

ERP TRANSFORMATION PLAYBOOK  
FOR UTILITIES:

# Maximizing ROI and Future-Proofing Financial Systems

# Why Starting with the Greenfield Path Offers a Clear Advantage

## EXECUTIVE SUMMARY

An ERP transformation is far more than a systems upgrade—it's a once-in-a-career opportunity to reimagine how your organization operates. Many US utilities are just starting to meaningfully evaluate their ERP platforms and data structures for the first time in 20 to 30 years, even as technology has advanced at an unprecedented pace. The rapid rise of AI alone has transformed business models, workflows, and the way we interact with technology, while cloud adoption accelerates—60% of active ERP systems are cloud-hosted, up from 46% in 2023<sup>1</sup>.

This whitepaper outlines the key considerations for utilities organizations embarking on an ERP transformation. It explores the foundational phases IT, transformation, and operations leaders should follow to set the stage for success with their finance partners.

Most critically, it addresses how to maximize your ERP investment by strategically integrating specialized financial solutions that address unique industry requirements and complement—rather than compete with—your core ERP functionality.

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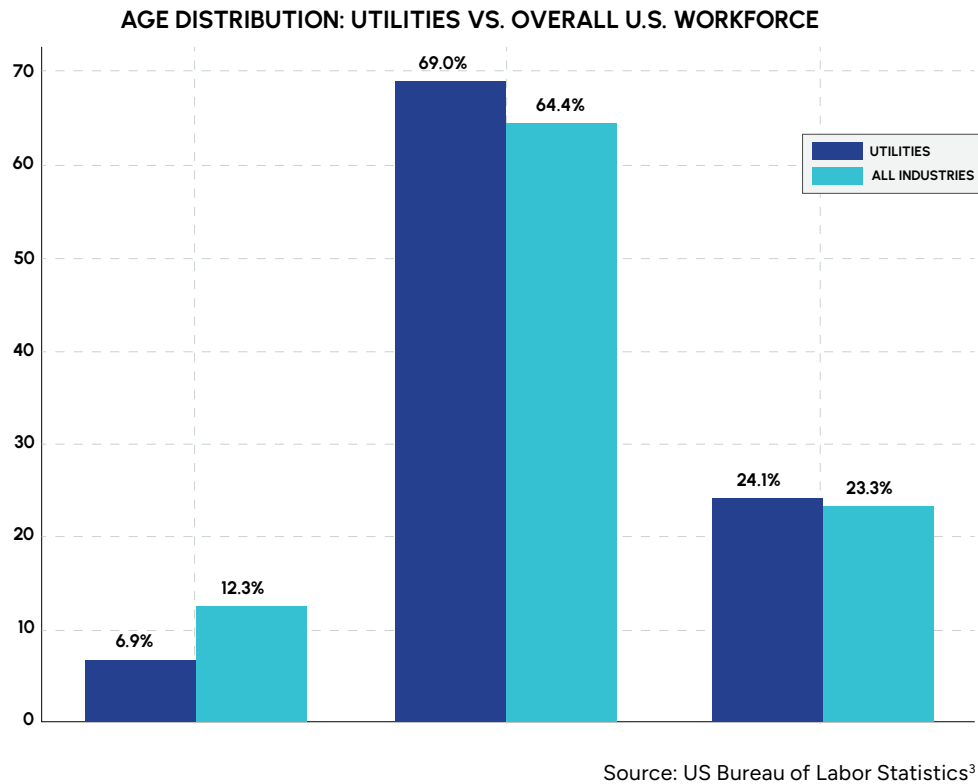
## Why Now? The Case for Utilities ERP Transformation

### TECHNICAL DEBT

Legacy ERP systems are showing their age. Most systems were implemented in the 1990s or early 2000s, long before cloud, AI, real-time analytics, or modern regulatory demands. For utilities specifically, integration challenges have jumped 22% year-over-year<sup>2</sup> to become the top pain point slowing migrations. The growing influence and power of AI have widened the gap. Utilities now face a critical window to modernize their systems before technical debt becomes unmanageable.

## TALENT SHORTAGE

Utilities also are facing an industry-wide talent shortage. According to the US Bureau of Labor Statistics, 24% of the utility workforce is over age 55<sup>3</sup>. Perhaps more importantly, the utilities sector has fewer young workers, with 6.9% under 25 vs. 12.3% in the US overall<sup>3</sup>. As legacy employees approach retirement, the risk of losing institutional knowledge grows. An ERP transformation offers a timely opportunity to capture and embed that expertise and business insight into future-ready systems. This ensures continuity, supports knowledge transfer, and lays a stronger foundation for new employee acquisition and onboarding.



