Very practical things to do with your "Digital Helpers" (AI for the SMB)

Most plants we walk into are not short on effort. They are short on eyes.

Nobody knows the true count on the shelf — the system says forty, the shelf says twelve, and the order that was promised for Thursday is the one that finds out. Nobody saw the job slipping until it was already late. The answer to the operator's question is in a binder in an office, or in the head of the one person who is out sick today. And at month-end, the owner learns what the month actually was — three weeks after he could have done anything about it.

This is not a technology problem, and it does not need a technology-sized answer. It needs the basics: a short list of simple things that good plants have always done, done every day, without fail, by something that never gets busy, never gets sick, and never forgets. That is the first use of SI in a factory and a warehouse — not the exotic uses, not the predictions and the robots. The basics. And the gains from the basics are not exotic either. They are the oldest gains in manufacturing: ship dates kept, freight not expedited, margin not given away, problems met while they are still small.

None of what follows is technology for its own sake. Every item is a simple thing to be done, and a plain gain for having it done. The expertise — and expertise is the product here — is knowing which simple things matter, in which order, and what their numbers are telling you when they move.

1. Keep the counts true.

The simple things: every warehouse move is read as it happens. Every receipt at the dock is tallied against the order that called for it. Every pick and every pack is counted as the work is done — not reconstructed at the end of the shift from memory and handwriting.

The gain is the end of the surprise stockout. When the shelf and the system agree, the order promised for Thursday ships on Thursday. The expedite — the premium freight, the overtime, the apology — was never really a shipping problem. It was a counting problem, discovered at the worst possible moment. True counts discover it at the moment it happens, when it costs nothing. In the factory the same habit gives the count by line and by shift, simply there in the morning because it was kept all day — no tally sheets, no archaeology.

2. Verify before it costs you.

The simple things: before a truck is loaded, the load is checked line by line against the order — item, quantity, lot — while the freight is still on your dock and mistakes are still free. And before an incoming order is accepted, it is checked twice: its prices against your pricing of record, and its configuration against the product it claims to be — every option chosen, every combination one that can actually be

built.

The gains stack up quietly. The wrong shipment never leaves, so there is no return, no credit memo, no apology tour, and no customer quietly deciding to call your competitor next time. The mispriced order is caught while it is still a conversation — a phone call, a correction — instead of after it has eaten the margin on a job the plant worked hard to win. And the order nobody can build as written, the one missing the choice that engineering would have discovered in week three, is caught at the desk on day one. Verification is unglamorous. It is also where a remarkable share of a plant's profit leaks out, one unexamined order at a time.

3. Watch the floor, hour by hour.

The simple things: production counts read against the hour's plan, as the hours close. Defects tracked at the moment they are found, typed and counted, with a live Pareto kept in front of everyone — the defect types sorted largest first, so the vital few causing most of the loss are never in doubt. Machine efficiency read hourly, with downtime and its reasons beside it. Labor productivity beside the counts, output per labor hour against the standard for the work — because counts without labor are half a fact.

The same facts are served at three altitudes. The lead sees the cell: this hour, against plan, with its defects and its efficiency. The supervisor sees the area, rolled up, with the exceptions that need a person. The owner sees the plant: the day so far, the top of the Pareto, and whatever crossed the lines he set. No separate reporting chain. No end-of-shift surprises dressed up as a daily report.

The gain is that problems arrive as notes, not as events. A line drifting below plan is a note at ten o'clock, not a missed ship date at four. A defect type climbing the Pareto is a note while it is still a nuisance, not a customer escape. A machine losing efficiency two hours running is a note to maintenance while it is still a bearing, not a breakdown on the weekend. Nothing in this watch fixes anything by itself, and it should not — a person sees it early and decides. Early is the whole profit in it.

4. Know your backlog, its margin, and your pipeline's real value — every morning.

The simple things: the open sales backlog, restated in full once a day — every open order, its value, its promised date — with the average margin in the backlog computed and carried day over day, so drift has nowhere to hide. Beside it, the sales pipeline at its real weighted value: every opportunity counted not at its face but at what it is worth after the odds of its stage — and the odds taken from your own history, what your company actually won from each stage, not from a textbook or a sales meeting's optimism. Face value and weighted value are shown side by side, because the gap between them is itself information.

The gain is the end of two familiar discoveries. The first is month-end: the plant worked hard all month, hit its shipments, and lost money — because the backlog it was working was quietly filling with thin and negative-margin orders that nobody priced against the light. With the margin in the backlog

read daily, that drift shows the day it starts, while the orders can still be repriced, renegotiated, or declined. The second discovery is the quarter planned on a pipeline that was hope wearing a suit. A weighted pipeline, calibrated on your own wins, is a number a owner can plan cash, capacity, and hiring against. It will usually be smaller than the face number. It has the virtue of being true.

5. Answer from your own books.

The simple thing: when someone asks a question — a torque spec, a setup procedure, how this customer wants this part packed — the answer comes from your manuals, your job records, your procedures. Your knowledge, in your words, from your plant. And when the answer is not in your books, the system says exactly that: not in your knowledge base. It does not guess. It does not improvise something plausible from the internet and dress it as your procedure.

The gain is that the knowledge stops walking out the door. Every plant has the veteran whose head holds thirty years of how things really get done here, and every plant has watched some of that walk out at a retirement party. A knowledge base built from the company's own records — started the first week, growing with every closed job and resolved question — keeps that knowledge at work. The new hire gets the plant's real answer on their first day, and gets it the same way at 2 a.m. on third shift as at noon. That is how a company gets better every day instead of merely older.

The rule underneath all of it.

These basics run safely because of one discipline, and it is not negotiable: the system drafts and proposes — pick lists, work orders, tomorrow's schedule, the exception list — and a human releases them. It works inside lines a human set once: the reorder points, the thresholds, the tolerances, the floors. Inside the lines, it works freely, all day, without asking. Outside the lines, it stops and comes back to a person. Nobody approves every small act — that would defeat the purpose. A human approves the boundaries, and approves the acts that commit the company. That is the arrangement that lets a plant trust the basics enough to let them run.

Digital Helpers propose. Humans decide. Humans always approve.

How it arrives.

Small. Nobody rips out the ERP the plant already runs — the legacy system stays the record, because replacing it is a project and this is not a project. What is added is a simple app on the screens already on the floor and in the warehouse, and a database connected to that system, watching the data move. The knowledge base build starts in the first week, from the company's own records. The learning routines watch from the start, and the trends they find — the supplier drifting late, the defect creeping, the margin sliding — come to the owner as proposals with the evidence attached, for him to act on.

But be clear about what is actually being bought, because it is not the app. It is the expertise: decades of turnarounds distilled into which simple things to watch, in which order, with which lines drawn where — and what to do when a number moves. The technology is only how that expertise keeps its eyes open every day, in every plant, without fail. Companies do not lack software. They lack the discipline

of the basics, performed daily. That discipline is the product.

The fancy uses come later, and most companies never need many of them. The basics pay from the first week, because the basics are where the day is actually lost — in the count that was wrong, the warning that came late, the price nobody checked, and the answer that left with a retirement. Start with the basics. Get them done every day. Then we can talk about the fancy part.

See the basics working, free: mep.gotbots.si — the Industry 4.0 Demo and Learning Tool.

Watch Episode 4 on YouTube: https://www.youtube.com/watch?v=3bd8F9ibiiU

— Chiles and Company · gotbots.si

