PALLETIZING AUTOMATION DEPLOYMENT CASE STUDY

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Productive From Day One

How Productiv replaced unpredictable manual palletizing with consistent, measurable, and cash-flow positive throughput.

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OVERVIEW

Productiv is a national fulfillment operation specializing in kitting, contract packaging, and custom fulfillment programs. With more than 1,200 employees across multiple facilities, Productiv serves some of the largest packaged food brands in the country, in addition to many other consumer brands. They manage complex, high-variability workflows that combine speed with precision.
Like most 3PLs, their operations are built around flexibility, but for years, the one thing they couldn't make flexible enough was the end of the line.

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CHALLENGE

Inconsistent end-of-line throughput and a labor shortage with no clear fix

Productiv's palletizing operation depended entirely on manual labor. They staffed two workers per shift with no reliable way to measure output, no buffer against absenteeism, and physical demands that made long-term retention difficult. As the business grew and demand scaled, the end of the line became the most unpredictable point in the entire facility.

SOLUTION

A full-service AI palletizing robot, deployed in two days

Tutor's palletizing robot replaced manual palletizing across Productiv's operation with minimal capital investment and minimal infrastructure changes. It deployed into Productiv's existing footprint and workflow in two days, required no programming, and immediately established the throughput consistency the facility had never been able to achieve manually. Best of all, it allowed Productiv to reassign a worker to more complex and interesting material handling work, without increasing the maintenance or engineering burden on their staff. Tutor handles all maintenance and support. Productiv just runs the line.

*Tutor's hourly rate is usage-based. Productiv pays only for the hours during which the robot works, over the minimum. There are no maintenance costs, long-term commitments, or capital investment required.

OUTCOMES

65%
palletizing cost reduction with Tutor

120 cases/hr
consistent throughput across four lines

2 days
to full-speed production

1 worker
redeployed to higher value work

93.3%
uptime, relaibility under pressure

DAY ONE
cash flow positive from the moment the robot started work

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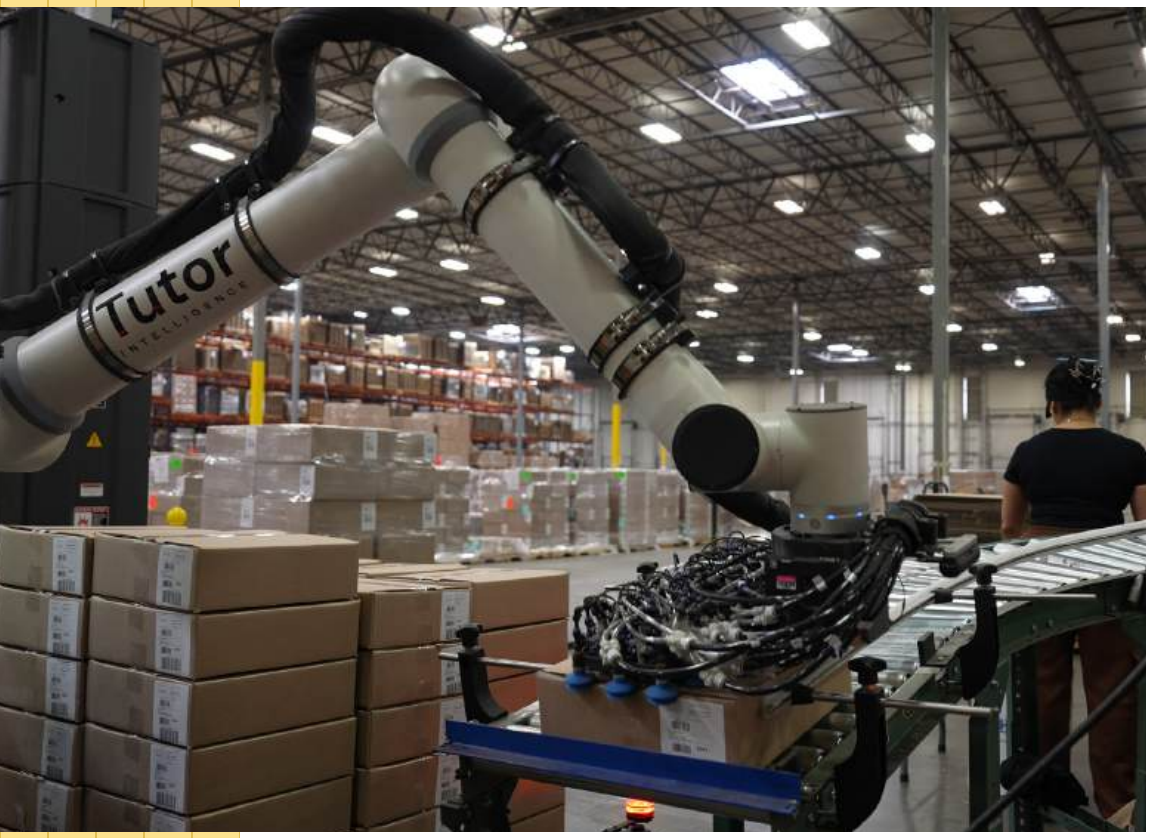
STORY

