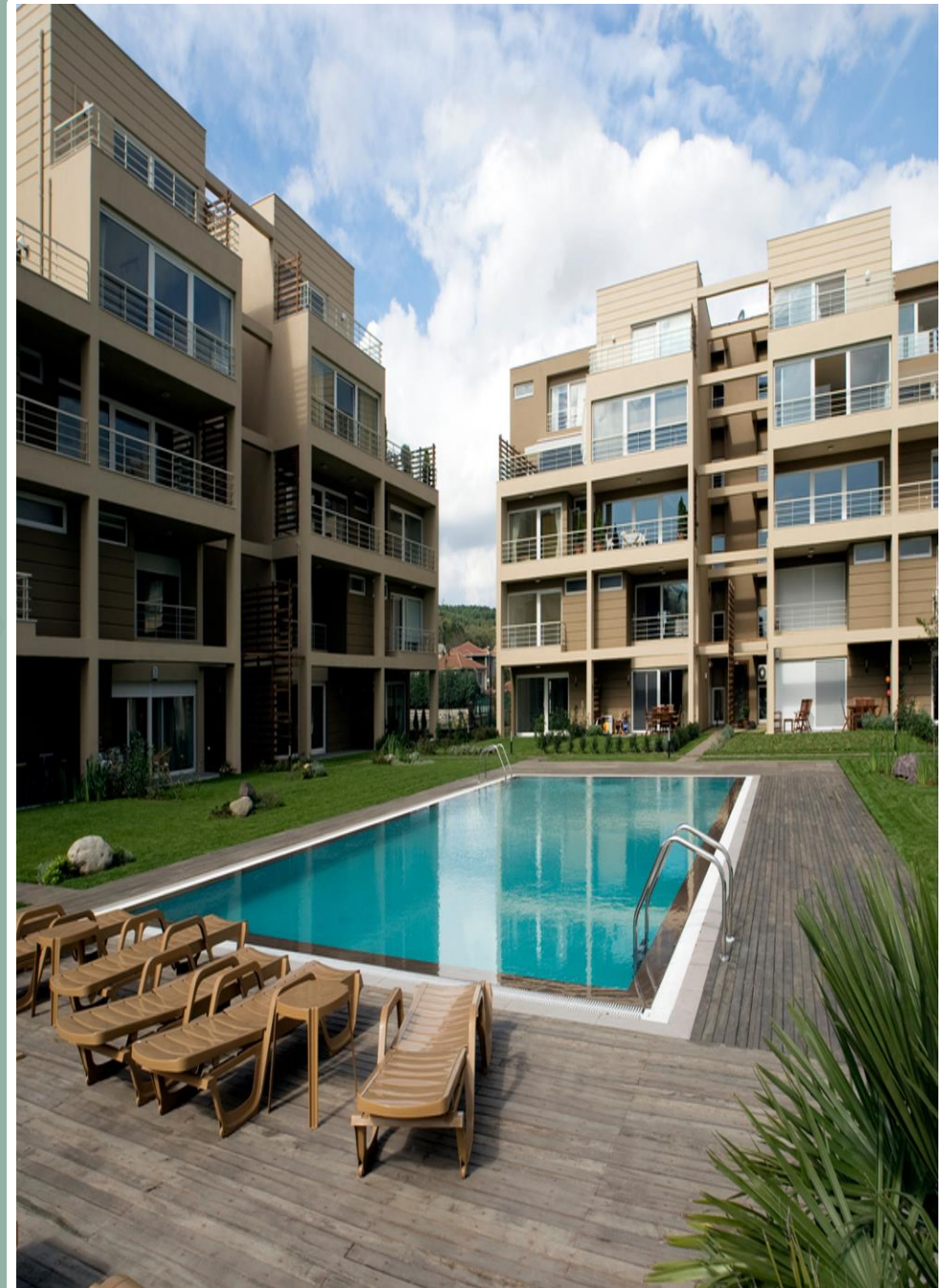


- 1- Land Use Regulations
- 2- Suitability
- 3- Infrastructure Availability
- 4- Access & Accessibility
- 5- Size & Capacity



7-Government Regulations and Standards

مرافق
تدريب واستشارات



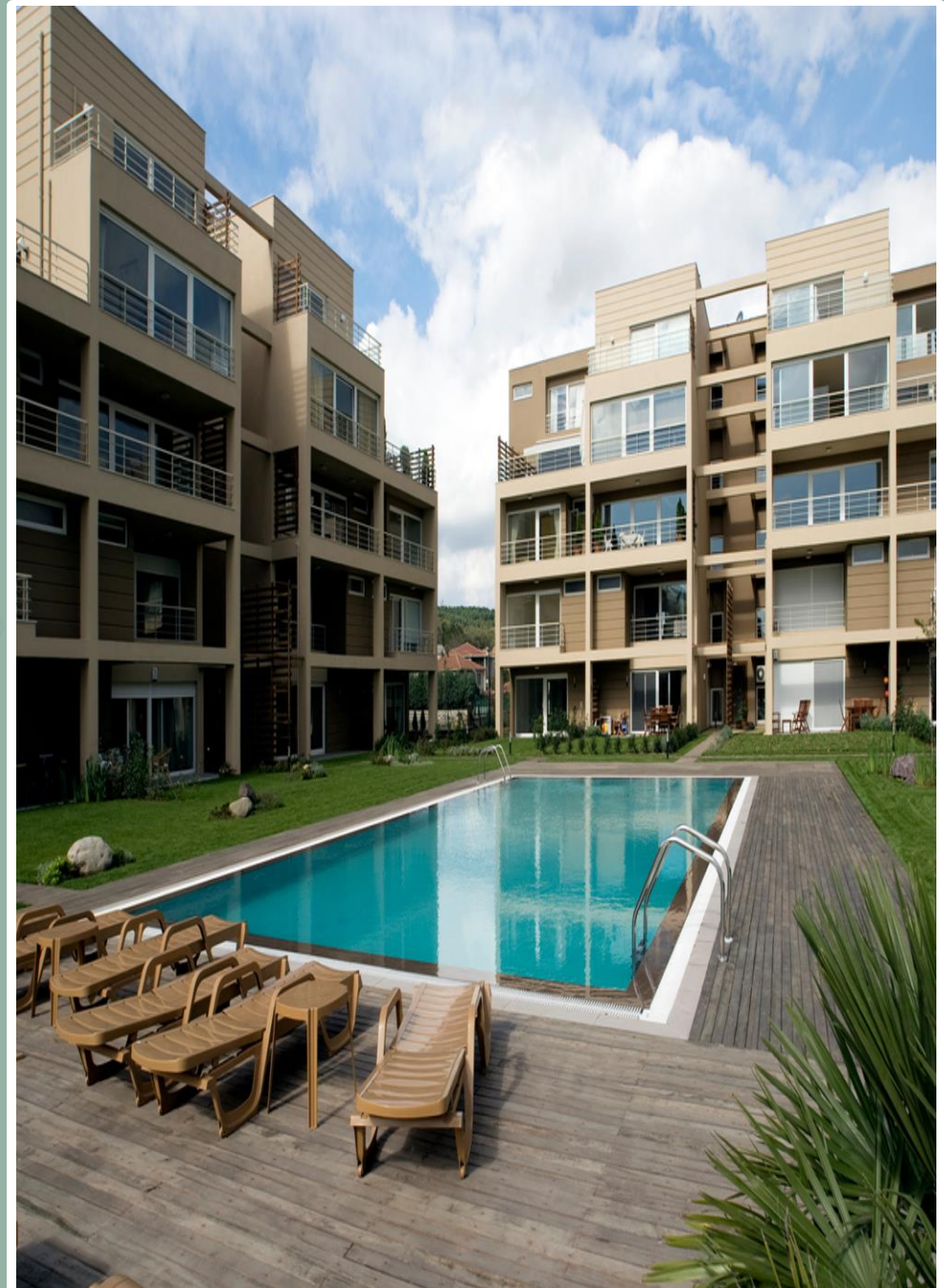
Regulatory Areas

Ownership restrictions

Zoning laws

Taxes, labor laws & agreements

Building codes & safety regulations



Standards

American Society for Testing &
Materials

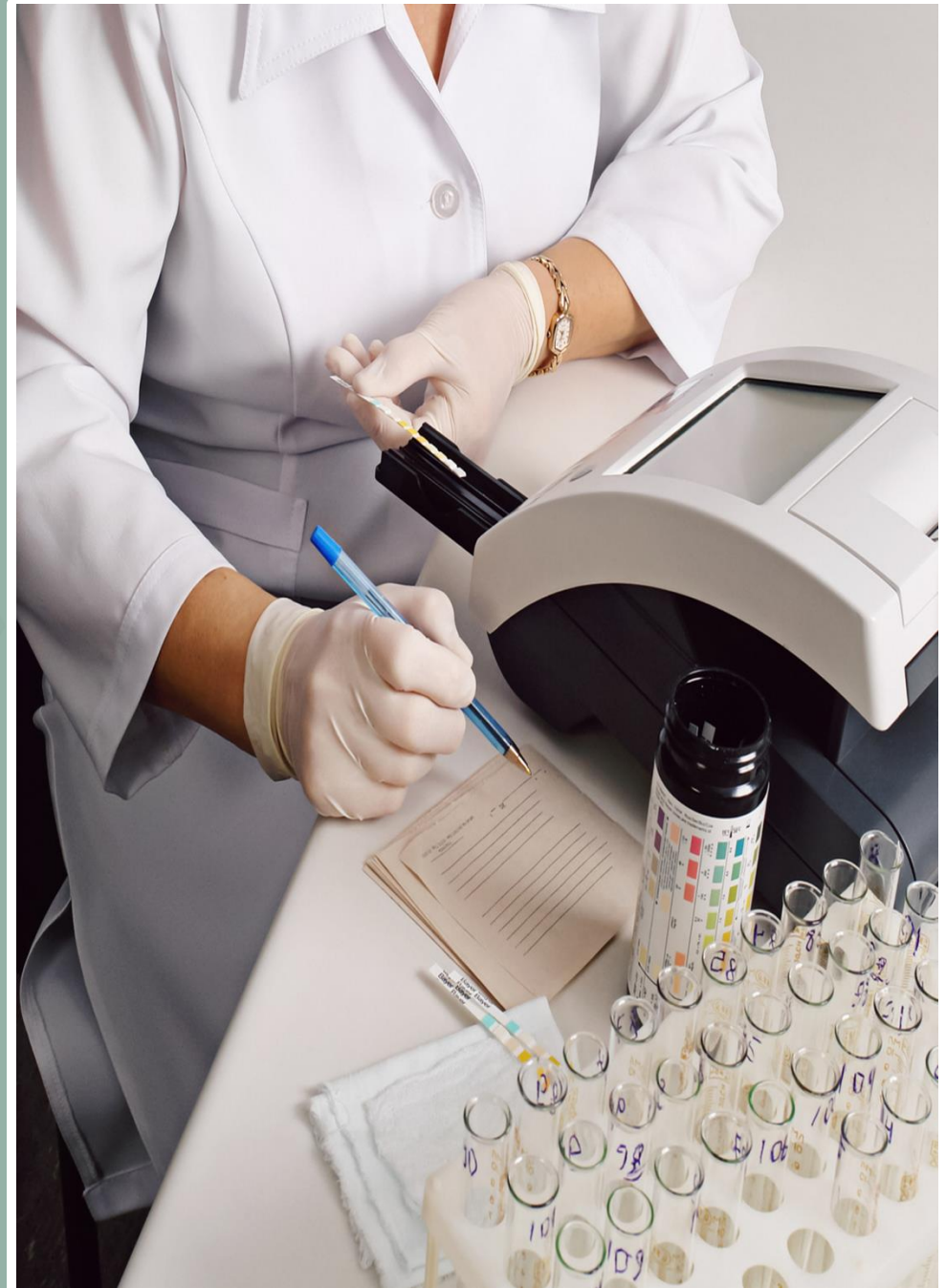
(ASTM)

ASTM/IFMA Standard (ASTM

E1836/E1836M-09e1)



