



A Manufacturing Conglomerate Digitizes Daily Plant Inspections with UBTI's Power App



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WHO WE ARE

“UB Technology Innovations is a Microsoft Power Platform delivery partner offering no/lowcode solutions, virtual bots, RPA, and data insights. We help clients on their digitalization journey by automating tasks, optimizing workflows, and providing a competitive edge through quick app deployment.”



THE CLIENT

The client is part of a multinational corporation with a strong presence across numerous operational segments, namely construction materials, real estate, digital platforms, and more. With multiple plants and specialized production units under its umbrella, the company has built deep expertise in managing large-scale industrial operations supported by layered leadership and structured governance systems. Today, it is recognized as an established enterprise known for its operational depth, diversified structure, and sustained industrial presence.



CHALLENGES

The client operates several manufacturing plants, each with specialized departments, including spinning, packaging, milling, etc. Teams conduct regular in-person plant visits and document their observations to review safety practices and equipment condition for overall compliance. Such notes were manually captured in Excel sheets. Each department had predefined equipment and machine checklists embedded into the sheet. Once filled, the file was emailed to department heads, section heads, and respective vice presidents for review and approval. This routine was repeated every single day, leading to:

- Delayed Approvals Due to Email-Based Workflow: Every completed Excel sheet had to be emailed manually to multiple stakeholders. Approvals depended on recipients opening the file, reviewing it, and responding. If someone missed the email or overlooked the attachment, the entire action cycle slowed down.

WHAT WE DO

- Compliance and Security
- Enhance Productivity
- Improve Time to Market
- Reduce Operational Costs
- Maximize Profits
- Customer Experience



- **Limited Visibility into Open and Overdue Actions:** Once an observation was recorded and sent for approval, tracking its status required physical follow-ups. There was no centralized view showing how many actions were still open, which department had pending items, or which due dates had passed. Ultimately, leadership lacked a summary of plant-level observations.
- **Inconsistent Data and Scattered Documentation:** Photos, SOP references, permits, and supporting documents were often stored separately from the Excel sheet and could be missed when sharing. This made historical retrieval difficult during audits. Additionally, since entries were manual, formatting differences and data gaps were common across departments.



SOLUTION

UBTI worked closely with plant operations teams and safety contributors to understand how client teams conducted daily on-the-ground observation rounds. Instead of reviewing only the Excel templates, our specialists studied the complete lifecycle (from plant visit and observation entry to email circulation and post-approval closure). Based on this assessment, we designed and deployed a [Canvas application](#) using Microsoft Power Apps for manufacturing plant inspections, integrated with [Power Automate](#), SharePoint, and [Power BI](#) to deliver:

- **Role-based home screen:** The app opens with a simple dashboard showing the number of open tasks and recent activity. Based on the user's role, they can either log in to the Admin View (to manage records) or to the Dashboard View (to review summaries).
- **Centralized admin view for action management:** From the home screen, administrators can access a structured table displaying all observation entries. Each row clearly shows plant name, department, assigned person, due date, observation type, and status. Overdue tasks are auto-highlighted, allowing teams to immediately identify pending actions without manual tracking.
- **Dashboard analytics view:** While the admin table provides detailed records, the dashboard presents the same data in a visual format. Pie charts show the statuses of all observation entries, line charts track observations over time, and bar charts compare departments.
- **Dedicated "My Tasks" workspace for accountability:** To ensure clarity at an individual level, the app includes a "My Tasks" section. On one side, users can see tasks assigned to them. On the other side, they can track observations they have raised, connecting responsibility with visibility.
- **Guided digital observation form with conditional logic:** All observations are captured through a structured digital form asking basic details such as date, plant, department, and work area. Once the observation type (Safe or Unsafe) is selected, the form automatically adjusts. If marked as Unsafe, due dates become mandatory.
- **Dynamic Permit, SOP, and deviation capture:** If the work involves a permit or SOP, additional fields relevantly appear to capture permit/SOP number, issuer, acceptor, and contractor details. Similarly, if work is carried out under deviation, the form expands to collect approval and supervision details.
- **Automated email alerts via Power Automate:** Once an observation is submitted, relevant stakeholders are notified via system-triggered emails for next steps.



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- Centralized document storage in SharePoint: Users can upload photos, screenshots, and support documents directly within the form. All files are securely stored in [SharePoint](#), ensuring every observation record remains complete and audit ready.
- Administrative Power BI dashboard: For leadership-level visibility, an integrated Power BI dashboard is accessible to authorized users. It provides consolidated metrics, including total observations, open versus completed items, monthly trends, plant comparisons, and category analysis. Separate dashboard views focus on Safety Insights and Compliance Data Exploration.
- Compatible across Tablets and Desktops: The app is optimized for both tablet use during plant rounds and desktop access for reviews/approvals, for a consistent experience across devices.



OUTCOME

- UBTI's Daily Observation Application strengthened the way the entire operations team governs daily inspections across plants. By moving from informal tracking to a structured digital system, plant leadership gained stronger operational control and alignment:
- Reduced filing errors and rework: Built-in validations, mandatory fields, and attachment captures, reduced incomplete entries and last-minute corrections. Records hence become more consistent and ready for review without repeated back-and-forth communication.
- Clear visibility into open and overdue actions: With real-time dashboards and highlighted due dates, teams could instantly identify pending observations and delayed closures. Leadership no longer depended on manual follow-ups or email reminders to understand the status of plant-level actions.
- Improved accountability across departments: The "My Tasks" workspace and role-based access ensured that every assigned action had a visible owner. Since responsibilities were clearly displayed within the system, follow-ups shifted from an informal to a structured process.
- Standardized practices across units: The same reporting structure is now followed across all plants and departments, reducing variations in how observations are documented and reviewed.

Conclusion:

The client was managing daily observation rounds across manufacturing plants using Excel sheets, which were circulated manually via email for approvals. If this process had continued, the growing number of inspections and follow-ups would have slowed corrective actions and created larger team coordination gaps. UBTI's Microsoft-certified experts implemented a Canvas Application using Power Apps for manufacturing plant inspections, combining observation entry, approval routing, and reporting into a connected digital environment. As the solution became a part of their daily routine, accountability improved, and leadership gained consolidated visibility across units. UB Technology Innovations, Inc. continues to design thoughtful [Low-Code/No-Code Apps](#) for multi-plant environments that will support operational governance and long-term scalability.



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ABOUT US

UB Technology Innovations, Inc. (UBTI) is a leading global technology solution provider with over 3 decades of experience across all industries, specializing in Capital Markets, Logistics, and Healthcare. We are the preferred Microsoft Solutions Partner backed by a world-class team of Microsoft Certified experts with rich experience in Azure Cloud Platform and Data Analytics.



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