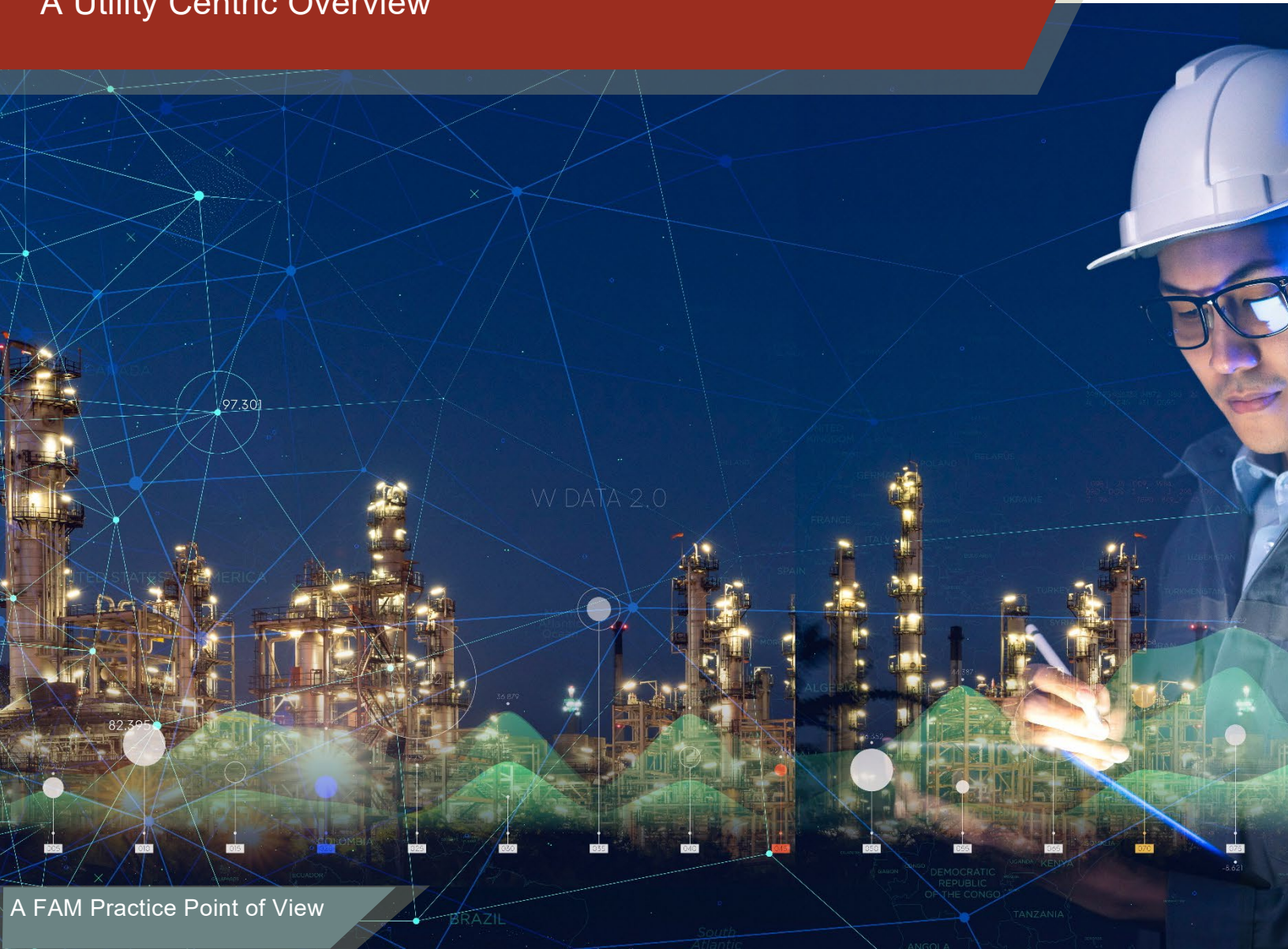




A Progressive Approach to FSM Maturity

A Utility Centric Overview



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1. Introduction

In an era where technological advancements and customer expectations are evolving at an unprecedented rate, the utility industry stands at a pivotal juncture. The imperative to modernize field service operations and enhance the maturity of Field Service Management (FSM) systems has never been more critical. Red Clay Consulting aims to guide utility organizations through the transformative journey of FSM, advocating for a strategic shift from traditional, large-scale overhauls to a more nuanced, continuous improvement model. We underscore the significance of field services in ensuring the reliable delivery of essential utilities and explore how incremental enhancements, digital adoption, and practical innovation can collectively elevate operational efficiency, customer satisfaction, and resilience against the backdrop of dynamic market demands. Through a collaborative exploration of strategies, insights, and real-world applications, we invite utility leaders to reimagine the path to FSM maturity—a journey marked by adaptability, foresight, and a steadfast commitment to excellence in service delivery.