مرافق
تدريب واستشارات



Standards

Standard of floor Measurement (1915)

ANSI/BOMA Z65.1-2010

ANSI/BOMA Z65.1-2017



**Building Owner
and Managers Association**



Standards

Open Standards Consortium for Real
Estate) (OSCRE)



National Association of Realtors) (NAR)



Chapter 2

Real Estate Assessment, Acquisition and Disposal

مرافق
تدريب واستشارات



Contents:

1-External Factors

2- Financing

3-Real Estate Master Plan

4-Acquisition and Divestiture

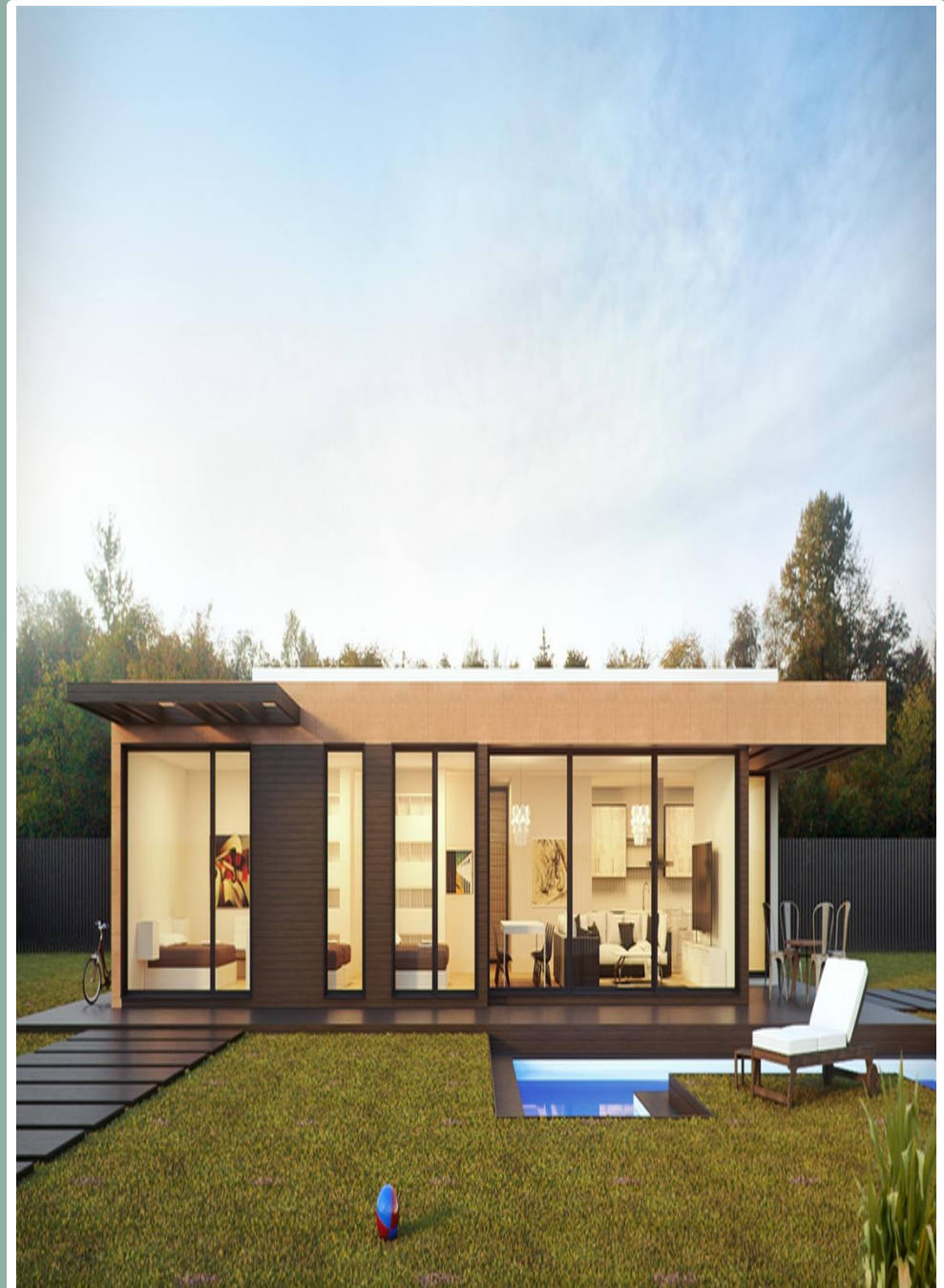
5-Portfolio Management

مرافق
تدريب واستشارات



1-External Factors that Influence Real Estate Decisions

مرافق
تجريب واستشارات



1-External Factors that Influence Real Estate Decisions

1-Economic cycles

2-Age of Property Development

3-Cyclical Market Condition

4-Highest and Best Use

مرافق
تجريب واستشارات



1-Economic cycles

A- Economic Contraction

B-Economic Expansion



2-Age of Property Development

- 1-New Development (0–15 years)
- 2-Peak Value/15–30 years)
- 3-Value Decline (30–40 years)
- 4-Least Value/Renewal (40–50 years)



3-Cyclical Market Condition

- 1- High Demand (Demand exceeds supply)
- 2-Low Demand (Supply exceeds demand)
- 3-Balanced Market (Supply and demand are equal)

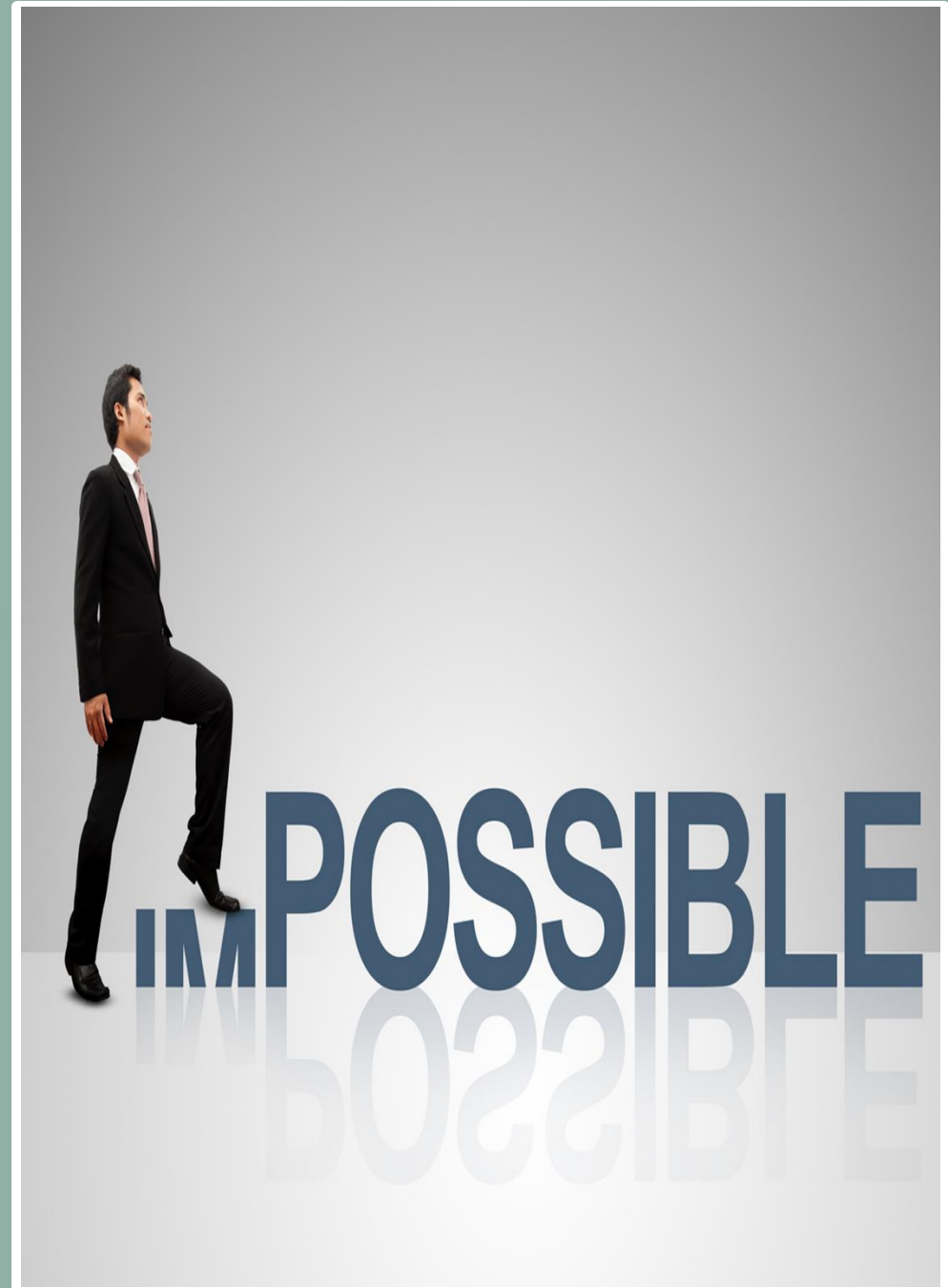
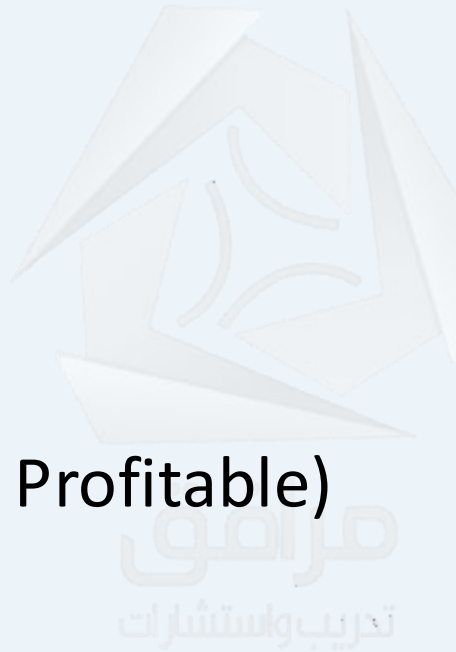
4-Highest and Best Use

1-Physically Possible

2-Legally Allowable

3-Financially Feasible

4-Maximally Productive (Most Profitable)



2-Financing



مرافق
تجريب واستشارات



2-Financing

- 1-Capitalization rates
- 2-Mortgage payments
- 3-Sinking fund
- 4-currency fluctuations
- 5-Interest rate risks



