TRANSFORMING UTILITIES







WHY HCL?



HCL has one of the longest and most consistent track records of successfully delivering transformational solutions in customer billing, enterprise asset management, smart grid integration, real-time analytics, and back-office solutions for regulated and deregulated utilities throughout the world.

Today utilities must deliver improved customer service to address the emerging demands of the smart grid and the maturing expectations of the intelligent consumer. This all needs to be accomplished at lower unit operational costs and within tighter regulatory regimes facing utilities around the world.

The sure path to achieving this profitability and expanded service offering requires a transformational program led by a company with a proven perspective on both current best practices and future evolutions and revolutions in the market. For utilities operating within competitive marketplaces, the added challenge of delivering sustained revenue and margin growth requires a partner with resources that understand how to deliver technological solutions that create competitive advantage and market differentiation.

Confronting Business Challenges

Many utilities operate a heterogeneous systems environment where there is limited integration between billing, service delivery, asset management and back-office solutions. This problem is compounded by the limited functionality of many of these systems and their inflexibility in terms of allowing for the rapid introduction of new products and services. As a result, utilities who find themselves in this position suffer from significant operational constraints and higher operational costs. These include:

Contact center inefficiency

The lack of system integration coupled with limited functionality increases agent hand-offs and leads to higher call handling times which in turn reduce customer satisfaction, lower call center agent productivity and increase costs

Reduced marketing effectiveness

Limited, outdated, or simply inaccurate customer information results in poorly targeted campaigns and lower rates of customer acquisition

Stranded Smart Grid investments

The investment in the Smart Meter is visible to the customer through a monthly fee with little to no value offered by the Utility in the form of additional value-added services or programs

Revenue leakage

The inability to accurately bill for services provided to the customer can be a huge missed opportunity to maximize revenue and profit

Limited web and IVR self-service capabilities

Customers who have difficulty transacting through their chosen channel are more likely to defect to competitors or report low satisfaction. The greater the extent to which customers can make their transaction via web-based tools and mobile apps, the less likely they are to increase call center costs by demanding to speak to an agent

Customer defection and churn

The inability to rapidly respond to competitor offerings coupled with reduced customer satisfaction in response to disjointed customer interaction processes leads to increased defection

Reduced collections effectiveness and increased bad debt costs

The lack of accurate customer data means that emerging customer payment and bad debt issues are not identified in time, resulting in increased collection costs and reduced debt recovery

Reduced operational effectiveness

The inability to accurately measure and manage operational costs at the installed equipment/plant level throws off targets for operational maintenance and capital investment funds

Reduced field force effectiveness

Limited integration between HR, customer service, and work order management solutions leads directly to increased workforce inefficiency

Increased system development and support costs

The expense of maintaining, much less improving, legacy systems results in significant additional operating costs without a corresponding increase of returns

Reduced management effectiveness

The lack of up-to-date and accurate performance information, in addition to the significant cost of extracting, normalizing and preparing reports, reduces the amount of decision support available to managers.

Over the course of dozens of utilities engagements, HCL has successfully deployed leading utility solutions for customer relationship management, smart metering, business intelligence, asset management, and other related products to address all of these issues. As a result, our clients have realized significant reductions in costs, improved operations and, most importantly, greater profitability.

HCL is recognized by industry analysts and leading solution vendors as one of the most experienced system integrators in the world dedicated to innovative and relevant solutions facing the utilities industry. We have a history of implementing innovative solutions and being first to the market with advanced technologies at lower risk, as a direct result of our proven tools and implementation methodologies.



HCL – AN OVERVIEW

HCL expanded its service offerings and presence in the utilities market with the 2008 acquisition of AXON. This has transformed HCL into a unique consultancy that offers the only truly global delivery model combining onshore business transformation with offshore realization and application support capabilities. This combination ensures that our clients are able to implement, manage and evolve their IT solutions at lower cost while still realizing tangible business benefits – benefits which we frequently underwrite.

