ISG[®] Smart Manufacturing Study

The State of Smart Manufacturing Initiatives Today

In pursuit of cost savings; growing success

Over 60% of respondents started a smart manufacturing initiative 4 **years ago** or earlier.

These investments appear to be paying off with +70% reporting success.

Success is measured by cost savings first, then by the quality of manufacturing, which is the opposite priority order from 2022.

Initiatives are growing; those with +2,500 staff doubled, while those with +100 staff rose to 75%.

Top 5 Industry Challenges

OCM Remains #1 Challenge

It's critical to have a **change management** strategy that connects the value chain. Reponses report that change initiatives struggle with conflicting priorities. Also of note, for the first time, IT/OT integration is a top 3 challenge, with system complexity as the largest success factor.

Technology Investments

Al is the #1 Investment Priority

In 2023, **75% of respondents increased or maintained investments in artificial intelligence** and machine learning, as shown in this chart. However, decision makers are split on digital twin tech; 60% increased or maintained investments, but 32% haven't invested at all. For AR/VR tech, most have not started or are maintaining investments, while 11% decreased spend.

Smart Manufacturing Partners

Multiple Partners Needed to Achieve Targets

Manufacturing companies are using an **ecosystem of multiple providers** to accelerate their initiatives; the top 5 preferred partners are shown on the right. Desired traits of ecosystem partners vary greatly by sub-industry vertical, but 63% prefer a highly customized service over quick project implementation.



129 executives interviewed from US, Germany, UK, etc.



success in 2022

success in 2023

Manufacturers are reporting significantly higher levels of success year-over-year.

Productivity improvements, cost savings and supply chain resilience are the biggest motivators for starting smart manufacturing initiatives.

After starting, the first tangible results are achieved within 12 months in **81%** of reported cases.



Note: Multiple responses allowed; will not add up to 100.



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39% board-level roles including CEO, CIO, CRO, CTO & COO.

Contact us to purchase the full study report. If your organization needs help navigating the technologies, processes and culture needed to refocus your initiative, ISG can help.