



INTEGRATED OIL AND GAS POWERED BY RADIX IOT

While distributed oil and gas rigs have harnessed sensing technology for years, recent advances in both advanced sensing devices and analytics brought to us by IoT and cloud analytics services have allowed for significantly more data-driven predictive maintenance.

According to a recent McKinsey study, monitoring technology can reduce costs by up to 27% by assuring the most consistent up-time, while also increasing energy efficiency by as much as 10%.

This data enablement aids in downstream efficiency by improving supply chain logistics and allowing better adaptability to consumer behavior. Additionally, this technology has shown it can lower operating costs by up to 10% and increase revenue by 3%.

All of this is possible only if data from sensing technologies is collected, organized and harnessed in real-time from upstream production. The Radix IoT platform enables this capability through its distributed edge platform, easily integrating into existing production sensing systems, allowing full portfolio analytics and data refinement while also allowing for scalable deployment on and offshore.

The Radix IoT Infrastructure is easily deployed using a single on-site appliance that communicates with all of your existing telemetry sources. Operations remain autonomous at the location. Relevant data for long-term analytics (such as predictive maintenance) are securely moved to the cloud when connectivity is available, allowing for a central repository of data for real-time and historical based analytics.



INTEGRATED OPERATION: Remotely monitor and manage hundreds or thousands of remote fields and/or off-shore infrastructure collectively from a central location assuring reservoir recovery as well as monitoring system health and safety.



IMPROVED LOGISTICS: Increase material planning caused by market volatility and supply limitations with integrated data operations with third-party suppliers.

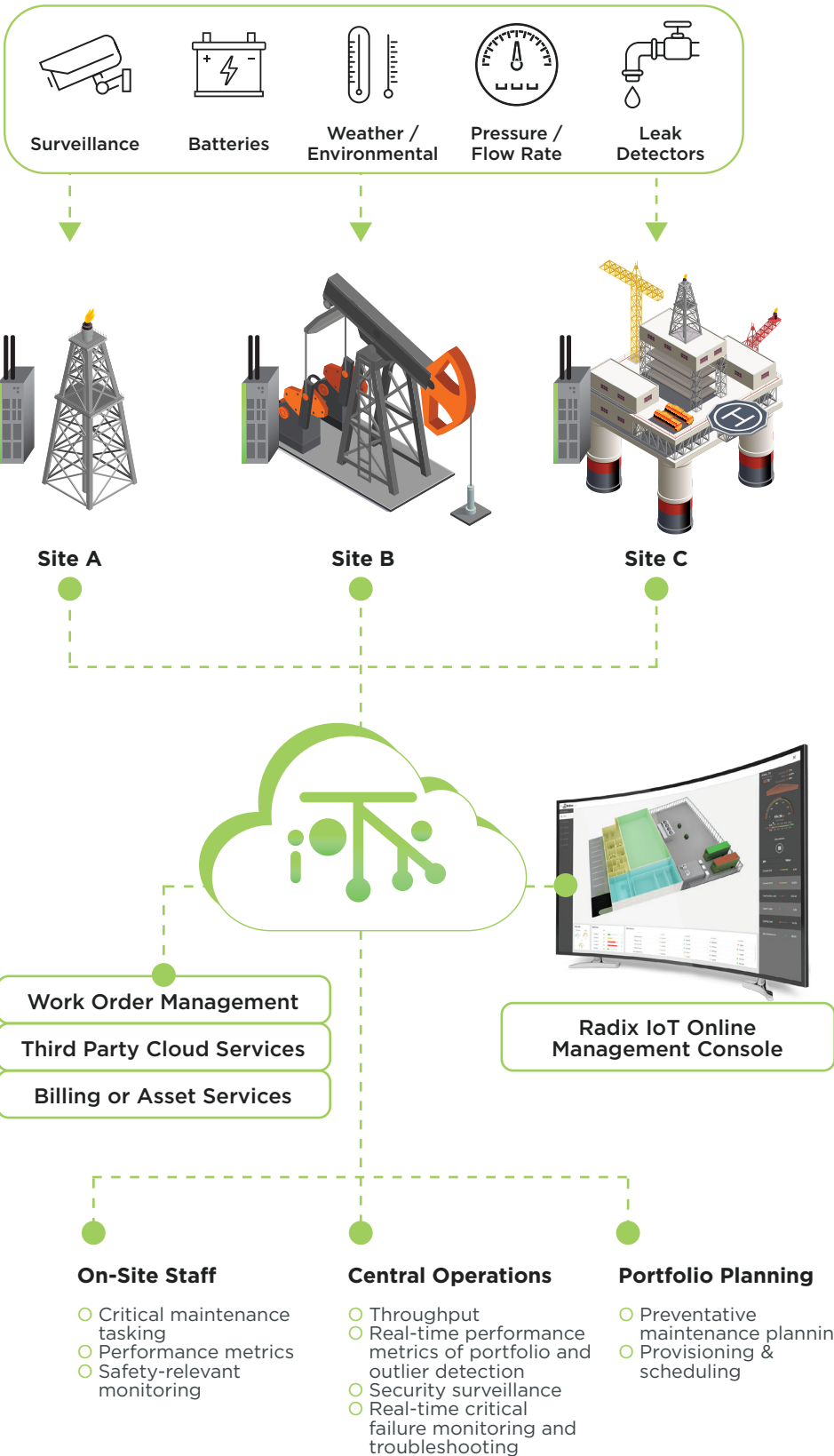


INCREASED ASSET MANAGEMENT: Lessen the burden and expense for on-site personnel and costly downtime through trackable and schedulable preventative maintenance instead of responding to critical failures in remote locations.



SIMPLIFY OPERATIONAL OVERSIGHT: Multiple software systems for monitoring and oversight make critical real-time decisions more complicated. Radix IoT provides a single source of truth for all data and allows for a customizable management solution that will allow for fact-driven operations.

TYPICAL ARCHITECTURE



CONNECT

One network appliance per site gathers data from Modbus, BACnet, SNMP, IoT, serial devices, or other connected sub-systems. Simple to install and deploy in both existing infrastructure or new designs. Wire and go. Radix IoT also has network appliances capable of extreme remote communications when off-grid using 4G/5G or satellite uplink.

RATIONALIZE

Provision all remotely equipped locations in the cloud using the Radix IoT secure management portal. Organize all location data into a private unified data-collection. Data can be placed in data lakes setup in AWS, Azure, GCP, Digital Ocean, or company-owned infrastructure.

MANAGE

The Radix IoT Cloud platform, powered by Mango, provides a web-accessed dashboard allowing for a centralized and per site views of the portfolio and all performance criteria with sophisticated configurable alarming and event management. Additionally, sophisticated reports can be created to foster preventive maintenance activities or run daily field tasking.

Beyond these critical operations functions, the Radix IoT Cloud allows for a secure REST API connection to any third-party application, analytics provider, or cloud platform allowing for tight automated workflow integration, as well as custom application development.