Experienced Consultants, Global Scale

HCL is one of the world's largest systems integrators (Sl's) focused on utilities, employing over 1,000 utility specific professionals in 60 offices and 15 global delivery centers across 31 countries. Leveraging this capability, we are able to fully meet our clients' local and multinational requirements – to date we have implemented solutions in over 85 countries. When compared with other global Sl's, we rank #4 in terms of scale across all industries, and #1 in the utilities industry.

Guaranteed Outcomes

Ultimately our engagements are driven by the need to deliver certainty to our clients:

- On Time, On Budget and On Value
- Delivered Guaranteed Service Levels
- Committed Cost Reductions
- Realized Cashable Benefits
- Achieved Business Metric Improvements

HCL regularly contracts to the delivery of specific outcomes — whether it is a reduction in a call center's average call handling time, guaranteed infrastructure management cost reductions or delivering defined net cash savings.

Financially Stable and Respected

HCL is a \$6 billion global technology leader with over 90,000 professionals and offices in 31 countries. HCL is not only financially robust, it is also globally recognized for its revolutionary management practices which focus on trust, integrity and the empowerment of our employees. This approach, which we call Employee First, is the subject of one of the most frequently taught Harvard Business School Case Studies.

True Global Delivery

We operate as a single global organization, allowing us to deploy consulting teams that leverage proven industry and solution best practices from our offices around the world. We know that successful business transformation programs require on-site client engagement to drive process design and business change, while simultaneously saving significant time and money through round-the-clock offshore and nearshore delivery centers. Our global delivery model does not treat offshore as an afterthought. We fully integrate our offshore capabilities into our implementation and application management methodologies to ensure that the value of onsite resources is best deployed.





BENEFITS-LED SOLUTIONS FOR THE UTILITIES SECTOR



HCL delivers best practice solutions to support all aspects of a utility's operations. We are able to deliver these solutions using our own employees without the need to rely on subcontractors. Specific capabilities relevant to the utilities industry include:

Customer Information Systems

HCL has delivered over 45 Customer Information System (CIS) implementations across all major utilities including gas, electricity, water and solid waste. Our implementations have delivered complex billing solutions for commercial and residential customers for regulated and deregulated utilities and for single and multi- service utilities. We have deployed standalone CIS solutions as well as integrated CIS/EAM/ERP implementations that included web and IVR self-service functionality. Realized benefits include reduced customer service and billing costs, improved rates of collection, reduced time and cost to implement and change tariffs, increased utilization of self-service channels, improved billing accuracy and reduced bad debt write off.

Meter Data Unification Systems

The rollout of smart meters at many utilities has created a flood of real-time data that can be leveraged by customer and billing applications, along with operational technology solutions within the utility. HCL has significant experience working with the leading Meter Data Unification System (MDUS) providers in the market to deliver integrated solutions for our utility customers. Working with these leading MDUS providers, HCL provides our utility clients with a fully integrated solution to aggregate this data, validate and cleanse, and distribute to down stream systems for its intended purpose.

Customer Relationship Management

HCL pioneered the use of CRM in utilities, developing a packaged contact center solution that was designed specifically to meet the required levels of transactional processing within high volume, scripted inbound and outbound call center environments. To date HCL has implemented multichannel CRM solutions in over 45 call centers, supporting more than 7,500 call center agents with seamless integration of eCommerce, eService and IVR applications. Our clients have reported improved call center capacity, reduced call handling times and improved cross-sell and up-sell rates, as well as offering new emerging smart grid programs such as conservation or demand side management.

Enterprise Asset Management

HCL is recognized by the leading EAM software providers as the go-to

partner for complex, large scale asset management solutions. We have partnered with many of the leading software platforms to develop additional EAM functionality specifically to support organizations which manage large numbers of complex assets. We have delivered full lifecycle EAM solutions in some of the most demanding industries including airline maintenance, engine overhaul, railroad and defense, in addition to utilities, HCL has delivered solutions to support both depot and mobile maintenance for static, moving and linear assets and components. HCL's delivered benefits have increased engineer productivity and asset reliability, and created more accurate operational cost of ownership information and better prioritization of investment. We have deployed fully integrated EAM solutions encompassing mobile asset management, GPRS and GIS technologies.