2-Financing

1-Capitalization rates

$$\text{CAP Rate} = (\text{NOI} / \text{Sales Price}) \times 100\%$$



2-Financing

2-Mortgage Payments

1-Principal

2-Interest

3-Taxes & Insurance

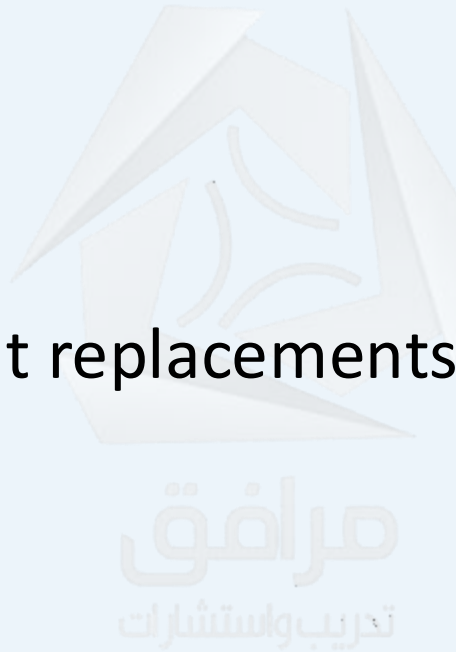


3-Sinking fund

Expansion projects

Capital construction

Major upgrades or equipment replacements



4-Impact of Currency Fluctuations

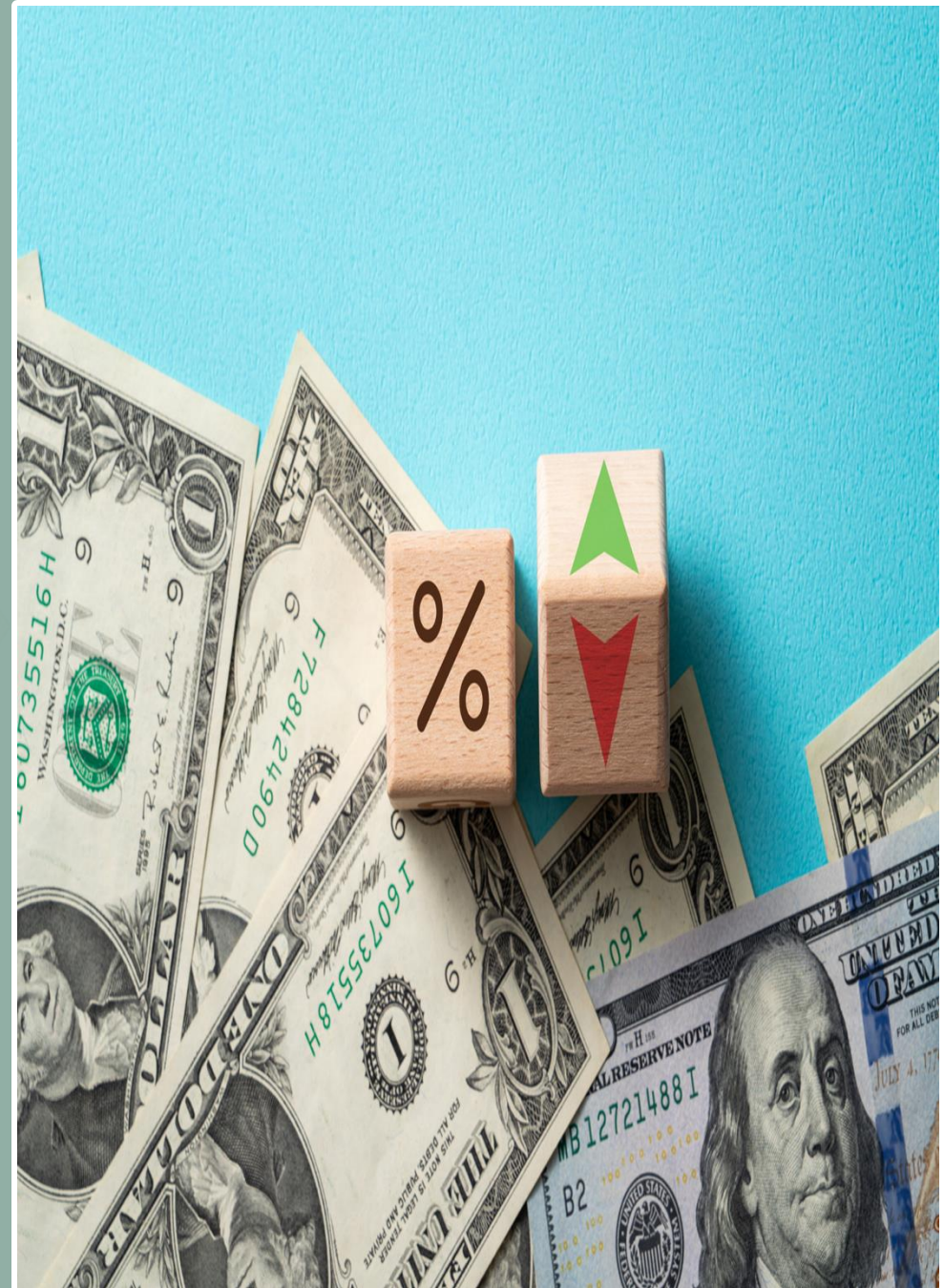
Stronger Domestic Currency

Weaker Domestic Currency



5-Interest Rate Risks

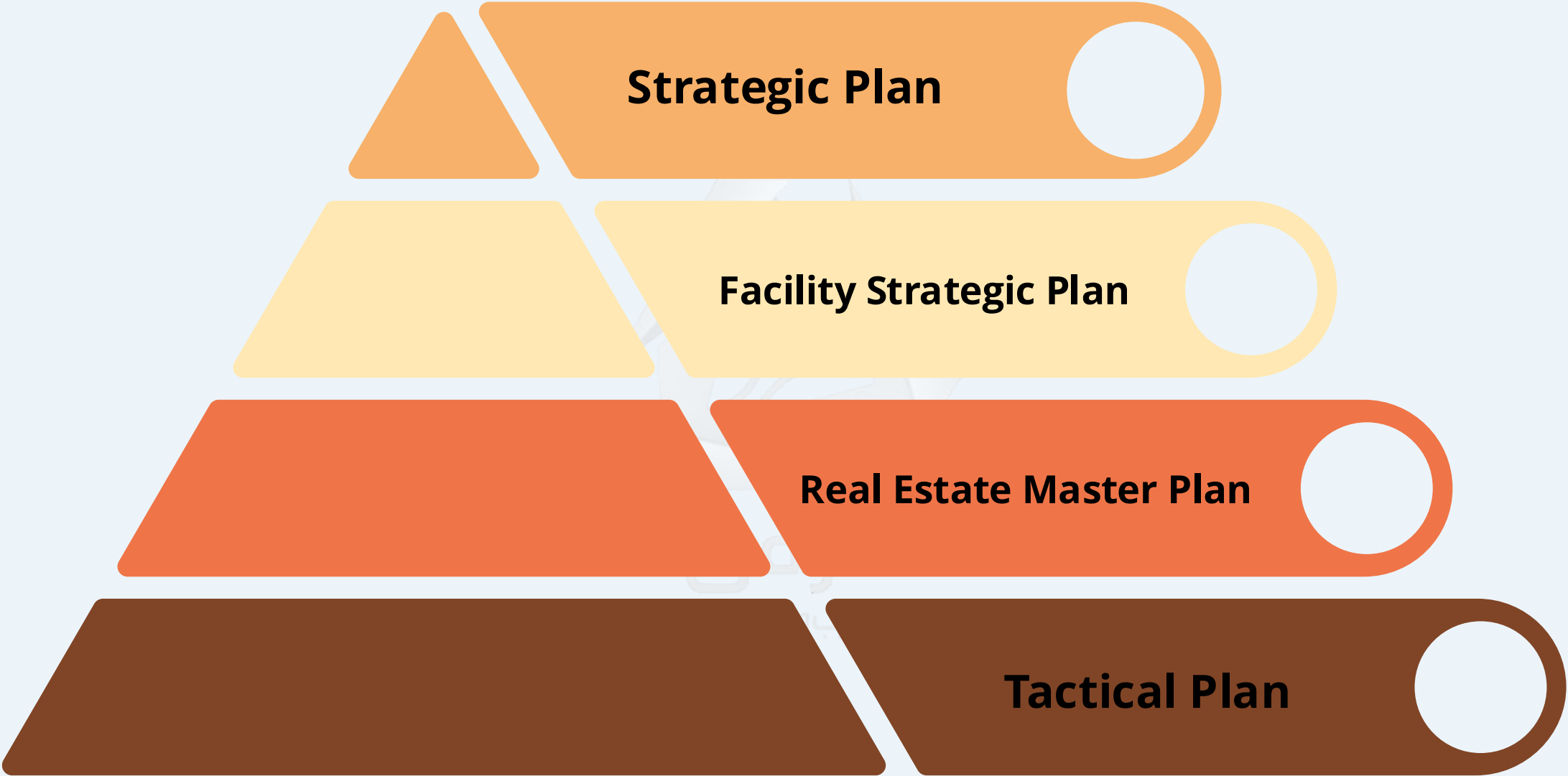
مرافق
تجريب واستشارات



3-Real Estate Master Plan



3-Real Estate Master Plan



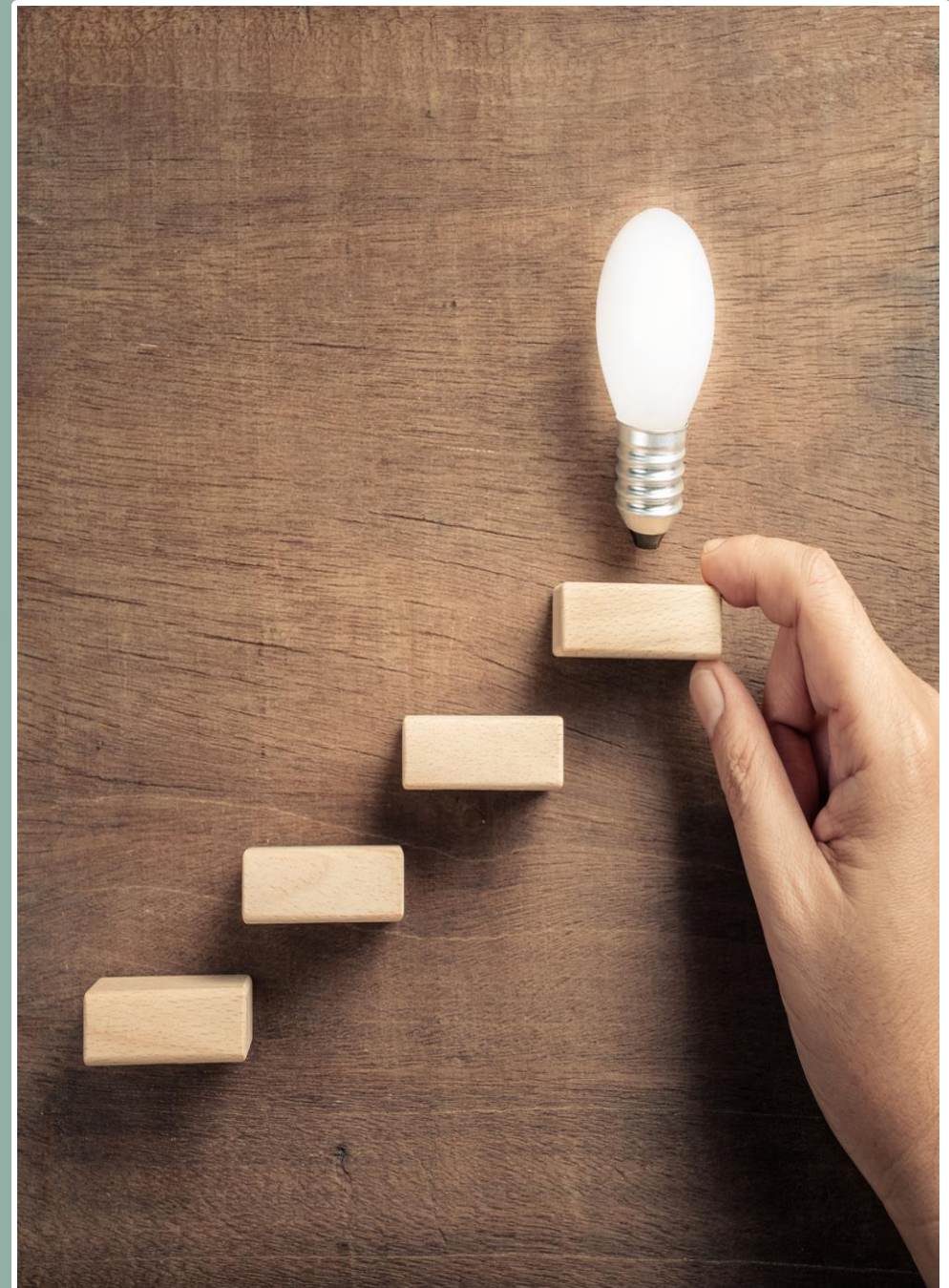
3-Real Estate Master Plan



Aligning with Organization Need

Steps

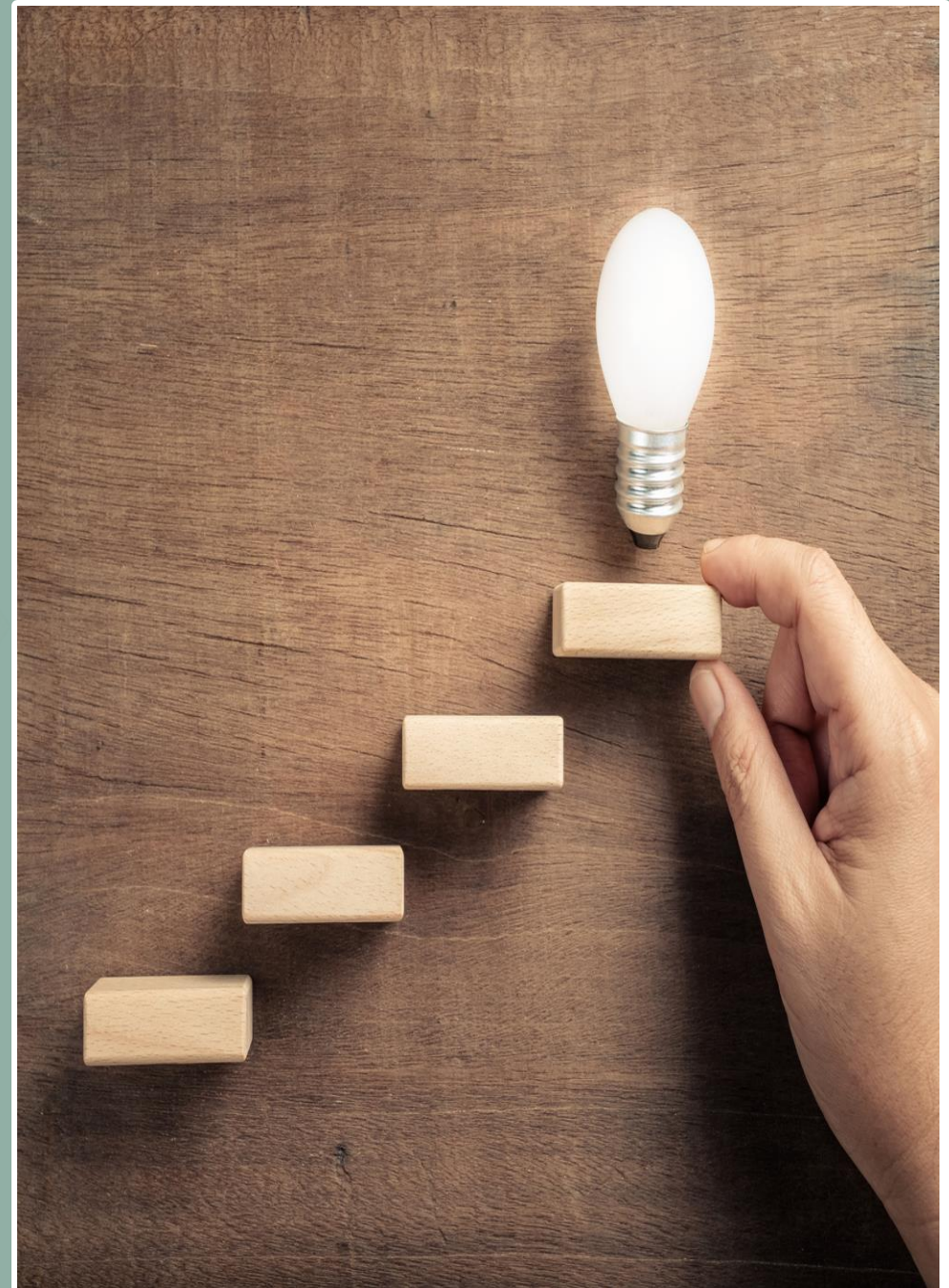
- 1- Review Organizational Plans
- 2- Engage Stakeholders
- 3- Submit Plan Format



Steps

4- Conduct Due Diligence

5- Finalize Plan & Approval



3-Real Estate Master Plan

Common steps in creating the plan include the following:

Step 1:

Review, understand organizational and strategic plans and validate records for assets.

Step 2:

Involve Stakeholders. Identify & recruit stakeholders to participate.

Step 3:

Submit outline & format the master plan.

Step 4:

