



TAREK TAWFIK
PMP , CP , GPM



GREEN PROJECT MANAGEMENT IN **CONSTRUCTION PROJECTS**

Combining PMI-CP (PMI Certified Practitioner) and PMI-GPM (PMI Green Project Management) certifications can significantly enhance the management of building construction projects by integrating best practices from both certifications.



- **38 years Experience in Portfolio, Program and Projects Management work at (UNDP, IBM, NCR, Teradata and DEWA).**
- *Masters in Project Management – British University in Dubai.*
- *PMO Specialist and Discipline Agile Coach and Value Stream Consultant.*
- *Value Engineering Specialist*
- *Program Manager for IBM Projects (Banking, Telecom and Post)*
- *SAP / SMART DOCUMENT Team Leader.*
- *One of the Founders of PM365WORLD PMI – ATP for Provider #: 5992 by establishing a project management training programs for Global Project Managers.*
- *Construction Project Management Experience.*
- *Leader in Innovation Project Management. (AI & BIM).*
- *Dubai International Project Management Forum (Scientific Comity Member)*



Tarek Hassan Tawfik
 Founder & CEO
 PM365WORLD LLC
 Senior Specialist – Portfolio,
 Program and Projects
 Management
 PMO Director – Agile Coach
 and Agile Value Stream
 Consultant
 Value Engineer Specialist





PM365WORLD



PM365WORLD – New York

PMI-ATP (5992)

The new version of the PMP exam went live in January 2021. In addition to multiple-choice questions, it now features new question formats.

For more information about the exam:
<https://www.pmi.org/certifications/project-management-pmp>





PM365WORLD is PMI-ATP

#FEATUREFRIDAY

NEW ATP HIGHLIGHTS

Welcoming our new training partners as they join the PMI mission to empower project professionals and drive project success worldwide.

PM365World LLC
(USA)

Professional Analysis, Inc.
(USA)

Myirha Consulting Engineers &
Project Managers (Pty) Ltd.
(South Africa)

Elyon Enterprise Strategies, Inc.
(USA)

Universidad Católica de Honduras
"Nuestra Señora Reina de la Paz"
(Honduras)



Using Sustainability Frameworks to drive performance



Sustainability in Project Management

The Market Signals: What is happening now

Sustainability is a business imperative,
with an Execution Gap

- **99% | Of CEOs intend to maintain or expand their sustainability commitments.** Yet only half feel confident sharing progress. [Source: United Nations Global Compact, 2025 CEO Report]
- **85% of organizations now consider sustainability a top strategic priority; only 17% have embedded it as a core engine of innovation, cost savings, and resilience** [Source: Kyndryl Sustainability Barometer 2025]

The Project driven
transformation is accelerating

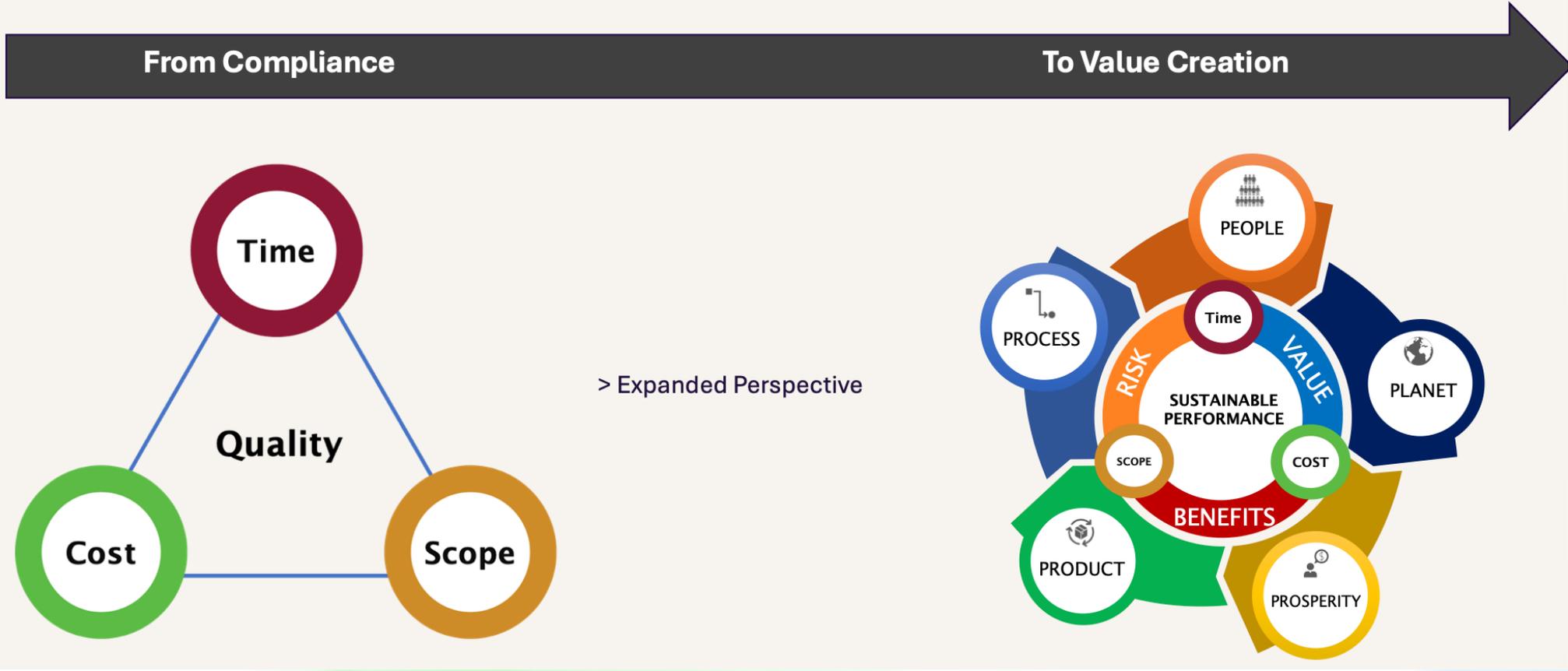
- **Businesses are transforming faster, and projects are the mechanism.** The *PMI Global Project Management Talent Gap Report* estimates that the world will need **65 million project professionals by 2035**, with a global shortfall approaching 30 million.
- **Sustainability is the higher predictor of Project Success.** However, only 23% of Projects include Sustainability in their KPIs [Source: PMI 'Maximizing Project Success Report, 2024']

