KloudGin

White Paper

Rethinking Vendor Risk:
How Traditional Risk Assessment Could Be Increasing Your Operational Exposure

Author

Michael Levi, KloudGin

KloudGin

Table of Contents

In the complex landscape of utility operations, technology decisions carry significant weight. As utilities face mounting pressures from aging infrastructure, a changing workforce, evolving regulatory requirements, and rising customer expectations, the choice between generalist enterprise platforms and utility-specialized solutions has become increasingly consequential. Recent industry research challenges traditional assumptions about technology risk and suggests that the conventional wisdom of selecting large, well-known vendors might actually introduce more operational risk than it mitigates, with a comprehensive analysis of over 1,000 digital transformation projects by McKinsey finding that "industry-specific solutions consistently outperformed general enterprise platforms in both time-to-value and ROI, with specialized utility solutions showing 3.2x higher success rates."

Understanding the True Risks in Utility Technology Selection

The utility sector operates unlike any other industry, bearing the responsibility of managing critical infrastructure that directly impacts public safety and security. The performance and capabilities of the systems they depend on are therefore paramount to maintaining safe, compliant, and reliable operations. However, while many utilities have historically relied on legacy systems for their core functions, these are falling short in the face of a rapidly changing industry landscape.

According to industry research from Deloitte’s utility practice, the assumption that larger vendors equal lower risk is fundamentally flawed in the utility sector. Their analysis shows that utility-specialized solutions actually present lower operational risk and higher success rates, with implementation failure rates 65% lower than general enterprise platforms.

This counterintuitive finding stems from the unique characteristics of utility operations. First, utilities must maintain strict compliance with evolving safety regulations while managing high-risk infrastructure. Generalist solutions often lack the deep domain expertise needed to embed these requirements effectively into daily operations. Additionally, the increasingly dispersed nature of utility field operations demands a shift to mobile-first solutions in order to seamlessly and effectively manage diverse work types, work groups, and asset networks. Enterprise solutions that have been designed primarily for corporate office environments and centralized operations struggle to meet these specialized needs.

The Hidden Costs of Generalist Legacy Solutions

While enterprise solutions may promise comprehensive functionality and ease of integration, the reality is that their implementation in utility environments often leads to unexpected costs and operational challenges. Recent research reveals that utilities implementing general enterprise platforms experienced significant challenges that negatively impacted their expected results.

The challenges uncovered manifested in several critical areas. Implementation timelines frequently extended two to three times beyond initial estimates as teams struggled to adapt standardized workflows to utility-specific processes. Additionally, many utilities found themselves facing budget overruns, with customization costs routinely exceeding initial projections as they worked to bridge fundamental gaps between the platform’s capabilities and the specific requirements of their organization. Finally, and perhaps most concerning, adoption rates amongst field users often remained below 50%, creating

operational risks and inefficiencies that persisted long after implementation. These low adoption rates not only diminished the potential benefits of the new systems but also required utilities to maintain parallel processes - further increasing operational complexity and costs.

The Step Function Impact of Purpose-Built Solutions

When examining successful utility modernization initiatives, a clear pattern emerges: specialized solutions designed specifically for utility operations consistently deliver superior results as compared to general-purpose systems. This insight is supported by the real-world results of utility organizations that are using industry-specific solutions and have achieved significant improvements across multiple aspects of their operations.

Analysis of the gains these organizations have made after implementing a utility-specialized solution found that on average, they experienced a 30% reduction in unplanned outages through enhanced predictive maintenance capabilities. First-time fix rates improved to 85% as field crews benefitted from intelligent field enablement tools and improved access to real-time operational information and insights. These solutions also supported asset utilization, which increased by 20% through more effective work and resource planning capabilities tailored to utility operations. Additionally, customer satisfaction rates during service restoration improved significantly when crews had appropriate tools and real-time information access.