Conduct due diligence. Solicit feedback and prepare.

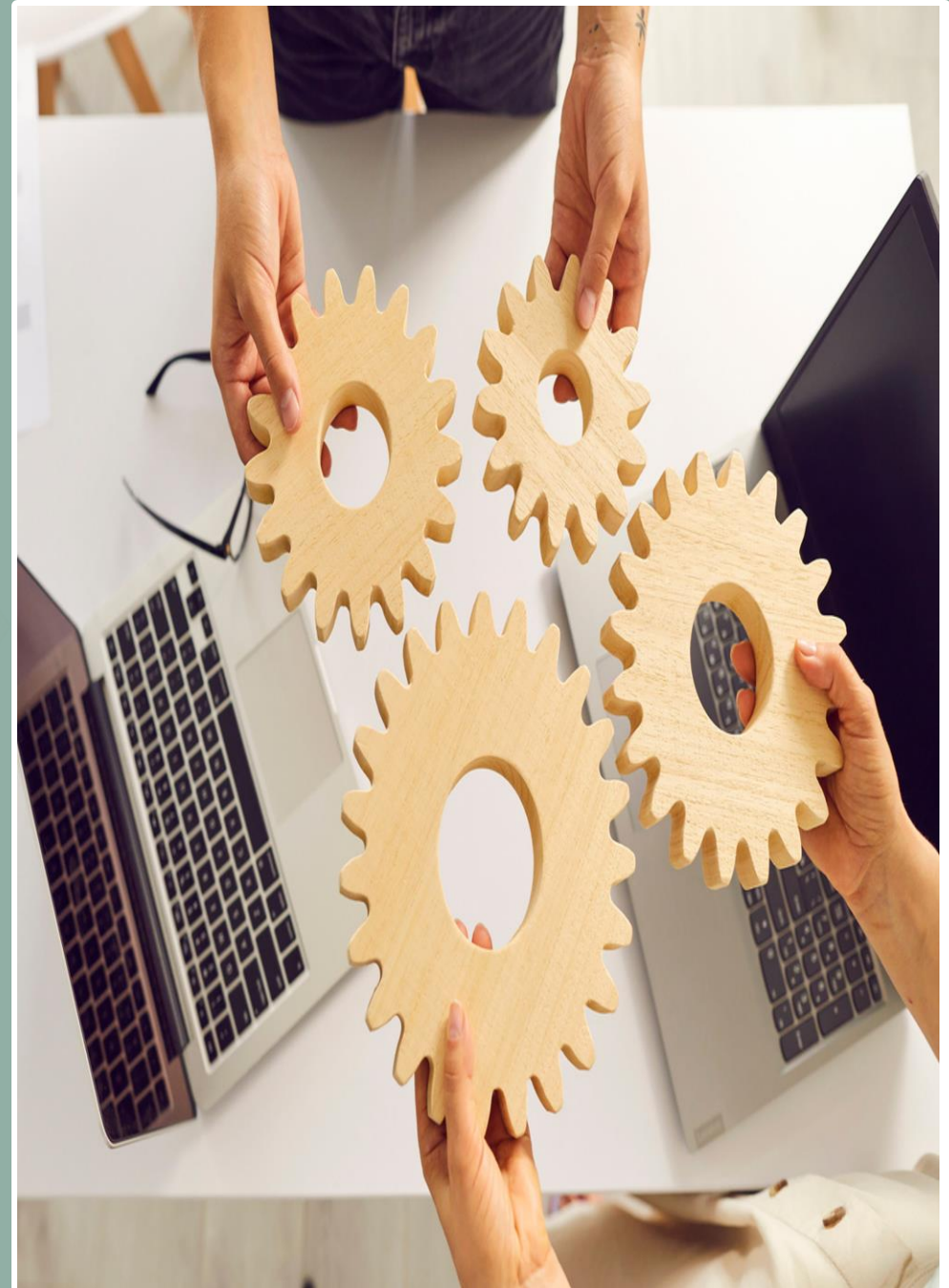
Step 5:

Finalize Plan and secure buy in.

Figure 5 Steps to create the Master Plan

3-Real Estate Master Plan

- 1- Right Amount
- 2- Right Time
- 3- Right Business Groups
- 4- Right Costs
- 5- Right Workplace Tools



Input to Master Plan

Facility Condition Assessment (FCA)

مرافق
تدريب واستشارات



Output to Master Plan

Facility Condition Index (FCI)
= (Cost of Deficiencies / Current
Replacement Value) x 100%

مرافق
تدريب واستشارات



Facility Condition Index

FCI =
$$\frac{\text{Renewal Needs \& Deferred Maintenance (DM)}}{\text{Current Replacement Value (CRV)}} \times 100$$



Deficiencies

1-Building Deficiencies

2-Programming Deficiencies

3-Policy Deficiencies



Partnering to Develop Plan

Internal Stakeholders

External Stakeholders



Partnering to Develop Plan

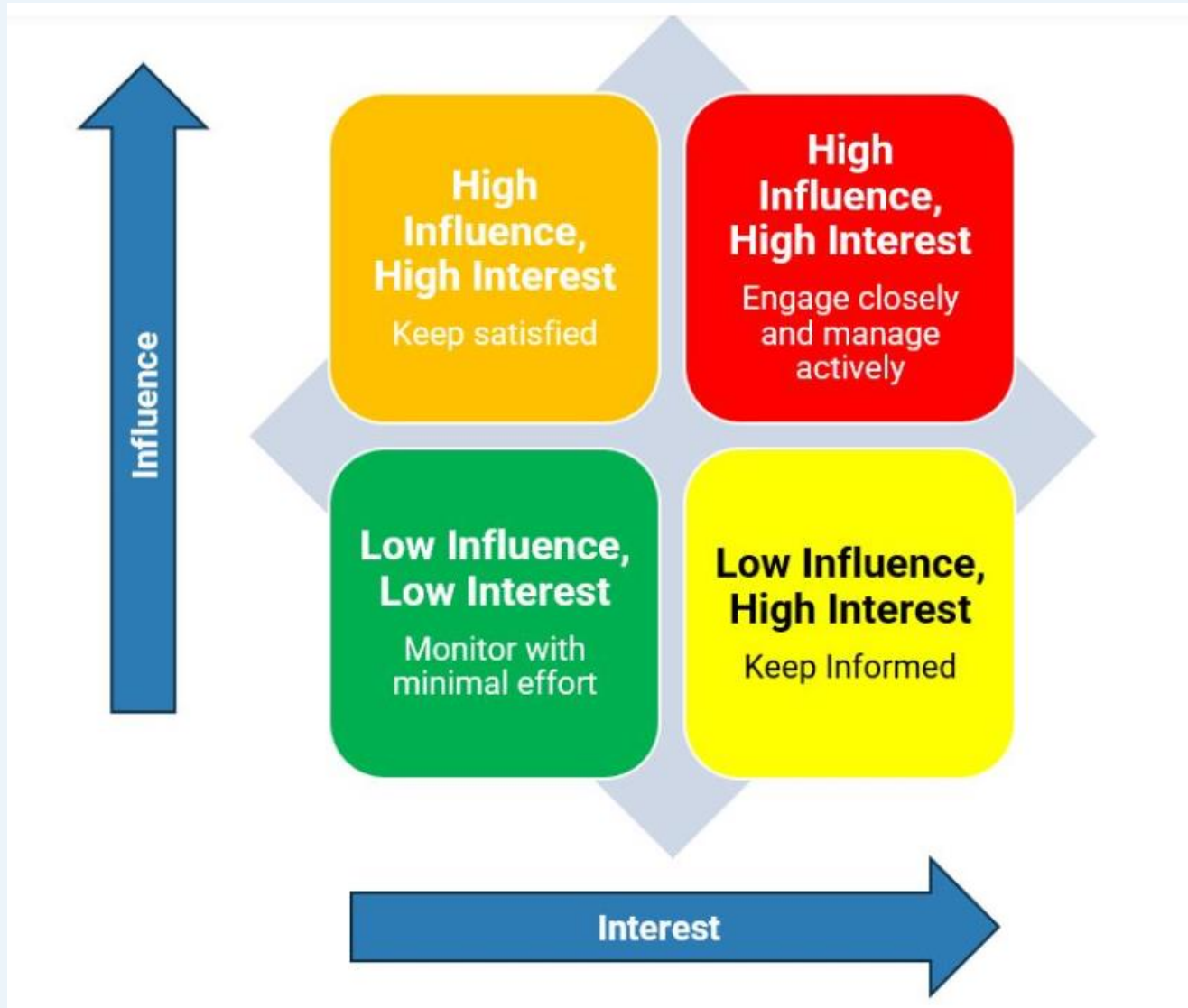
1-Key Stakeholders

2-Primary Stakeholders

3-Secondary Stakeholders



3-Real Estate Master Plan



Components of Master Plan

Executive Summary

Abbreviations & Terms

Methodology & Contributors

Life Safety & Regulatory Compliance



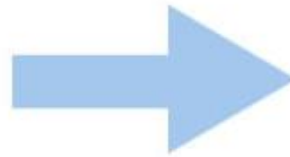
4-Acquisition and Divestiture

مرافق
تجريب واستشارات



What is a Divestiture?