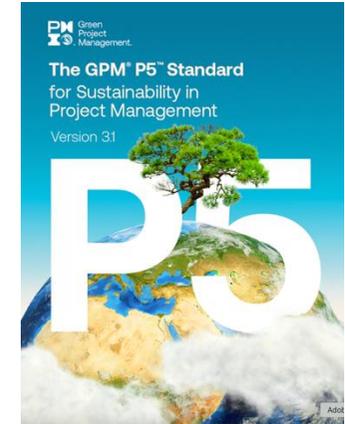
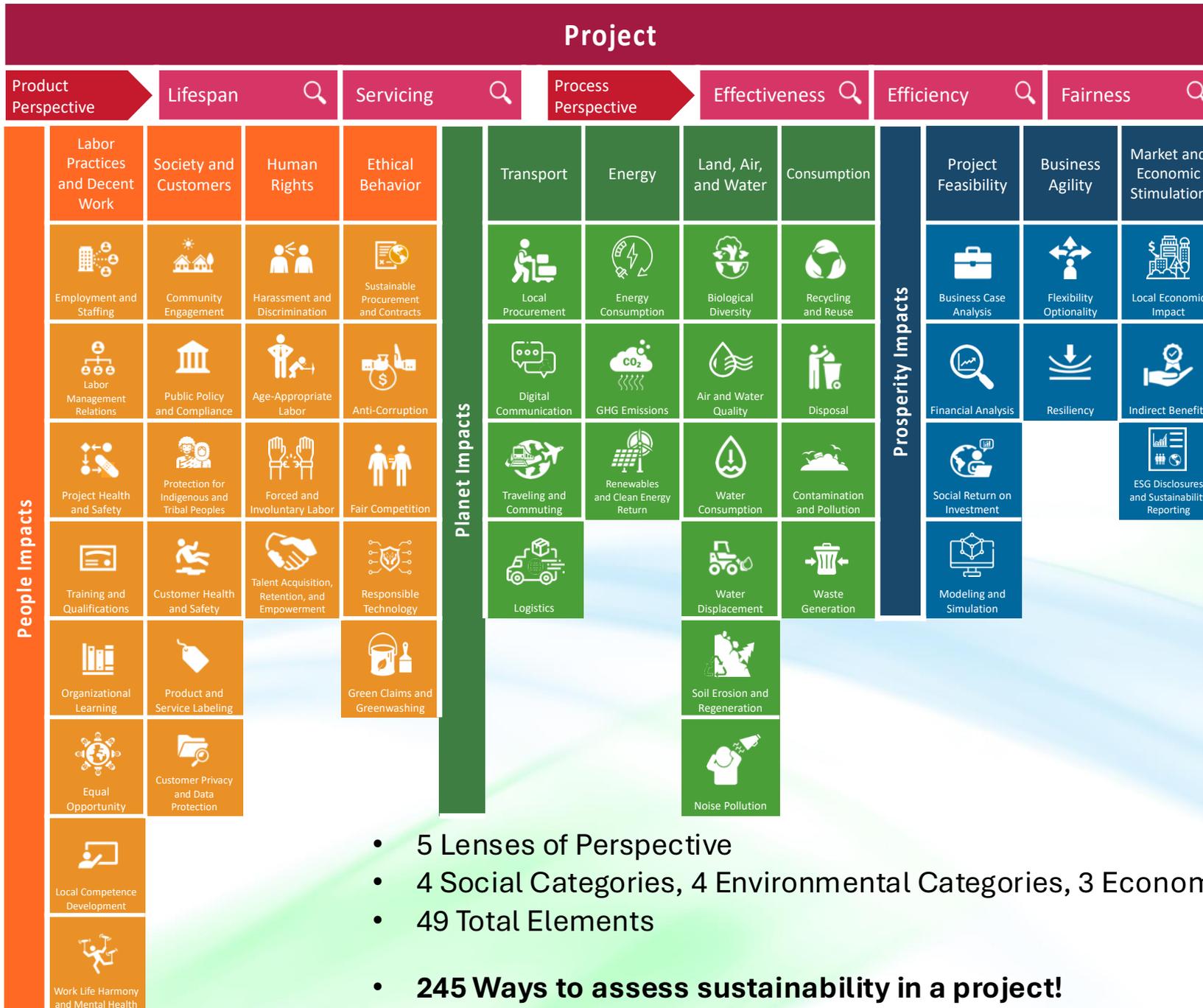
Strong demand for
Sustainability Talent

- **The demand for green-skilled talent is growing twice as fast as its supply.** Job postings requiring sustainability skills grew 22.4% year-over-year, while the supply of workers with those skills grew only 12.3%.
- **Organizations are hiring green-skilled professionals at rates far exceeding traditional roles.** Workers with sustainability skills are 29% more likely to be hired [Source: the LinkedIn Global Green Skills Report 2025]

What is Sustainable Project Management?

Expanding Perspective beyond the Tripple Constraint to Resiliency and Sustainable Prosperity: The P5 Methodology

