



ORACLE FUSION CLOUD ERP FOR GROWING BUSINESSES

Manufacturing Operations in Oracle Fusion Cloud ERP: Planning, Costing, and Quality

The 25-point gap between average plants and world-class ones

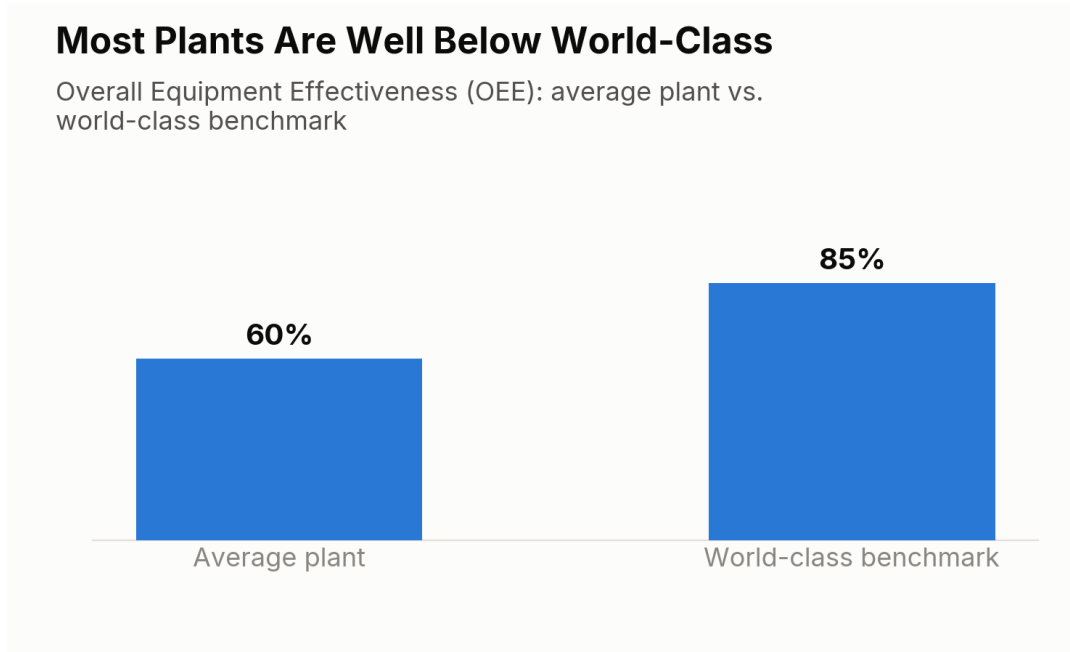
Ask a plant manager how efficiently their operation is actually running, and you'll often get a confident answer that has little to do with what a rigorous measurement would show. It's not that plant managers are dishonest — it's that "efficient" tends to get judged by how busy the floor looks and how many orders shipped, rather than by the harder, more precise metric that actually captures performance: Overall Equipment Effectiveness, or OEE, which measures availability, performance, and quality together into a single number.

That number tends to be humbling. The widely used benchmark for world-class manufacturing performance is an OEE of 85%. The average plant runs closer to 60% — a 25-point gap that represents an enormous amount of lost capacity sitting in plain sight, disguised as "normal" operations.

Where the 25 points actually go

OEE losses get grouped into what the industry calls the "six big losses," and they rarely show up as one dramatic event. They accumulate from small stops, minor speed reductions, and quality defects that individually look unremarkable but compound into a large gap over a full production run. In some documented cases, reduced running speed alone accounts for over 58% of total losses in a given

operation; in others, idling and minor stops account for more than 62%. Changeover time between product runs has been identified as the single largest cause of OEE decline in some analyses, responsible for roughly 37% of the gap on its own.



*The gap between average and world-class OEE represents a substantial, largely hidden reserve of manufacturing capacity.
Source: Godlan, 2026.*

The financial exposure tied to unplanned downtime specifically is enormous at scale — Siemens research puts the cost of unplanned downtime across the world's 500 largest companies at roughly 11% of annual revenue, a combined \$1.4 trillion. The per-hour cost varies enormously by industry: an hour of downtime in automotive manufacturing runs an estimated \$2.3 million, while the same hour in fast-moving consumer goods production is closer to \$36,000. Even at the lower end of that range, an SMB manufacturer losing a handful of unplanned hours a month is looking at a real, recurring cost that rarely gets tracked as precisely as it deserves.

25 pts

the gap between average plant OEE (about 60%) and the world-class benchmark (85%) — representing capacity that already exists on the floor but isn't being captured.

