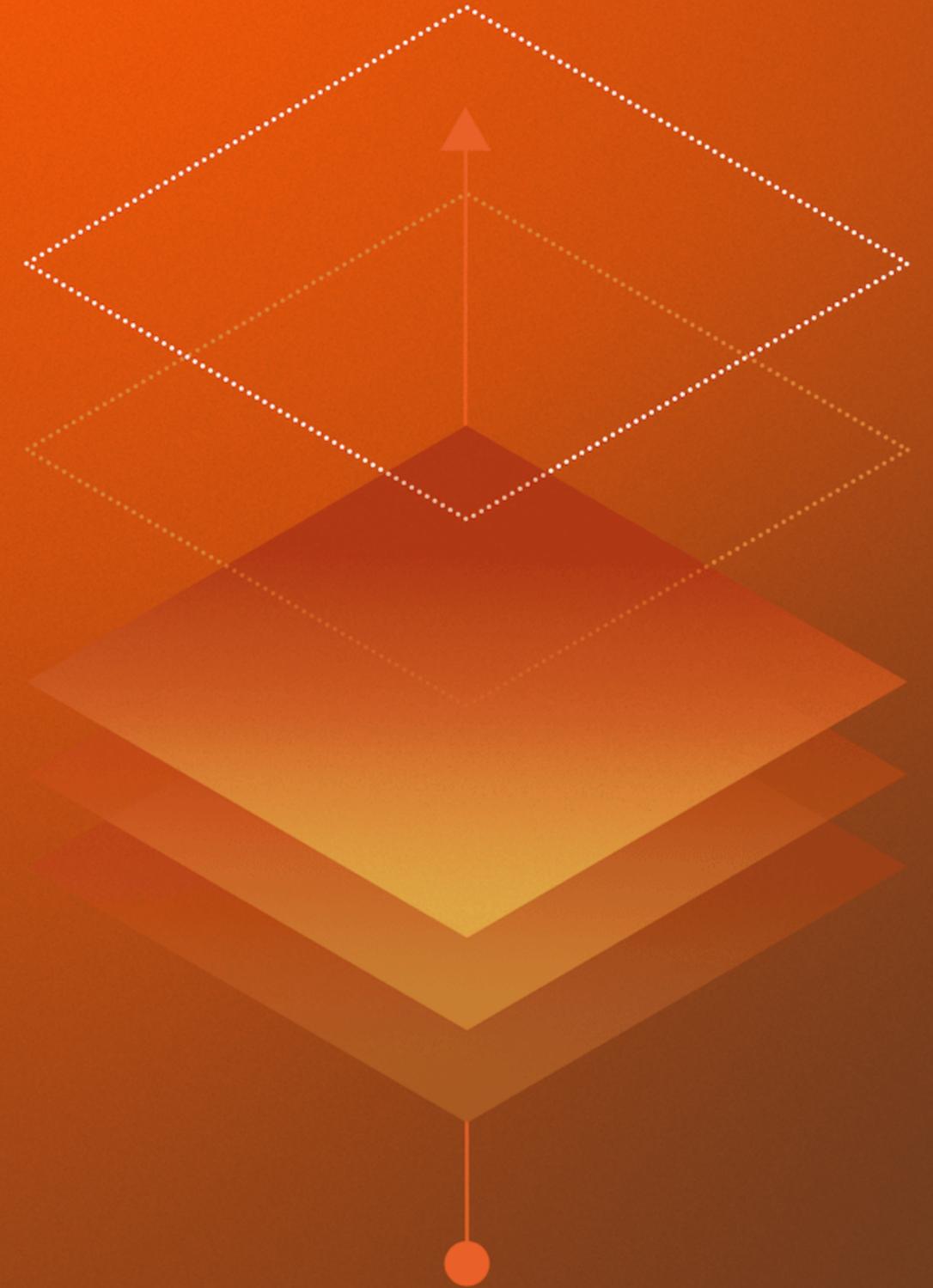


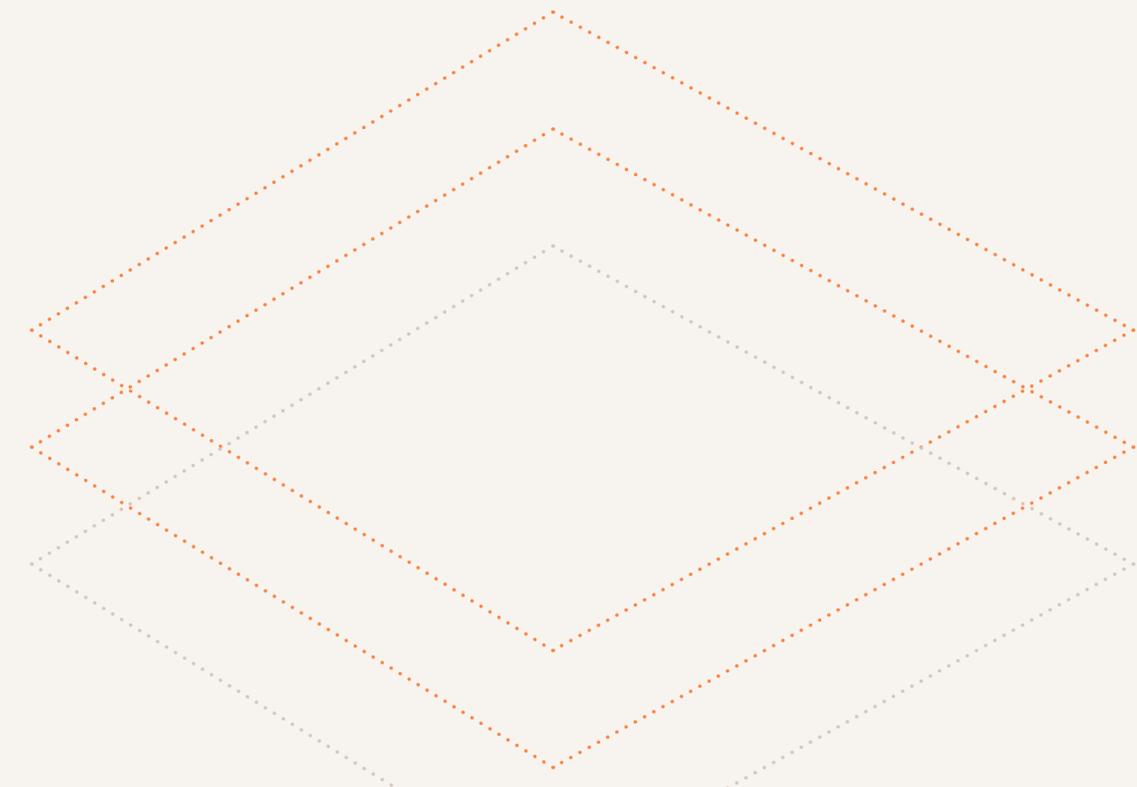
# The Construction Project Management Talent Gap