2. Understanding Field Services in the Utility Industry

Field services play a critical and multifaceted role ensuring reliable delivery of essential services such as electricity, water, and natural gas to both residential and commercial customers. The importance of field services in utilities cannot be overstated, as it directly impacts the efficiency, reliability, and customer satisfaction levels associated with utility services. Below are some of the key aspects of the role field services plays in utilities:

- Infrastructure Installation and Maintenance
- Emergency Response and Restoration
- Customer Services and Engagement
- Compliance and Safety Inspections
- Smart infrastructure Implementation
- Environmental Protection

The orchestration of field operations through a mobile workforce encompasses all activities involved in managing the end-to-end cycle of field service operations, including scheduling, dispatching, service execution, and analysis. FSM is pivotal in ensuring that utility infrastructure is efficiently installed, maintained, and repaired, thereby guaranteeing uninterrupted service delivery to customers. Some of the key considerations to field services are:

- Work Order Management
- Scheduling and Dispatch
- Inventory Management
- Mobile Workforce Management
- Customer Engagement
- Analytics and Reporting
- Compliance and Safety Management
- Real-Time view of Operations
- Time Capture

The role of field services in utilities is both dynamic and indispensable, bridging the gap between utility providers and their customers. Field service teams ensure that utility infrastructure is maintained, customer needs are met, and the utility services delivered are safe, reliable, and efficient. Their work directly influences the operational success of utility companies and the satisfaction of the communities they serve.

3. The Case for Investing in FSM Maturity in Your Organization

The case for investing in FSM maturity centers around the profound impact that advanced field service operations can have on a utility's operational efficiency, customer satisfaction, and overall resilience. A mature FSM system, characterized by optimized processes, advanced technological integration, and a highly skilled workforce, can transform the way utilities respond to both routine service requests and unexpected emergencies.

However, achieving a high level of FSM maturity requires more than just technological investment; it demands a holistic approach that encompasses process improvement, people management, and a culture of continuous innovation. It also requires a strategic perspective that recognizes the value of incremental gains over time, rather than expecting overnight transformation.

Utilities that recognize and act on the opportunity to invest in FSM maturity stand to reap significant rewards. Not only can they expect to see improvements in operational metrics, but they will also position themselves as leaders in a sector that is increasingly defined by its ability to innovate and adapt to change. As we delve deeper into the dimensions of FSM maturity, key indicators, and the benefits of climbing the maturity ladder, the strategic importance of this investment becomes even clearer. This section aims to provide utility executives with the insights needed to make informed decisions about advancing their FSM capabilities, ultimately leading to a more resilient, customer-centric, and efficient operation.

4. Traditional Approach to Field Service Maturity

The traditional approach to achieving maturity in FSM within the utility sector has often been characterized by the "Big Bang" model—a comprehensive and immediate implementation of new systems, processes, and technologies across the organization. This method is driven by the intent to rapidly overhaul and update field operations, aiming to quickly realize improvements in efficiency, customer satisfaction, and operational effectiveness. At its core, the Big Bang approach involves a significant upfront investment, extensive planning, and a concerted effort across all levels of the organization to adopt new ways of working simultaneously.

However, while the promise of instantaneous transformation is appealing, this approach comes with its own set of challenges. High costs, substantial risks of disruption to ongoing operations, and the overwhelming nature of large-scale change can lead to resistance among staff, operational inefficiencies, and even project failure. The assumption that an organization can seamlessly transition to a new state of operational maturity overnight is optimistic, often underestimating the complexity of integrating new technologies and processes into existing workflows. Furthermore, the Big Bang approach demands a level of rigidity in planning and execution that can stifle adaptability and responsiveness to unforeseen challenges or emerging opportunities.