Source: Godlan, 2026

Why so much of this comes down to visibility, not equipment

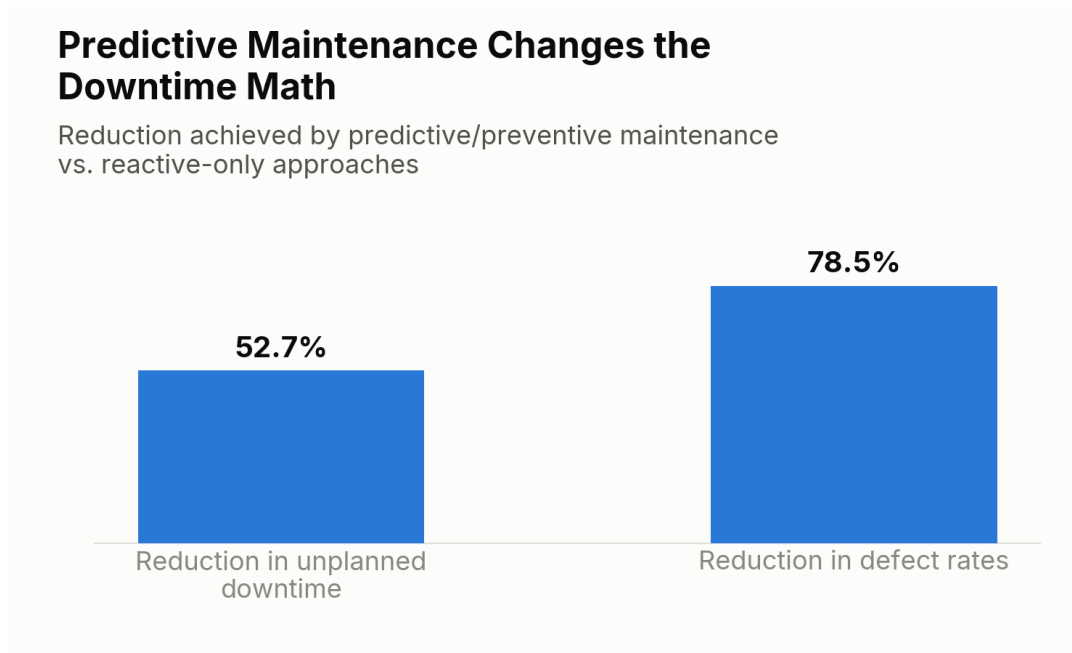
It would be easy to assume the fix for a 25-point OEE gap is new machinery, and sometimes it is. But a large share of the gap in a typical mid-sized manufacturer traces back to something less

capital-intensive: not knowing, in real time, why a line stopped, how long a changeover actually took versus how long it was supposed to take, or which specific defect category is driving quality losses on a given product line. Without that visibility, problems get treated as one-off incidents rather than patterns, and the same losses repeat month after month without ever being formally identified.

This is the specific gap Oracle Fusion Cloud ERP's manufacturing functionality is built to close, by connecting production execution, quality management, and costing into the same system that runs financials and supply chain. Work orders, material consumption, labor time, and machine downtime get captured as they happen rather than reconstructed later from paper travelers or a shift supervisor's notes. Quality holds and non-conformances feed directly into both production reporting and cost accounting, so a defect isn't just a shop-floor event — it's visible, in real terms, in the cost of the product it affected.

The maintenance strategy shift that shows up in the numbers

One of the more concrete, well-documented levers here is the shift from reactive to predictive or preventive maintenance. Plants that lean into predictive and preventive maintenance strategies see unplanned downtime drop by an estimated 52.7% compared with reactive-only approaches, alongside a 78.5% reduction in defect rates — a striking figure that reflects how much unplanned downtime and quality problems are actually connected, since equipment running outside normal parameters tends to produce both.



Predictive maintenance strategies deliver outsized reductions in both downtime and defects compared with reactive-only approaches. Source: Godlan, 2026.

An ERP system doesn't perform maintenance, obviously, but it's what makes a predictive approach practical at a company that isn't running a dedicated reliability engineering function. Equipment usage data, maintenance history, and production schedules living in the same system make it

possible to trigger maintenance based on actual condition and usage patterns rather than a fixed calendar interval that either wastes maintenance budget on equipment that didn't need it yet, or misses a failure that a calendar-based schedule wasn't tuned to catch.

What tends to trip up smaller manufacturers specifically

Manufacturing modules are among the more complex parts of any ERP to implement well, because they need to accurately reflect a company's actual production processes — bills of materials, routings, work centers, costing methods — and smaller manufacturers sometimes discover mid-implementation that their existing process documentation is far less precise than assumed. A bill of materials that's "close enough" for a paper-based system becomes a real liability in an ERP that uses it to drive costing and material planning automatically.

It's also worth noting that manufacturing costing methodologies (standard costing versus actual costing, for instance) carry real tradeoffs, and getting this decision wrong early tends to create reporting headaches that surface months after go-live, when the business has already made decisions based on numbers that didn't mean quite what everyone assumed. This is exactly the kind of configuration decision worth validating carefully, ideally with someone who's seen it go wrong before, rather than defaulting to whatever the implementation template suggests.

Continuing the series

Manufacturing operations produce an enormous amount of data — machine performance, quality metrics, cost variances — that's only valuable if someone can actually turn it into a decision. That's where the series goes next: what real-time analytics and reporting look like inside Oracle Fusion Cloud ERP, and why so many companies with plenty of data still struggle to get a straight answer out of it.

Sources

1. The Six Big Losses in OEE: 2026 Manufacturing Data, Costs, and Benchmarks, Godlan — <https://godlan.com/oeo-six-big-losses/>