Needs, Challenges  
and Opportunities



# Contents

<b>Introduction</b> .....	<b>3</b>
The global talent gap .....	4
What we cover in this report .....	5
Identifying talent needs .....	6
The barriers to cross .....	10
Closing the talent gap in construction .....	13
Keeping pace with technology and unlocking its potential .....	14
<b>Acknowledgements</b> .....	<b>17</b>
<b>Appendix</b> .....	<b>18</b>
<b>Endnotes</b> .....	<b>21</b>



# Introduction

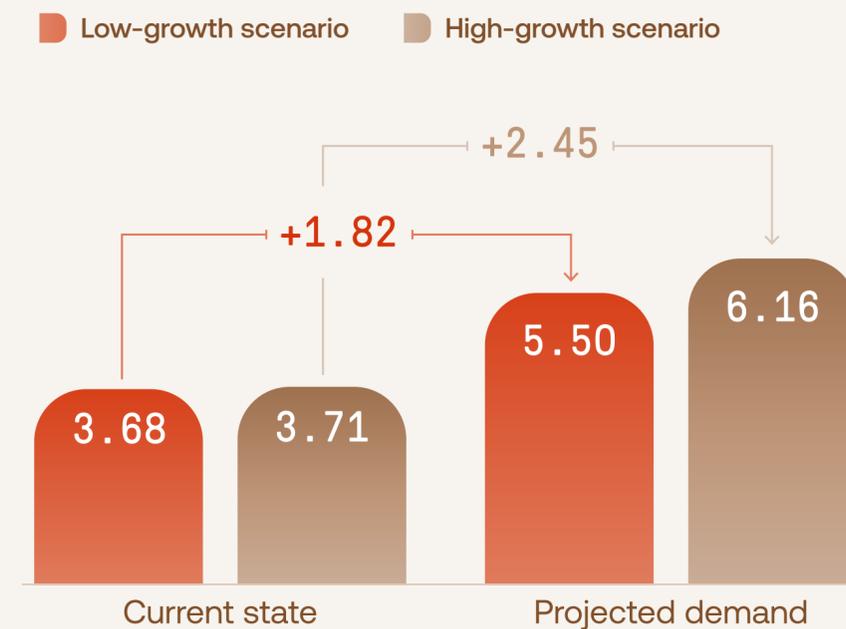
The construction industry sits at the heart of global ambitions. Some of the world's most pressing priorities, including infrastructure investments, the energy transition, and housing development, rely on the construction industry successfully delivering projects. This offers a wealth of opportunity but also poses huge challenges for organizations who must find ways to recruit, develop and retain project talent to stay competitive.

Our research highlights the urgency needed in the construction industry. PMI projections show almost 2.5 million construction professionals will be needed to meet demand by 2035—as much as a 60% increase from 2025 levels (see **Figure 1**). To close this gap, organizations will need to find ways to recruit, develop, and retain project talent in order to stay competitive.

Proactively addressing this skill shortage of project professionals is vital to deliver the infrastructure projects communities depend on. This report combines our rich data and our ongoing conversations with construction project management leaders to understand how the talent gap is impacting the construction industry, and the steps organizations can take to close the talent gap.

**Figure 1:** The global talent gap (*in millions*)

Current global market size and projected for construction project professionals



Source: PMI Global Project Management Talent Gap 2025

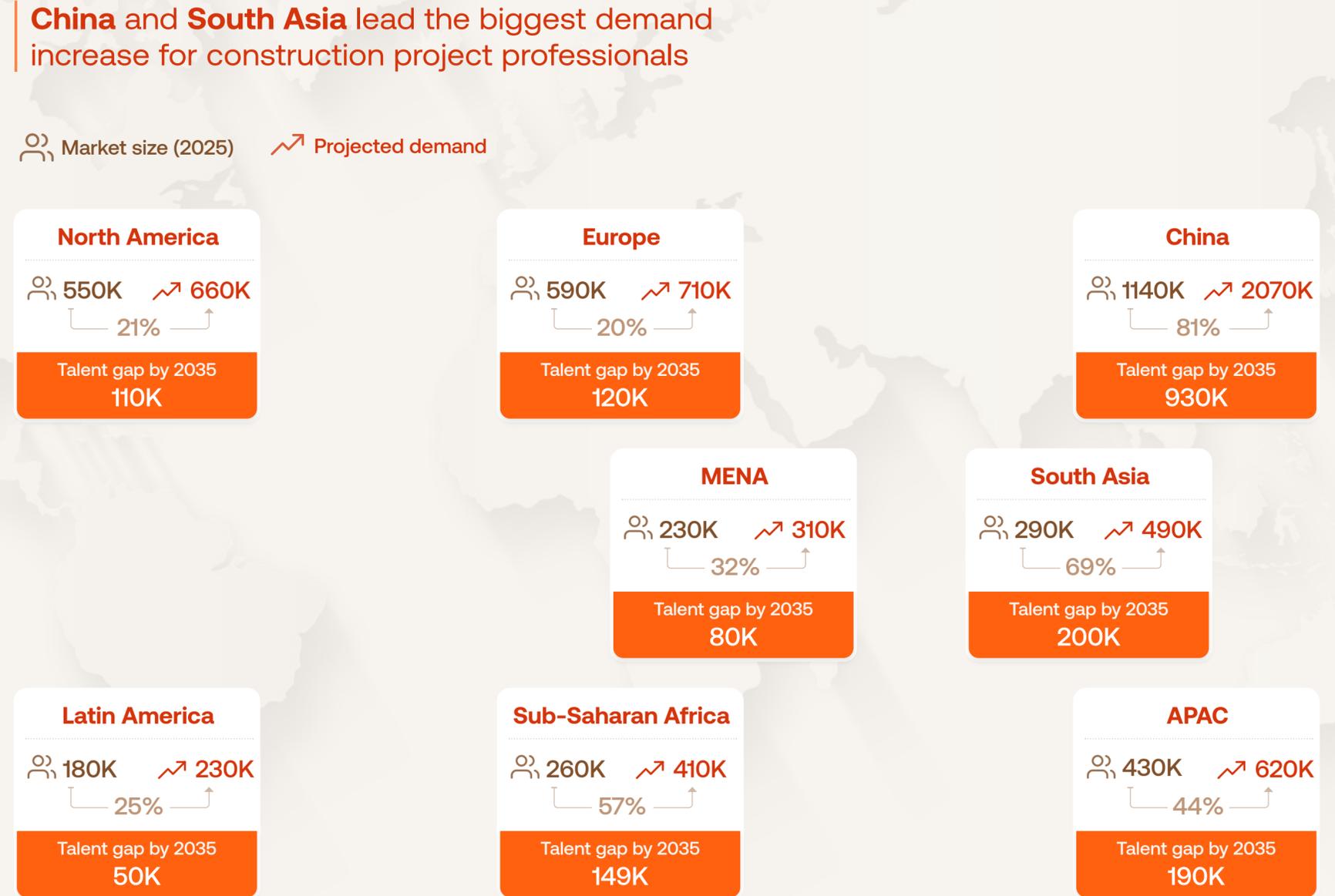
## The global talent gap

Driven by factors including technological transformation and large-scale infrastructure investment, this projected demand in the construction industry can be found across all regions of the globe (Figure 2).

