



WHITEPAPER

How manufacturers can overcome the ERP disconnect

Implementations falter when differing stakeholder pain points create division.

82% of shop floor workers say the most difficult aspect of their job to explain to others is the constant need for real-time problem-solving.

That finding gets to the heart of why ERP implementations often falter when shop floor adoption is neglected. While manufacturers recognize the potential of well-executed ERP software, implementation is challenging. Manufacturing environments are unique, defined by distinct processes, equipment, and personnel. Because every plant and workforce is different, stakeholders often have conflicting priorities and concerns regarding technology changes.

ERP: A divide behind the scenes

Not every decision within a business is the result of a consensus. More often than not, a top-down-driven approach to new technology results in a rollout that's ideal for some team members and less so for others.



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Top-down tends to center on the executive team's ability to see the value, back the change and enforce its use. Unfortunately, adoption of the technology is more complicated, and shop floor employees are unlikely to blindly accept the change. Meanwhile, a lack of understanding of these line level needs means division begins to form among split priorities.

And yet, it's the full buy-in of many stakeholders that often determines the success or failure of any technology initiative. The question is not just whether ERP ticks the boxes for financial success but, also, whether the technology usefully addresses pain points on the manufacturing floor.

For many manufacturing businesses, there is a need for standard processes, quality control, and machine/tooling requirements that makes it easy to fall into old habits and to be wary of change. Disruptions to the status quo may affect productivity and - in some cases - incentive pay or compensation which directly affects the livelihood of those on the shop floor. However, as business needs evolve, executive leadership defines the digital transformation needs to optimize, grow and improve margins. This naturally forms a divide or misalignment within the core of the business, often pitting the corporate office against shop floor operations.

The data

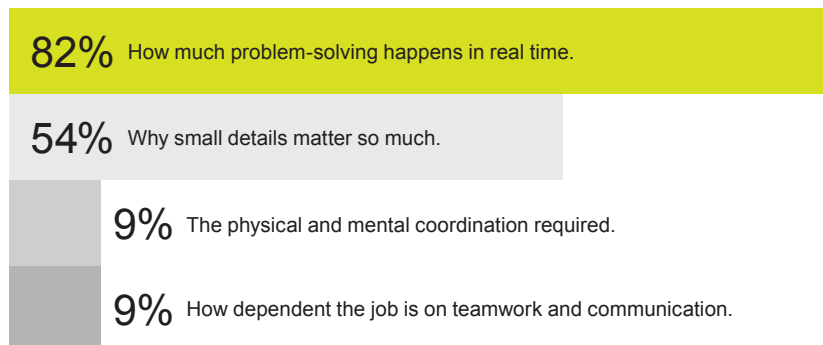
A recent poll conducted by Sikich and Industrial Equipment News (IEN) reaffirmed the divide between these two groups – and pointed to some enlightening specifics.

In our poll, we looked at the priorities of both corporate leaders (IT, accounting, executive, financial, etc.) and those who serve more of a shop floor function (maintenance, operations, production line, assembly, etc.). The goal was to understand each group's key considerations and, perhaps, the points of friction between them that were limiting the success and effectiveness of technology implementations. Unsurprisingly, there were some differing perspectives.

Our results revealed that the shop floor is underrepresented during these technology initiatives, sometimes to the point where a new ERP makes their job more difficult to perform.

ERP implementations tend to focus on refining processes and standardizing as much as possible. While many of those initiatives are already done on the shop floor through ISO or Six Sigma programs, ERP takes the process one step further and requires a data capture component. This is where the divide begins to show.

What parts of your job are hardest to explain to someone who's never done it?



The poll also found that 55% of respondents said it was difficult to relay "why small details matter so much." Thinking about this from an ERP perspective, it speaks to how businesses must capture problem-solving steps without encumbering the user with unnecessary additional labor. More than half of the responses added that the biggest mistake a corporate team could make during a new ERP implementation would be making decisions without involving the people who actually do the work.