5. Continuous Improvement as an Alternative to Big Bang Transformations

The utility sector, traditionally seen as a bastion of stability and gradual evolution, is increasingly recognizing the limitations of the Big Bang approach to system transformation as it pertains to FSM implementations. We at Red Clay propose Continuous Improvement as an alternative approach to transformations. This approach, particularly relevant to FSM systems, emphasizes flexibility, phased implementation, and ongoing optimization and resonates with our utility clientele's outlook. Here we explore four crucial concepts underpinning this strategy:

Phasing into the Organization: Modern FSM solutions offer the flexibility needed to adopt a phased implementation strategy. Our Continuous Improvement approach allows utilities to integrate these new systems by department, process, or as replacements for specific legacy systems, then gradually expand to include additional processes and departments. Starting small in this manner minimizes risk and enables organizations to tackle their most pressing issues first. This strategy fosters a "pull" effect, where successful initial implementations create demand for expansion into other areas, as opposed to the "push" effect seen in large

transformations. By addressing immediate needs and demonstrating quick wins, utilities can build buy-in from various stakeholders, ensuring a smoother and more effective transformation process.

Buildup: One of the challenges in traditional FSM implementations is the difficulty of capturing detailed requirements from the outset. The diverse nature of field services operations often means that initial requirements are broad and lack specificity. Our Continuous Improvement approach addresses this by getting the FSM tool into the hands of end-users early in the process and then refining requirements based on actual use. This method allows for a more iterative implementation, where detailed requirements are gathered and phased improvements are made over time. Such an approach not only enhances the system's relevance and effectiveness but also engages end-users directly, making their feedback a pivotal part of the continuous improvement process.

Release Management: With the advent of Software as a Service (SaaS) FSM solutions, Continuous Improvement can become an integral part of the product lifecycle through scheduled product releases. Effective release management involves the careful integration of these updates, including new features requested by the utility or those derived from best practice enhancements. Managing this process ensures that the FSM system remains stable, up-to-date, and aligned with the utility's evolving needs. It also underscores the commitment to leveraging technology advancements for ongoing operational improvement.

Cultivating Growth and Buy-In: A critical aspect of our Continuous Improvement approach is demonstrating growth within the product and organization, which marks a significant departure from the "set it and forget it" mentality historically prevalent in utility field operations. Today, with the challenges of resource acquisition, retention, and cost management, providing operational teams with the tools they need to succeed is paramount. This approach values and implements end-user feedback, fostering a sense of ownership and buy-in. By showing a commitment to continuous growth and improvement, utilities can ensure their teams are equipped, engaged, and empowered to deliver exceptional service.

Our Continuous Improvement method offers a viable and effective alternative to the traditional Big Bang approach for FSM in utilities. By embracing phasing, buildup, and effective release management and cultivating growth and buy-in, utilities can minimize risks, adapt to change more swiftly, and ensure that their FSM systems evolve in tandem with their operational needs and the expectations of their workforce and customers. This strategy not only facilitates smoother transitions and better system adoption but also positions utilities for long-term success in an increasingly dynamic sector.

6. Balancing Innovation with Practical Implementation

In the realm of FSM within the utility sector, the drive for innovation must be judiciously balanced with the imperatives of practical implementation. This equilibrium is crucial for ensuring that advancements in technology and process improvements translate into tangible benefits without overwhelming the organization or its stakeholders. The utility industry, characterized by its critical infrastructure and essential services, requires a thoughtful approach that aligns cutting-edge solutions with the realities of day-to-day operations. We explore some key strategies that we have effectively used to help utilities achieve this balance, fostering an environment where innovation enhances, rather than disrupts, service delivery:

The Snowball Effect: Adopting a phased approach to innovation allows utilities to incrementally introduce new technologies and processes. An incremental progression strategy enables organizations to test and learn from each stage of implementation, ensuring that innovations are both scalable and sustainable. Starting with small-scale pilots or proofs of concept allows for the identification of potential issues and the gathering of stakeholder feedback before broader rollouts. This method minimizes risk and ensures that new initiatives are grounded in practical realities.

Example: Facing the challenge of upfront resource alignment and resistance to change for a comprehensive asset inspection program, an electric utility client leveraged a strategic phased approach. This segmented implementation allowed them to focus initial efforts on a limited set of targeted assets and a single service group. This facilitated the refinement of interfaces and workflows, ensuring a smooth user experience. They then expanded the program to a subset of assets in another service area in their second phase. This enabled validation and adaptation of the program to cater to service-specific needs refining their rollout process along the way. Finally, in the third phase they integrated the remaining assets, leveraging feedback and learnings from previous phases; the organization was ready and eager for the change.