The highest demand by % growth for construction project professionals is in Sub-Saharan Africa, led by Ethiopia (7.8%), Côte d'Ivoire (7.6%) and South Sudan (7.3%).

By volume, China is projected to face a talent gap of more than 1 million construction project professionals in 2035, followed by India and the United States, with shortages of about 178,000 and 161,000, respectively.

Figure 2: Market size and talent gap by region (low growth scenario)



Note: All numbers were rounded for easy reading

## What we cover in this report

This report combines our rich data and our ongoing conversations with construction project management leaders to understand how the talent gap is impacting the construction industry.

**Key insights** include:

Understand the current and future construction project management talent gap

Explore strategies to meet this growing demand for project professionals—now and in the coming years

Identify the skills that will be most important to help project teams realize success

Recognize the importance of sustainability and AI competencies in talent efforts

Consider the barriers that hinder efforts to attract, develop and retain project talent

Take steps to overcome these challenges and maximize the opportunities to close the talent gap



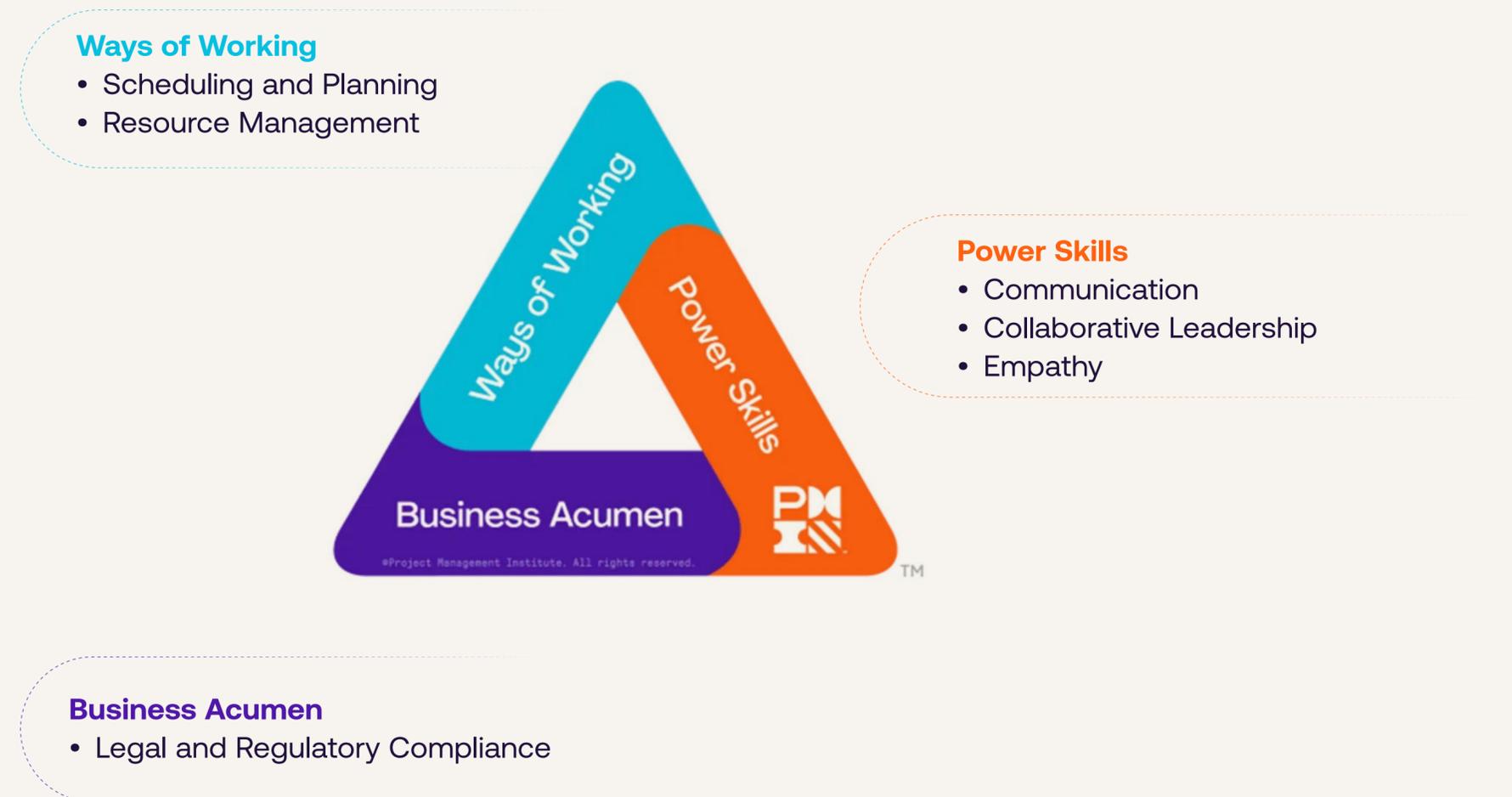
## Identifying talent needs

PMI research identified a mixture of key skills that construction companies want to find and strengthen in their talent recruitment and development efforts. Ranging from critical soft or people skills such as communication, to project management knowledge such as planning, to context-specific needs in regulatory environments, all these skills are seen as fundamental to project success.

**Inadequate communication and collaboration** are persistent problems on many projects, causing significant financial waste and subpar outcomes. "Poor communication has dire consequences on construction projects," says Sindi Kwenaita, PMI-CP, COO of South African Council for the Project and Construction Management Professions.

She cites a scenario in which changes to a building design are made by one team, perhaps offsite, but not properly conveyed with other teams working on site. Inevitably, at some point, different teams are working on different versions of the design, eventually leading to costly rework when the discrepancies are discovered.

