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Split surfaces in survey over product quality and teams' understanding of AI

In newly released Ease.io research, a strong majority of manufacturing managers view their companies' quality culture favorably while their own frontline workers said they are less sure. Also, a disconnect showed in the poll over familiarity with AI's capabilities.

Scott Achelpohl

What you'll learn:

- Management is significantly more assured in their understanding of quality management than frontline workers.
- Quality issues are going unaddressed. Nearly half of frontline operators have experienced quality issues being ignored or covered up, with a substantial portion remaining silent.
- Operators are less familiar with AI's role in product quality than management believes.

New data from a survey commissioned by Ease.io, vendor of a digital audit and inspection software platform designed for manufacturers, shows a disconnect inside U.S. manufacturing plants: Leadership thinks product quality is under control, but frontline operators aren't so sure.

The Ease.io survey polled 1,000 manufacturing professionals in the U.S. only—a 50-50 split of 500 frontline operators/workers and 500 managers—and found significant gaps in how each group views quality processes, culture, and emerging use of AI.

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Only about half of frontline respondents said they understand quality management processes "very well" while 75% of the management group did, which reveals "a knowledge and training gap that may be limiting effective implementation," according to an "executive snapshot" that accompanied the report, which was released May 21.

Survey explores understanding of AI in quality management

As methodology for its survey, Ease.io anticipated that artificial intelligence uses in quality management would "become a growing area of disconnect between frontline workers and managers, especially as AI investment accelerates across the manufacturing sector."

And the findings fell along those lines, revealing that management tends to overestimate their teams' familiarity with AI and its utility. A 22-point gap emerged between how well managers understand the technology and how competent frontline workers themselves feel.

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"Taken together, the findings highlight a pressing need for improved two-way communication and a more inclusive quality strategy that empowers those closest to the work," the study notes.

"Organizations have an opportunity to close these gaps through more targeted frontline training, visible accountability measures, and leadership practices that consistently reinforce a culture of quality—not just in message but in action."

Some highlights of the Ease.io study's findings:

- A majority of respondents (77% of frontline operators, 92% of managers) recognize their company's efforts to promote quality.
- There was a 15-point difference in perception among roles, indicating that those in management believe quality culture is stronger than how frontline workers experience it on a day-to-day basis.
- Roughly one in four frontline workers are not convinced that their companies promote a positive quality culture.
- Low overall confidence from both frontline workers (22%) and managers (39%) indicate a broader systemic problem in quality management.
- Roughly one in five managers (18%) and frontline operators (21%) said they felt pressured to compromise on quality "often" or "all the time" to meet deadlines or production goals.
- Only 21% of frontline workers said they felt very confident that their managers prioritize quality over production goals, indicating a trust deficit.
- Nearly half (49%) of managers said their teams are "fully empowered" to suggest process changes to improve quality; only about one third (36%) of operators felt the same way.
- AI in quality is not equally understood, as one in three (31%) of frontline operators have no understanding of AI's role, while only 21% of managers said they're in the dark. A total of 36% of managers had moderate understanding of AI, while only 21% of operators did.
- The survey generally reported that leadership is more proficient and more confident in AI. But less than half of all respondents (22% of operators, 43% of managers) said they use AI-enabled quality tools.

"Manufacturing leaders are facing a perfect storm," Ease.io CEO Eric Stoop said in remarks accompanying his software company's new research. "Expectations around digital transformation and AI adoption are accelerating. At the same time, rising input costs, supply chain disruptions, workforce shortages, and a renewed push to reshore production are reshaping operations from the top floor to the shop floor."

See also: Manufacturers cite widespread labor shortages, use of automation and AI to help

Stoop added: "In this uncertain environment, it's tempting to cut costs whenever possible. But cutting corners on quality creates bigger risks. Customers still expect reliability, consistency, and products that perform. Protecting quality while staying agile and efficient isn't easy, but it's what separates manufacturers that survive from those that lead."



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I've come to Smart Industry *after stints in business-to-business journalism covering U.S. trucking and transportation for* FleetOwner*, a sister website and magazine of SI's at Endeavor Business Media, and branches of the U.S. military for Navy League of the United States. I'm a graduate of the University of Kansas and the William Allen White School of Journalism with many years of media experience inside and outside B2B journalism. I'm a wordsmith by nature, and I edit* Smart Industry *and report and write all kinds of news and interactive media on the digital transformation of manufacturing.*