



Engaging and Serving Residents

Presented by: Joe Gaspard
Date: December 7, 2015

Agenda

1. UtiliWorks Background
2. Customer Relationship with Utility: Past and Present
3. Technological Changes
4. Conclusions, Q&A

UtiliWorks Consulting

Since 2005, UtiliWorks has been working with electric, water, and gas utilities to develop business and technology solutions around increasing operational efficiency.

Utiliworks Advantage Process

Assess - needs assessment, cost estimate, project schedule, and core value propositions

Design - development of technical specifications and associated business processes

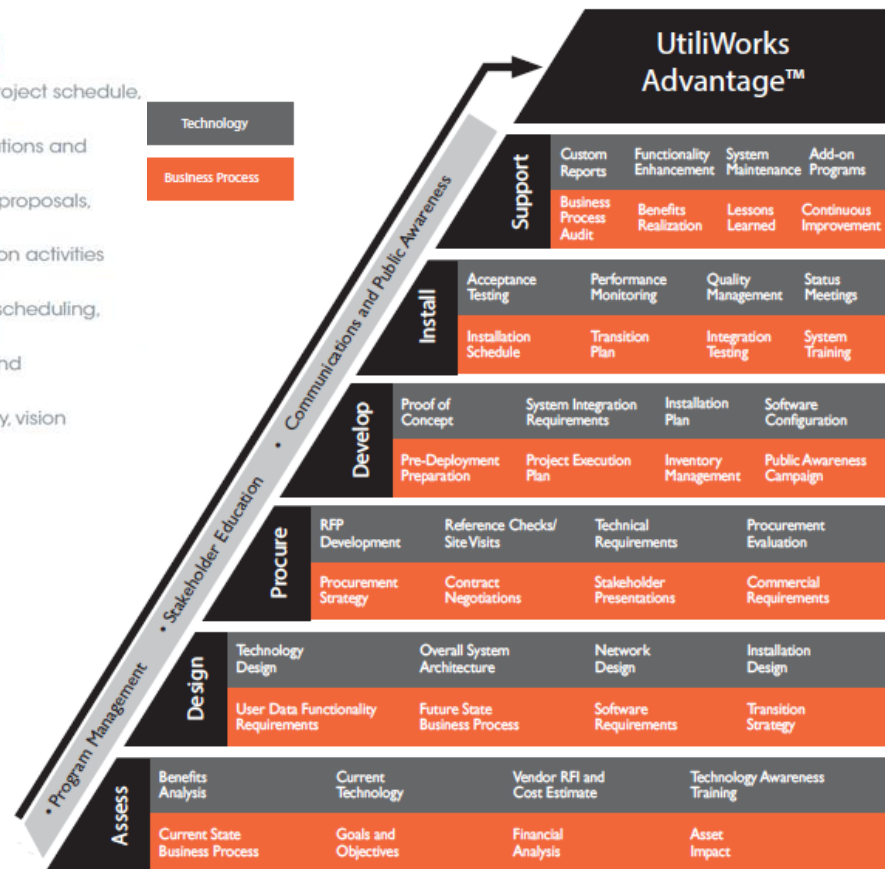
Procure - develop formal requests, evaluate proposals, and support contract negotiations

Develop - plan and coordinate pre-installation activities for all involved parties

Install - implementation activities including scheduling, reporting, training and acceptance testing

Support - customization of reports, alarms, and business processes

Public Awareness - communications strategy, vision and objectives



Historical Relationship with Customer

- Traditionally, utilities and customers interacted very infrequently, and impersonally:

- Meter reading



- Bill generation

ELECTRIC COMPANY									
P.O. BOX 123, Anytown, USA									
ACCOUNT NUMBER	ACCOUNT NAME		RATE		CYCLE	SERVICE ADDRESS			
123456789	XYZ Manufacturing		Large General Service		708	123 Main Street			
SERVICE PERIOD	NO.	BILL	METER READING		WKS	PKW	POWER		
FROM	TO	NO.	PREVIOUS	PRESENT	MULTIPLIER	USAGE	DEMAND	FACTOR	
08/15	09/11	20	00545	71545	800	1,440,600	440 kW	75%	
\$ AMOUNT									
CUSTOMER CHARGE						\$10.00			
ENERGY CHARGE: (1,440,600 X \$0.009/kWh)						\$97,624.00			
FUEL COST ADJUSTMENT (\$0.005) (1,440,600 X \$0.009/kWh)						\$7,203.00			
DEMAND CHARGE: (440 kW X \$9/kW)						\$3,960.00			
POWER FACTOR PENALTY: (440 kW X \$9/kW)						\$600.00			
SALES TAX - STATE: (6%)						\$5,858.40			
SALES TAX - SPECIAL: (1%)						\$678.27			
TOTAL AMOUNT DUE:						\$112,223.67			

- Outage notification, service disruption



Technology Supporting Change

- Utilities have adopted new ways of distributing and operating their systems and billing for their services
 - Advanced Metering Infrastructure (AMI) enables higher accuracy, hourly consumption data
 - Time of Use (TOU) rates are on the rise, particularly where energy costs are higher
 - Remote disconnect capabilities allow them to turn-off service for delinquent customers
- Customers have more options available to them to bypass utility:
 - Energy storage
 - Solar panels
 - Smart thermostats

Change in Customer Expectations

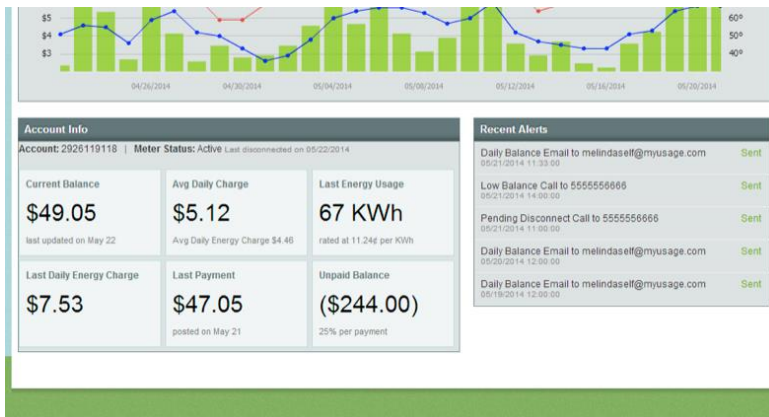
- Today's utility customer is more informed:
 - Energy efficiency and “going green” are important
 - Knows generally that there are things they can do to modify their consumption (and ultimately lower utility bills)
 - In some areas, conservation is mandatory (i.e. state-enforced water conservation in face of drought)
- The customer wants to take control of their energy use

Utility Response - New Programs

- Customer Web Portal




- Prepay



- IVR

Keeping the Customer in the Loop

- Customer notifications
 - (bill notices, mailers)
- Door hangers
- Status Letters
- Press Releases
- Brochures



DPU
factsheet

“Preparing for the new
Advanced Meter”

DPU will begin installing new “advanced” meters for all of its customers beginning in April 2013. Through this initiative, DPU is seeking to help customers better manage their energy use and help protect the environment by using the most efficient and cost effective processes available. Located below is some important information to ensure the advanced meter installation goes smoothly:

- DPU employees will be performing the meter installation. DPU employees will be driving our white vehicles with the DPU logo on them and will be wearing blue shirts and blue pants. They will also carry DPU identification badges.
- Please prepare for the new advanced meter by making sure that anything blocking access to the existing meter, such as improperly installed siding and/or other physical modifications, is removed. Also, please make sure installers do not encounter locked gates, dogs in the yard, etc., which could prevent a meter exchange.
- Installers will knock on the door to notify the customer of their arrival and prepare for the service interruption, if necessary. If no one answers, the installer will proceed to make the installation.
- If no one is at home and a meter is inaccessible, the installer will try again later. After several failed attempts, the installer will leave a card asking the customer to call and schedule an appointment.
- In most cases, an installer requires only a few minutes and can complete the work without any customer assistance. In some cases, such as with inaccessible meters, installers may require special access to the meter. If DPU has existing meter access arrangements with the customer, installers will access the meter according to those existing arrangements.
- If DPU installers find equipment that is unsafe or unable to accept a new meter, DPU will dispatch a service person to determine what corrective action must be taken and whether that work can be performed by DPU or must be performed by the customer.
- Installation of a new advanced meter may result in a brief (less than ten (10) minute) interruption of electric, gas and water service. Customers may need to reset their clocks and other electronic equipment after the exchange. Also, if natural gas pilot lights are not able to be reset at the time of installation, customers may need to call (803) 268-4000 to have a service person dispatched to their location.
- These meters will not cause your usage to increase. They will measure power, water, gas just like before.