When End of the Line Is the Weakest Link



> A lot of the robots we came across had a very high upfront CapEx, were deterministic models, and had a monthly maintenance fee. We were looking at a much more difficult ROI. What was interesting about Tutor was the hourly basis. We said, okay, we know what we're currently paying in wages for someone doing palletizing, and at the same speed or quality, it's really an easy one for us.
>
> Paul Baker, CFO, Productiv

Productiv has built its business on the ability to handle complexity. Kitting, contract packaging, custom fulfillment: these are high-variability workflows that most operations can't manage at scale. Productiv can. But for all the operational sophistication the business had developed, the end of the line remained stubbornly manual, inconsistent, and difficult to staff.

Palletizing is one of the most demanding, repetitive jobs in any fulfillment operation. It's the kind of work that's hard to hire for, harder to retain, and nearly impossible to make consistent. At Productiv, two workers per shift handled palletizing across four production lines feeding two bays. On a good day, with full staffing and steady volume, the workers on these lines were able to hit their throughput targets. On a bad day, when injury or sickness forced an absence, seasonal volume spiked, or someone simply struggled to keep up with the pace of the line, the end of the line became a bottleneck. Delays on the loading dock rippled upstream through the entire facility.

The deeper problem was that Productiv couldn't fully measure how inconsistent things were. Volume varied by day. Workers moved at different speeds. There was no reliable baseline to measure against, which made it impossible to plan around. As Paul Baker, CFO of Productiv, put it plainly: the math of automation was attractive in theory, but past options had always required a level of capital commitment and operational disruption that made the risk hard to justify.

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> The biggest risk was whether the quality and the speed would do what Tutor said it would do. If the palletizing robot didn't keep up with the conveyors, we'd be slowing down 20 people. But it didn't turn out to work that way. It dropped in and does its job.
> **It's been a complete add.**

Paul Baker, CFO, Productiv

A Decision That Made Itself

When Tutor's CEO Josh Gruenstein reached out to Paul to discuss a technology development partnership, the timing couldn't have been better. Productiv was already a future-focused business interested in participating in the development of new technology. As a company developing AI-powered robotic workers for warehouses and factories, Tutor was a natural partner.

Tutor's commercial model made the decision to partner easy. No capital investment. No long-term commitment. A flat hourly rate charged only for productive hours. Maintenance, repairs, and upgrades included. A technology partner that could deploy immediately, and help Productiv to continually automate more and more of its operations. It was instantly clear that the economics worked. The question then was: would the technology actually perform?

Productiv cared most about throughput. Their palletizing operation feeds directly from conveyor lines running at a fixed speed. If the robot couldn't keep pace, it would back up the entire line, affecting every worker upstream. If the robot broke down, staff would need to pick up the slack. With two workers previously handling the task and one being redeployed after deployment, there was no margin for a robot that required babysitting.

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Two Days To Results

Tutor's deployment team arrived on site and had the palletizer operational within two days. Only minor changes to infeed was required, but the rest of Productiv's operations went untouched. There were no process overhauls. No extended integration period during which production was at risk. The Productiv floor team was trained on day two and the system went live immediately.