**Figure 3:** Key skill gaps highlighted by experts

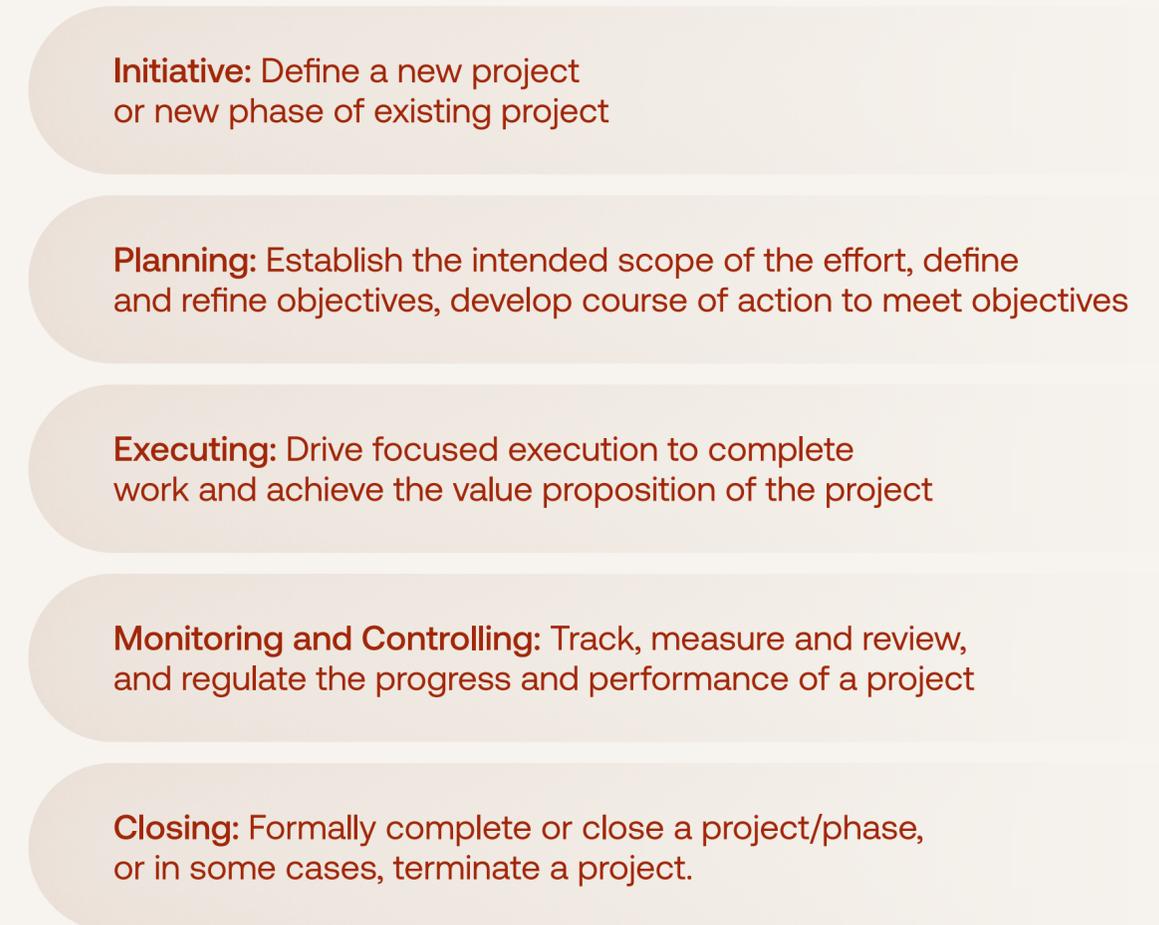


In addition to communication, **leadership skills and empathy** are often lacking among entry-level project professionals in construction. "More leadership competencies are needed for people in construction management to collaborate with upper-level management and VPs," says Adel Zadeh, PMP, PMI-CP, director, College of Professional Studies, Northeastern University, Toronto. "The old school thinking was project managers are just responsible for execution of the project. Now project managers are very much involved in a number of decision-making processes. To do that, they need an understanding of organization priorities, vision and mission."

At a fundamental level, engineers sometimes lack integrated project management knowledge in **planning, scheduling and resource management**. "They jump right into execution, but if you look at the *PMBOK® Guide* – Eighth Edition focus areas you will find almost half [address] planning," says Md. Hafiz Al Asad, PMP, PMI-CP, chief project management officer, Shanta Holdings Limited, a leading real estate developer in Bangladesh. "Many engineers lack competency in scheduling and planning."

Many engineers lack competency in scheduling and planning

Figure 4: *PMBOK® Guide* focus areas



Source: *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*. (8th edition) Project Management Institute, 2025.

### The need for digital skills and sustainability integration

On the technical side, construction project managers need more knowledge in digital transformation and **AI tools**, whose rapid data-processing capabilities will change the skills required in project management, particularly in scheduling and management. Most organizations are planning or already undertaking AI transformation initiatives, including determining what can be automated to improve their efficiency, productivity, risk management and decision-making on projects. They want project professionals who are comfortable with AI on a task level, while understanding its big-picture impact on strategy and execution as well.

There is also a huge demand for project professionals who combine **sustainability expertise** with strong construction project management capabilities. "Traditional construction talent pools don't consistently provide these skill sets," says Aylin Kaptan, PMP, GPM-b, founder of PY Akademi in Istanbul, Türkiye (Project Management Consultancy and Training). "Many candidates have solid technical or managerial backgrounds, but they often lack structured knowledge in areas such as impact assessment, sustainable procurement, lifecycle thinking, and ESG-aligned reporting."

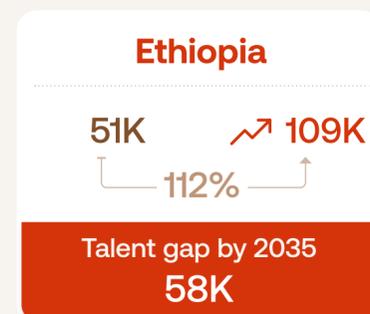
There is also a huge demand for project professionals who combine sustainability expertise with strong construction project management capabilities



Finally, talent needs are sometimes influenced by factors beyond an organization's control. In Ethiopia, more than 92% of construction projects are government funded, so **regulatory requirements** impact project processes and decisions, according to Dr. Eng. Wubishet Jekale Mengesha, PMP, general manager, Jekale CM Consultancy. That means the talent focus is on developing people who are comfortable operating in a highly regulated environment.

Whether they are just getting started in their careers or looking to advance into bigger and more strategic initiatives and roles, project professionals who can communicate and collaborate are always going to be in high demand. On the technical side, fundamental project management skills will continue to be valuable in any organization. And the need for AI and sustainability competencies is growing rapidly.

**Figure 5:** Ethiopia leads the global expected demand increase for construction project professionals



Project professionals who can communicate and collaborate are always going to be in high demand



## The barriers to cross

Our conversations with construction experts revealed the key barriers organizations face to close the project management talent gap.

Of paramount importance among the challenges that construction organizations face in the search for talented project professionals is the **problem of perception**, which can significantly hinder recruitment efforts. "Most people stumble upon construction because they never thought they wanted to go into construction, they thought it was uncool: hard hats, dirty, working outside in the hot or cold," says Noe Saenz, PMI-CP, OCMP, Global PMO Planning & Implementation Director, Burns & McDonnell, and chair of the Construction Industry Institute at UT Austin. "But once they find and learn what construction is all about, people find it very rewarding."

"So, we have a perception and communication problem in recruiting," says Saenz, who has 26 years of experience managing energy and infrastructure projects. "We need to change the narrative of what construction is about so we attract more young people. We need to explain the benefits as well as the challenges that are so exciting to fix, and how highly compensated our professionals can be. We need to be talking about the innovations, the progress, the cool things that we're building."

## 4 KEY BARRIERS TO CLOSE THE TALENT GAP



### Perceptions of construction

Recruitment in the construction industry can be hampered by perceptions of the industry as demanding, masculine and with challenging outdoor working conditions. More work needs to be done to change this narrative and emphasize the benefits and rewards of choosing a career in the construction industry.