## MARKET MOMENTUM

The momentum for modernization is accelerating across the utility sector. Investor-owned utilities serve 250 million Americans and are dramatically increasing grid investments<sup>3</sup>. This sustained modernization cycle creates the perfect opportunity to align ERP transformation with broader infrastructure improvements, with 93% of utility executives planning meaningful investment in digital technologies over the next five years<sup>4</sup>.

**1 IN 4**

Utilities workers will be eligible for retirement in the next decade.

**6.9%**

Of utilities workers are <25, creating a knowledge transfer crisis.

# Phase Zero: Laying the Groundwork for Success

Approaching your ERP transformation as a large-scale business transformation, not just an IT system replacement, is essential. Your business has evolved substantially over the life of your last ERP implementation. This is the opportunity to guide your organization in rethinking both the financial ecosystem and how the organization operates. A clear ERP vision, anchored by guiding principles, sets the foundation for an outcomes-driven approach. This vision should include all key financial systems and not just the core ERP platform, as specialized systems can enhance and improve the overall ERP vision.

This important groundwork is Phase Zero—an essential step that precedes all other pieces of the project. Phase Zero is where critical decisions are made about technology architecture, vendor partnerships, and process optimization that will impact your organization for the next 20+ years. Phase Zero includes the following aspects:

## STAGE 1

### The Hard Questions

The starting point for any ERP transformation is a ground-level, honest assessment of your current state. This is the time for asking hard questions to begin building your project vision:

- What business outcomes are you trying to achieve, and how will you measure success?
- Do your current systems enable growth or inhibit it?
- How customized is your current environment, and how far have you strayed from industry-standard processes?
- Which specialized business functions are unique to your industry, and should they remain outside your ERP to reduce complexity and customization?
- What is your organization's risk tolerance?
- How much technical debt are you carrying, and what's the long-term cost of maintaining it?

## STAGE 2

### Data Integrity

Data Integrity is an often-overlooked aspect of the implementation, yet it is one of the most foundational pieces of success. Take a close look at the data stored in your financial systems and the data your finance teams may be storing in ancillary places (such as spreadsheets). Consider whether a data clean-up project would be beneficial in setting the stage for success.

*"Data credibility is currency with regulators."*

James Major, Director, Industry Strategy and Advisory, PowerPlan

## STAGE 3

### Assembling the Right Team

The best ERP teams include three key components:

- **Executive Sponsor**  
Champions the vision for the transformation and serves as the face of the initiative.
- **Cross-Functional Leads**  
Gives a voice to the people in the organization whose departments will be impacted by the transition.
- **Change Management**  
Facilitates the organization's transformation beyond the technical execution (often this person is from outside the organization).

## STAGE 4

### Technology Strategy—Integration and Vendor Partnerships

This is the time to define your long-term technology architecture. It's important to note that the future of ERP is composable, not monolithic as it used to be. The focus is no longer on forcing one system to do it all with complicated customizations, but instead on ensuring all the right systems are talking to each other seamlessly and intelligently. This integration imperative has become even more critical—integration challenges have emerged as the top pain point for utilities undertaking ERP migrations, with 45% of utility organizations citing this as their primary concern<sup>2</sup>. The most successful ERP transformations leverage a core ERP system for broad enterprise processes while engaging specialized technology partners for industry-specific requirements.

For utilities, this means evaluating which financial processes are better served by specialized solutions designed specifically for asset-intensive, highly regulated industries. By unburdening your ERP from complex tax compliance, asset accounting, and regulatory reporting requirements, you create a cleaner, more maintainable system that delivers greater value across the enterprise.

## STAGE 5

### Evaluating Your Current Technology Ecosystem

Successful US utilities approach ERP transformation as an opportunity for process optimization. If you already have proven, specialized solutions in place—particularly those that complement your ERP functionality—the transformation becomes an opportunity to optimize how these systems work together. The goal is to unburden ERP configuration and reduce customizations by leveraging specialized tools that are built to handle complex, industry-specific requirements. **This approach results in:**

- A cleaner, more supportable ERP implementation
- Reduced total cost of ownership through less customization
- Faster ERP upgrade cycles in the future
- Better outcomes for the thousands of employees who interact with your ERP daily

# Maximizing Your ERP Investment

One of the most significant opportunities in an ERP transformation is the chance to align business processes with technology investments. Unlocking untapped potential from ERP investments is often derived by starting with processes and activities that impact the largest number of users within an organization. With operations and engineering resources making up the largest group of stakeholders, how can ERP transformation simplify and reduce the burden on the largest resource pool?

