# From a Full Day to Minutes: How Alimentos Prosalud Accelerated Production Planning

Every morning at Alimentos Prosalud, the main seafood processor in the western hemisphere, production planners make a critical decision that determines the next four days of work: *How much tuna should leave cold storage and enter the plant today?*

That single release decision commits the factory to a chain of dependent processes: cleaning, cutting, canning, sterilization, and labeling. Once tuna leaves the frigorífico, there is no rewind button. Too much release creates congestion and **excess work-in-process**. Too little release **starves bottlenecks** and leaves people waiting. The cost of getting it wrong shows up later, often as overtime or inventory that never should have existed in the first place.

For years, planners made this decision the only way they realistically could: by stitching together thousands of lines of Excel. Inventory lived in one file. Restrictions lived in another. SKU rules, species compatibility, and operational constraints lived mostly in people's heads. Producing a feasible plan routinely consumed most of a working day.

When we visited Alimentos Prosalud, we spent days in a Costa Rica conference room with the planning team, desperately trying to navigate the web of Excel files that had to be cross-referenced endlessly to come up with a single day's planning decisions. One erroneous keystroke could be a **single point of failure** for the whole planning system.

The problem was not a lack of expertise. It was the friction created by fragmented information and irreversible decisions.



*Aerial view of Alimentos Prosalud's facilities in Costa Rica*

# Turning Judgment into Something You Can Work With

ProDex provided our Advanced Planning and Scheduling module to formalize how Alimentos Prosalud's planners made decisions without replacing their judgment or forcing a "black-box" tool into the process.

The platform centralizes cold-storage inventory, release quantities, and operational rules into a single planning surface. Instead of reconciling 18 spreadsheets, planners have a clear decision-making workflow to make three core decisions: what enters the plant, in what quantity, and on which day. The system enforces SKU and raw material constraints automatically and flags violations before they propagate downstream.

That change alone altered the nature of planning.

*"The system alerts us before making an incorrect assignment—SKU, species, or restriction."*

What was previously caught late, or corrected through experience, is now prevented upstream.



*A look inside the tuna cutting process at Alimentos Prosalud*

## From a Day of Work to Minutes

The most visible impact showed up immediately in planning time.

Before Asignación, building a daily release plan took **roughly one full day for the planning team**. After rollout, planners generate and adjust release plans in **minutes**, with feasibility checked in real time. The time savings did not come from cutting corners. It came from removing manual reconciliation and codifying tribal knowledge, which accelerated decision-making.

As one team member put it:

> *"The distribution of tuna for cleaning is faster and more precise."*

That speed mattered because it changed how planners spent their attention. Instead of assembling plans, they now focused on evaluating intricate tradeoffs.

Rapid replanning was once a nice-to-have. With the speed and visibility unlocked by ProDex, iterative planning and improved precision became the norm.

## Designing a Natural Interface

One reason adoption happened quickly and easily was the interface design. It matched how planners already worked. The system did not introduce new abstractions or dashboards. It gave planners a visual surface where assignments could be adjusted directly.

> *"The interface makes it easy to visualize and adjust assignments."*

Drag-and-drop scheduling replaced copy-paste logic. Small changes no longer required rebuilding the entire plan. Planning became lighter and more fluid while preserving complexity.

Just as important was how the system evolved. Planner feedback translated into product changes almost immediately.