### Recruitment and retention of women

The construction industry has one of the lowest shares of women in the workplace. It is potentially missing out on a huge talent pool needed to close the talent gap.



### Lack of professional development opportunities

Opportunities can be limited by operational pressures (e.g. prioritizing billable hours over all else) and lack of investment in training programs.



### Lack of structured career pathways

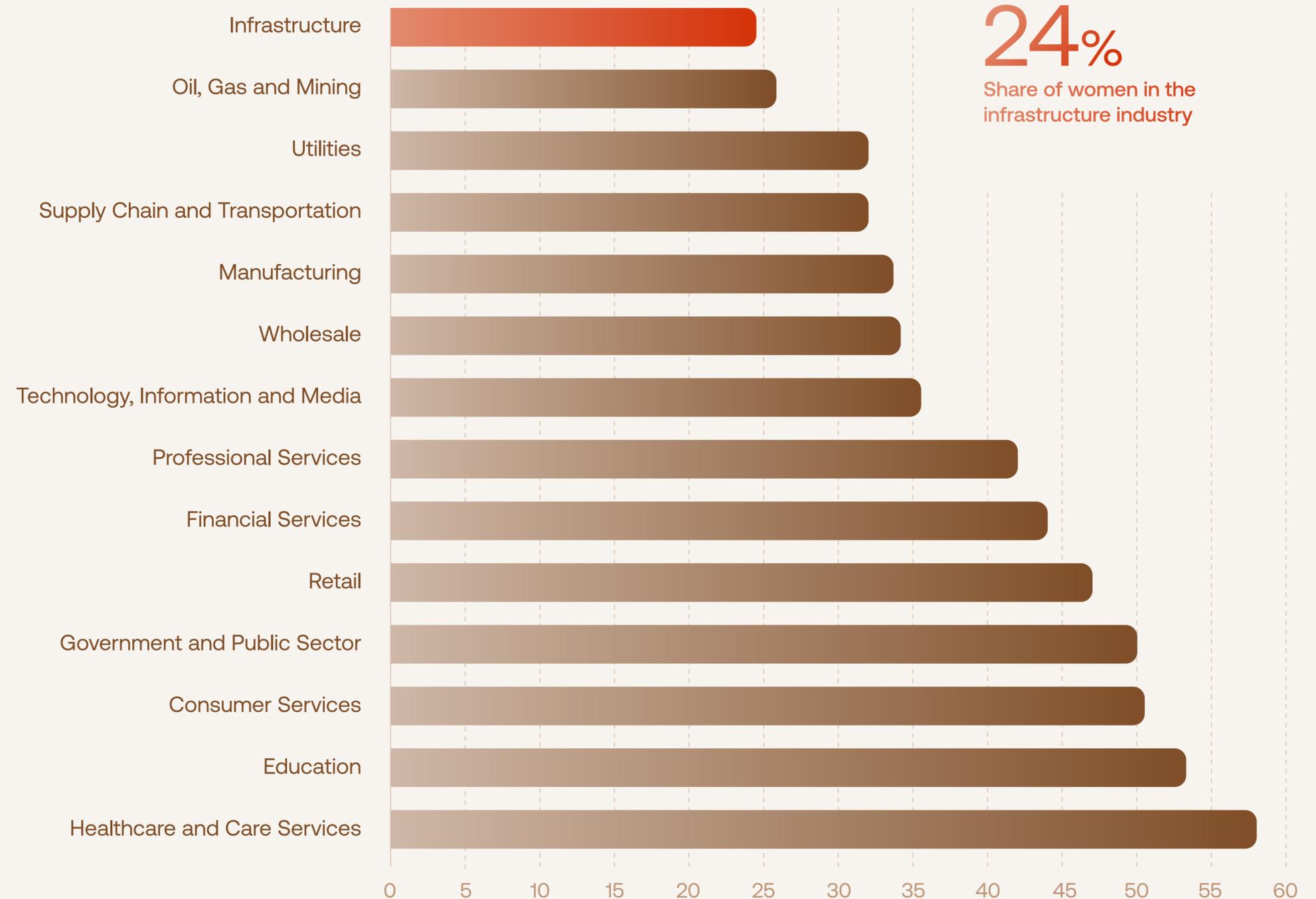
A commitment to providing clarity and direction for employees is vital for retention. In many organizations, this is not evident for young and mid-career project professionals.

The World Economic Forum highlighted that the infrastructure industry has one of the lowest shares of women in the workplace, estimated at only 24% globally. This highlights the urgency for the industry to act in order to close the talent gap.

The experts we spoke with identified a number of systemic barriers and workplace conditions that contribute to high attrition among women. Women must often overcome unique hurdles in the building industry, from inadequate facilities to ill-designed safety gear, which leads to high turnover rates, according to Kwenaite. No industry is operating at its fullest potential if half of its potential workforce is not being accommodated.

Attracting more women into the construction industry should not be framed as a pipeline problem to be solved through recruitment. To build a sustainable pipeline, organizations must first improve the working environment and culture for women already in the industry. Retention must precede recruitment.

**Figure 6:** Share of women in the workforce, by industry, selected economies



Source: World Economic Forum Global Gender Gap Report 2025

Just as important as recruitment practices is what organizations do for their project professionals once they are on board. Unfortunately, a **lack of professional development opportunities** exacerbates the skills gap in the industry. But "many companies view training as a cost rather than an investment," says Asad, hampering their talent development efforts.

Moreover, **operational pressures**, from inflexible deadlines to a focus on billable hours over all else, often deters otherwise motivated employees from finding the time to pursue additional training and certifications—"there just isn't enough time or encouragement from the top," Saenz says.

In addition, **structured career pathways** are not clearly evident in many construction organizations, according to industry leaders. Young and mid-career project professionals alike need to see and believe there are achievable steps they can take—"from project coordinator to project manager, for example," says Zadeh—and on to higher management roles down the road.

Beyond formal training, there is also a **shortage of mentors** in the industry to guide and support young project professionals along their career journeys. The positive role an experienced mentor can play in nurturing colleagues who are getting started is well-documented, but it depends greatly on a supportive organizational culture that facilitates the mentor-mentee relationship.



## Closing the talent gap in construction

There is indeed much that construction organizations can and should do to overcome the many barriers that undermine efforts to recruit, develop and retain talented project professionals—to close the talent gap, now and in the future.

On the problem of perception, organizations and industry associations need to make a concerted effort to **communicate the rewarding aspects of construction** careers to attract young talent. But saying it's a great industry to work in won't be as powerful as showing it to be true. The industry must take tangible steps to counter its reputation, whether it's working conditions or lagging behind technology trends.

To that end, **improving working conditions** and **adopting technology** are crucial for retaining younger generations in the industry. Younger people are very comfortable with technology and they want to work for organizations that invest in the latest tools—not only to help them be more efficient but also to empower them to be more agile and creative.

