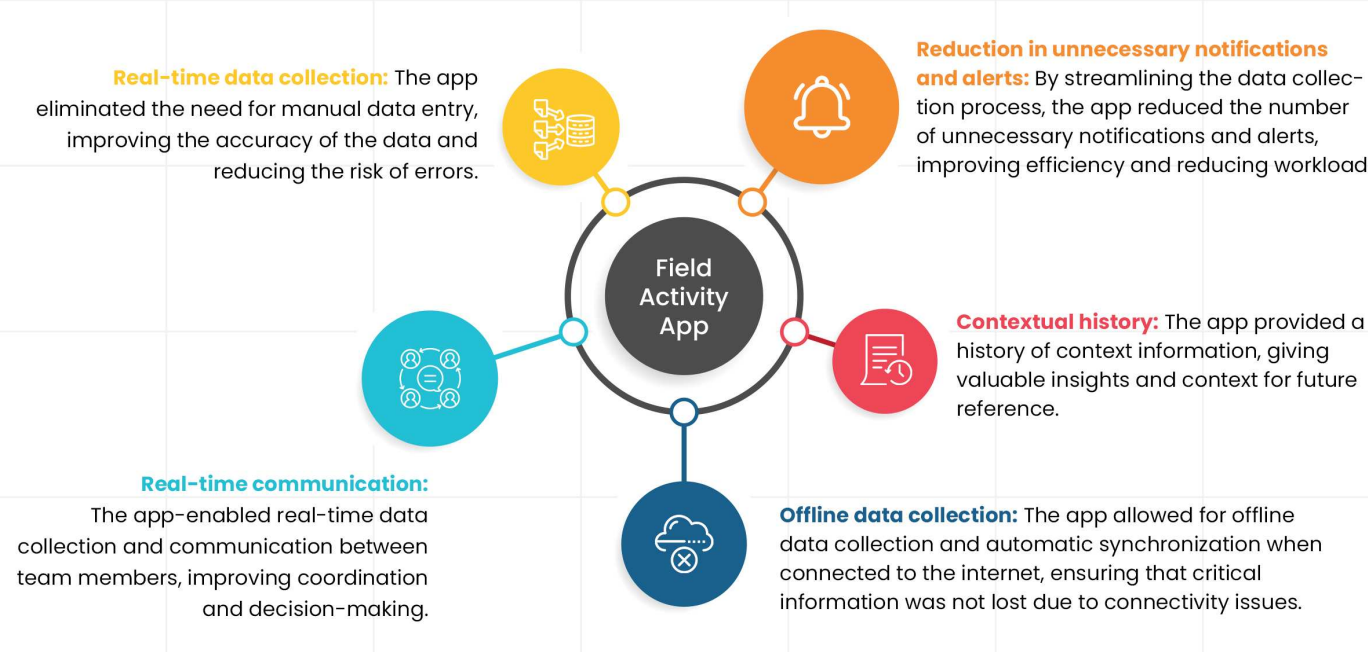# A Case Study: Streamlining Water Quality Monitoring with the Field Activity App

The metropolis water supply department is vital for providing clean water to over 9 million residents and managing the city's wastewater treatment plants. Operating under a 1.3 billion dollar budget, the department maintains a complex network of reservoirs, controlled lakes, water mains, tunnels, and aqueducts to deliver over 1.1 billion US gallons of water daily.

