

ilities

# 5 SIMPLE STEPS TO GET THE MOST OUT OF YOUR AMI SOFTWARE STAKE







# INTRODUCTION



When data and devices meet, the grid is empowered: there's now a two-way connection between customer and utility rather than the static one-way of before. If done correctly, it should all blend into a dynamic, multi-dimensional relationship linking customers, utilities and all of the energy resources on the grid—from traditional to distributed—seamlessly.

As the smart grid begins to live up to its full potential, utilities can live up to theirs—transforming into market-makers who introduce customers to a broad spectrum of services and opening up a bevy of benefits, from better customer service numbers to broader returns.

Leading utilities know they can't capture the deepest value of their AMI investments through meter installations alone, though. The hardware is only the start.

The software—and all the information that software brings—is the next wave, one that ties those devices to both the grid and the people who use it (and one that maximizes smart-meter value by using data across the full utility enterprise).

With relationship-building and ROI-realization as jumping off points, we've put our best minds together and handcrafted this five-step guide to getting the most out of your AMI software investments, full of lessons learned from working with hundreds of utility partners of all sizes and types.

TO ENABLE YOUR  
METER DATA  
TRANSFORMATION  
AND TAP INTO THAT  
DYNAMIC INDUSTRY  
CROWDSOURCING,  
START WITH **STEP 1**

## 1 MAP OUT YOUR SMART GRID INSTALLATION AMBITIONS

This first step seems the most simple, but it may actually be the most difficult. You've got a lot of questions to ask yourself, and the answers will define (and refine) the rest of this process. But seeing the big picture (and how this meter program will plug into every aspect of your utility) is vital to setting up the right software.

So, to make sure you get answers from each and every part of the business that may be impacted, gather a team with representatives across the board: customer care, credit and collections, IT, operations, HR, regulatory affairs, marketing and communications—and especially the C-suite.

At your first meeting, assign a little homework: have your team look at what other utilities have accomplished with their smart meter rollouts. Take notes on both the highs and the lows. Be sure to break down the installation into phases during these meetings and to build contingencies into your schedule.

All those notes will likely show you the questions you need to answer, but here are a few additional suggestions.

## THINK ABOUT

- » What role will smart meter data play in each part of your business, and what would be the estimated timeline to see benefits?
- » Once your meters are installed, where/how will that data be used that day? In a month? In six months? In a year?
- » Can this program help you with workforce efficiency and asset health? Do you plan to use remote meter commands?
- » How will these meters specifically improve network reliability? Do you plan to use the data to improve outage handling?
- » What steps will be required—and what technology and storage options—to transform this data into usable information?
- » What new business models will be possible with these meters and data?
- » How can this program increase profitability? Have you considered new billing options?
- » What new customer service options will now be possible? What energy management tools?
- » What testing requirements does your PUC have for new meters and programs?
- » How will you track your installation process?
  - Oracle DataRaker can help you do just that (and, later, it will allow you to look at meter data from multiple head-ends with additional context such as geographic location, installation schedule, historical use and weather data). Learn more at [oracle.com/industries/utilities/products/dataraker](https://oracle.com/industries/utilities/products/dataraker).





## 2 BUILD YOUR SOLID DATA FOUNDATION

Smart meters are a critical step on your path to becoming that brilliant digital utility of the future. To get there, you must do one thing well: use all that data those meters deliver.

You'll need to make sure your meter data management system (MDMS) is ready, willing and able to ensure data accuracy, and you'll need to look at the entire software and tech ecosystem that MDMS connects to. It's all about integration at this point. (If software or integration issues hold up your meter installation timeline, that can cost big money, so be working on this early and keep working on this daily throughout the installation process.)

Ask yourself: What's connected? What needs to be? What's currently being measured? What should be?

Plan your priorities here. Know which systems need (and get) that data first and which can wait. You can't do it all at once. Use those goals you set in step one to craft this more detailed sub-plan.