> *"The team understood what we needed very quickly and adapted the tool to how we actually work."*
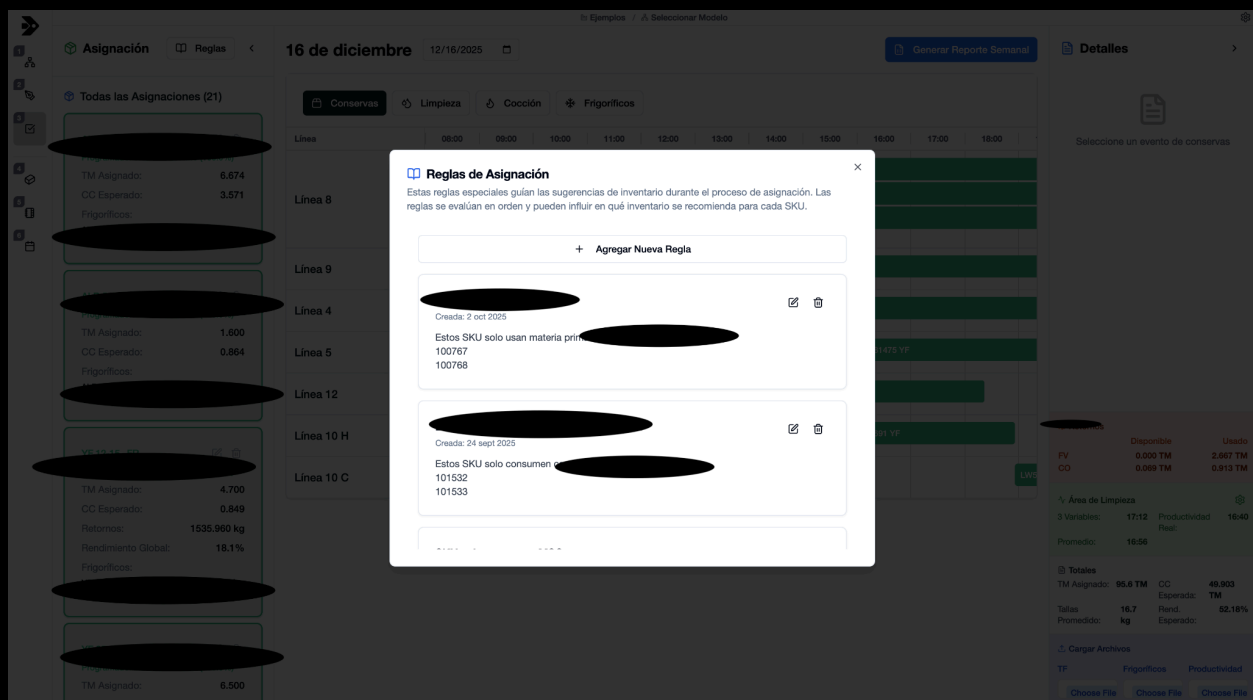
> *"Updates and fixes came in one to two days."*

Asignación is not a static problem. Product mix and constraints shift daily. A planning system that *cannot* adapt quickly becomes useless software, a poster on the wall. ProDex is the opposite.

## Saving Complex Business Logic as Rules and Traces

The single most important effect of our software is that we've stopped costly errors by codifying very complex business logic in production planning decisions. A simple misclick in an Excel sheet is no longer a point of failure for the entire production planning process.

The ProDex agent operates like an Operations Research engineer and joins our production planners in their daily workflow. The agent learns from each day of planning, and, for complex-edge cases, allows the user to add rules via simple conversations which it remembers and applies in the future.



## Early Signals of Success

Aligning daily release quantities with downstream feasibility produced other promising results. Early data shows **meaningful reductions in excess inventory tied directly to release decisions**. In addition, **overall clean meat throughput improved for the 2 months we measured.**

Based on 12 weeks of operational data from September through December of 2025, early results are promising.

- **Remaining inventory after releases dropped from 2,943 metric tons to 1,968 metric tons (-33%)**

*Note: specific to raw materials used in that week's production.*

This indicates we were 1) releasing more inventory and 2) releasing inventory of the same kind in batches. Batch-releasing allowed for efficiencies such as using the ovens on similar fish with similar process times, expanding capacity.

The inventory gains matter because inventory mistakes compound quietly. They do not show up as a single failure, but as friction spreads across days of production and as excess inventory causes working capital issues over weeks and months.

- **Daily production increased from 84.9 metric tons to 93.8 metric tons per day (+11%)**
- **Labor productivity increased from 0.34 to 0.37 metric tons per worker per day (+10%)**

With less than 1% of new labor, the amount of clean meat increased by 10%. With a faster planning process and fewer errors, planners were able to squeeze more production out of its tuna cleaning process. A more deliberately planned process is a more efficient one.

## Why this Decision Mattered

ProDex's APS did not eliminate human judgment. It removed the friction around it.

Alimentos Prosalud now starts each production cycle with a release plan that is consistent, constraint-aware, and grounded in downstream feasibility. That foundation makes the next step possible: end-to-end factory simulation across sterilization, canning, manual processes, and labeling without having to recalculate its raw material inputs every morning.

The experience at Alimentos Prosalud reinforced something we now believe strongly:

**The highest-leverage software in a factory lives where decisions are fast-paced and irreversible.**

For Alimentos Prosalud, that decision was how much tuna to release each day.

And reducing that decision from a day of spreadsheet work down to a few minutes of structured judgment changed everything.

In the first-half of 2026, ProDex and Alimentos Prosalud will build on this foundation, expanding the model downstream into larger systems within the factory and incorporating end-to-end simulation. We look forward to continuing our strong partnership with Alimentos Prosalud as ProDex grows into the all-in-one factory tool for operational decision-making.