



**LEVERAGING THE TRUE VALUE OF LEGACY  
CUSTOMER INFORMATION SYSTEMS**

SPONSORED BY: JACADA

For many years, customer information systems (CIS) have been at the heart of utility operations and the principal system of record for customer data and transactions. Long before regulators introduced concepts of separation, unbundling or sought to inject choice and competition in the energy retail markets, utilities have relied on their CIS, developed for the most part as proprietary solutions, as the principal source for customer data. For many utilities, the CIS is a heavily customized, largely isolated system, built initially to accommodate customer billing information. Many customer information systems were purpose built – designed to be a workhorse for account information and billing calculations. CIS applications were not built with continuous, multi-channel customer service and the robust functionality and agility requirements for contact center interface in mind.

Today utilities find themselves facing an important dilemma. Does the utility incur the significant risk, time and cost of replacing its CIS application to better address front office needs – or is there a way to introduce significant improvements in functionality and operations while delivering on ever changing, market-driven needs. When faced with the current economic difficulties and the need to carefully manage significant capital investments, the correct system change decision becomes critical.

*Proprietary data formats, restrictive data models and aging functional capabilities cannot be a barrier to utilities that are continuously forced to change and improve product and service offering.*

The energy industry has changed significantly in the past 10 plus years, specifically the pressure to continue to reduce operating costs and to improve customer service levels, while at the same time supporting new types of customer interactions such as the real-time exchange of electricity price information. Today's CIS is not only a technology, but it is also a comprehensive, customer-centric approach to the organization's customers and must be reflective of its customer support strategy and its regulatory and competition mandates. This comprehensive approach includes policies and processes, front-of-house customer service, employee training, marketing, systems and information analytics and management. It is important that CIS implementations extend beyond technology toward the broader utility organizational and information technology requirements.

Over the years, utility's customer care functions have managed multiple transactions on behalf of the customer and the utility. Regardless of age, CIS are responsible for gathering and storing extensive customer data records. The value to the organization lies in gaining access to that data and to its ability to drive new customer products by extrapolating previously unavailable business intelligence. Proprietary data formats, restrictive data models and aging functional capabilities cannot be a barrier to utilities that are continuously forced to change and improve product and service offering.

## Protecting legacy data

CIS implementations are difficult, costly, lengthy, and can fail for a multitude of reasons. Stories of previous implementations caution companies against the challenges. Utilities seek an approach that can mitigate the risk, reduce the implementation time and significantly reduce the cost. Examining what contributes to lengthy implementations is important in terms of understanding the future options for CIS implementations and CIS alterations. Poor project planning, unforeseen over-runs, scope creep all contribute. But predominant among delays associated with CIS implementations are:

1. Poorly defined functional requirements
2. Complex product customisations and changes
3. Data migration
4. Business Process challenges
5. Interface challenges
6. Legacy system interoperability

Change is by far one of the largest variables. It is not always easy to convey the desired or expected change when utilities seek proposals. It may be that the primary reason a utility seeks to implement a new system may be to replace old technology, or to have a system that is more reliable and easier to support or integrate with other enterprise systems. In either case, the changes brought about by introducing new technology will be significant. By some estimation, upwards of 43% of the project budget can be sunk into business process reengineering and change management.

Data conversion is another area that drastically affects the length of a CIS implementation. It is not unusual for utility CIS projects to have data conversion on the critical path, and running the entire length of the implementation project. Many utilities are coming off old legacy systems with data in flat files or stored in proprietary formats. In addition there is the challenge of mapping data to the target system and meeting the addressing and the data schema associated with modern CIS implementations. How well the vendor understands the utility's data issues and how they approach conversion can be a big factor in the total timeframe of the project. The challenge in any new CIS program is to enable the utility to easily get at the legacy data and isolate the CIS improvement opportunity from the data connect and data access challenges.

Many vendors are offering products that allow the utility to configure the system to work the way that best fits the utility's business practices. If the utility selects a solution that can be configured it can take an extensive amount of time for the utility's implementation team to become familiar with the system, to understand how each configuration decision will affect the way the system will work and also how each decision will affect future configuration decisions. If the utility seeks to modify the product or customize it to work in a specific way, those product engineering changes take the vendor time to make and test, and they also add time in the project for the utility to test those changes. The number and extent of the interfaces and integration points can also change the length of the project timeframe.