Improving working conditions and adopting technology are crucial for retaining younger generations



## Keeping pace with technology and unlocking its potential

Digitalization in the construction industry, including the use of Building Information Modelling (BIM), Digital Twins and AI, has massive potential to unlock greater productivity in the sector. Yet construction has historically lagged behind other industries in technology adoption.

Addressing this skills shortage requires more than recruitment. It demands greater investment in the available workforce through training, certifications and improved access to tools. This will provide the opportunity for the workforce to develop the expertise to implement and lead technological change, and ensuring new technology is used to solve key pain points in their organization.

Investing in technology and technology training also helps attract and retain younger generations. According to Kwenait, "I think adopting technology is key for retention." she says. "Gen Z, Gen Alpha, they are very passionate about technology and it is a draw card for many of them."



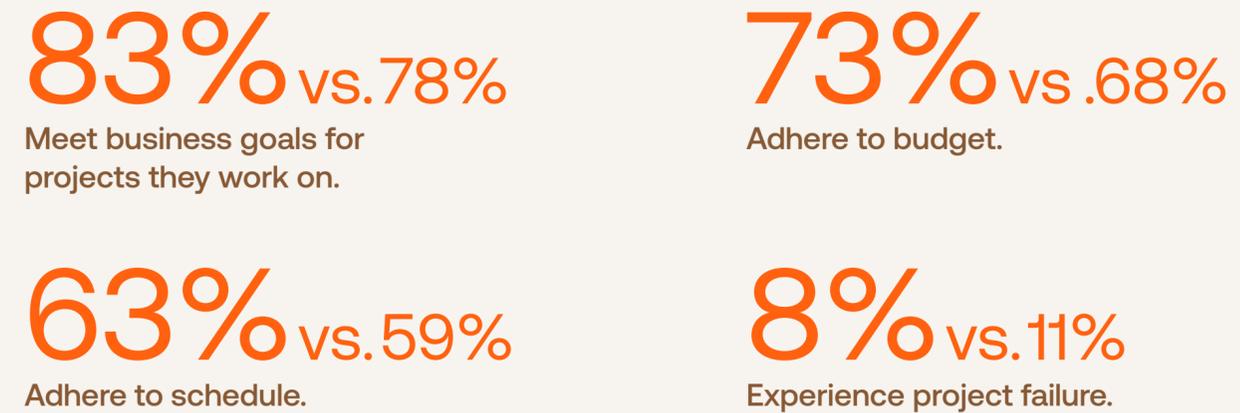
On the sustainability front, in addition to recruiting professionals who have credentials such as the Green Project Manager - Basic™ (GPM-bTM) and PMI Construction Professional (PMI-CP)™, organizations can build capabilities through joint, **multidisciplinary programs** for designers, architects and project managers. They can also develop and provide site-focused training in areas such as carbon management, waste reduction and material optimization for field teams.

The younger generation of project talent comes in many shapes and sizes, so it is important that organizations **seek a range of skills** to fill their teams of the future because most individuals will not possess every one of the skills they may need immediately upon arrival. Some candidates will show strong emotional intelligence and people skills but have limited knowledge of the business side; others will bring strong technical capabilities but struggle with the people side of things. "You're going to need a mix," Saenz says.

Research by PMI revealed project professionals with high business acumen skills consistently outperform their peers and achieve better outcomes. Organizations need to ensure their training has a strong focus on developing business acumen and accelerating this learning journey for younger and less experienced employees.

**Figure 7:** Project professionals with high business acumen achieve better outcomes

**Better outcomes:** Project professionals with high business acumen achieve better outcomes.



Source: PMI Pulse of the Profession report (2025)

Mentoring, whether informal or structured, can play an important role in developing talent and introducing newcomers to real-world, applicable ways of working. "We don't put them in charge right away," Saenz says. "We put them under someone for the first year at least, so they can learn as they do things."

Kwenaite recommends **short, targeted training** programs focused on specific skills to quickly upskill new entrants to the industry. She also says people who benefit from training should be enlisted as "ambassadors" to encourage their peers to follow in their footsteps to quell industry apathy.

Some organizations go a step beyond and **incentivize** people to pursue certifications and training through bonuses, new titles and raises. Other companies sponsor training and exam fees, promoting a culture of **continuous learning** and development.

Mengesha says project management training programs should strive to be "down to the earth" so they can function as an applicable complement to the PMP and other certifications. "'Hands on' will make the development faster," he says.

As the saying "culture eats strategy for breakfast" implies, efforts to engage and retain project talent won't gather much momentum or make a lasting impact without a **work culture** that underpins that strategy in meaningful ways.

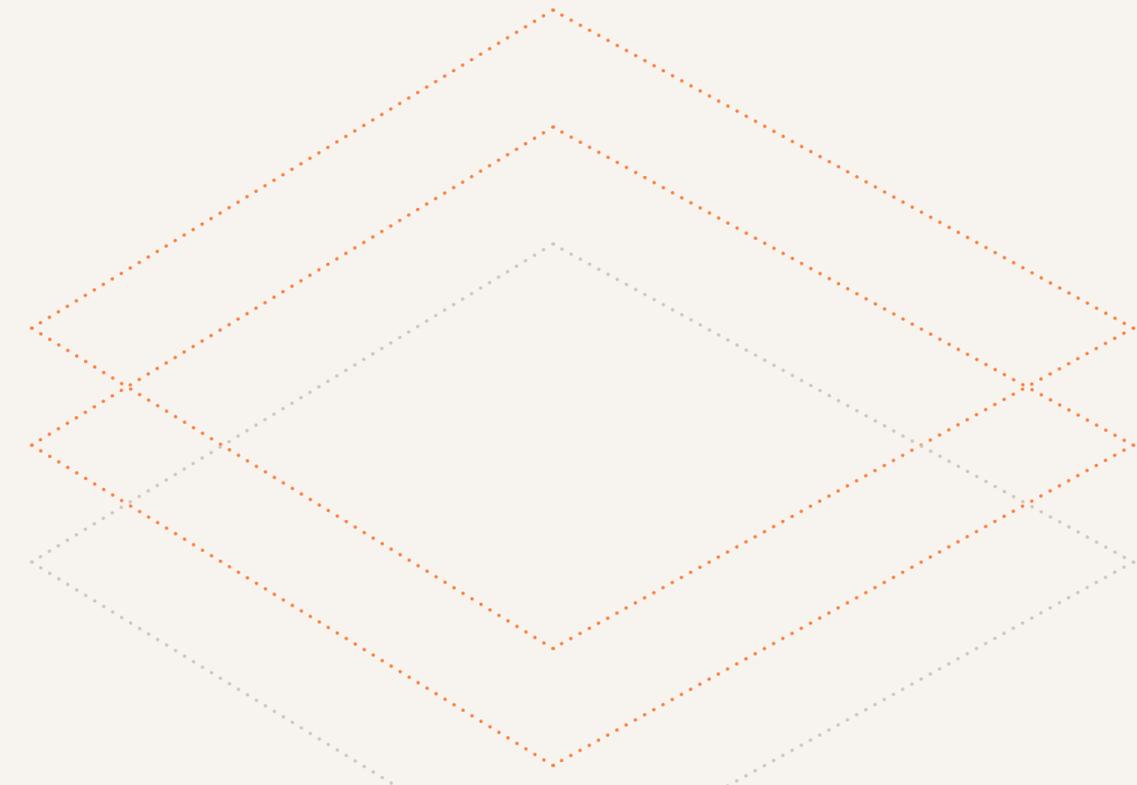
A pro-talent organizational culture includes giving **recognition** for worthy performance by both individuals and teams. It also supports **work-life balance** through flexible work arrangements. And it provides ongoing opportunities for skills development and career growth.