A divestiture takes place when a company sells an asset such as a service, piece of property, or product line.



4-Acquisition and Divestiture

Due Diligence Areas

- 1-Employee & Customer Needs
- 2-Organizational Considerations
- 3-Economic Conditions
- 4-Financial & Value Assessment

مرافق
تدريب واستشارات



4-Acquisition and Divestiture

Due Diligence Areas

5-Environmental Factors

6-Land Details

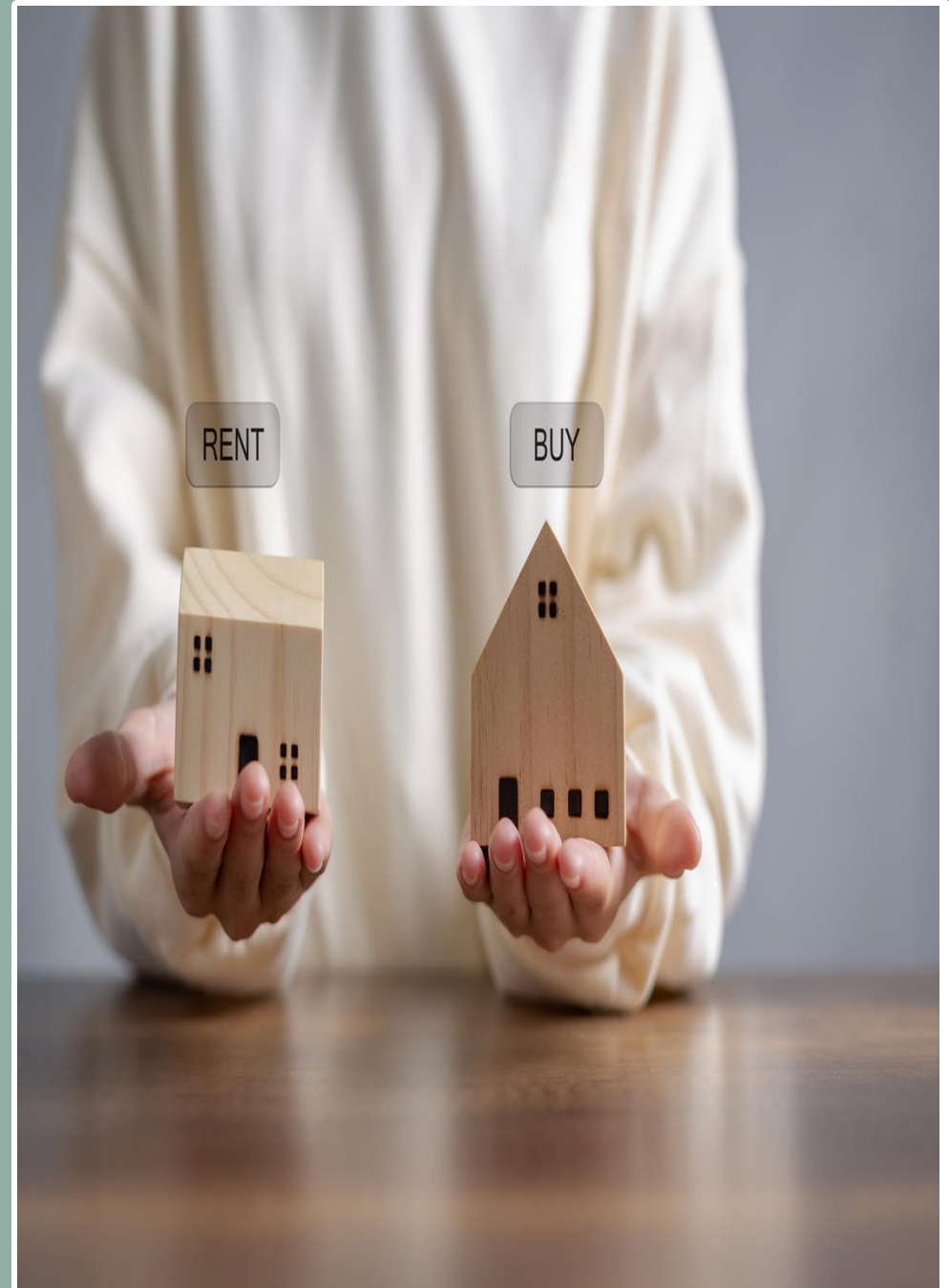
7-Code Compliance

8-International Real Estate
Considerations



4-Acquisition and Divestiture

Purchase vs. Lease Decisions



4-Acquisition and Divestiture

1. Purchase Options

Option	Outcome
Purchase of real estate for ownership	Provides full control of real estate, site improvements, and facilities.
Purchase with a development partner	Shares capital investment to reduce financial risk.
Purchase of existing space & remodel	Saves cost/time compared to new construction but requires upgrades.
Purchase land & build new facility	Higher cost but customized to business needs.

4-Acquisition and Divestiture

2. Lease Options

Option	Outcome
Lease without capital investment	Higher rent but avoids cash outlay for tenant improvements.
Lease to minimize rent	Lower rent but requires tenant-financed improvements.
Short-term lease (<3 years)	Higher rent but provides flexibility during uncertainty.
Long-term lease	Provides stability for specific operational needs.
Lease with purchase option	Allows purchase at a later date for a predetermined price .
Ground lease (10-25+ years)	Tenant owns improvements , but land remains property of the landlord.
Build-to-suit lease	Property custom-built for tenant but leased instead of owned.
Sale-leaseback	Organization sells the property and leases it back , freeing up capital.

4-Acquisition and Divestiture

Service charge Allocation

1-Base Rent Method

2-Cost Model

3- Facility Cost Allocation



4-Acquisition and Divestiture

Lease Types

- 1-Gross Lease
- 2-Modified Gross Lease
- 3- Net Lease (N)
- 4- Double Net Lease (NN)



4-Acquisition and Divestiture

Lease Types

5-Triple Net Lease (NNN)