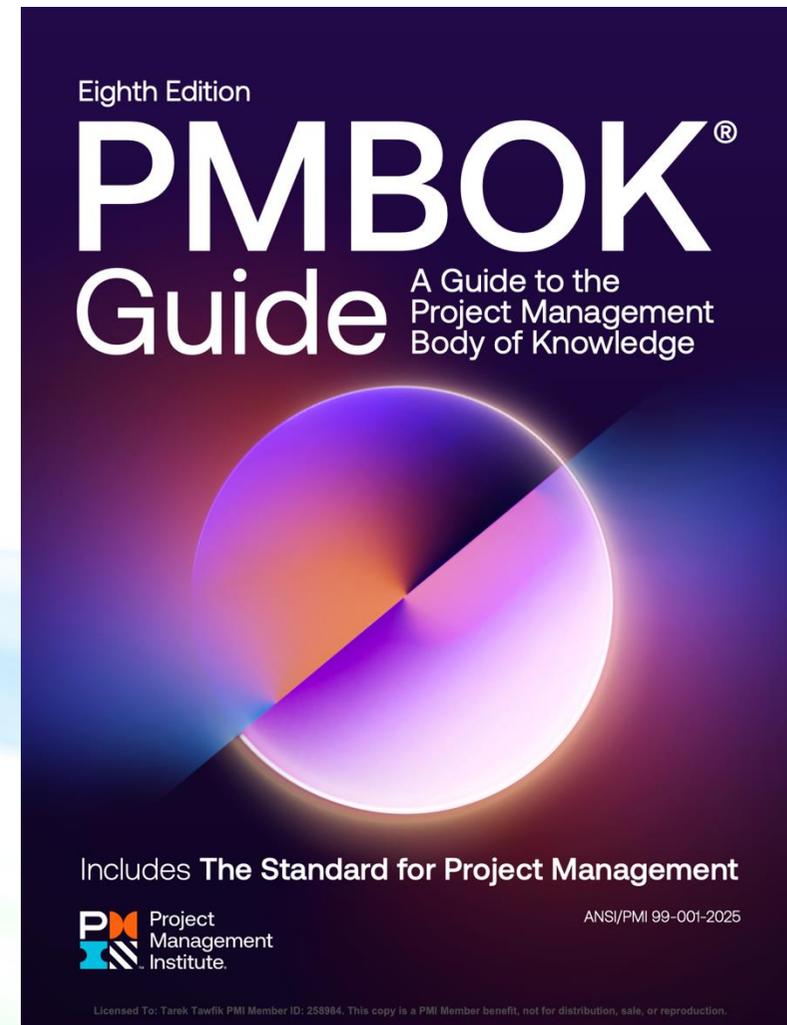




- 5 Lenses of Perspective
- 4 Social Categories, 4 Environmental Categories, 3 Economic Categories
- 49 Total Elements
- **245 Ways to assess sustainability in a project!**

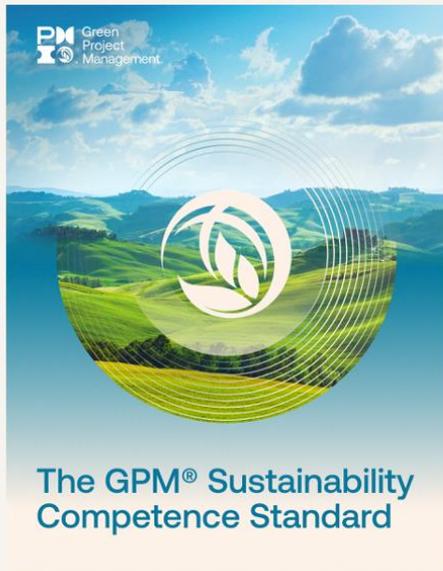
Sustainable Project Manager Skills

- **Knowledge of Sustainability Practices:** Understanding of environmental science, green technologies, and sustainable project management methodologies.
- **Project Management Expertise:** Proficiency in project management tools and techniques, including scheduling, budgeting, and resource allocation.
- **Communication Skills:** Ability to convey complex information in a clear and engaging manner to various audiences.
- **Analytical Thinking:** Strong problem-solving skills to assess challenges and develop effective solutions.

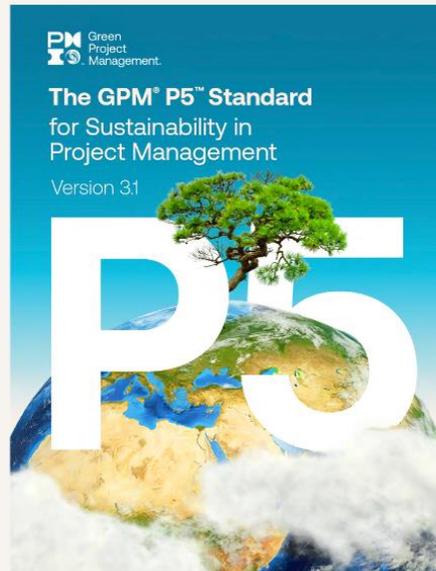


Their skills & efforts lead to innovative solutions that benefit both the environment and society, paving the way for a more sustainable future.

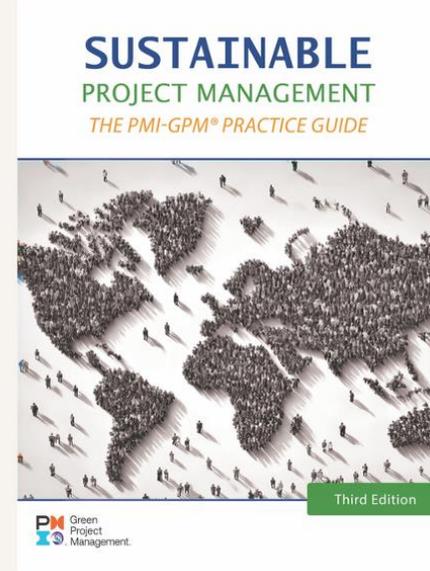
The PMI-GPM Ecosystem.



Knowledge



Methodology



Practice



Measure

PM Green
Project
Management.

Elevate every project



GPM-b™ Certification: Two paths

Short Format: For Certified Project Professionals (i.e. PMP, CAPM)

- 12 hours of eLearning content + Short-Form Exam
- Total: 75 multiple-choice questions.
- Time: 1.5 hours allowed

Standard format

- 24 hours of elearning content + standard exam
- Total 150 multiple choice questions
- Time 3hrs allowed



Integrated Design.
Sustainable Materials.
Energy Efficiency.
Water Management.
Waste Reduction.



Green project management (GPM) in construction involves

- Applying environmental, social, and economic sustainability principles throughout a project's lifecycle, from initial design to operation and eventual demolition.
- This approach goes beyond traditional project management goals of time and budget, aiming to significantly reduce negative environmental impacts while enhancing long-term value and performance.