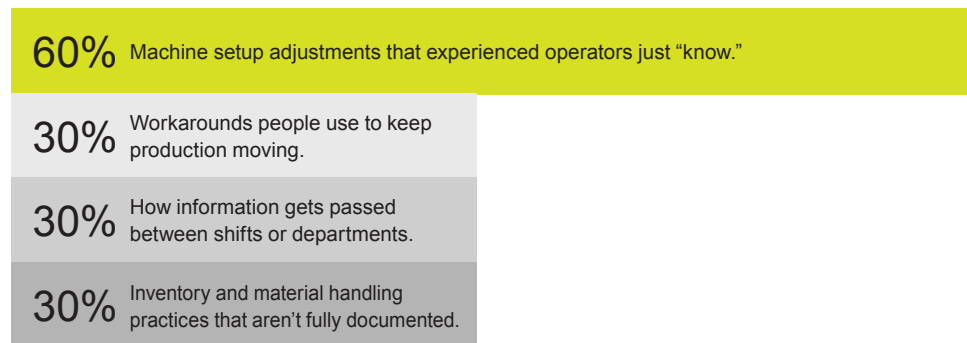
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Meanwhile, our poll shows that corporate leaders have other priorities. They largely believe that fragmented processes and systems are generating bad data and, therefore, they are limited in their ability to achieve actionable insight. Their goal of attaining good data tends to supersede other plant-floor impacts — despite the fact that these leaders acknowledge that morale depends heavily on how the change is introduced.

How to bridge the gap

So what can these two critical teams do to bridge the gap and, ultimately, enable ERP technology to target manufacturing business goals?

What parts of your current processes rely on tribal knowledge that the ERP will break if you don't capture it?



According to Bob Buechel, Senior Director at Sikich, the specialized or "tribal" knowledge on the shop floor is notoriously difficult to capture. While ERP implementations aim to standardize processes, preserving this knowledge remains critical to manufacturing productivity. In the poll, 60% of respondents pointed to machine setup adjustments as an example of work that experienced operators just "know." These are the kinds of processes that rely on tribal knowledge, and ERP can unintentionally break them if they are not properly accounted for during implementation.

When corporate leaders, pursuing better data, implement solutions that rely directly on information from the shop floor, "they put more work on a workforce already trying to meet productivity goals." Buechel noted that ERP implementations are prone to failure when user adoption does not occur on the shop floor, but the reasons adoption doesn't happen are far from simple.

"When you're working with heavy machinery, tools and equipment, there are a lot of variables that affect output — from ambient factors like humidity to physical issues with material, or the machines themselves that require on-the-fly problem-solving and skills that ERP doesn't capture," explained Buechel. "A lot of these workers are hourly or piece-rate; their livelihood is directly affected by their ability to do work, and oftentimes they feel neglected by the corporate side who gets a salary and aren't directly affected by productivity."

While this dynamic is complex, it can be improved. According to Buechel, companies must take change management seriously during ERP implementations, moving beyond simple lip service to investing in the people and the technology that is going to drive their business to grow.

Promoting end user adoption should take priority when considering the investment at hand. For example, manufacturers should account for key requirements, including training, customization, hardware, additional ISV software — even building inventory cushions that account for potential downtime.

But perhaps the most important consideration is empowerment. Shop floor employees need to be given a real seat at the table and a voice representing those who have a true impact on product quality.

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Change management as a priority

Change management must be viewed as non-negotiable when businesses set out their priorities for ERP implementation. This adjustment is real, and it applies to both corporate leaders and shop floor employees.