Please recognize that these are general guidelines the company will follow during the installation of the new advanced meter. There may be exceptions that will be handled on a case-by-case basis. Please call (803) 268-4000 if you have any questions.

RUSTON Power Smart

The CITY OF RUSTON is building an electric system that is more efficient, resilient, cleaner, reliable and responsive – a Smart Grid.

THE SMART GRID AND AMI

The City of Ruston is at the forefront of the Smart Grid movement. The electric industry as a whole is making the transformation from a centralized, producer-driven network to one that is more interactive for consumers. The Smart Grid is characterized by a two-way flow of electricity and information. By incorporating innovative technologies into an improved electric infrastructure, the Smart Grid will advance utility performance and provide better service to customers.



The foundation of the Smart Grid is a term coined “Advanced Metering Infrastructure” or “AMI”. An AMI system utilizes smart meters which automatically communicate consumption and other system data directly to the utility. These new meters measure and record usage data at a minimum, in hourly intervals, and provide usage data to both consumers and energy companies at least once daily.* Most utilities currently have one month ready, which is used to estimate consumption and billing.

AMI technology enables:

- Revenue recovery
- Identifying variable rate structures
- Improving meter and billing accuracy
- Reducing labor costs
- Reducing customer complaints and errors
- Enabling customers to manage consumption

Smart Grid extends these benefits to include:

- Enabling active participation by consumers
- Operating resiliently against physical and cyber attack
- Accommodating all generation and storage options
- Optimizing assets and operating efficiently

BRIGHT DEVELOPMENTS FOR RUSTON LIGHT & POWER

The City of Ruston successfully completed the design, procurement and implementation of a Smart Metering Pilot Project in 2009. During the course of the pilot, the City applied for the U.S. Department of Energy Smart Grid Investment Grant Program. Ruston was selected late October, 2009 to receive \$4.3 million in funding as one of only one-hundred recipients nationwide. Utility Automation and Engineering T&D Magazine awarded the City of Ruston the Smart Grid Project of the Year in March, 2010 for its innovative design in the grant application.

Goals for the Smart Grid Grant project include:

- Renewable energy generation for targeted city buildings
- A 50% reduction of distribution system interruptions
- Fuel reduction of 7,500 gallons
- A 5% energy reduction overall for customers
- An estimated community cost savings of over \$5,266,674

According to Danell Caraway, Public Utility Manager, the three-year project also focuses on enhancements to customer account software, automation of the electric distribution system, and testing of energy storage devices including electric vehicles.

Mayor Dan Hollingsworth said that when fully deployed, the new system will make Ruston’s power grid more efficient and user-friendly. “These improvements will save Ruston customers on their power and water bills. It will also ensure more accurate meter readings,” says the Mayor.

The City retained Utiliworks, a Baton Rouge-based firm that builds smart utility solutions, to assist with the pilot and the grant application. Dale Pennington, Utiliworks’ Managing Director, explains that the project fully accommodates all critical components of a smart grid as defined by EPRI: the Electric Power Research Institute. “Incorporating all these components which cut across so many technical disciplines will make this one of the forward thinking smart grid projects in the United States,” says Dale Pennington.

Conclusions

- Technology has brought the customer and the utility much closer, with potentially daily interactions between company and customer
- Presenting customers with options about their energy users allows them to use energy smarter and more efficiently
- During the implementation and introductory phases, customer communication is key