World Class Finance

HCL has delivered numerous finance transformation programs designed to better align the provision of financial services to the needs of the wider organization. Benefits delivered include reduced transactional processing costs, consolidation and streamlining of financial functions, improved financial information and shared financial services.

Enterprise Performance Management

HCL has unique capabilities in the design and deployment of effective enterprise performance management frameworks that are both tied to our clients' required strategic outcomes and guided by HCL's best practices. Our consultants employ a rapid development methodology to accelerate the delivery of demonstrable reporting and business planning prototypes which are used to iteratively confirm the overall reporting framework and create project buy-in by producing 'Quick Wins' early in the project. Within our utilities practice, we have developed standard reporting frameworks to support operational unit cost analysis of assets, customer profitability, reporting and analysis, as well as rate case modeling and planning tools.

Supply Chain Management

HCL has the in-house experience and capabilities to assess and re-engineer our clients' procurement and supply chain processes, including delivering inventory optimization and procurement efficiencies. Supply chain performance diagnostics have identified improved patterns of inventory disposition and warehouse rationalization opportunities for numerous other organizations. We are recognized experts in delivering SCM solutions, in the deployment of catalog based procurement solutions, supplier integration and eRFX solutions.

Human Capital Management

HCL has one of the strongest global HR implementation capabilities of any systems integrator. Our capabilities cover all HCM components and extend into re-engineering HR functions and the implementation of HR shared services. We have particular expertise in the design and deployment of web-enabled HR self service solutions and have developed a library of solutions which significantly extend the power of the standard ESS and MSS solutions. We are recognized by the leading enterprise software providers in this space as having delivered the most comprehensive implementations of shift planning to support workforce deployment and duty based payroll. Our implementations have been proven to directly reduce HR administration costs and to lead to improved workforce deployment patterns. HCL's solution delivers increased organizational capacity with reduced payroll costs.



CLIENT SUCCESSES

HCL has a track record of delivering SAP based services to our large and growing client list. The below table below provides a summary of some of our utilities clients from around the globe.

	CLIENT							COMMENTS
		SAP ERP	SAP CR&B	SAP CRM	SAP BW Analytics	SAP EAM	Web Self- Service	
AQUARION Water Company	Aquarion, Water Utility of CT, NH, MA and NY	1	1		1	1	1	HCL prime for a full ERP, CR&B and EAM implementation
WaterOne	Water District No. 1 of Johnson County	1	1		1	1	1	HCL prime for a full ERP, CR&B and EAM implementation
T∰ T∭ T∰	Tacoma Water, Tacoma Public Utilities, and the City of Tacoma	✓	1		1	1	1	HCL prime for a full ERP, CR&B and EAM implementation
9	City of Toledo, OH Water	✓	1		1	1	1	CR&B implementation – SAP was the prime, HCL consultants played critical functional and technical roles on the project
(Mich une Oby The Value Dathibus Frant	Oklahoma City Water Utilities Trust	✓	1	✓	1	✓	1	Prime implementer for CR&B
MARIN MUNICIPAL WATER DISTRICT	Marin Municipal Water District	✓	1		1	1	1	CR&B implementation and subsequent solution evolution
	Suffolk County Water Authority	1	1		1	1	1	CR&B upgrade and prime implementer for ERP
	Sacramento County	1	1			1	1	CR&B vendor for ongoing maintenance, enhancements and support. Device management and SAP applications management
2	Imperial Irrigation District	1	1		1	1	1	SAP Upgrade, optimization and applications management
CPU	Rochester Public Utilities	1	1		1	1	1	ERP Upgrade and prime implementer for CR&B
	Navajo Tribal Utility Authority	1	1		1	1	1	CR&B implementation
Pinellas County	Pinellas County Utilities	1	/		1	1	/	Prime implementer for CR&B
PUBLIC UTILITY DISTRICT NO. 1	Snohomish County Public Utility District #1	1	/	1	1	1	/	Prime implementer for CR&B & CRM
EGRU ^M	Gainesville Regional Utilities	1			1			Prime implementer for ERP
Experience of the second	Huntsville Utilities	1				1		Prime implementer for ERP and EAM
Fairfax Water	Fairfax Water	1				1		Prime implementer for ERP and EAM
City of Dallas	City of Dallas Water	✓	1		1	1	1	Prime implementer for CR&B
	City of Palo Alto	1	1	1	1	1	1	ERP upgrade and prime implementer for CR&B & CRM
Commence of the Commence of th	Lansing Board Water & Light	1						Prime implementer for ERP
NewYorkPower Authority	New York Power Authority	1	1		1	1		CR&B implementation
AEPCO	Arizona Electric Power Cooperative	1			1	1		ERP implementation
FirstEnergy	First Energy (GPU)	1	1		1	1		Prime implementer for CR&B
SMUD	Sacramento Municipal Utility District	1	1		1	✓	1	CR&B and ERP upgrade, support; subsequent SAP enhancement projects
MOBILEGAS Irang, to Life	Mobile Gas	1	1	1	1	1	1	Prime implementer for CR&B, CRM and retail ERP components
≈Regional Water Authority	Regional Water Authority	1	/	1	1	1	1	Prime implementer for CR&B & CRM
TXU	Texas Utilities	1	1	1	1	1	1	Prime implementer for CR&B & CRM