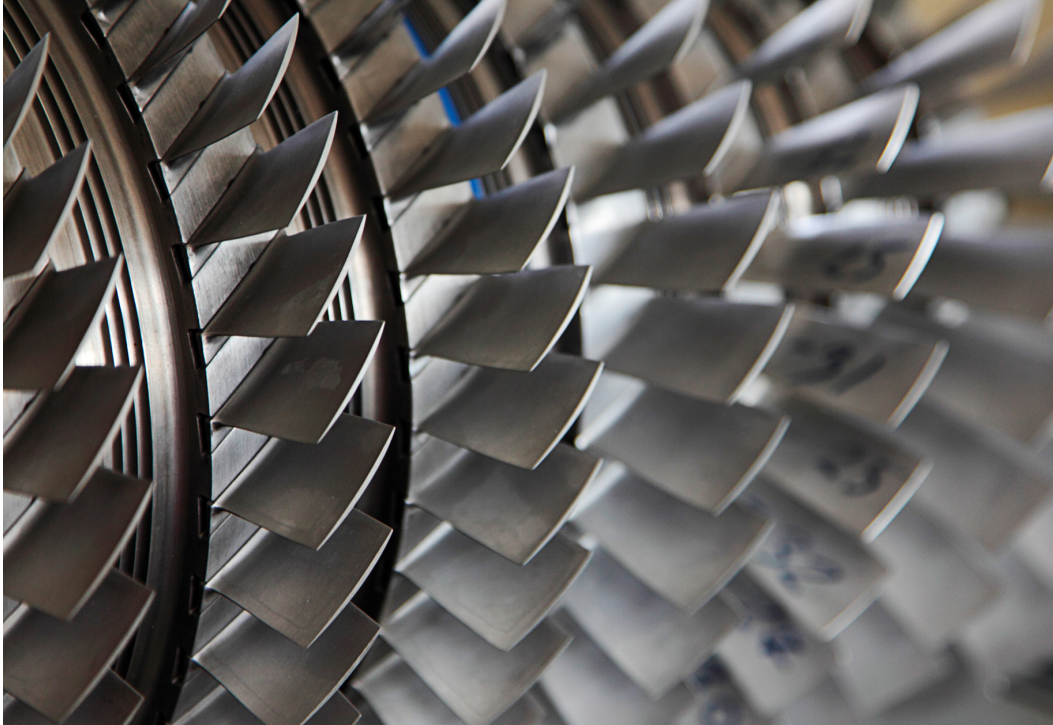
Legacy systems were typically built over the course of several decades, and Buechel emphasized that these investments can't be replaced in an instant. Instead, organizational leaders must acknowledge that they are changing a long-standing culture, and that it will take time.

"During ERP sales we have seen a developing trend of not just providing a budgetary estimate for software and implementation services, but also expected client project team involvement," explained Buechel. "Often we hear the phrase, 'these guys have their regular jobs to do also, so we want to understand what sort of investment the project team is going to have to make.'"

While this is a good start it is only just the tip of the iceberg. Ultimately, this dedicated approach involves several key areas, advice that Buechel believes starts with planning for the unexpected that comes along with rapid-fire troubleshooting on the shop floor — even pushback from tenured employees.

Furthermore, Buechel says manufacturers should prioritize the following:

- Propping up internal resources who will "own" their departments, processes, and business units, and hire or outsource qualified people to take their place (not just SMEs or employees doing double duty). This includes things like promoting from within so the solutions are borne out by familiar faces. It might also take the form of strong investments in educating the workforce as well as a dedicated approach to gathering worker feedback.
- Expecting to bring in additional resources from your machine manufacturers (for PLCs, MES, and other production equipment).
- Investing in additional hardware(s) that will automate data capture like cameras or machine sensors, even mobile collection devices.
- Partnering with a firm that not only understands technology, but that aligns with your culture and goals.



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This last point carries significant emphasis when you consider how much ERP implementations are prone to failure. While many businesses feel they can go it alone, that approach carries the heavy risk of failing to address all of the requirements, from technology to people, that materially impact the success or failure of the process.

The go-forward strategy

According to Buechel, manufacturing ERP implementations often suffer from the stereotype that shop floor workers “just need to produce what’s on the paper and hit their goals.” Corporate directives don’t always acknowledge that quality starts on the shop floor with an empowered workforce.

“We often hear anecdotes referring to data that ‘garbage in equals garbage out,’” said Buechel. “As such, it’s important to remember that the collection of ‘good data’ starts directly with the end users who are inputting that data. So even when we think about quality starting on the shop floor, this is both product quality and data quality.”

But true empowerment in pursuit of quality isn’t “set it and forget it.” It’s more than a manual or a training session. It’s about acknowledging that the small details matter, and ensuring that each stakeholder who plays a role in executing the technology can be seen and heard throughout its implementation. It’s only then that each critical piece of this puzzle will connect in order to provide the full vision of what modern ERP can provide.

About Sikich

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