HOW DO WE "HOLD 'EM BACK?"
Titan Delivers Plant Maintenance Solution on Mendix!

The Project Plan did not address it. Neither did the Project Charter or Problem Statement. The Leadership Team sponsored by the COO did not consider the prospect of this outcome. The IT Director and Plant Maintenance Manager leading the project had never seen anything like it for an enterprise software project.

"How do we hold 'em back?" asked the Plant Manager? We cannot roll out the Mendix Plant Maintenance solution to all locations at one time. But that is what the maintenance teams wanted. They had heard from their peers at the prototype plant how this solution met all of their requirements and helped them get their work orders done faster.

$$MTTR = \frac{Total\ Maintenance\ Time}{Number\ of\ Repairs}$$

Every Plant Maintenance team wanted the Mendix App implemented at their plant ASAP.

For the past few years, the company was paying over $100K per year for a SaaS Plant Maintenance solution. The user adoption was low; they stopped the rollout after 10 plants. The plan was to focus on higher adoption and stabilization before continuing the rollout. It never happened!

The feedback on the SaaS solution was consistent: "It doesn't work like the way we work.", "It takes longer to do my job.", "I still have to update spreadsheets." The list of complaints and enhancements was lengthy.

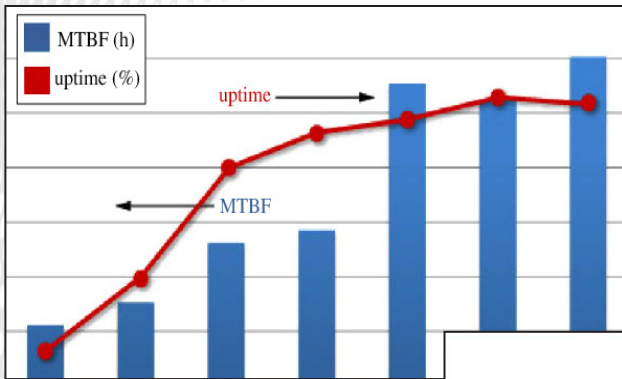Unplanned downtime is the biggest killer of productivity and profit for an integrated manufacturer. With over 100 plants spread across North America, a delay in one plant's shipments causes the entire downstream network to ripple.

The downtime cost for an integrated manufacturer easily surpasses $1000/hour/plant. When multiple sites are affected, the adverse impact on profit is exponential. The maintenance teams' goal is to keep the lines humming like a finely tuned orchestra – and that does not happen in a spreadsheet.

Enterprise software providers like SAP and Oracle offer modules that handle this functionality. These applications can be configured and enhanced to your specific needs. However, you are charged for the entire application's functionality and capabilities.

Advanced UI presented the technician with their work schedule, and allowed the technician to view the planned and actual time incurred by work order, update each work order with time, materials used, and pictures of the completed repair.

Planners could visualize, schedule, and re-schedule work orders depending upon the priorities. The scope of the project included:
- Machines,
- Sub-components,
- Logistics vehicles – forklifts, AGVs, etc.
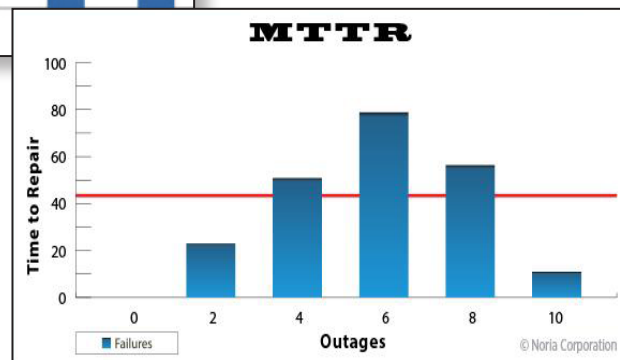
Dashboards provided key metrics of MTTR – Mean Time To Repair, Percent of Downtime, Mean Time to Failure, % Complete, and Time-to-complete were some of the real-time metrics captured and visible to stakeholders.

SaaS applications or cloud-based apps provide the benefits of rapid standup and deployment. The limitation is that the functionality may not be a fit for your business. Low-code platforms like Mendix enhanced by Titan's development and business process experience enables the right fit for the right value.

Reducing unplanned downtime is the primary objective of the Mendix Plant Maintenance solution. However, reaping additional benefits such as reduced inventory in spare parts, reduced time to repair critical equipment, and enhanced preventative and predictive capabilities further drive down the time and costs.

Payback on software in less than one year is the norm, not the exception with Mendix and Titan. The plant maintenance solution went from design to deployment with Tesla-like speed. After two weeks, a working prototype was available for the plant maintenance teams to test and try.

Titan runs agile projects for their software development works. Mendix is ideal for leveraging rapid development with business users and IT working through UI/UX, backend integration, Dashboards, KPIs, and workflow that streamlines processes on the shop floor or the back office.

Mendix is our platform for Application Development (AppDev). The stats support their leadership role with a 96% customer retention rate and 75% annualized subscription growth rate. Blue-chip companies like Toyota, Johnson & Johnson, and Chevron use Mendix across the business. We have focused our expertise on helping small and mid-tier companies deploy Mendix across the enterprise.
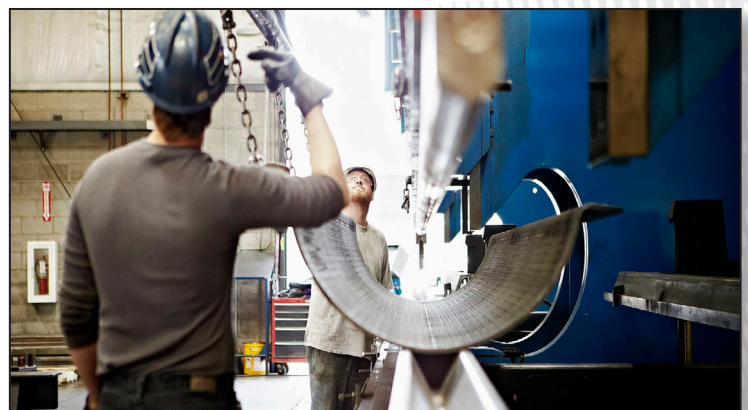
From our experience, the rule of thumb is *break-even at 3 apps*. Many companies can now deploy more than 10-20 apps per year like our plant maintenance solution.

In eight weeks, the team deployed functionality that allowed for planning, scheduling, tracking, monitoring, reporting, and analyzing the plant maintenance process. No more looking at spreadsheets to figure out what is the priority of work.

Would you like to experience a "hold 'em back" project? Titan Consulting has implemented Mendix in functional areas across the enterprise: Order to Cash, Supply Chain, Production, HR, and Finance. Talk to Mike McCane, mike@titanconsulting.net, our Sr. Solutions Architect and Practice Leader for our Mendix Applications. You can also contact your Titan Consulting Director. Read, learn, and share additional information on our Mendix capabilities and use cases at www.titanconsulting.net/mendix/.