Within the department, the Watershed Water Quality Operations and Distribution Water Quality Operations units are responsible for monitoring the quality of water being treated at various facilities. This involves tracking critical parameters such as pH, conductance, turbidity, temperature, orthophosphate, fluoride, and chlorine dioxide using SCADA systems and handheld equipment. However, the team faced several challenges with their manual, paper-based system for recording and tracking this data.
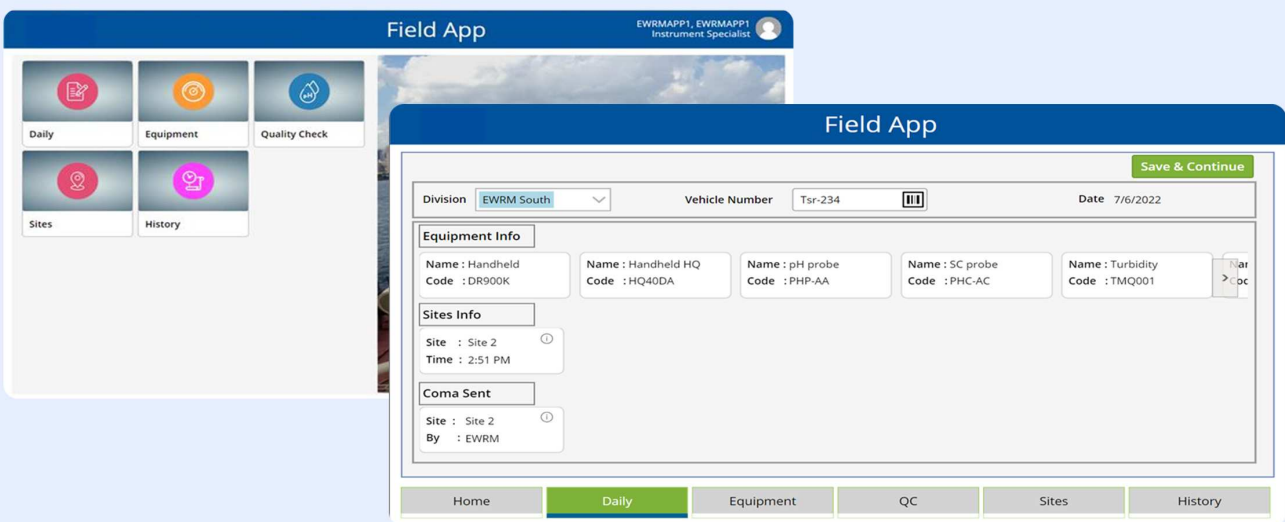
The manual system was time-consuming and inefficient, making it difficult to review and analyze information. There were also concerns about the accuracy and integrity of the data due to the reliance on manual interventions. The process was labor-intensive and had a high review burden, which hindered the department's efficiency and effectiveness.

To address these challenges, Acuvate proposed the Field Activity App for remote monitering, a custom Power App built on the Power App platform with insights and analytics provided by Power BI. The app addressed several key challenges faced by the department, including:

Real-time data collection: The app eliminated the need for manual data entry, improving the accuracy of the data and reducing the risk of errors.

Reduction in unnecessary notifications and alerts: By streamlining the data collection process, the app reduced the number of unnecessary notifications and alerts, improving efficiency and reducing workload.

Field Activity App

Contextual history: The app provided a history of context information, giving valuable insights and context for future reference.

Real-time communication: The app-enabled real-time data collection and communication between team members, improving coordination and decision-making.

Offline data collection: The app allowed for offline data collection and automatic synchronization when connected to the internet, ensuring that critical information was not lost due to connectivity issues.

01 Eliminated manual data entry and manual to digital transcription.

02 Saving up to **80%** of the time previously spent on these tasks and improving efficiency and productivity.

03 Provided supervisors with real-time visibility into all operations and historical data through Power BI dashboards.

04 Ensuring data quality and consistency with built-in validation and time stamped entries.

The app improved communication and coordination between team members through real-time updates and notifications, streamlining maintenance activities and task management. Overall, the Field Activity App was a successful solution that helped the department address its challenges and improve the efficiency and effectiveness of its water quality operations.

WHY ACUVATE

Acuvate is a global software service provider with over 16 years of experience in digital solutions, accelerating enterprise-wide digital transformation with our AI accelerators. We provide solutions and services that modernize, automate and support enterprise applications, IT systems, and infrastructure. We have a strong presence in the North America, Europe, and MEA, where we serve various ultra-large, large customers, and SMBs. We specialize in Migration & Modernization of Content, Data, Infrastructure, and Digital Workplace Solutions such as AI-powered Chatbots, Intranets, Advanced analytics, & Trade Promotion Optimization.

Acuvate is a Microsoft Gold certified partner and has transformed 200+ reputed enterprises globally, including many Fortune 500. With our multi-skilled experts and packaged AI accelerators, we deliver unparalleled efficiencies and accelerate time-to-value for our customers.