TESTIMONIALS

"HCL personnel always know what they're talking about - they don't try to use us as a training ground. And because their consultants know the system so well, they get the job done very quickly which helps keep our costs down. Whenever people do what they say they're going to do, I'm happy"

Terry StigallFinance Director,
Marin Municipal Water District

"We have selected HCL because their people are knowledgeable and experienced, and their methodology fits in with the way that RWE works. We are confident that this partnership will deliver an integrated solution that will enable RWE's business to rise to the challenges of the future"

Jeff Grady
Program Director
RWE Generation and Renewables

"HCL presented a clear, concise plan to undertake an end-to-end SAP IS-U implementation with minimum disruption to the organization during and after the implementation. They delivered on that plan"

Michael Armstrong General Manager WaterOne "HCL is a key SAP partner in the utilities industry. They continue to deliver large and challenging projects successfully using the latest SAP solutions"

Stefan Engelhardt IBU SAP Utilities

"We were very impressed with the energy that HCL demonstrated in their presentations and the way that they applied themselves to us as an organization. So it wasn't so much a situation whereby we felt we were employing consultants; we were actually working with a business partner. It worked well and it was fun"

Kerl HaslamBack Office Systems Strategy
Orange Telecommunications
(now France Telecom)

"The ability of HCL's people to rapidly grasp concepts and apply their industry knowledge to new and unique situations was a critical factor in the project's successful implementation"

Steve SchumacherProject Director
GPU Enterprise Project



CASE STUDY TXU ENERGY

Business Overview

TXU Energy (TXUE) is the largest retail electric provider in the state of Texas.

TXUE serves over 2.4 million customers in a deregulated market where competition is extremely intense.

Business Challenges

- Need to rapidly respond to dynamic market conditions by introducing new campaigns and initiatives
- Difficulty providing excellent customer service through a variety of channels due to high costs to serve and non-integrated customer information systems
- Inefficient back office operations

Solution Components

- SAP ERP 6.0; IS-U 2005
- SAP CRM and Billing including customer account management and self service, IVR integration, marketing/ campaign management, and BI reporting
- SAP EAM including service order processing and customer meter reading
- SAP Reporting SAP data warehouse consolidating data from numerous sources and full regulatory reporting solution

Outcomes

- Marked improvement in customer service reflected in reduced customer churn, increased sales uplift, and increased enrolment
- Call center productivity improved through increased first call resolution, increased customer authentication using IVR, and increased self-service
- Reduced days unbilled, reduced percentage of unpaid final bills and reduced bad debts as a percentage of revenue







CASE STUDY AQUARION WATER COMPANY

Business Overview

Aquarion Water Company serves over 675,000 customers in the northeastern United States. Faced with increasing pressure to provide better service while reducing rates, Aquarion engaged HCL to guide it through a complete business transformation program.

