S.sas
THE POWER TO KNOW.

■ Business Impact

"In order to ensure a successful smart metering deployment, potential barriers need to be analyzed in advance and necessary steps to mitigate barriers need to be taken. In addition, developments which may endanger successful smart metering deployment need to be taken seriously throughout the process."

Development of Best Practice Recommendations for Smart Meters Rollout in the Energy Community
KEMA, February 2012

■ Challenges

- **Lack of integrated planning across business units.** Without coordination, time and money may be wasted on duplicated work and multiple visits to the same site.

- **Poor data quality.** If customer addresses are inaccurate or network information is wrong, meter installations are ineffective.

- **Customer rollouts not prioritized.** It's inefficient to install assets for customers who will churn almost immediately.

- **Poorly executed awareness campaigns.** Ineffective campaigns increase consumer resistance and oversight from regulatory agencies.

- **Modeling software limitations.** Without a sufficient range of modeling capabilities, utilities struggle to improve efficiency and predict future needs.

How can we optimize smart meter deployments across our broad customer base?

YOUR GOAL: Manage technology rollouts efficiently and cost-effectively to meet stakeholder expectations

Meter deployments (installations) are major logistical tasks that require integrated planning across multiple utility divisions. From scheduling work orders and replenishing inventory to cleaning address databases and overseeing regulatory reporting, it takes a coordinated effort to avoid failure. These efforts are most successful when guided by analytics from planning through implementation.

Before fitting a meter on a wall (inside or outside), utilities must have accurate customer address and contact information so they can book appointments for installation. In some countries where retailers are responsible for rollouts, it's advantageous to assess short-term churn propensity prior to installation. Once appointments are set, utilities must select the optimal routes, forecast resources, prepare inventory and maintain data for regulatory reporting. These tasks are critical to meeting rollout timetables and maintaining customer satisfaction.

OUR APPROACH

Smart meter deployments present utilities with many logistical, technical and commercial challenges. Getting the installation process right and improving efficiency means significant savings across the board. We approach the problem by providing software and services to help you:

- **Optimize the rollout process.** Use optimization, project scheduling and simulation techniques to identify the actions that will produce the best results, while operating within resource limitations and other relevant restrictions.

- **Monitor performance of the rollout plan.** Measure progress toward targets and goals, receive alerts about underperformance, visually depict indicators, objectives and initiatives, and share feedback and commentary.

- **Choose the right pilot customers.** View summary reports and graphs to see total offers and expected profitability. Constraint summaries show actual resource consumption in the optimized scenario, as well as opportunity costs for constraints.

- **Manage timely and effective customer communications.** Define target segments, prioritize selection rules, choose optimal channels for customer outreach, schedule and execute campaigns, and analyze performance.

- **Forecast resources for installations.** Quickly generate granular forecasts to reduce forecasting and planning cycles and to permit more frequent updates – using the level of automation that's right for you.

SAS helps utilities optimize smart meter deployments and undertake course corrections in response to field situations. This approach delivers measurable business benefits and transforms the way utilities manage future technology deployments.

THE SAS® DIFFERENCE: Advanced capabilities address all aspects of smart meter rollouts

SAS provides the full breadth of analytical and data management capabilities needed to tackle the complexities of optimizing smart meter deployments. With SAS, you get:

- **A broad range of techniques to solve complex business problems.** SAS offers the broadest available spectrum of operations research modeling and solution techniques, including state-of-the-art advancements in mathematical optimization.

- **Comprehensive, integrated analytics.** With SAS, you get optimization, forecasting, econometrics, statistical analysis and data mining in one integrated system – so you can avoid niche vendors and the need for manual intervention.

- **Embedded data quality.** SAS augments the data management process with data quality tools that cleanse marketing data and provide an accurate starting point for all marketing campaigns.

- **Large-scale automatic forecasting.** You can choose to let SAS automatically generate large quantities of statistically based forecasts without human intervention – making the forecasting process more efficient and freeing analysts to focus on high-value or problematic forecasts.

Using SAS, utilities can execute the most effective plan for asset utilization and financial performance during smart meter rollouts.

CASE STUDY: A large European utility in the process of rolling out smart meters

■ Situation

The utility needed to more effectively match data from energy delivery points and customer identification fields in its billing system. But separate databases for 35 million customers and 45 million electricity delivery points made accurate billing difficult and costly. The utility was unable to reap smart meter benefits such as detecting fraud, following customers after relocations and minimizing billing errors.

■ Solution

SAS® Data Management.

■ Result

A single solution for resolving data quality and data matching issues requires only two full-time employees rather than 10, and achieved quantifiable ROI in nine months. Because the solution runs alongside the existing SAP and UNIX systems, the utility minimized IT and business disruptions during the project.

■ What if you could ...

Smooth the rollout process
What if you could reduce stranded assets, increase hit rates for installation appointments and quickly profile resource usage and availability?

Closely track deployment plans
What if you could track installation problems online, conduct accurate root-cause analyses of faults and get near-real-time updates to installation plans?

Increase retention
What if you could install meters for the most profitable customers first and avoid installations for those likely to churn?

Communicate more effectively
What if you could strengthen consumer awareness, trust and knowledge through more timely, targeted communications?

■ You can. SAS gives you THE POWER TO KNOW®.

SAS FACTS

- SAS has been in business since 1976 and today has customers at more than 60,000 sites worldwide, including 500 energy customers.

- SAS' corporate environmental initiatives include solar farms, green buildings, and EV charging stations. Read more at: sas.com/csr.

- SAS was positioned in the Leaders quadrant of Gartner Inc.'s *Magic Quadrant for Data Quality Tools* in August 2012 (sas.com/news/analysts).

Learn more about SAS software and services for utilities:
sas.com/industry/utilities

THE POWER TO KNOW®