Santosh Yerramsetty, Program Manager at Productiv, had been involved in evaluating automation solutions across Productiv's operations for some time. His benchmark for a successful deployment was specific: consistent throughput, zero disruption to existing workflows, and a frontline team that was comfortable running the system. Tutor's solution hit all three criteria almost immediately.

> Smooth integration. Capable team. Zero surprises. This is what a well-executed deployment looks like. The results speak for themselves.
>
> Santosh Yerramsetty,
> Program Manager, Productiv

What Consistent Throughput Actually Means

Before Tutor, Productiv's palletizing output was a function of whoever was assigned to the task that day. Volume varied. Speed varied. There was no reliable baseline to plan against. Workers were assigned targets, but there was no way to know whether those targets allowed Productiv to hit maximum efficiency.

After deployment, that changed entirely. Four lines feeding two bays, running at approximately 120 cases per hour in total, with consistent output that doesn't vary by shift, by day, or by staffing level. It's a predictable solution that allows the entire operation to hit a profitable pace.

For an operation serving major packaged food brands, who have tight shipping windows, specific pallet configurations, and zero tolerance for end-of-line delays, consistency is not a minor operational improvement. It is an iron clad requirement. Productiv can now commit to throughput levels with confidence that wouldn't have been possible when the end of the line depended on two workers and a good day.

The worker who had been handling palletizing didn't leave the facility. They moved to material handling, where they can make better use of their judgment and experience, with significantly lower physical demand. Santosh described the shift in terms every operations leader will recognize:

> Lift and stack is gone. The people who were doing those tasks have moved to oversight, QC, or exception handling. Better work, less wear and tear.
> That's where we are looking right now.
>
> Santosh Yerramsetty,
> Program Manager, Productiv

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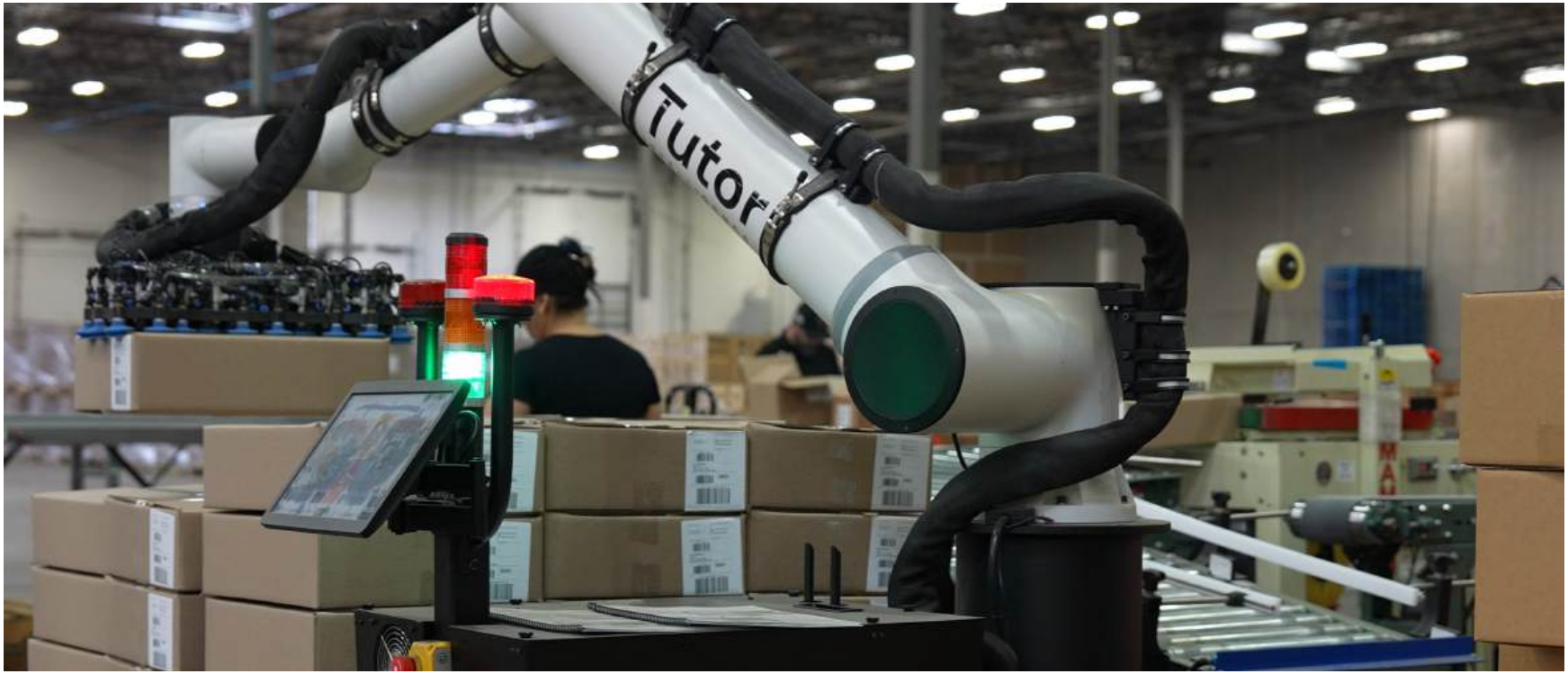
Cash Flow Positive on Day One