By unburdening your ERP from complex tax compliance, depreciation calculations, regulatory reporting, and asset accounting, you create a cleaner implementation that's easier to maintain and upgrade. This approach maintains a small number of trusted, enterprise-grade technology partners rather than proliferating point solutions—reducing complexity, not adding it.



# Including Specialized Solutions in Phase Zero Planning

For organizations with existing specialized financial systems, the ERP transformation represents an opportunity to optimize and modernize these integrations, not to start from scratch.

By including these technology partners early in your Phase Zero planning, you can:

- **Optimize system architecture:** Design ERP structures that maximize efficiency across both systems, impacting everyone from field workers entering time sheets to executives reviewing financial reports.
- **Reduce project risk:** Maintain proven solutions for your most complex financial processes, minimizing change management scope and the risk of business disruption.
- **Enable better decisions:** Leverage partner insights to structure your new ERP in ways that complement existing capabilities, preventing inefficiencies or costly mistakes that impact your organization for decades.

The business case for ERP transformation is complex and multi-faceted, and achieving these outcomes depends on making smart decisions about your technology architecture. Organizations that try to solve every problem with their ERP alone either end up with heavily customized systems that are expensive to maintain, or departments reliant on manual processes completely outside the centralized IT ecosystem. Those that leverage a strategic mix of core ERP and specialized solutions benefit from cleaner implementations, purpose-built capabilities, and faster time to value.

## Essential Capabilities for Utility Financial Success

As you plan your ERP transformation, ensure your technology architecture addresses the specialized needs of utility finance:



### Cost Recovery

Modern automation of key financial processes strengthens regulatory recovery while reducing manual effort. Optimize your ability to recover prudently incurred costs through depreciation rates and accelerating rate base.



### Analysis and Compliance

Provide detailed insights into capital processes to support informed decision-making. Industry-leading functionality for asset retirement obligations and regulatory requirements prevents forcing complex compliance into a generic ERP.



### ERP Optimization

Streamline core ERP functions while maintaining industry-specific capabilities your finance teams need. This minimizes transition risks to cloud-native software while reducing total cost of ownership.

# Looking Forward



Your ERP transformation represents a significant investment and a rare opportunity to modernize your financial systems for the next 20+ years. By approaching the transformation strategically—maintaining proven specialized solutions while modernizing your core ERP—you position your organization to reduce project risk, achieve faster time to value, and create a more maintainable, cost-effective system landscape.

PowerPlan provides mission-critical software for the highly regulated and incredibly complex world of utilities. For more than 30 years, our solutions have complemented ERP systems by delivering specialized financial capabilities essential to financial success. In the new age of cloud-native technology, we bring a deep understanding of the industry problems facing IT and finance departments during ERP transformations.



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[PowerPlan.com](https://PowerPlan.com)  
to learn more.

PowerPlan began with a simple realization: The more fixed assets an organization has, the more challenging it is to manage them financially and to strategically understand how compliance requirements impact the treatment of each asset. Our founders saw ERPs and EAMs alone didn't capture enough data to optimize decisions, so they built the first software platform that combined granular financial and operational asset data from every corner of the organization, filling the gaps ERPs and EAMs could not provide. For more information, please visit [powerplan.com](https://powerplan.com).

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## Endnotes:

- 1 ERP Statistics 2025 - [parsimony.com](https://parsimony.com); ERP Software Statistics, By Market Size, Trends and Facts (2025)
- 2 ASUG x Prometheus Utilities Infographic (2024); ASUG Insights article
- 3 US Bureau of Labor Statistics, Labor Force Statistics from the Current Population Survey, "Employed persons by detailed industry and age" (1/29/2025)
- 4 EEI—U.S. IOU footprint & investments: Industry Data, U.S. Investor-Owned Electric Companies
- 5 EY (Mar 2025)—P&U tech adoption & cloud usage: Future of Energy – P&U
- 6 SAP—official maintenance timeline (ECC 2027; S/4 to 2040): Maintenance 2040