AL SHERAA

DEWA'S NEW HEADQUARTERS



Linking sustainability objectives to project requirements



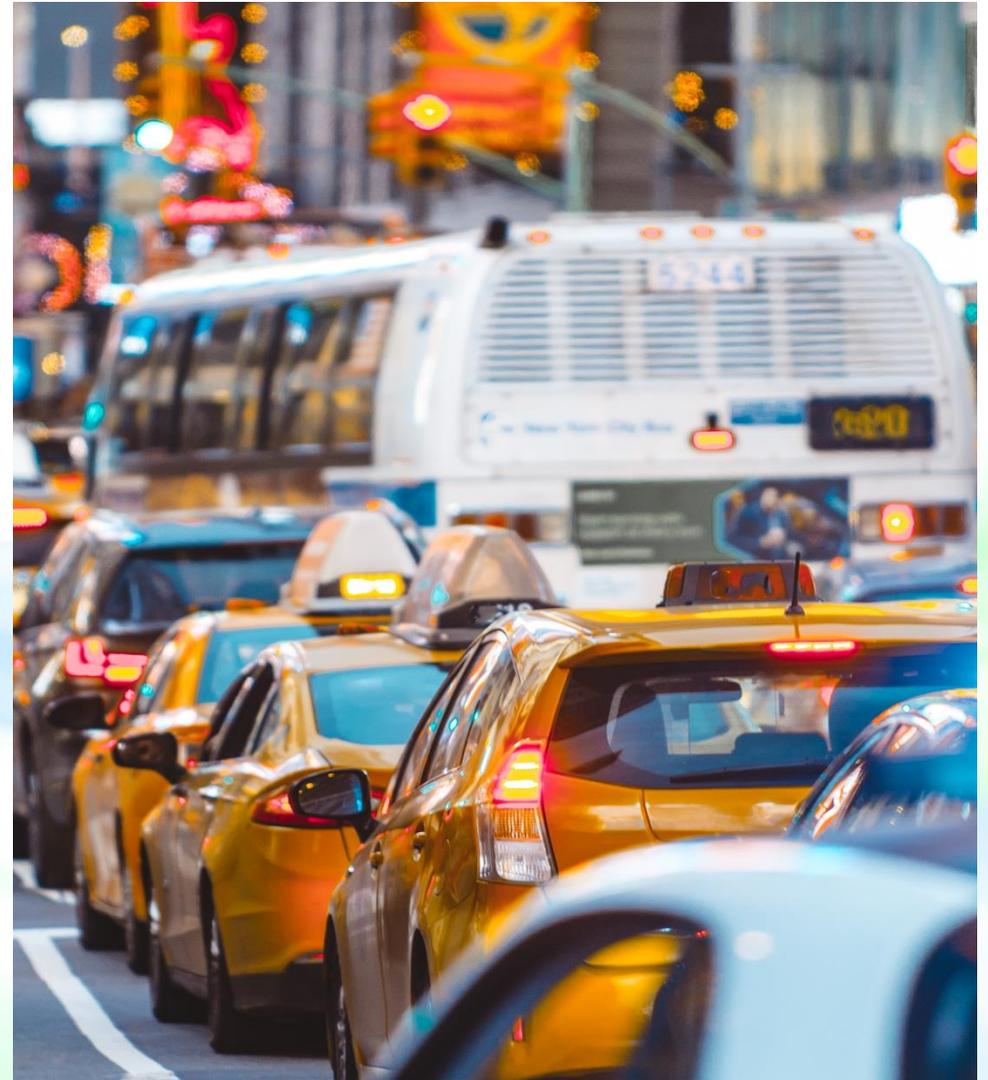
1. Identify Sustainability Objectives

- Reducing carbon emissions
- Minimizing waste
- Promoting social equity
- Enhancing resource efficiency
- Supporting local economies



2. Engage Stakeholders

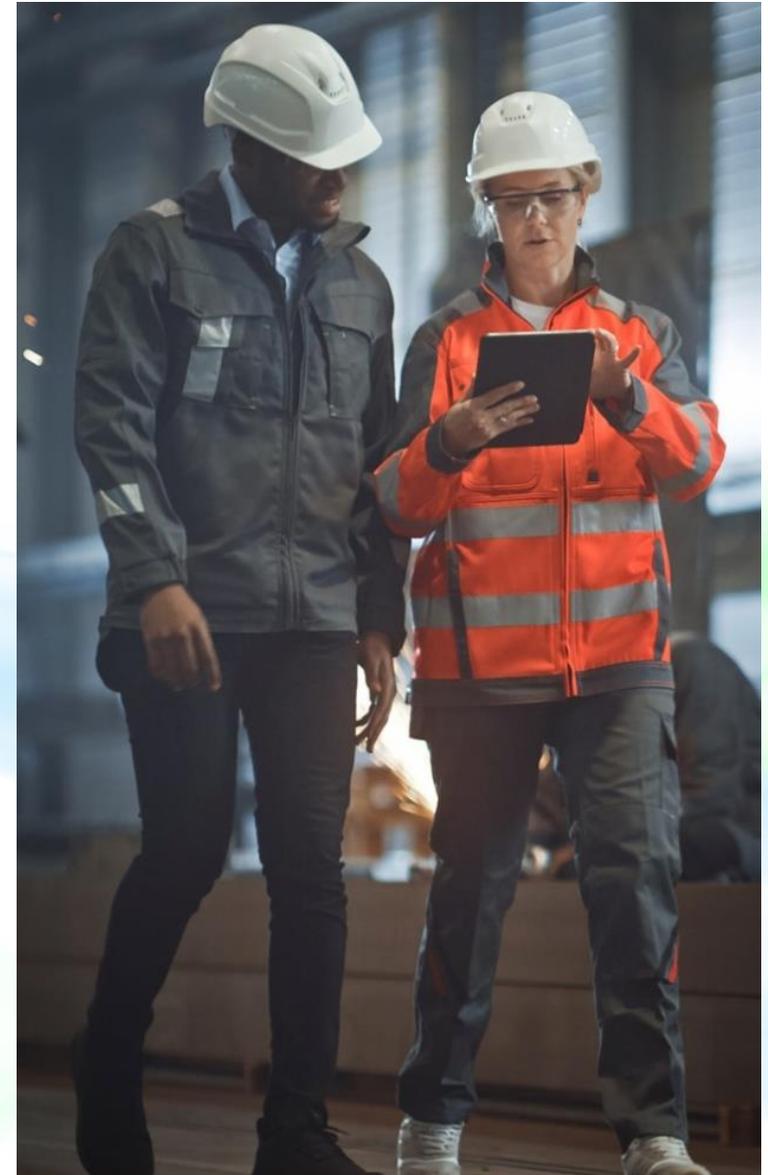
- Project team members
- Clients and customers
- Local communities
- Regulatory bodies
- Environmental groups