6-Revenue Based

7- Index Lease

8- Step Lease

9- Green Lease



4-Acquisition and Divestiture

Basic Components in a Lease Agreement

Bankruptcy

Code Compliance

Demised property

Floor area measurements a



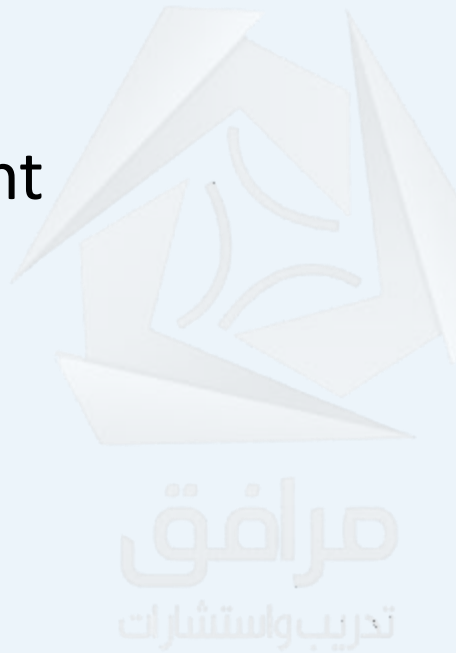
4-Acquisition and Divestiture

Exit Strategies

1-Subletting and Assignment

2-Lease Termination

3-Lease Buyout

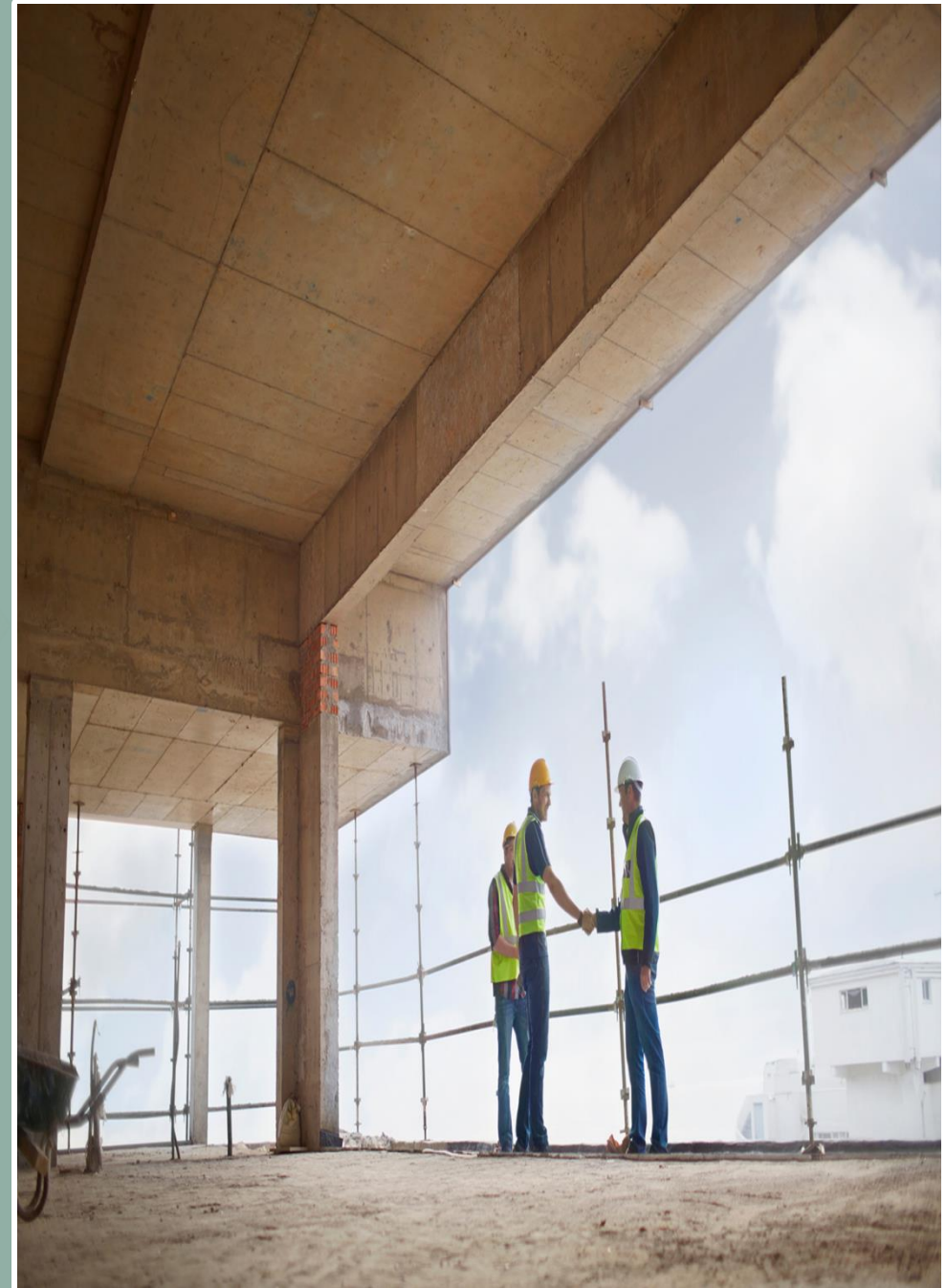


Decommissioning

Restoring the space

Disposing of assets

Removing data cabling



4-Acquisition and Divestiture

Successful Negotiation in Real Estate



4-Acquisition and Divestiture

1-Psychology

2-Process

3-Time

4-Power & Information

5-Closing



4-Acquisition and Divestiture

Property Divestiture

Sale & Leaseback

Subdivision

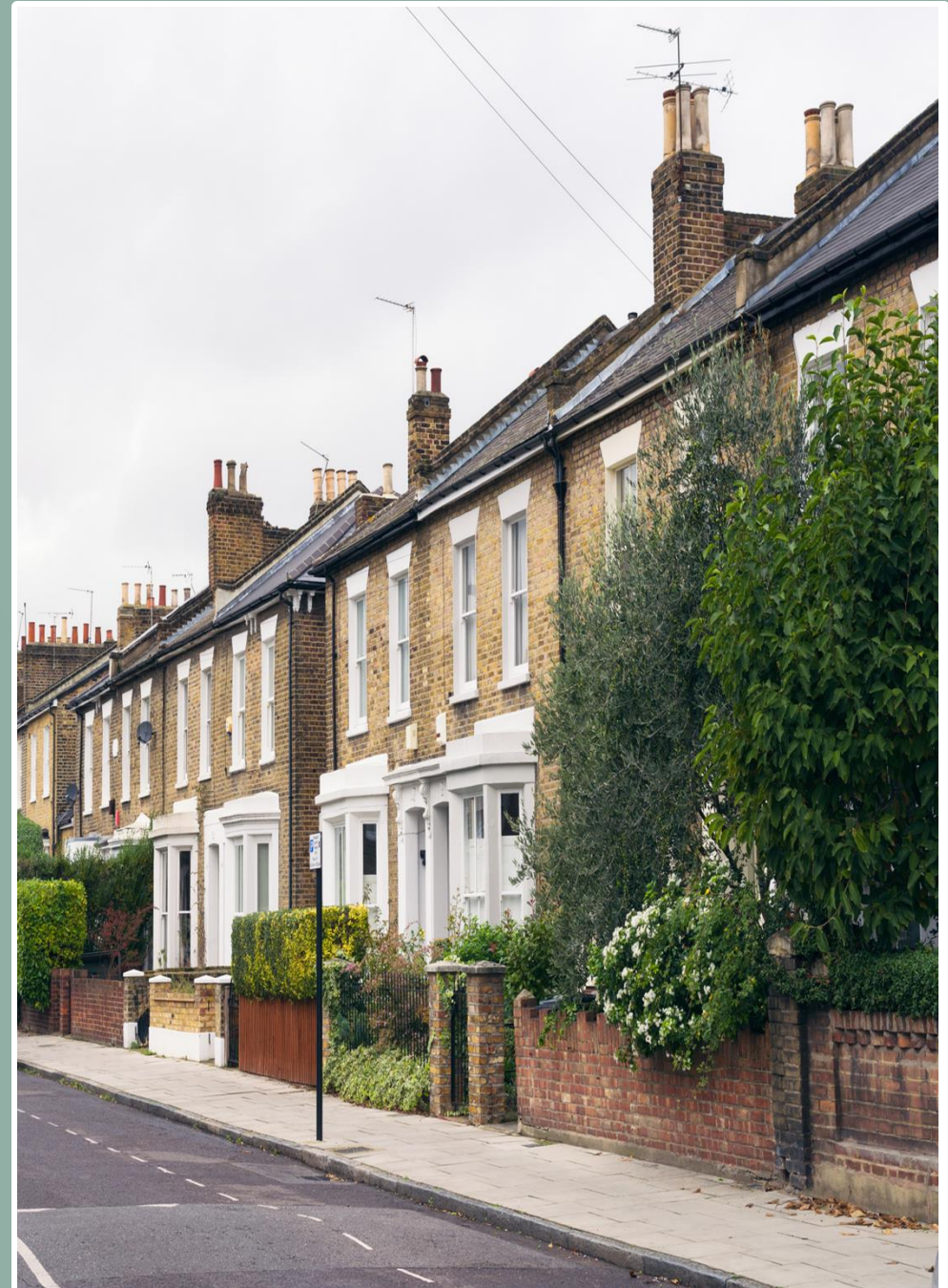
Redevelopment

Donation



4-Acquisition and Divestiture

- 1-Review Internal Needs
- 2-Analyze Financial Impact
- 3-Gather Buyer Information
- 4-Address Legal
- 5-Execute the Sale