Baker's assessment of the financial case was direct: Tutor Pal was cash flow positive from the moment it started running. At $14/hr for productive hours only, with no capital outlay or maintenance costs, the comparison to fully-loaded manual labor costs is straightforward. It's simple math, leading directly to more effective cost control and stronger margins.

What Baker also noted, and what operations leaders evaluating automation for the first time often underestimate, is the organizational learning that comes with deployment. Understanding how automation integrates with existing workflows, where the dependencies are, and how the floor team adapts is key to planning for the future. Productiv isn't thinking about their first palletizing cell as a solution in isolation.



> Not only is there a certain automation that is already cash flow positive on day one, like what we're doing with Tutor. And the amount that you learn by putting automation in. You learn about where you want to go, what you want to invest in, what works, what the time horizons are. It's really valuable information on how you drive the strategic direction of your company.
>
> Paul Baker, CFO, Productiv

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CONCLUSION

What This Means for Operations Leaders

They're thinking about it as the first step in a much longer journey.

Productiv's story is not about a company that needed to automate or face serious consequences. It's about a well-run operation that identified a persistent, measurable weakness, and found a solution that eliminated it without disruption, without capital risk, and without asking its workforce to absorb the cost of change.

For 3PL operators, the lesson is about competitive positioning. The ability to commit to consistent throughput, easily absorb volume spikes, and service demanding customers, including major packaged food brands with precise fulfillment requirements, is a meaningful differentiator in a market where most competitors are managing the same labor challenges with the same manual approaches.

For food and beverage manufacturers and co-packers evaluating palletizing automation, the Productiv deployment offers a useful proof point. The operational challenges are not identical, but the core problem is the same: manual palletizing is variable, physically demanding, and difficult to staff consistently. The solution is the same.

> The line doesn't blink. It frees the headcount for high-value work, which was the whole point.

Santosh Yerramsetty, Program Manager, Productiv

Santosh's framing captures what's changed most simply. Before Tutor, a bad staffing day had a ripple effect on everything downstream.

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ABOUT TUTOR

Robot workers for the real world

Tutor Intelligence is a robotics company building AI-powered automation for warehouses and factories. Its robotic platforms are designed to deliver the adaptability and intuition of a human workforce alongside the speed and precision of modern automation, enabling facilities of any size to adopt end-to-end automation without overhauling existing infrastructure. Founded by Josh Gruenstein and Alon Kosowsky-Sachs, Tutor Intelligence is headquartered in Watertown, MA.

Tutor's Cassie is a proprietary physical AI platform that enables robots to handle variable tasks without fixed programming or extensive customization. Solutions based on Cassie deploy quickly, and require no infrastructure changes and no capital investment. Cassie operates on a usage-based model, in which customers pay a flat rate only for production. Tutor handles all maintenance, repairs, and upgrades for the life of the deployment. The maintenance burden never falls on the customer.

For more information, visit tutorintelligence.com