Regardless of whether utilities opt to implement a new CIS or to extend the capabilities of existing applications through innovative solutions, it will be a difficult and expensive undertaking. Today's CIS systems are designed to handle more and more aspects of the utility customer information and service connection, with meter reads, billing and meter management functions now part of the solution. But replacing or modifying legacy applications, particularly ones aligned in a business silo configuration is difficult and expensive. Where applications are designed to support line-of-business users, the interfaces are often tightly coupled with business logic and lack the agility needed to meet new business objectives.

CIS solutions from vendors like Oracle and SAP are designed to handle many aspects of a utility's operations, including meter reads, billing, and also undertaking associated functions like payment processing, collections, field service, and meter management. They are designed to allow utilities to leverage database and middleware technology as part of the application installation. In spite of the technology advancements and the widening business and regulatory challenges integrated solutions support, CIS implementations are often complex, lengthy and costly to complete. The costs of trying

to deal with current day CSR (customer service representative) chaos and ensuring that solutions deliver improvements in agent operations and customer satisfaction contribute to the expensive price tag of complex CIS implementations. And this at a time when, despite the escalating costs of CIS projects, the level of service, according to the American Customer Satisfaction index saw its largest decline since 1997.

## The Unified desktop alternative

As the economic challenges faced by utilities grow in number and complexity and the cost of capital associated with large infrastructure projects continues to rise, utilities are starting to carefully examine the complexity, time and commitment associated with large programs. In good times there is almost certainly an increased willingness to work through implementation challenges. Delays associated with resource availability, not meeting business requirements, complex integration and business process changes are all part of any complex CIS implementation. But in leaner times, when CIS projects are competing for scarce capital, utilities are less inclined to accept lengthy implementations and cost over-runs. Utilities want an approach that allows them leverage and extend their current investments and to adopt a low-risk strategy that can deliver immediate and measurable improvements. In short the advantages associated with immediate improvements including more intelligent views of the customer data, automating critical processes or reducing call handling times are strong factors in utilities seeking solutions that do not require removal or replacement of their legacy applications. Utilities who have developed their CIS systems over many years and who have grown to depend implicitly on the customer data it contains may require nothing more than an improved screen display for customer services representatives and a unified view of the customer information.

Solutions providers like Jacada offer utilities an approach that helps customers uncover process inefficiencies and identify call types and flows that can offer organizational gains. As an alternative to a large-scale replacement strategy, this simple process approach allows utilities to create a solution that works with the legacy CIS application but easily adopts the desktop to how organizations want to conduct their call centre business. It shares some common approaches with the larger CIS vendor solutions, combining a workspace and middleware solution for automated processes. Its principal difference lies in its ability to work with and reuse the existing legacy data and the legacy application platform. Average implementation times are also considerably reduced compared to traditional CIS implementations, with some utilities reporting project durations of between 4 and 6 months. If utilities are able to work with service providers in implementing significant improvements in their CSR operations and costs in those time frames, then the opportunity for early and rapid adoption to new business processes or environmental changes should be significant.

*But in leaner times, when CIS projects are competing for scarce capital, utilities are less inclined to accept lengthy implementations and cost over-runs. Utilities want an approach that allows them leverage and extend their current investments and to adopt a low-risk strategy that can deliver immediate and measurable improvements*

## A Race to the Bottom Line

As part of any future CIS review or replacement strategy, utilities need to clearly communicate their current conditions, their requirements for moving to a new CIS, and their future business objectives. Vendors for their part need to understand the business considerations, and develop project plans and timeframes that address each utility's unique conditions. It may very well be the case today, that utilities weight up the cost of a full scale CIS implementation against an approach that delivers early-realised benefits. Utilities may be willing to accept a cost-effective and quick time-to market approach, recognising that early wins can sometimes make the difference in the short-term. The race to the CSR bottom line, whether that be to reduce overall costs or to contribute to the organizations bottom line performance through innovative products and service offerings, should facilitate an approach that meets the needs, budget and business requirements of the organization. Today, utilities have choices about their CIS strategies. The challenge for utilities and CIS vendors is to ensure that the chosen strategy is reflective of the organization needs. For the foreseeable future, smart utilities and smart vendors can ensure that the correct approach continues to deliver the solutions that the energy companies and the industry needs.