5-Portfolio Management

مرافق
تدريب واستشارات



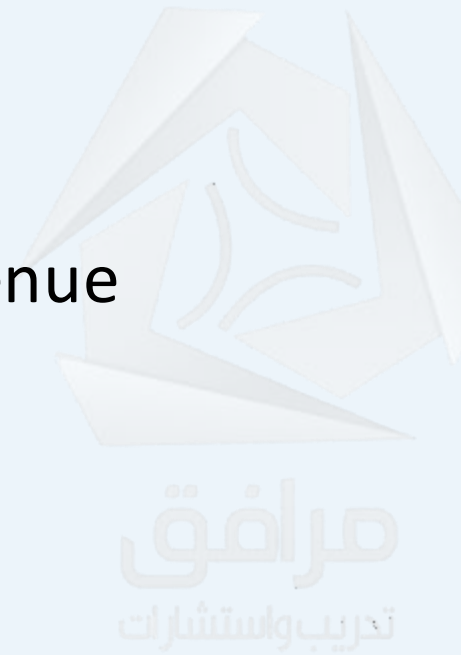
Strategic Activities

Space Utilization Strategies

Generating Additional Revenue

Capital Improvements

Strategic Asset Planning



Portfolio management Tools

ASTM Standards

ISSA CIMS Standards

Real Estate Portfolio Database

مرافق
تدريب واستشارات



Business Case for Real Estate Decisions

Step 1: Options Analysis

Step 2: Impact Analysis

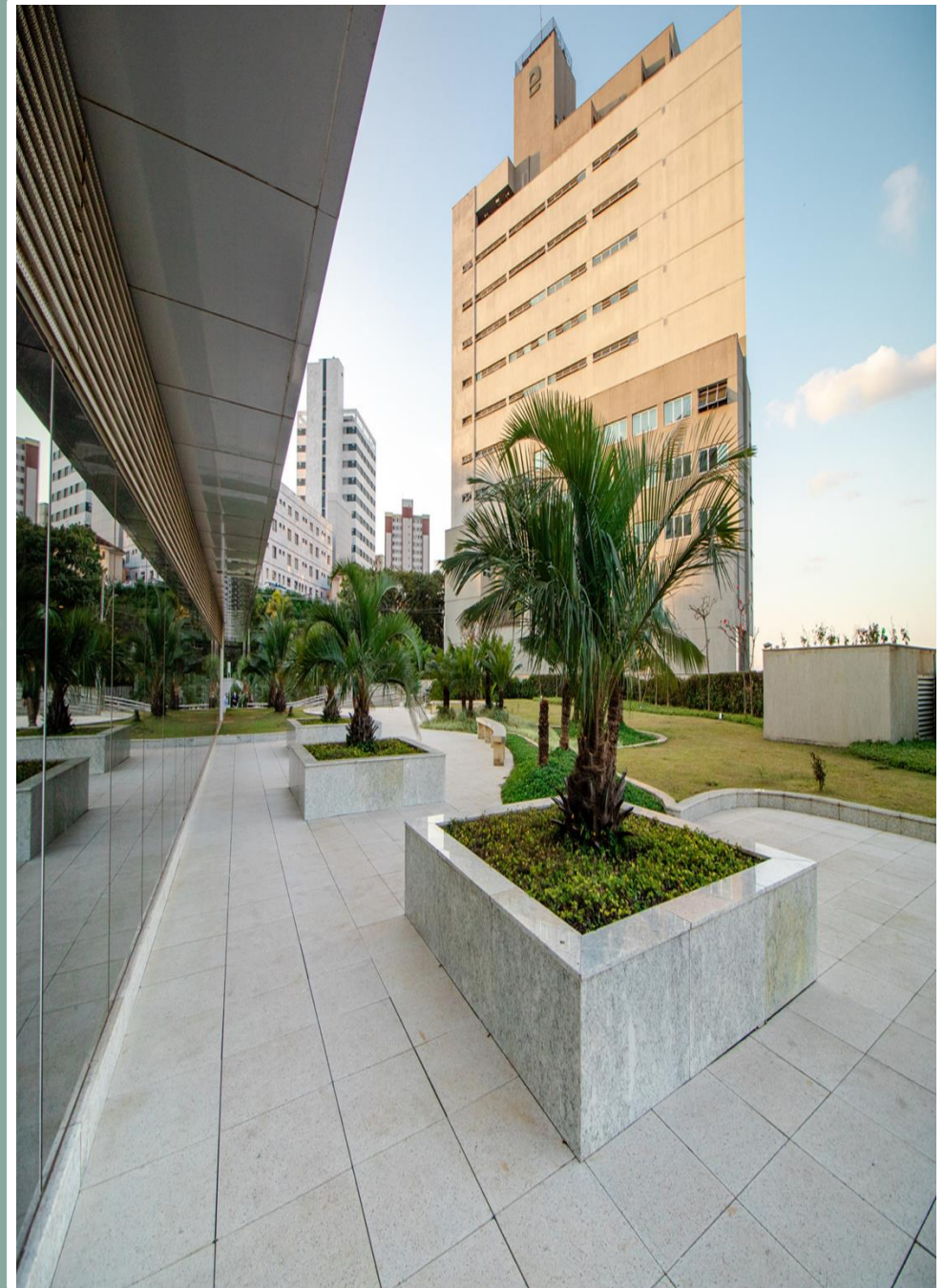
Step 3: Cost Analysis



Chapter 3

Real Estate Asset Management and Space

مرافق
تدريب والاستشارات



Chapter 4: Real Estate Asset Management and Space



Site Management

VS



Space Management

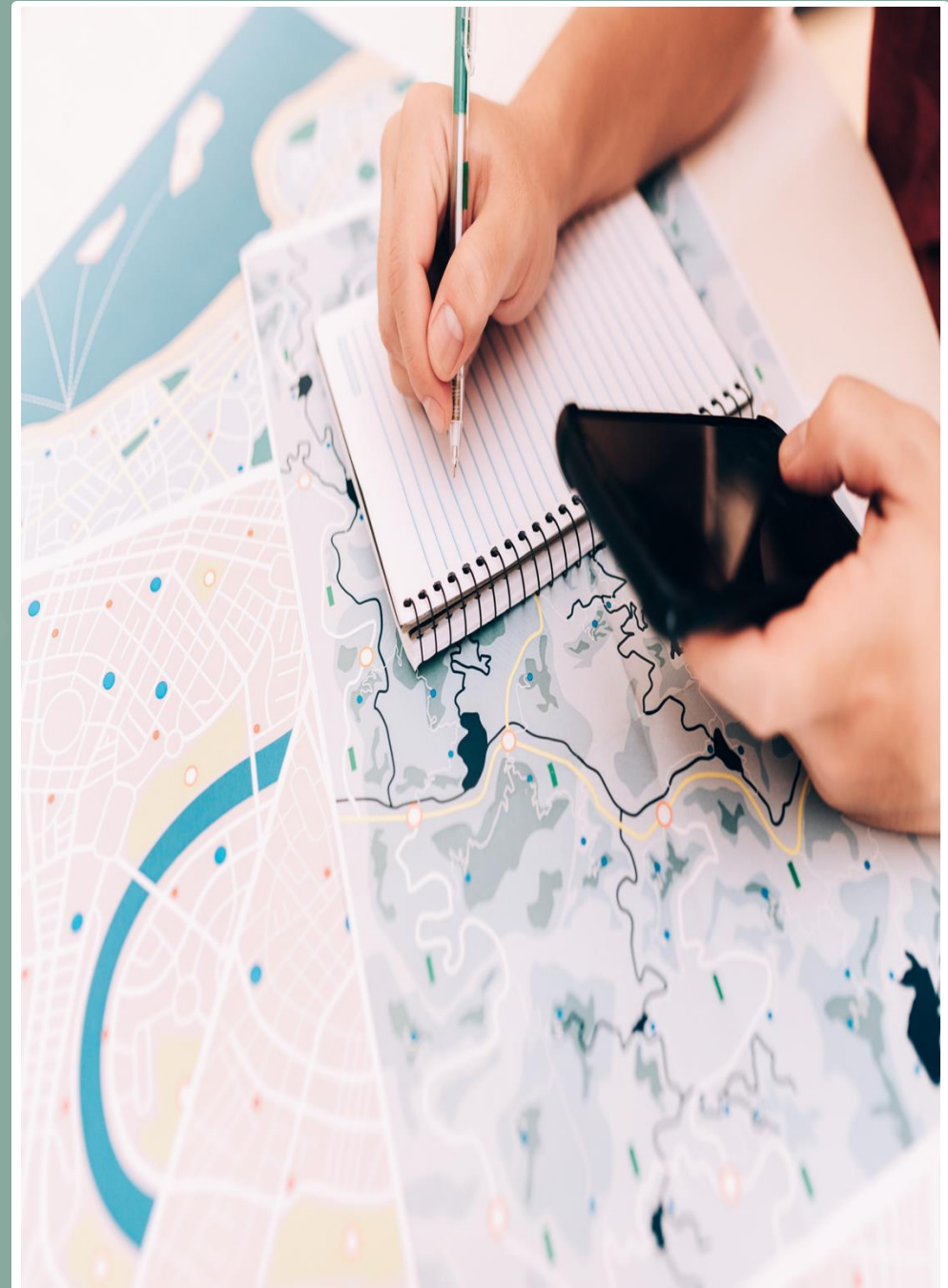
مرافق
تدريب والاستشارات

Chapter 4: Real Estate Asset Management and Space

Identification of space requirement

1-Forecasting

2-Planning



Space programming

- 1-Goal Setting
- 2-Data Mining
- 3-Needs Analysis



Chapter 4: Real Estate Asset Management and Space

Due diligence

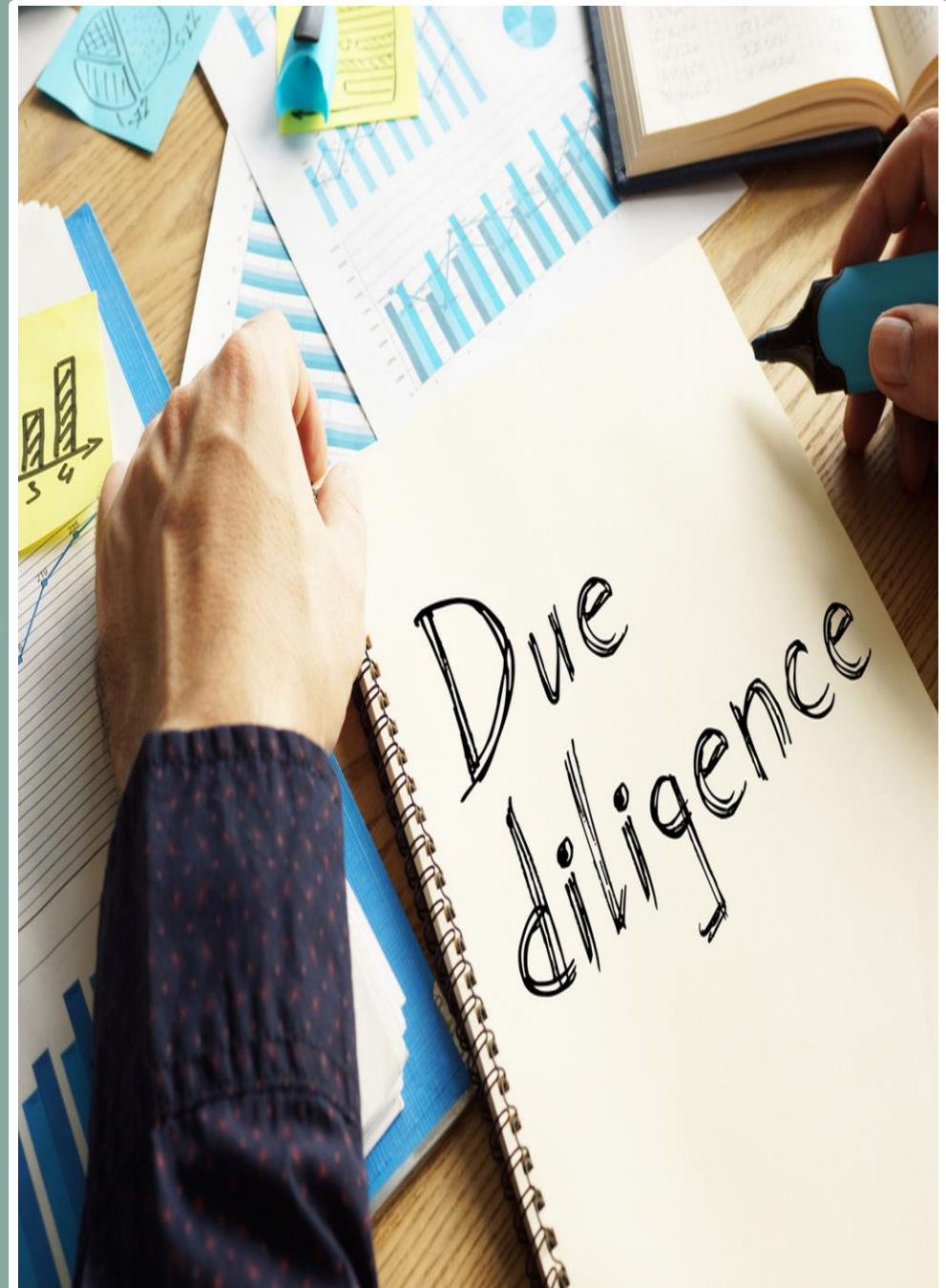
Space Management Policy and Procedures

Space Evaluation

Future Space Projections

Highest and Best Use Analysis

مرافق
تدريب والاستشارات



Chapter 4: Real Estate Asset Management and Space

Due diligence

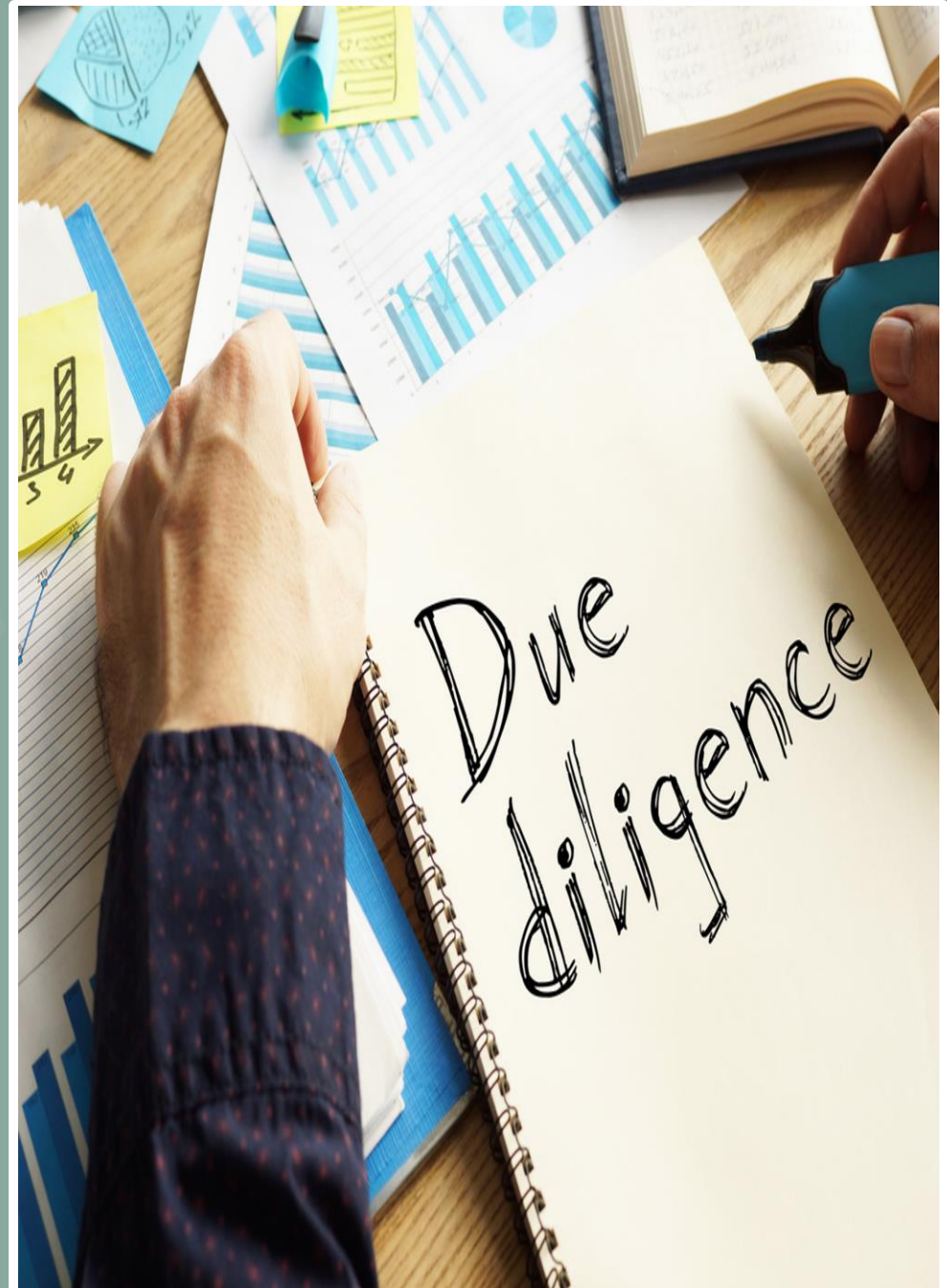
Occupant Profiles

Employee Efficiency

Alternative Workplace Strategies

Churn Rate

مرافق
تدريب والاستشارات



Chapter 4: Real Estate Asset Management and Space

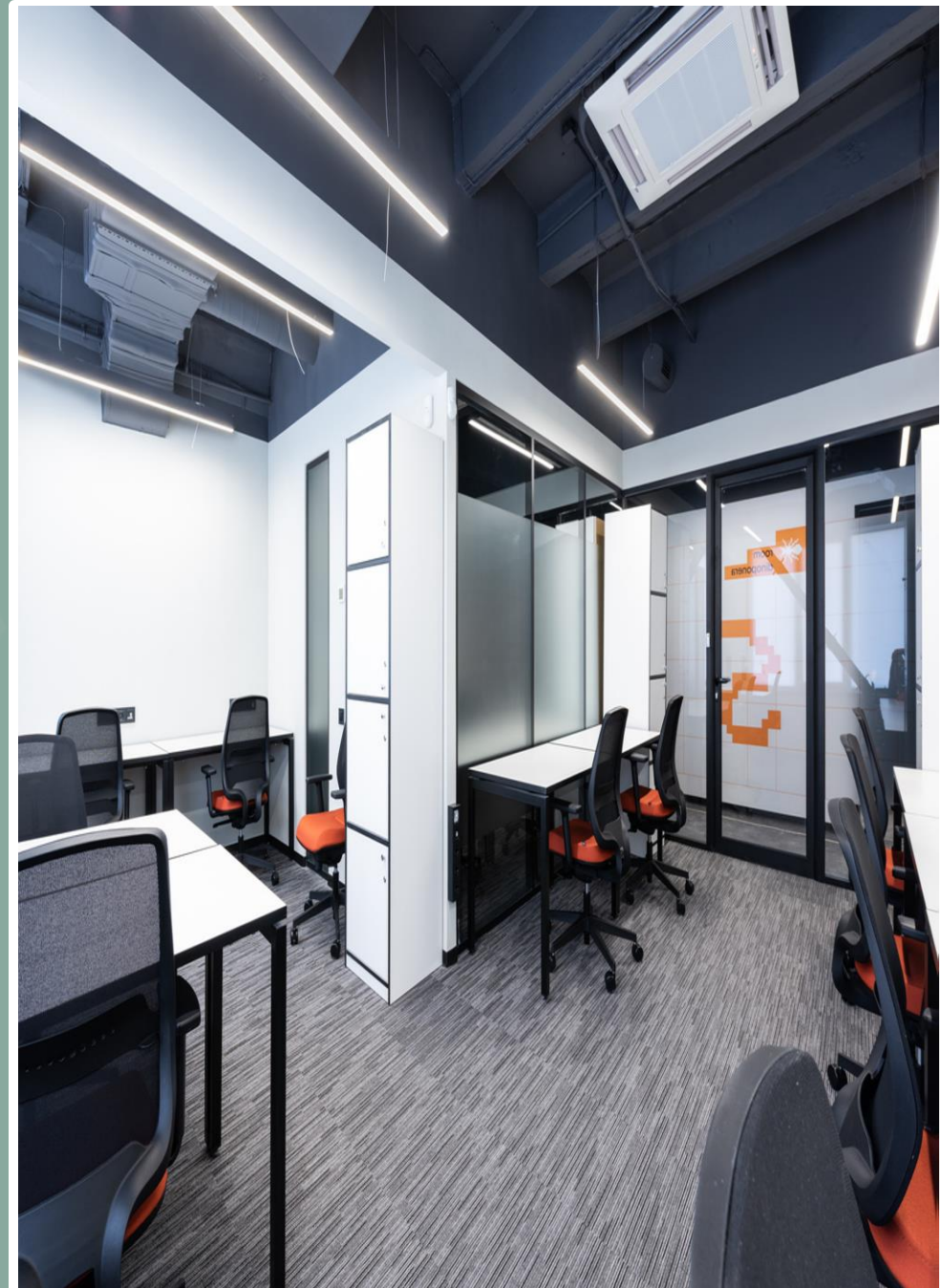
Space Forecasting

Organizational Planning

Resources

Understanding Occupants

Benchmark Validation



Space Planning

- 1-Determining the Amount of Space
- 2-Identifying the Type of Space
- 3-Optimizing Space Utilization

مرافق
تدريب والاستشارات



Chapter 4: Real Estate Asset Management and Space

Space Planning

4-Configuring Space

5-Space-Related Cost Analysis

6-Measuring Space Utilization

مرافق
تدريب والاستشارات



Chapter 4: Real Estate Asset Management and Space