Conduct interviews, surveys, or workshops to gather insights on their expectations and priorities regarding sustainability

3. Analyze Project Requirements & Align it with Objectives

- Technical specifications
- Budget constraints
- Timelines
- Compliance with regulations
- Quality standards



4. Develop Sustainable Strategies

- Choosing sustainable materials and technologies
- Implementing energy-efficient practices
- Engaging local suppliers to support the economy
- Creating community engagement plans



Applying Green Project Management in Complex Build



THE TALLEST, LARGEST AND SMARTEST NET POSITIVE GOVERNMENTAL BUILDING IN THE WORLD



STRATEGIC OBJECTIVE

By building the tallest, largest and smartest net positive government building in the world, DEWA is establishing a precedent in Dubai and around the world by maintaining a balance between development and the environment, to protect the right of future generations to live in a clean, healthy and safe environment.



IDEAL DESIGN

Al-Sheraa's design was inspired by the traditional houses in the UAE.

Al-Sheraa will target the LEED Platinum Certification, the WELL Building Standard Silver Certification, and the Al Sa'fat Platinum Certification, Dubai's latest green-building regulation code.

CLEAN ENERGY

Al-Sheraa's design makes the most of its location to provide the largest possible surface area to generate solar power. The building will generate over 7,500 megawatt hours (MW/h) a year of renewable energy. It will have over 26,000 square metres of photovoltaic solar panels on its roof.

Stakeholder	Needs & Expectations
Government	 <ul style="list-style-type: none"> • Aligning with national development plans & programmes • Commitment to good citizenship • Regulatory compliance
Customers	 <ul style="list-style-type: none"> • Quality safety and cost - effectiveness of service • Ethical business • Reducing the environmental impact of organisation activities
Employees	 <ul style="list-style-type: none"> • Secure working environment • Competitive salaries • Ethical behaviour • Non-discrimination & recognition • Investment in professional developments • Career progression & recognition
Partners	 <ul style="list-style-type: none"> • Sharing best practices • Continuous and systematic dialogue and engagement • MoUs to collaborate on issues
Society and Future generation	 <ul style="list-style-type: none"> • Transparency and effective communication • Raising awareness on sustainability issues • Supporting social and cultural initiatives • Management of environmental impacts of organisation activities
Suppliers	 <ul style="list-style-type: none"> • Supplier qualification based on cost and quality including environmental and social assessment • Transparent procurement processes • Profitability
Providers of capital/Investors	 <ul style="list-style-type: none"> • Creating value in the short and long term • Reliability, profitability and transparency

The United Nations Sustainable Development Goals 2030



Top Priority Goals	6 CLEAN WATER AND SANITATION 	7 AFFORDABLE AND CLEAN ENERGY 	8 DECENT WORK AND ECONOMIC GROWTH 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	13 CLIMATE ACTION 
Second Priority Goals	5 GENDER EQUALITY 	11 SUSTAINABLE CITIES AND COMMUNITIES 	14 LIFE BELOW WATER 	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 	17 PARTNERSHIPS FOR THE GOALS 	
Other Important Goals	1 NO POVERTY 	3 GOOD HEALTH AND WELL-BEING 	4 QUALITY EDUCATION 	10 REDUCED INEQUALITIES 	15 LIFE ON LAND 	

Real-world lessons from the Al Sheraa Building



Al Sheraa



مبنى الشراع - مقر هيئة كهرباء ومياه دبي
Al-Sheraa Building – Dewa Headquarters

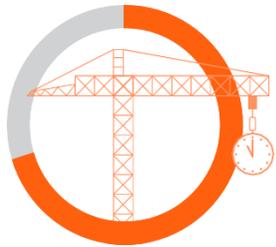
How Smart Systems and clean energy impact project Planning



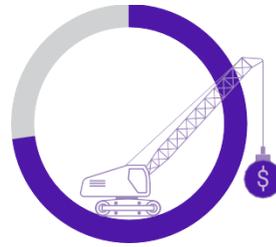


The **built environment industry** represents **13% of global GDP**

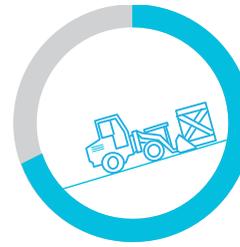
Our Research



72%
of construction projects experience **project delays**



73%
of construction projects end up **over budget**



70%
of construction projects experience **scope creep**

For every **\$1 billion** spent on construction projects, **\$127 million** is wasted.

- PMI Pulse of the Profession research; 2020

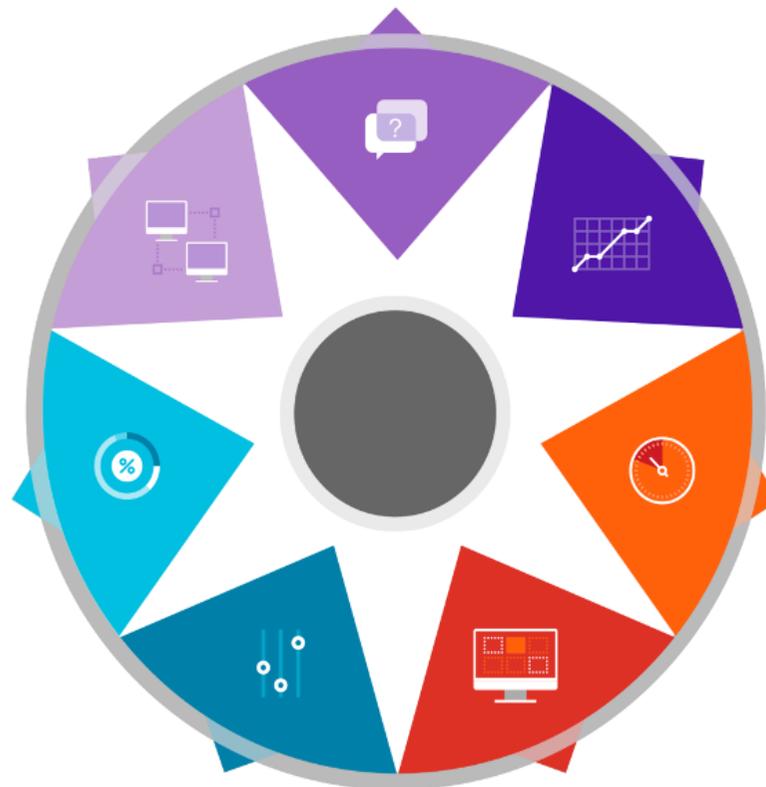
Pain Points Identified

Ineffective communication often leads to confusion, frustration and distrust amongst key stakeholders.