Construction organizations and their leaders who take these actions, from the practical to the visionary, from the strategic to the cultural-driven, are going to be more effective at attracting, developing and keeping the construction project professionals who can make a difference, now and in the future.



# Acknowledgements

- ▶ Md. Hafiz Al Asad, PMP, PMI-CP, chief project management officer, Shanta Holdings Limited (Bangladesh)
- ▶ Pascal Godjo, Energy, Sustainability & HVAC Manager, SEATEC Group (Cameroon)
- ▶ Aylin Kaptan, PMP, GPM-b, founder of PY Akademi in Istanbul, Türkiye (Project Management Consultancy and Training)
- ▶ Sindi Kwenaita, PMI-CP, COO of South African Council for the Project and Construction Management Professions
- ▶ Dr. Eng. Wubishet Jekale Mengesha, PMP, Associate Professor, Jekale CM Consultancy (Ethiopia)
- ▶ Noé H. Saenz, PMI-CP, OCMP, Construction PMO Services Leader, Burns & McDonnell, and chair of the Construction Industry Institute at UT Austin
- ▶ Dr. Raji Sivaraman, Pracademic, ASBA LLC (Singapore)
- ▶ Dr. Adel Zadeh, PMP, PMI-CP, director, College of Professional Studies, Northeastern University, Toronto



# Appendix



**Figure 1.** Current market size and projected demand by year for project professionals in global construction

Global Construction	High-growth scenario	Low-growth scenario
Global employment 2024	3,538,248	3,538,248
2025 demand	3,710,158	3,675,776
2026 Demand	3,892,827	3,820,190
2027 Demand	4,086,993	3,971,867
2028 Demand	4,293,449	4,131,209
2029 Demand	4,513,049	4,298,639
2030 Demand	4,746,709	4,474,608
2031 Demand	4,995,412	4,659,592
2032 Demand	5,260,215	4,854,097
2033 Demand	5,542,255	5,058,656
2034 Demand	5,842,751	5,273,837
2035 demand	6,163,016	5,500,240
Demand gap	2,452,858	1,824,464
Attrition from retirements	397,910	397,910
<b>Total Talent Gap</b>	<b>2,850,767</b>	<b>2,222,373</b>

**Figure 2.** Top 10 countries by annual projected demand growth (low growth scenario)

Top 10 Demand Growth	CAGR* (low scenario)	2025 Demand	2035 Demand	Demand Gap	Attrition From Retirements	Total Talent Gap
Ethiopia	7.8%	51,220	108,729	57,509	2,088	59,597
Côte d'Ivoire	7.6%	6,134	12,743	6,609	224	6,833
South Sudan	7.3%	2,370	4,815	2,445	106	2,551
Djibouti	7.0%	176	347	172	11	182
Somalia	7.0%	1,196	2,350	1,153	39	1,192
Malawi	6.5%	2,375	4,452	2,077	73	2,150
Mali	6.5%	1,682	3,144	1,462	49	1,511
Bangladesh	6.4%	34,021	63,096	29,075	2,141	31,216
China	6.1%	1,141,567	2,070,719	929,152	150,646	1,079,798
Mongolia	6.1%	1,051	1,900	849	80	928

**Figure 3.** Top 10 countries by total talent gap projected in 2035 (low growth scenario)

Top 10 Talent Gap	CAGR* (low scenario)	2025 Demand	2035 Demand	Demand Gap	Attrition From Retirements	Total Talent Gap
China	6.1%	1,141,567	2,070,719	929,152	150,646	1,079,798
India	5.3%	236,088	395,760	159,672	18,024	177,695
United States of America	1.9%	490,006	591,847	101,841	59,188	161,029
Indonesia	4.3%	109,045	166,639	57,594	9,890	67,484
Ethiopia	7.8%	51,220	108,729	57,509	2,088	59,597
Bangladesh	6.4%	34,021	63,096	29,075	2,141	31,216
Russian Federation	1.6%	103,766	121,490	17,724	12,887	30,611
United Kingdom	1.6%	89,602	104,776	15,174	11,125	26,300
Philippines	5.1%	34,490	56,841	22,351	2,394	24,745
Saudi Arabia	3.1%	59,292	80,315	21,023	3,220	24,243

\* CAGR: Compound annual growth rate

**Figure 4.** Current market size, projected demand, talent gap, and attrition by region

<b>APAC</b>	<b>High-growth scenario</b>	<b>Low-growth scenario</b>
2025 demand	429,975	426,160
2035 demand	686,333	619,279
Demand gap	256,358	193,119
Attrition from retirements	41,615	41,615
<b>Total Talent Gap</b>	<b>297,973</b>	<b>234,734</b>

<b>China</b>	<b>High-growth scenario</b>	<b>Low-growth scenario</b>
2025 demand	1,158,066	1,141,567
2035 demand	2,424,774	2,070,719
Demand gap	1,266,709	929,152
Attrition from retirements	150,646	150,646
<b>Total Talent Gap</b>	<b>1,417,354</b>	<b>1,079,798</b>

<b>Europe</b>	<b>High-growth scenario</b>	<b>Low-growth scenario</b>
2025 demand	595,620	592,983
2035 demand	752,404	714,033
Demand gap	156,783	121,050
Attrition from retirements	74,837	74,837
<b>Total Talent Gap</b>	<b>231,621</b>	<b>195,888</b>

<b>Latin America</b>	<b>High-growth scenario</b>	<b>Low-growth scenario</b>
2025 demand	185,569	184,599
2035 demand	246,983	231,525
Demand gap	61,414	46,926
Attrition from retirements	16,961	16,961
<b>Total Talent Gap</b>	<b>78,375</b>	<b>63,887</b>

<b>MENA</b>	<b>High-growth scenario</b>	<b>Low-growth scenario</b>
2025 demand	233,436	231,908
2035 demand	330,794	306,092
Demand gap	97,359	74,183
Attrition from retirements	14,378	14,378
<b>Total Talent Gap</b>	<b>111,737</b>	<b>88,561</b>