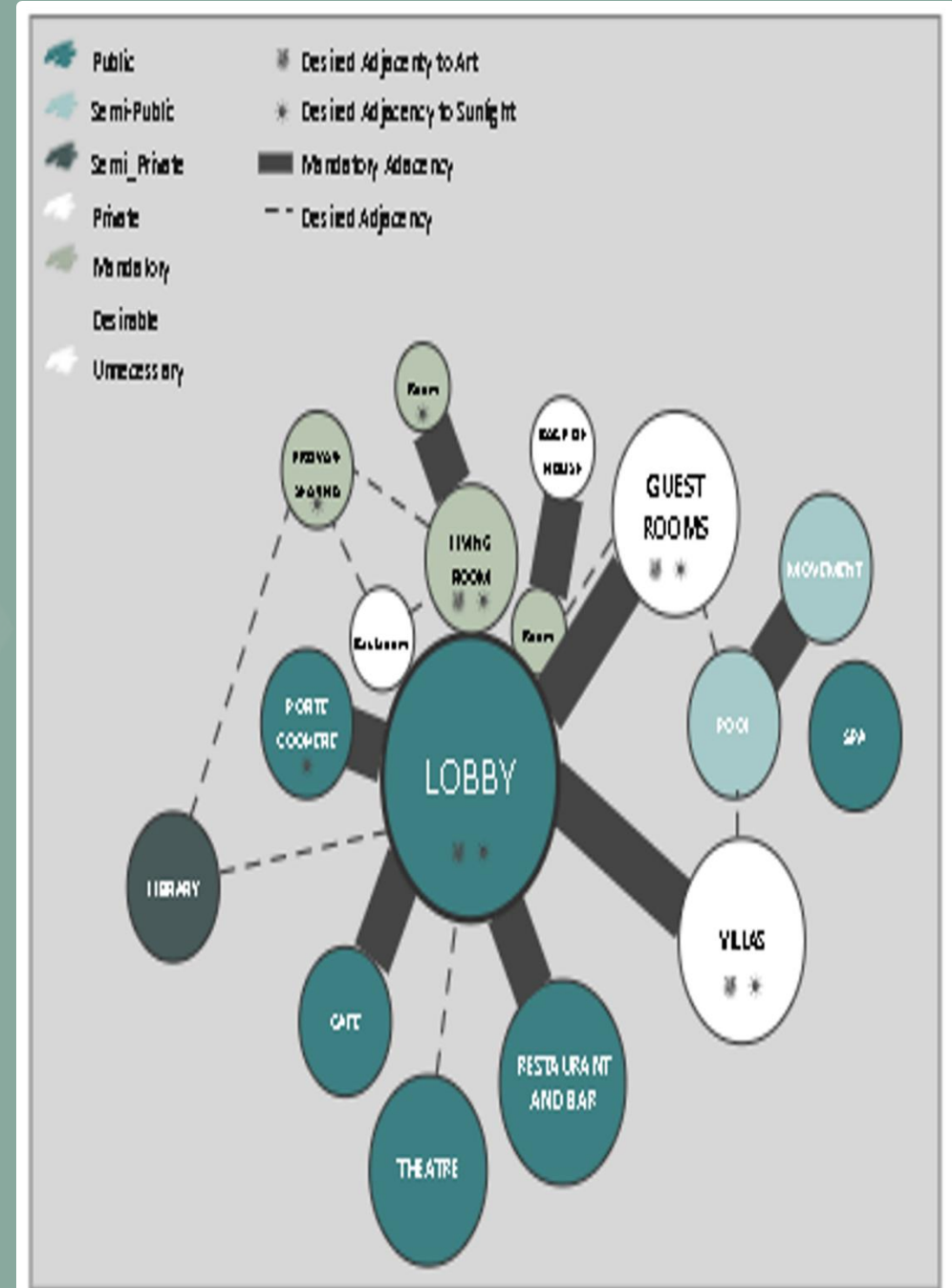
Space Planning Tools

1-Adjacency Diagram

2-Bubble Diagram

3-One-to-One Assessment Diagram

مرافق
تدريب واستشارات

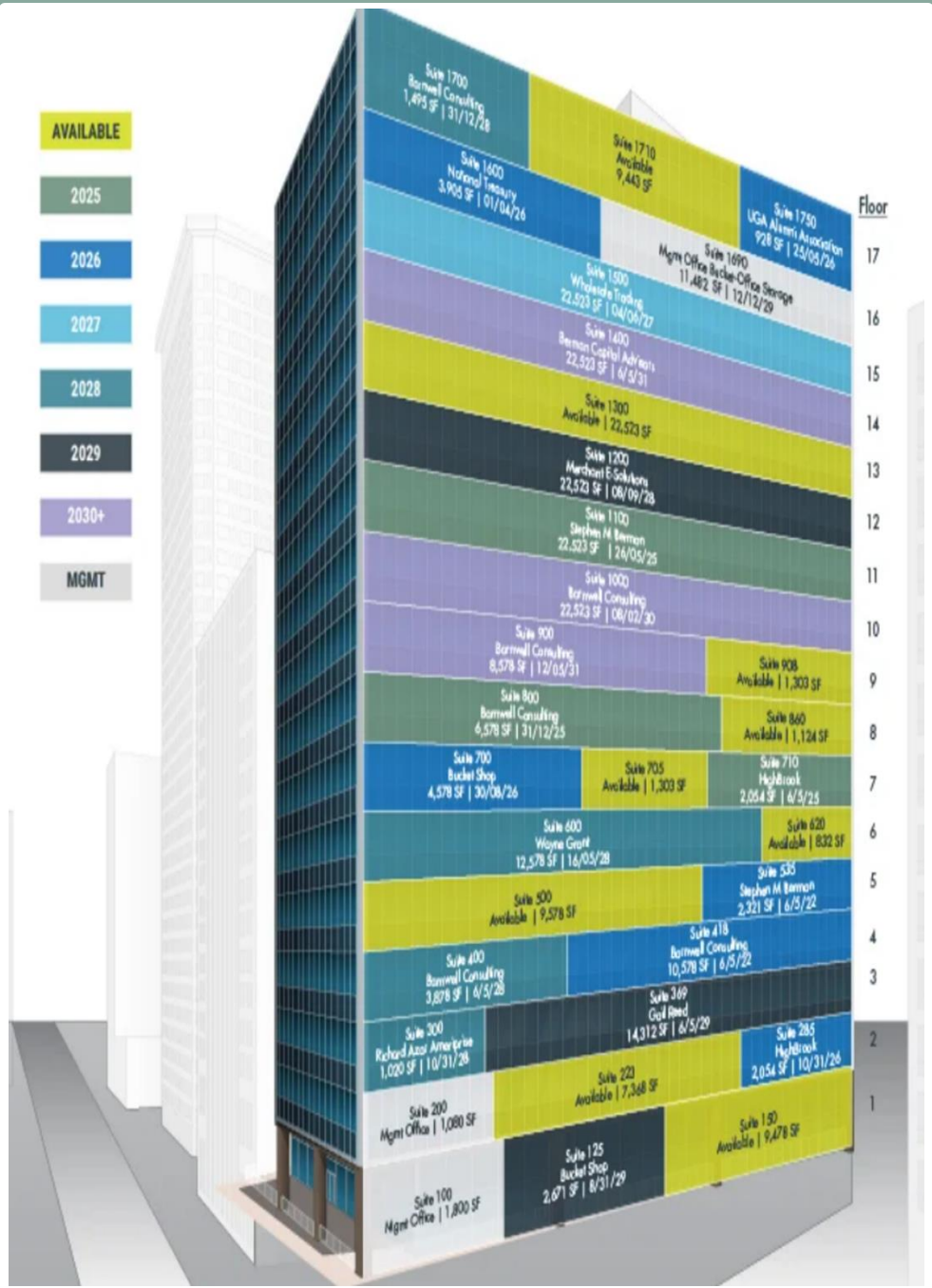


Chapter 4: Real Estate Asset Management and Space

Space Planning Tools

4-Block Diagram

5-Stack Diagram



Chapter 4

Major Projects and New Construction

مرافق
تجريب واستشارات



Contents

1-Project Management

2-Project Teams

3-Inspections

4-Manuals, Drawings and Warranties



1-Project Management

مرافق
تجريب واستشارات



1-Project Management

FM Role in Project Management

مرافق
تدريب واستشارات



1-Project Management

FM Acting as an Advisor in Project Management

1-Initial Phase

(Defining Requirements & Success Criteria)

مرافق
تدريب واستشارات



1-Project Management

FM Acting as an Advisor in Project Management

2-Planning Phase (Acquiring Space & Designing):



1-Project Management

FM Acting as an Advisor in Project Management

4-Monitoring
&
Close-Out



1-Project Management

FM Acting as an Advisor in Project Management

1-Initial Phase

(Defining Requirements & Success Criteria)



2-Project Teams

مرافق
تجريب واستشارات



2-Project Teams

Stakeholders

External Contributors (Directly Involved
in Construction)

مرافق
تجريب واستشارات



2-Project Teams

Stakeholders

External Non-Contributors (Influence
but Do Not Directly Contribute)

مرافق
تجريب واستشارات



2-Project Teams

Stakeholders

Internal Contributors (Organizational
Involvement in Decision-Making)

مرافق
تجريب واستشارات



3-Inspections



3-Inspections

The Purpose of Doing Inspection

مرافق
تدريب واستشارات



3-Inspections

Notice of Correction and Tests



3-Inspections

4-Operation and Maintenance Manuals, As-Built Drawings and Warranties

مرافق
تدريب واستشارات



4-Operation and Maintenance Manuals, As-Built Drawings and Warranties

Record Documentation

1-(O&M) Manuals

2-As-Built Drawings

3-Warranty Documents

