AI Innovators:
Cracking the Code on Project Performance
Artificial intelligence (AI) isn’t the next big thing in some far-off future.

High-PMTQ* organizations—and their project leaders—see how AI technologies are already fundamentally changing the business landscape. Eighty-five percent of global CEOs predict AI will significantly change the way they do business in the next five years, according to PwC.¹

New research from Pulse of the Profession® confirms AI disruption is happening: 81 percent of respondents report their organization is being impacted by AI technologies. And 37 percent of respondents say adopting these AI technologies is a high priority for their organization, sparking a shift in project management approaches. Over the next three years, project professionals expect the proportion of projects they manage using AI will jump from 23 to 37 percent.

Even companies in legacy industries like construction and engineering know they can’t miss out on AI. When Bechtel, a U.S.-based construction and engineering firm, was looking to improve its productivity rates, it turned to deep learning. The company now uses a 3D neural network that allows project teams to test out different sequences virtually until they find the one that maximizes their productivity.²

Yet, while some organizations are leading the way on AI, others are falling behind. Just over a third of respondents (36 percent) say adopting AI technologies is a low priority at their organization, with nearly 31 percent reporting less than 5 percent of their projects have used AI in the past three years.

THE TECH ON TOP

*Pulse research shows six AI technologies are having a big impact—and could grow even larger in the near future.*

- **KNOWLEDGE-BASED SYSTEMS** understand the context of the data being processed, helping support human learning and decision making.
  - Organizations Currently Impacted by This Technology: 37%
  - Organizations That Expect a High/Moderate Future Impact: 71%

- **MACHINE LEARNING** analyzes data to build models by detecting patterns, yielding improved decision making with minimal human intervention.
  - Organizations Currently Impacted by This Technology: 31%
  - Organizations That Expect a High/Moderate Future Impact: 69%

- **DECISION MANAGEMENT** creates an intelligent process or set of processes based on rules and logic to automate decision making.
  - Organizations Currently Impacted by This Technology: 29%
  - Organizations That Expect a High/Moderate Future Impact: 68%

- **EXPERT SYSTEMS** emulate and mimic human intelligence, skills or behavior in a particular field, topic or skill.
  - Organizations Currently Impacted by This Technology: 21%
  - Organizations That Expect a High/Moderate Future Impact: 64%

- **DEEP LEARNING** builds, trains and tests neural networks that predict outcomes and/or classify unstructured data based on probabilities.
  - Organizations Currently Impacted by This Technology: 21%
  - Organizations That Expect a High/Moderate Future Impact: 63%

- **ROBOTIC PROCESS AUTOMATION** mimics and automates human tasks to support corporate processes.
  - Organizations Currently Impacted by This Technology: 21%
  - Organizations That Expect a High/Moderate Future Impact: 62%

81% of project professionals report their organizations are being impacted by AI technologies.
UNLOCKING AI’S VALUE

Organizations can adopt all the AI they want, but to truly deliver on AI’s potential, they need collaboration between humans and machines.

Research by Accenture finds the most visionary organizations apply five key principles, called MELDS, to their AI investments:

- **Encourage the right Mindset**
- **Promote Experimentation**
- **Support actively involved Leadership**
- **Incorporate Data into strategy**
- **Cultivate new Skills**

This “human + machine multiplier effect” is more than a hypothesis. Organizations that embrace all five MELDS attributes saw a 6.5x increase in their key performance indicators, according to Accenture.

New Pulse research also shows adopting MELDS principles leads to better project performance.

A quarter of Pulse respondents report their organization follows all five of the principles. These are the AI Innovators. But 23 percent say their organization has yet to embrace even one of the traits: These are the AI Laggards.

**The difference between the two groups is real.**

AI Innovators are more likely to establish an organizational infrastructure that leads to project success, by highly prioritizing:

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<th>AI Innovator</th>
<th>AI Laggard</th>
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<tbody>
<tr>
<td>A culture receptive to organizational change</td>
<td>73%</td>
<td>17%</td>
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<tr>
<td>Investments in technology</td>
<td>72%</td>
<td>18%</td>
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<td>A culture that values project management</td>
<td>71%</td>
<td>24%</td>
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<td>The development of a comprehensive program delivery capability that allows for quick adaptation to changing market conditions</td>
<td>71%</td>
<td>15%</td>
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These organizations are also more likely than AI Laggards to have:

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<td>Projects with actively engaged sponsors</td>
<td>70%</td>
<td>55%</td>
</tr>
<tr>
<td>High benefits realization management maturity</td>
<td>69%</td>
<td>28%</td>
</tr>
<tr>
<td>High organizational agility</td>
<td>61%</td>
<td>15%</td>
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**AI in Action: Robotic Process Automation**

When Rio Tinto was looking to speed up the pace of its production, the global mining company launched a project to create fully autonomous train technology.

Since completing the first run, the iron ore trains have now traveled over 1 million kilometers (621,371 miles) autonomously across the Pilbara region of Western Australia.
THE PAYOFF?
The proof is in the project.

AI Innovators consistently outperform AI Laggards in several key project metrics:

- **BEFTER ON-TIME DELIVERY**
  Al Innovators report they delivered 61 percent of their projects on time, versus 47 percent for AI Laggards.

- **SUPERIOR BENEFITS REALIZATION**
  Al Innovators report 69 percent of their projects realized 95 percent or more of their business benefits, compared to 53 percent of projects for AI Laggards.

- **HIGHER ROI**
  Al Innovators report 64 percent of their projects met or exceeded their original ROI estimates, versus 52 percent of projects for AI Laggards.

Capturing the value of AI isn’t just about rolling out a bunch of new technologies. It takes the right people with the right skills and the right attitude. It takes PMTQ. The best out there know this.

It’s time to become an AI Innovator.

Learn more about PMTQ from our earlier report, *The Future of Work: Leading the Way With PMTQ*, and be sure to look out for the next report in this series.

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**About This Report**

This report highlights insights from 551 project management professionals across a range of industries and from around the globe.

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