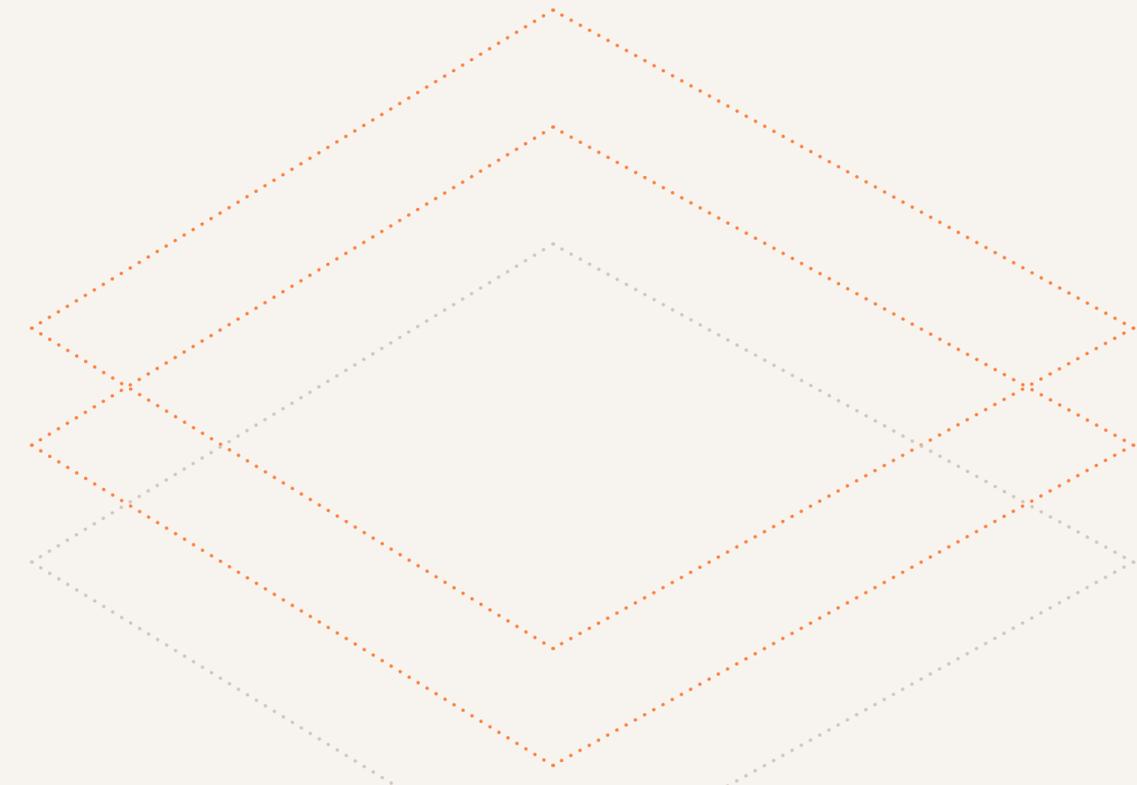
<b>North America</b>	<b>High-growth scenario</b>	<b>Low-growth scenario</b>
2025 demand	552,132	549,589
2035 demand	697,123	662,568
Demand gap	144,991	112,979
Attrition from retirements	66,814	66,814
<b>Total Talent Gap</b>	<b>211,805</b>	<b>179,793</b>

<b>South Asia</b>	<b>High-growth scenario</b>	<b>Low-growth scenario</b>
2025 demand	291,776	288,121
2035 demand	558,188	485,599
Demand gap	266,412	197,477
Attrition from retirements	21,337	21,337
<b>Total Talent Gap</b>	<b>287,749</b>	<b>218,814</b>

<b>Sub-Saharan Africa</b>	<b>High-growth scenario</b>	<b>Low-growth scenario</b>
2025 demand	263,584	260,849
2035 demand	466,416	410,425
Demand gap	202,833	149,576
Attrition from retirements	11,321	11,321
<b>Total Talent Gap</b>	<b>214,154</b>	<b>160,897</b>

# Endnotes

1. CITB. 2025. New perspectives on recruitment to the construction industry. <https://www.citb.co.uk/media/zktmen43/rethinking-recruitment-constructing-a-more-attractive-industry-full-report-january-2022.pdf>
2. MIT Sloan. 2023. [Why Companies Should Help Every Employee Chart a Career Path](#)
3. RICS Construction productivity report 2023. <https://www.rics.org/news-insights/rics-construction-productivity-report-2023>
4. RICS Digitalisation in construction report 2024. <https://www.rics.org/content/dam/ricsglobal/documents/research/Digitalisation-in-construction-report-2024.pdf>



## How to cite this report

Please use the following citation format for referencing this report:

PMI Thought Leadership. (2026). The Construction Project Management Talent Gap: Needs, Challenges and Opportunities. [Report]. Project Management Institute.

<https://www.pmi.org>

## About PMI Thought Leadership

---

We are a multidisciplinary team of subject matter experts, experienced leaders and researchers dedicated to creating, retaining and disseminating innovative and thought-provoking project management research and content. Partnering with the PMI community, industry thought leaders, academia, and prominent authorities, we build and sustain a community-generated knowledge platform. Thought Leadership is dedicated to offering cutting-edge perspectives, bridging academic theory and practice, contributing meaningfully to solving problems and providing solutions to a broad, diverse global community spanning from early career professionals to executives. We are committed to the diversity of opinions and community contributors to represent all voices of the project management profession equally.

Our work has three core areas of focus:

- ▶ **Individuals:** Equip project professionals with high quality, actionable recommendations based on practical experience and academic research to drive individual growth, performance and continuous learning.
- ▶ **State of the profession:** Inform project professionals of the latest trends, academic insights and practices to improve project management effectiveness and success as well as to advance the profession.
- ▶ **Enterprise and innovation:** Inspire and provide strategic direction to senior executive leaders through applied insights combined with academic perspectives, to help transform their organizations for long-term growth.

Grounded in evidence-based research, analytical insights, and practical recommendations, our work empowers our community to successfully navigate dynamic business landscapes and society.

## About Project Management Institute (PMI)

---

PMI is the leading authority in project management, committed to advancing the project management profession to positively impact project success. We empower professionals to excel in project management practices through our growing global community, knowledge sharing, and best-in-class certifications—driving positive change in organizations and communities. Since 1969, our unwavering mission has been to advocate for the profession by offering lifelong learning and connections to sharpen high-demand skills.

Today, PMI provides professionals at every stage of their career journey with the globally recognized standards, online courses, thought leadership, events, and tools they need to succeed. With more than 300 chapters around the world, PMI members can network, find mentors, access career opportunities, and learn from peers, working together to drive greater impact.

Visit us at [PMI.org](https://www.pmi.org),

- ▶ [linkedin.com/company/projectmanagementinstitute](https://www.linkedin.com/company/projectmanagementinstitute)
- ▶ [instagram.com/pmi\\_org](https://www.instagram.com/pmi_org)
- ▶ [tiktok.com/@pminstitute](https://www.tiktok.com/@pminstitute)
- ▶ [youtube.com/c/pmi](https://www.youtube.com/c/pmi)
- ▶ [facebook.com/PMInstitute](https://www.facebook.com/PMInstitute)
- ▶ and on X [@PMInstitute](https://twitter.com/PMInstitute).