These improvements stem from several key advantages of specialized solutions:

Deep Utility Industry Expertise and Focus

The foundation of successful utility technology implementation begins with deep industry expertise. Utility-specialized solution providers build their entire organization around the unique challenges of utility operations, with industry experience embedded from their development teams to their implementation specialists. These subject matter experts typically bring decades of utility operations experience, having worked directly in transmission, distribution, and field operations roles. This practical experience

translates into solutions that inherently understand the complex interplay between safety, reliability, regulatory compliance, and operational efficiency that defines utility operations.

This deep industry focus manifests in several critical ways. First, specialized providers maintain dedicated utility advisory boards that guide product development based on real-world operational challenges and emerging industry needs. This strengthens the specialist provider's understanding of utility-specific challenges that enterprise software providers often overlook, including:

- The complex regulatory environment that requires seamless integration of compliance requirements into daily operations
- The critical nature of safety protocols and their impact on every aspect of field operations
- The unique challenges of managing aging infrastructure while maintaining service reliability
- The specific needs of field crews operating in challenging conditions with limited connectivity
- The intricate relationships between work management, asset management, and core utility systems

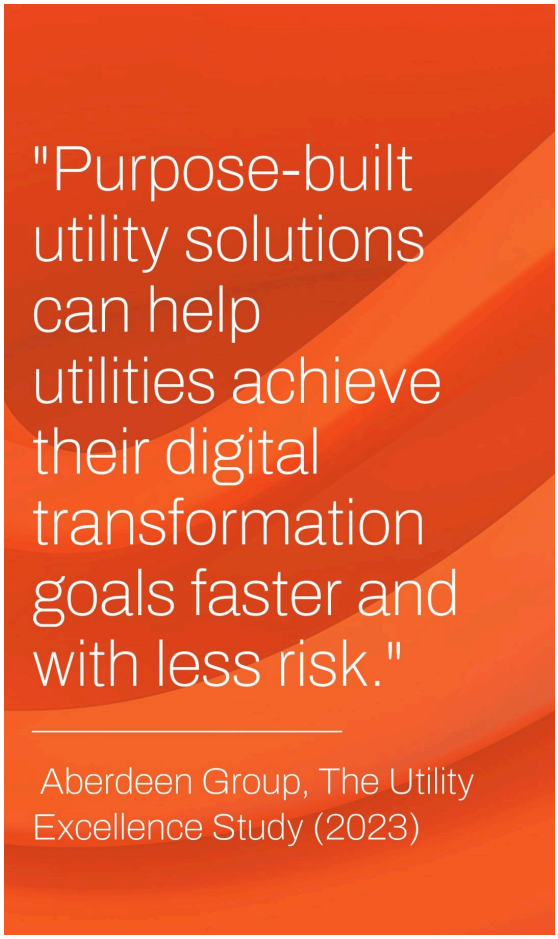
This expertise extends beyond technology to ensure utilities are operating from a perspective of industry excellence, built on a foundation of expert knowledge around utility best practices, the highest service delivery standards, and regulatory compliance.

Field-Proven Expertise and Best Practices Implementation

Purpose-built utility solutions are based on decades of operational experience from award-winning utilities across the sector and embed industry best practices and regulatory requirements into their core functionality. Instead of starting from scratch, utilities can access a comprehensive library of proven workflows and processes that have been refined through real-world implementation.

The value of this approach extends beyond basic functionality. Utilities can rapidly deploy field-tested solutions while maintaining the flexibility to adapt them to their specific operational needs. This valuable resource gives them access to:

Documented best practices from leading utilities across multiple operational domains, from emergency response to third-party



contractor onboarding to regulatory compliance.

Pre-built composite workflows that combine multiple best practices into end-to-end solutions, enabling rapid deployment of proven approaches.

Configuration and integration templates that accelerate implementation while maintaining flexibility for utility-specific customization.

Organizations that leverage these pre-built utility workflows achieve operational readiness faster and report significantly higher satisfaction rates among end users compared to those building custom solutions from scratch.