User-Centric Design: It is our strong belief that innovation should be driven by the needs and experiences of its users — both field personnel and customers. By adopting a user-centric design philosophy, utilities can ensure that new FSM solutions address real-world challenges and enhance usability. Engaging end-users in the design and testing phases ensures that innovations are not only technically sound but also practically useful and intuitively integrated into daily workflows.

Example: A mixed services utility client introduced a new mobile app for field technicians that aims to streamline work order management. To ensure its practicality, they involved the field technicians in the design phase, incorporated features such as offline access, intuitive navigation, and relatable UI design (placement, colors, fonts, and configurable buttons),

directly addressing field challenges. This user-centric approach ensured the app is eagerly adopted and effectively improved field operations. This demonstrates how innovations must stem from the users' actual needs and daily experiences.

Leverage Data for Decision Making: The wealth of data generated by modern FSM systems offers valuable insights that can guide innovation efforts. Utilizing data analytics to inform decision-making ensures that innovations are targeted and effective. By analyzing trends, performance metrics, and user feedback, utilities can identify areas where innovation can yield the greatest impact. This data-driven approach helps prioritize initiatives based on potential benefits and return on investment.

Example: A multi-utility client was seeking to optimize scheduling and resource allocation and were able to leverage machine learning to predict work order durations. By analyzing user interactions and system data, they gained granular insights into execution times and user behaviors across various work order types and at all stages of execution. This empowered them to tune their system to automatically adjust estimated completion times, ensuring accurate predictions and improving overall scheduling efficiency including appointment timeslot usage.

Ensure Organizational Alignment: In our experience, innovation aligned with the overall strategic goals of the utility yields the best outcomes. This alignment ensures that new technologies and processes contribute to broader organizational objectives, such as improving service reliability, enhancing customer satisfaction, or increasing operational efficiency. Regular communication between IT, operations, and executive leadership is essential to maintain this alignment and ensure that innovation efforts are focused and strategic.

Example: An organizational goal for a water utility client was to improve response times. They implemented a targeted auto-scheduling system for their emergency responders as a pilot. It prioritized and dispatched the closest qualified crew based on response time and availability, leading to a dramatic reduction in dispatch times. Compared to other utilities, their dispatch speed jumped from the bottom third to a competitive level, representing a 50% improvement. By demonstrating the system's potential and positive outcomes, they secured continued investment and support to expand it to certain same-day work orders and were able to improve response times for non-emergency tasks while enabling efficient allocation of crews.

Manage Change Effectively: We consistently highlight the importance of effective change management to our clients when they plan to introduce new technologies and processes. We believe managing change effectively is crucial for smoother adoption, reducing resistance and fostering innovation. Providing comprehensive training, clear communication, and ongoing support can help ease the transition for field personnel and other stakeholders. Celebrating successes and demonstrating the tangible benefits of innovation can also build momentum and foster a culture of continuous improvement.

Example: When a large multi-utility client decided to implement a new digital dispatch system, they anticipated resistance from long-term employees accustomed to traditional methods. They launched a comprehensive change management program that included hands-on workshops, a feedback portal, and visible leadership support. Success stories from early adopters were shared widely, showcasing improved dispatch efficiency and technician satisfaction, thus facilitating a smooth transition and widespread acceptance of the new system.

At Red Clay, it is our view that balancing innovation with practical implementation involves a thoughtful approach that integrates phased deployment, user engagement, leveraging data, aligning with organizational goals, and managing change with finesse. By embedding these strategies into their innovation efforts, utilities can ensure that advancements are both visionary and firmly rooted in the reality of operational needs and challenges. This balance is crucial for driving sustainable improvements and achieving long-term success in the dynamic utility industry.

7. Our Call to Action: Embrace Digital Transformation in Field Operations

Embracing digital transformation in field operations is not merely an option but a necessity for utilities aiming to thrive in the modern era. As utilities navigate the challenges and opportunities presented by aging infrastructure, regulatory pressures, and evolving customer expectations, the strategic adoption of digital technologies and innovative practices is imperative.

The journey towards digital transformation involves leveraging advanced technologies such as AI, IoT, and mobile solutions to enhance data accessibility, optimize resource allocation, and improve customer engagement. By adopting a phased approach to innovation, focusing on user-centric design, and prioritizing continuous improvement, utilities can ensure their operations are both efficient and resilient.