The construction industry lags other industries in terms of **innovation and technology** adoption.

During the contracting and tendering process, **contractors will underbid competitors** in order to secure the contract.

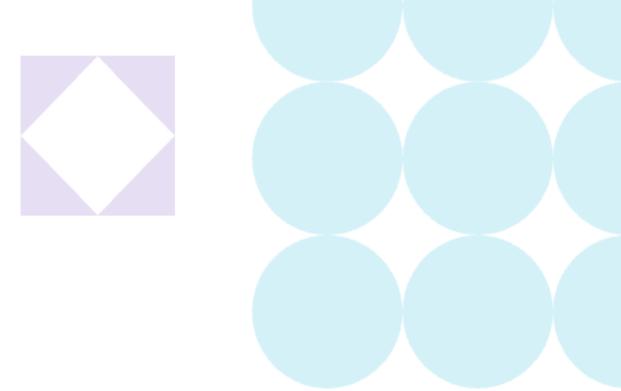
Often projects are setup with **metrics** that drive the **wrong behaviours** and performance measurement most times doesn't have a standardized process.



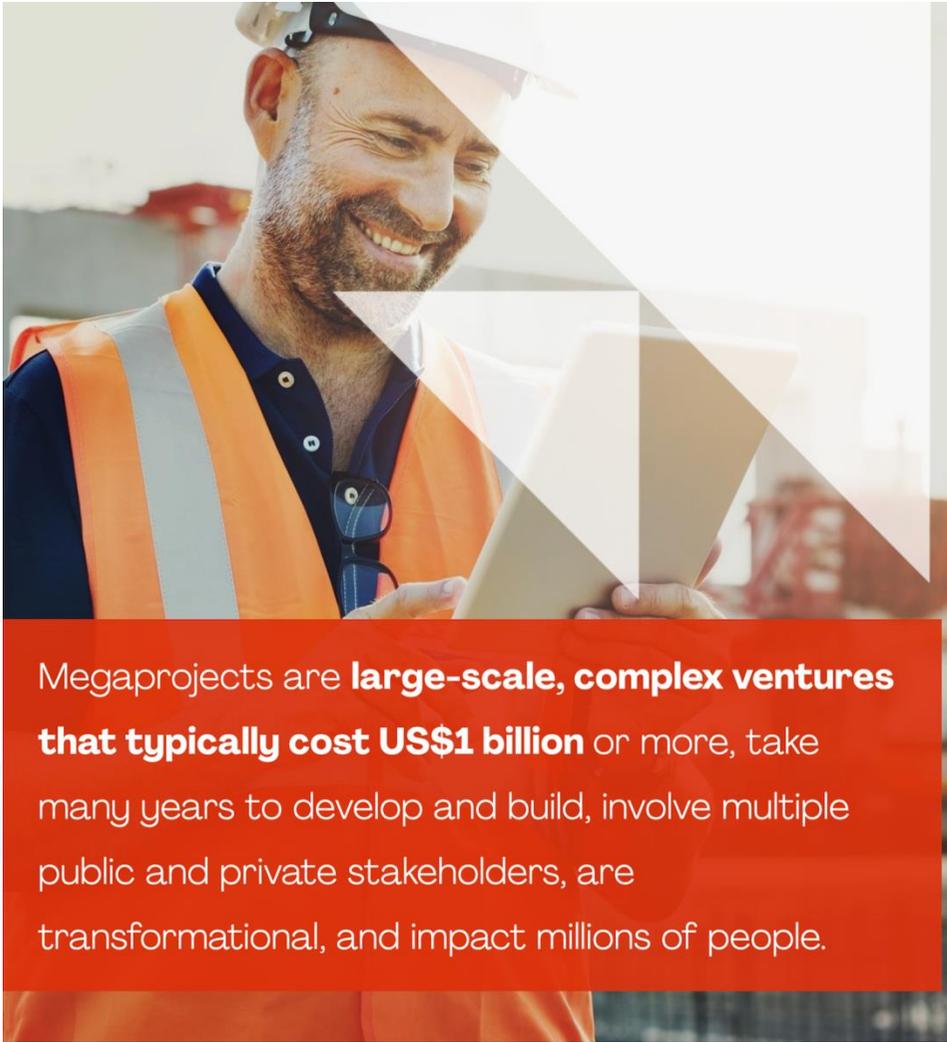
Changes in project requirements, creates downstream rework and waste. This also leads to scope creep.

The complex nature of **managing large scale projects with the associated multi disciplinary element**, results in inherent overlap of scope or scope being missed.

Construction projects struggle as a result of **poor design**, which leads to **poor execution**.



Minimizing Waste



COURSE BACKGROUND -----

PMI conducted extensive research across the built environment industry:

- For every US\$1b spent, **US\$127m is wasted** (compared to US\$113m nonconstruction Pulse of the Profession® [PMI, 2020]).
- **Nine out of ten megaprojects overrun**, resulting in claims or disputes. However, this is not restricted to megaprojects alone, and is becoming an industry-wide occurrence.
- **Profit** margins are shrinking.
- A seasoned construction professional said, “this initiative could **“revolutionize the construction industry,”** and we can **“make history together.”**

Megaprojects are **large-scale, complex ventures that typically cost US\$1 billion** or more, take many years to develop and build, involve multiple public and private stakeholders, are transformational, and impact millions of people.