Business Challenges

- Lack of common information and consistency between customer and field service units
- Sustaining customer service levels with reduced personnel
- Inefficient scheduling of field service crews
- Revenue leakage due to poor visibility of individual taps

Solution Components

- SAP R/3, SAP for Utilities (IS-U/CCS)
- SAP HCM (Mobile workforce)
- SAP BI

Outcomes

- 50% reduction in call center time to answer service work inquiries
- 25% reduction in call center time to resolve billing issues
- 40% increase in finance staff productivity
- Increased efficiency of field crews
- Automated planning for meter maintenance





We chose HCL as their team gave us the best opportunity to realize the true business transformation we were looking for at the lowest possible risk. In just one year HCL delivered an integrated, enterprise-wide system across our whole business enabling us to build upon our transformation goals

Steve HalloranNextGen Project Director
Aguarion Water Company



CASE STUDY GPU

Business Overview

GPU Energy (now FirstEnergy) provides electricity service to over 2.5 million customers. The implementation was the first go live of a full scope ERP and CCS landscape. In addition, this was only the second implementation of SAP IS-U/CCS in the United States and was the largest implementation of the solution at the time.

Business Challenges

- Integration of complex multi-party systems – three separate legacy customer information systems
- Compressed integration timetable imposed by external regulation
- Immense database to cleanse, extract and migrate

Solution Components

- SAP ERP
- SAP IS-U/CCS
- Automated field service order system and automated meter reading management system

Outcomes

- Solution was delivered on time and on budget
- Fully functional deregulated market functionality with accelerated ability to introduce new products and services
- Improved coordination between call center and field operations
- Improved visibility into customer behavior





HCL was selected as the prime implementer due to their previous experience in IS-U/CCS. The ability of their people to rapidly grasp concepts and apply their industry knowledge to new and unique situations was a critical factor in the project's successful implementation. (They) were able to provide immediate value and were able to seamlessly integrate into our project, earning the respect of GPU team members

Steve Schumaker Regional President GPU



CASE STUDY TUAS POWER

Business Overview

Tuas Power is key energy provider in Singapore. It has a fully integrated portfolio of business including generation, trading and retail.

Business Challenges

- Intense competition required more complicated and creative products based on business analysis
- Legacy systems were not integrated and could not scale
- Lack of end to end insight impaired business performance

Solution Components

- SAP ERP 6.0
- SAP IS-U
- SAP CRM 2007 (marketing and sales)
- Custom Solution for foreign exchange hedging and risk management on SAP NetWeaver
- SAP BI 7.0
- SAP E 7.0

Outcomes

- Lower total cost and maintenance costs from standardization
- Significant reduction in database maintenance efforts and increased reliability of and integrity of data
- New functional products implemented through configuration as opposed to coding
- Better business decision making and increased innovation through greatly improved business analytics
- Seamless integration with external systems via SOA architecture



- Ramp-up customer and one of the first Global SAP CRM 2007 for Utilities implementations
- One of the first to use Key Account Manager (KAM) functionality specific to the Utilities Industry



CASE STUDY RWE INNOGY

Business Overview

RWE Innogy is a leading integrated energy company providing gas and electricity in the retail market. In addition, it operates and manages a portfolio of flexible, low cost coal, oil and gas fired power plants.

Business Challenges

- Inability to respond to dynamic market conditions due to inflexible and poorly integrated legacy systems
- Poor reporting impaired timely decision making
- Inability to integrate new acquisitions quickly

Solution Components

- SAP V 4.7
- SAP FICO
- SAP MM (IM and PUR)
- SAP EBP

Outcomes

- Improved back office operations enable rationalized finance and procurement functions
- More rapid realization of benefits from acquisitions through eased integration and comprehensive solution for finance operations
- Reduced procurement costs resulting from improvements in procurement, inventory, and quality management





are knowledgeable and experienced, and their methodology fits in with the way that RWE Innogy works ??

Jeff Grady Program Director Innogy





HCL delivers significant business value to leading organizations through the innovative implementation of SAP technologies.

www.hcl.com