Actively pursuing digital transformation by integrating these strategies into their field operations will not only drive operational excellence but also foster a culture of innovation and sustainability. The time to act is now, to build a future-ready utility infrastructure that is capable of meeting the demands of tomorrow.

8. Red Clay Is Here to Support Your Journey.

Founded in Atlanta, Georgia in 2001, Red Clay Consulting focuses on utility solutions. We have 182 full-time employees, along with dedicated contractor resources experienced in technology solutions and Field Service Management processes. Most of these resources engage directly in utility client projects, and our management and company operations teams also have several decades of collective utility experience. We bring the experience that comes from more than 40 full cycle implementations and more than 300 discrete projects.

With consulting services spanning across Advisory, Transformations, and Operations as a Service, Red Clay Consulting can provide a full spectrum of services and is positioned to be a utility's partner in all stages of their FSM transformation journey.

Advisory Services

We support our clients in evaluating, planning, and managing their digital transformations by providing expert, client-focused advisory services, ensuring that FSM solutions are seamlessly integrated and aligned with the client's strategic business goals and operational frameworks.

Some of our core Advisory offerings include:

Owner's Representative: Act as the client's advocate and / or the program leader throughout the FSM implementation; ensuring client interests and objectives are prioritized and represented in all project phases from product selection to implementation / go-live and postproduction support.

Client Side – Solution Architecture Support: Provide expert guidance on the architectural setup and integrations of FSM tool to align with client-specific technical environments and business processes; ensuring the solution architecture is scalable, efficient, and meets client current and future needs.

Transformation Risk Assessment Support: Identify and analyze potential risks associated with the digital transformation process; develop strategies to mitigate risks, ensuring a smooth transition and implementation.

Business Readiness Support (OCM): Prepare the client's team for the upcoming changes, ensuring they are ready and equipped to adopt new processes and technologies; focus on training, process adjustments, organization design and cultural readiness.

Road mapping Services: Develop a detailed, step-by-step implementation and integration plan; setting clear timelines, milestones, and success metrics to track progress and outcomes utilizing Red Clay's PathwayOne proven methodology.

Transformation Services

We help drive significant, impactful change in client organizations through the strategic implementation of FSM solutions, enhancing overall efficiency, effectiveness, and market agility.

Some of our core Transformation offerings include:

End-to-End Digital Transformation: Holistic transformation of client business processes and systems into a digital-first approach; emphasizing innovation, efficiency, and competitive advantage in the digital era. 360 transformations along the People, Process, and Technology dimensions utilizing Red Clay's proven TransformOne methodology.

Solution Architecture: Design robust, scalable, and efficient architecture for FSM solutions; ensure the solution architecture aligns with current and future business goals, with a focus on simplicity in interface designs for ease of long-term maintenance.

Systems Integration: Integrating leading FSM systems with existing client systems to create a cohesive, unified IT ecosystem. Focus on data consistency, process harmonization, and streamlined operations.

Organizational Change Management: Manage the people side of change to achieve the desired business outcome. Address the human factors, communication, training, and support needed for successful adoption.

Project Management: Comprehensive management of the transformation project from planning to execution; ensure projects are delivered on time, within scope, and budget, with the desired business outcomes.

Operations as a Service (OaaS)

We provide dynamic, ongoing support and enhancement for FSM solutions, ensuring that they not only remain robust and effective but also continuously evolve with the client's growing needs and the changing technological landscape.

Some of our core OaaS offerings include:

System Maintenance: Regular monitoring and maintenance of FSM solutions to ensure optimal performance. Address defects, provide configuration support, and ensure system integrity.

Process Optimization: Help clients identify and integrate additional processes into the FSM solution in small chunks on an ongoing basis; enhancing efficiency and extracting more value from the existing solution stack with minimal shock to the organization.

Feature Updates & Education: Keep clients informed about the latest FSM product features and updates, educating them on the benefits and applications of new features within their specific business context. Help create and manage a feature uptake road map that is aligned to the client's strategic business objectives.

Custom Adaptation: Assist clients in adapting and customizing new features to fit their unique operational environments; ensuring that each update is seamlessly integrated and fully leveraged.

Strategic Enhancement Planning: Regularly review client usage and feedback to plan strategic enhancements; align FSM solution evolution with the client's long-term business goals.