Source: Oxford Handbook of **Megaproject Management**

“
The single biggest
problem in
communication is
**the illusion that it
has taken place.**

- GEORGE BERNARD SHAW

INTRODUCTION -----

The impact of **ineffective communication can be detrimental** to built environment projects:

33%

of all megaprojects **fail due to communication issues.***

50%

of projects experience significant **communication-related impacts due to time, cost, and scope.***

*Pulse of the Profession® (PMI, 2017) <https://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-leadership/pulse/pulse-of-the-profession-2017.pdf>



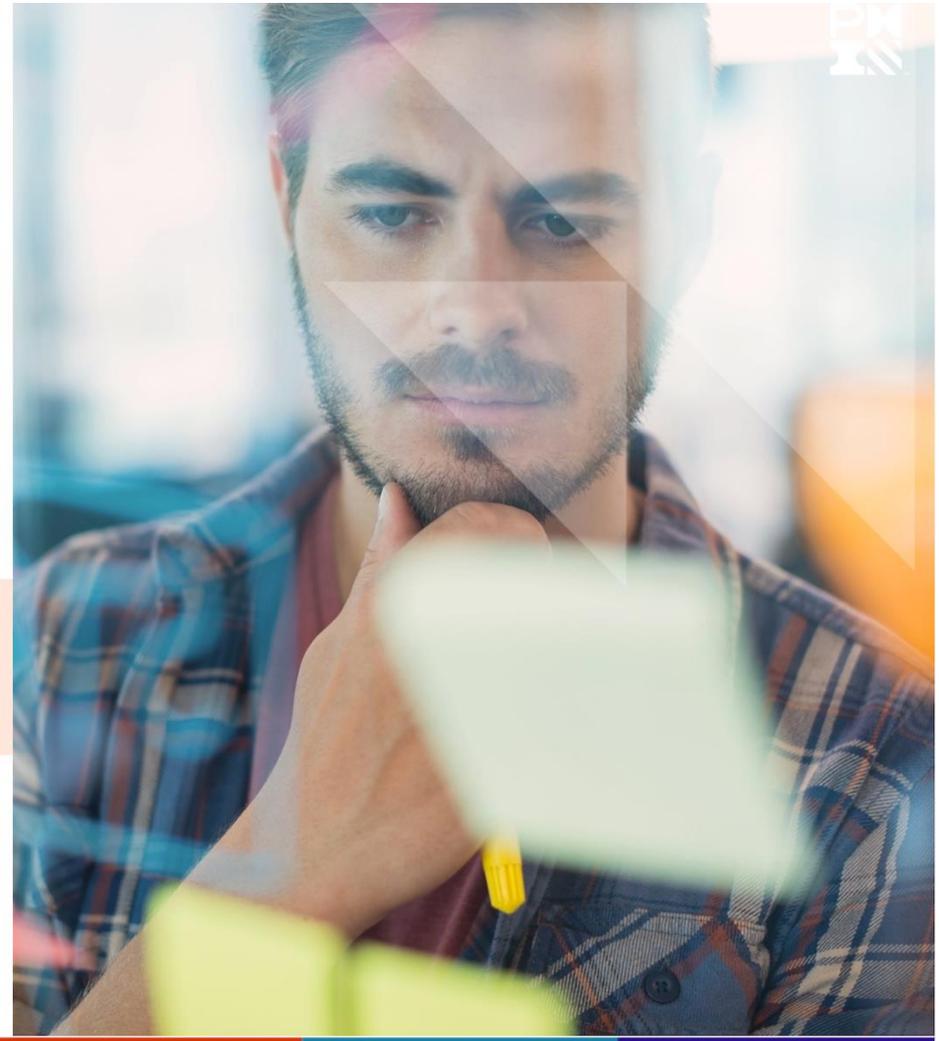
OBEYA

WHY IS OBEYA NECESSARY? -----

An effective Big Room **supports cross-functional team collaboration** by advancing work and bringing teams involved on a project up to speed on the activities of other groups or individuals.

The overarching philosophy behind Obeya comes from Lean.

- Collaborative running of a project.
- Leverages effective communication.
- Builds a cohesive team environment.



**PARTICIPATING IN THE
BIG ROOM -----**

**The Big Room will contain
visually engaging
information such as scope,
milestones, plans, and
progress to date.**

It will also present problem-solving and countermeasures to existing technical or scheduling issues.

Participation in the Big Room is a scheduled and recurring event.

It brings key stakeholders together to collaborate, plan, update, and solicit resources.

TEAM MEMBERS CAN:

- Invite feedback
- Demonstrate accountability
- Make decisions
- Schedule events
- Compare the project's current state to the published goals or conditions of satisfaction (CoS)

Construction Industry Challenges



Construction Industry Challenges

The biggest hurdles for construction projects



Construction Needs a Shift – Now

McKinsey & Company

Construction, the biggest industry in the world (13% of GDP but has only seen 1% annual growth for the past two decades.

\$69.4 trillion in global infrastructure investment would be needed through 2035.

Skilled-labor shortages have become a major issue and retirements will drain talent. 41% of the US construction workforce is expected to retire by 2031.