System Flexibility and Extensibility

Utility operations require technology solutions that can adapt to changing business needs while maximizing existing technology investments. Purpose-built solutions achieve this through composable architectures that enable continuous improvement and evolution while preserving the value of their established systems and processes:

- **Seamless System Integration:** Existing operational systems have their value extended through the seamless connection of work and asset management capabilities with core utility systems like GIS, CIS, ERP, SCADA, and OMS. Utilities using extensible platforms achieve higher returns on their existing technology investments through improved system utilization and reduced integration costs.
- **Flexible, Adaptable Architecture:** Utilities can future-proof their operations with flexible integration frameworks that adapt to changes in connected systems without requiring extensive reconfiguration. This architectural approach reduces the cost and complexity of system updates, enabling utilities to evolve their technology with minimal disruption.
- **Best Practice-Based Solutions Library:** Combining pre-built components to create custom workflows and capabilities accelerates innovation and time to value, enabling rapid response to emerging operational needs without starting from scratch. Organizations using composable architectures report faster deployment of new capabilities compared to traditional platforms.

Mobile-First Design for Field Operations Excellence

With 80% of today's utility workforce in the field, it is critical for utilities to equip crews with instant access to real-time information and collaboration tools that help them work better, smarter, and safer. Mobile-native platforms designed specifically for the needs of utility field crews have emerged to support the increasingly dispersed mobile workforce, delivering significant improvements in productivity and operational effectiveness.

Mobile-first solutions and user-optimized interfaces help organizations drive measurable operational benefits with several key capabilities. Analysis of utilities that implement these solutions indicates that these platforms deliver a 20% increase in completed work orders per shift while reducing administrative time by 40%. Their offline capabilities ensure continuous access to critical asset information and work instructions even in areas with limited connectivity, while seamless GIS integration provides precise location mapping and context for every work order and asset. Advanced data collection tools support the elimination of paper-based processes and manual data entry, enabling crews to capture real-time field data with streamlined forms, photos, and annotations.

These utility-specific mobile functionalities not only accelerate service delivery and worker efficiency but also improve data quality and enable real-time collaboration between field crews and back-office teams. These capabilities result in both higher user adoption rates by field crews and continuous improvements in operational efficiency across field operations.

Enterprise Integration and Extensibility

Solutions built specifically for utilities deliver deeper integration between workforce management, asset management, and operational systems through flexible, extensible architecture designed for the industry's needs. Key capabilities include:

- Advanced integration frameworks that preserve current core systems while extending their capabilities into work and asset management, enabling utilities to achieve higher utilization of their existing platforms.
- Pre-built connectors and APIs designed specifically for utility systems, significantly reducing integration complexity and accelerating deployment across the technology ecosystem.
- Flexible data models that adapt to changing business needs without requiring extensive reconfiguration, reducing system update timelines and enabling utilities to quickly implement new capabilities as their operations evolve.

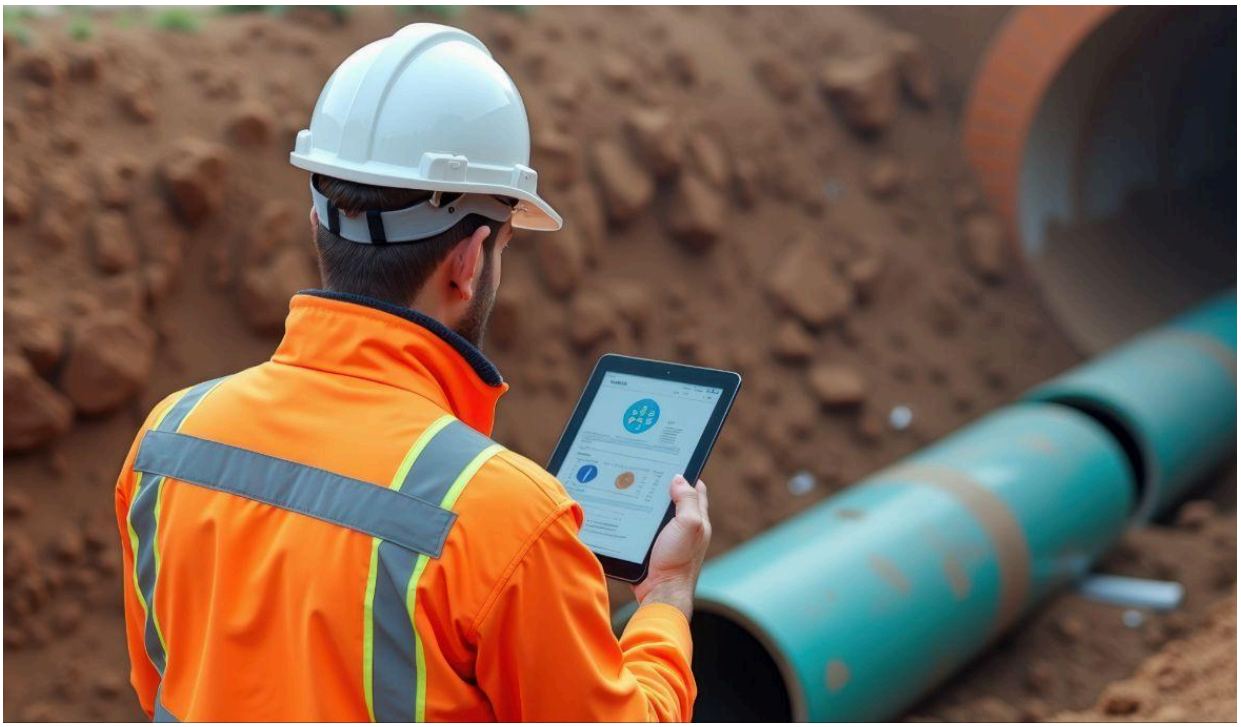
"When evaluating technology solutions, utilities should consider the total cost of ownership, including implementation, customization, and support costs."