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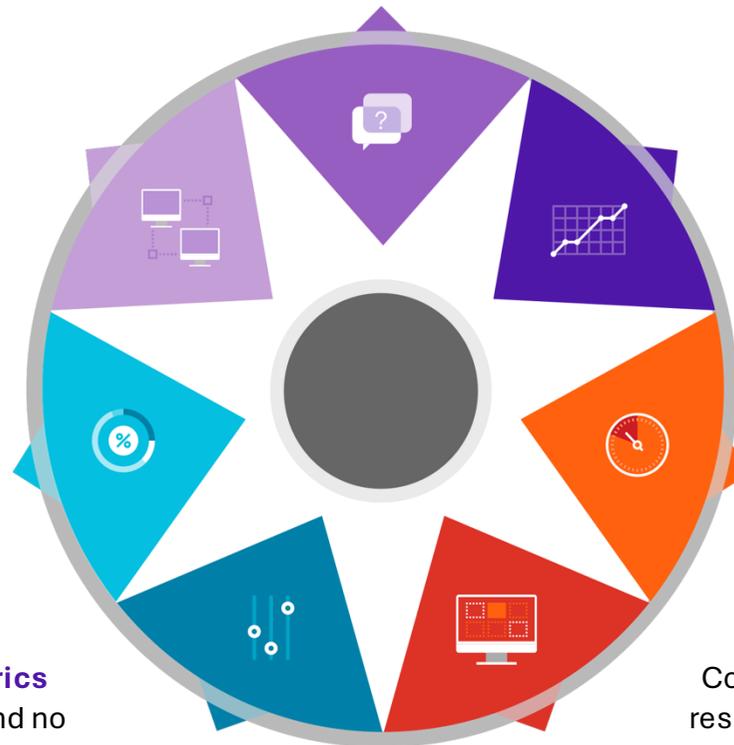
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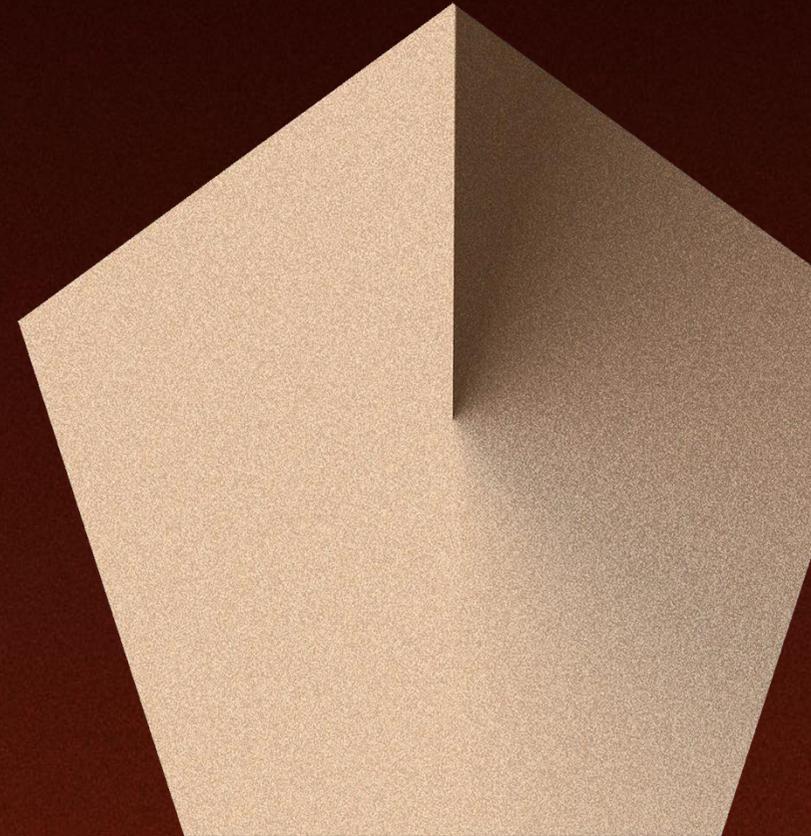
PMI Construction Professional (PMI-CP)[™]

The only internationally-recognized certification with an in-depth focus on bringing large, complex construction projects to life.

Why earn PMI-CP[™]?

PMI-CP[™] prepares professionals in the construction industry to confidently plan and lead megaprojects, elevating your capabilities and relevance in one of the world's fastest-growing sectors.

- ✓ Increases professional relevance in the construction industry
- ✓ Enhances job performance and prospects
- ✓ Suitable for all professionals in the construction sector
- ✓ Internationally recognized
- ✓ Instills the skills to adapt to evolving innovation and sustainability demands
- ✓ Demonstrates the ability to lead large, highly complex construction projects



PMI Construction Professional (PMI-CP)[™]

- PMI-CP[™] certification builds and verifies knowledge, skill and experience as a construction project professional, demonstrating your ability to:
 - ✓ **Plan:** Effectively strategize and manage project resources
 - ✓ **Manage Contracts:** Ensure contracts align with project goals
 - ✓ **Mitigate Risks:** Proactively handle risks and challenges
 - ✓ **Lead Complexity:** Use communication, active listening and commitment-based management skills
 - ✓ **Empower Innovation and Sustainability:** Adapt to current industry dynamics and sustainability demands
 - ✓ **Stay Current:** Remain up-to-date with current technologies, materials and communication in a rapidly evolving industry

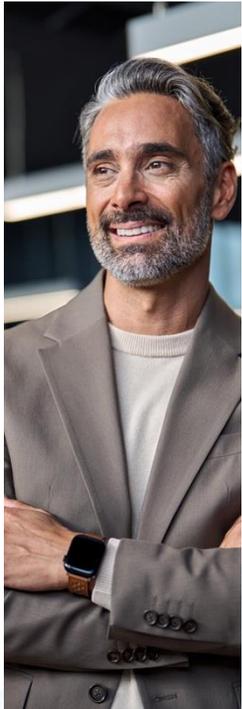
Exam Details

- 120 questions over 230 minutes.
- Delivered in-person and online

Prerequisites

- 36 months leading construction projects
- Completion of the four foundational PMI-CP learning modules

Who Should Enroll in PMI-CP™?



Developers



Consultants



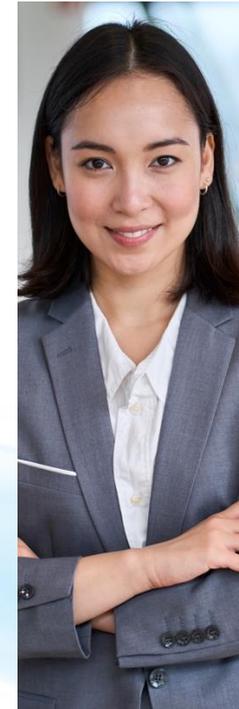
Contractors



**Project
Managers**



Engineers



Architects



**Quantity
Surveyors**



**Planners
& more...**

PMI-CP™

Why choose PMI-CP?



Equip your teams with knowledge of advanced processes and technology in the industry.



Realize huge return on investment (ROI) in technology and new processes, Optimizing available resources.



Alleviate key pain points that the construction industry has identified as crucial.

Real-world lessons from the Al Sheraa Building



GPM and CP Real Case Study - DEWA



هيئة كهرباء ومياه دبي
Dubai Electricity & Water Authority

Open: Q & A





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Thank You