Verdantix Green Quadrant: Mobile Workforce Management for Utilities (2024)

Making Technology Decisions That Support Operational Excellence

For utility leaders evaluating technology solutions, the most critical considerations they should be guided by are:

- **Understanding the Total Cost of Ownership**: While initial licensing costs might favor general enterprise solutions, the total cost of ownership often proves significantly higher when accounting for customizations, extended implementations, and lost productivity.
- **Evaluating Operational Risk:** Technology decisions should consider the full spectrum of operational risks, including safety incidents, compliance violations, and workforce adoption challenges.
- **Measuring Time to Value:** Implementation timelines and the speed at which new solutions can deliver measurable benefits need to be prioritized and carefully considered.



Looking Ahead: The Future of Utility Operations

As utilities navigate their digital transformation journeys, the importance of choosing the right technology partners grows increasingly critical. The evidence suggests that success lies not in selecting the largest vendor but in choosing solutions that truly understand and address the reality of their challenges on the ground. While an enterprise solution might appear to be a safe, reliable choice, the real-world experiences of leading utilities are proving that utility-specialized solutions deliver superior results with lower risks.

The transformation of utility operations requires more than just one-size-fits-all technology – it demands solutions built with deep industry understanding and expertise. For leaders navigating these decisions, the key lies in looking beyond traditional assumptions about vendor size and evaluating solutions based on their ability to address specific utility challenges, enable field operations, and deliver measurable operational improvements. It's clear that the future of utility operations belongs to those who choose partners that truly understand the industry's unique requirements and challenges.

KloudGin is the only cloud provider to combine work and asset management and AI-powered algorithms into a unified operating system solution which connects the back office, customers, mobile employees, and assets. Built for the workers who use it most, KloudGin eliminates traditional information and process silos to enable clients to unify systems, resources, and processes in real time so they can transform the customer experience and improve worker productivity. Visit the KloudGin website to learn more.

About the Author

Michael Levi

Vice President of Marketing, KloudGin

Michael Levi currently serves as Vice President of Marketing at KloudGin Inc, where he oversees product marketing strategy and execution. A transformative leader in energy systems and utility operations, he has pioneered innovative approaches across power generation, renewables, and enterprise technology for more than 25 years.

KloudGin

Sources

Aberdeen Group, The Utility Excellence Study, 2023
Deloitte, The Future of Utilities: A Global Perspective, 2024
Gartner, Field Service Management Report, 2023
McKinsey & Company, Digital Transformation Study, 2024
Verdantix, Verdantix Green Quadrant: Mobile Workforce Management for Utilities, 2024