## THINK ABOUT

- » Testing for data accuracy. (Don't assume those meters are working perfectly just because they are new. Set up a verification plan comparing new and old numbers.)
- » Using scalable infrastructure and easy-to-use APIs. (If your project is phased-in over years, think about phasing-in data storage, too.)
- » Moving to the cloud. (MDMS is a data-rich application that needs to scale. Perfect for the cloud.)
- » Thinking beyond meter-to-cash. (Smart meters will transform your full meter-to-cash process, but they also present big opportunities for better outage management, distribution management, and more efficient field service, too. Make sure your MDMS easily supports the integrations necessary for that.)
- » Planning for problems and building in flexibility. (A truly modern MDMS should recognize storm conditions and avoid triggering bills to customers based on estimates produced during an outage.)
- » Supporting other device types—for example, behind-the-meter batteries. (Be prepared for the influx of new connected devices which may offer powerful new information and connections to customers for demand response programs and more.)
- » Building up your verification, estimation and editing of meter reads (VEE) rules and business exceptions so that exception and flag quantities generated are manageable your staff.
  - Look at functionality for VEE and business flag configuration when evaluating an MDMS. Learn more at [oracle.com/industries/utilities/products/meter-data-management](https://oracle.com/industries/utilities/products/meter-data-management).



# 3

## ENABLE YOUR NEW BILLING MODELS

The transition to smart meters means major changes to your customer-facing processes. The first true benefits you'll realize with your AMI effort will be automated billing, and that's a great first step to making all this new data work for both you and your customer.

But transitions can bring hiccups—system issues, billing errors, miscommunications, shifts in arenas that customers know and like (such as traditional meter-to-cash options). Additionally, legacy customer information systems (CIS) were not built for the complexity of smart metering, and you will likely need to evaluate upgrade costs and integration options, too.

Still, despite how much we may fear it, change usually isn't bad. Smarter meters mean a smarter and more flexible meter-to-cash process and the opportunity to offer new and innovative billing models that encourage customers to use energy when it's plentiful and save when it's scarce. We just have to approach change as fully prepped as possible.

## THINK ABOUT

- » Building base functionality first before layering on complex processes. (For example, focus first on accurate billing with new AMI meters. Cutover can be complex, and isolating changes will help with troubleshooting.)
- » Switching to interval billing. (It offers the flexibility to bill a customer on any rate from a single set of meter data. You won't have to reprogram that customer's meter when they want to switch rates.)
- » Crafting bill determinants in a way that enables new rate options. (Experiment with new revenue models a bit. Whether customers and regulators end up favoring time-based, location-based, dynamic, pre-paid, or peer-to-peer, you'll be prepared.)
- » Revisiting your customer engagement strategy.
  - For those utilities with a legacy CIS that will struggle to support interval billing, now is a great time to consider your ideal billing and customer service platform, and how you can use AMI data to fuel a billing transformation. Learn more at [oracle.com/industries/utilities/products/billing-solutions](https://oracle.com/industries/utilities/products/billing-solutions).



## 4 ENHANCE YOUR CUSTOMER EXPERIENCE

Roughly half of all consumers say the utility digital experience doesn't measure up to other experiences they have on the web. That reduces satisfaction and it keeps customers on high-cost channels—namely phone and paper.

AMI data can dramatically elevate your digital experience—surfacing the kind of personalized, meaningful insights that increase customer satisfaction and self-service.

In fact, your AMI rollout is a grand opportunity for customer communication efforts. Explain the benefits that are coming to them in the future (and give a timeline for when they'll see those benefits).

And while you're having those conversations, keep an eye on the tech and processes to make those benefits (and related timelines) a real reality. Delve into how you're going to segment your customer data and use it to the customers benefit for your customer service representatives (CSRs) and other channels too.

## THINK ABOUT

- » Personalizing customer engagement about your rollout to drive education first and program engagement to follow. (While smart meter investment planning tends to focus on operational benefits, customers can make or break a smart meter rollout.)
- » Building customer benefits such as enhanced energy management tools and high bill alerts into the AMI business case to ensure regulatory approval.
- » Using multi-channel approaches to reach all your customers: paper, email, web and even community gatherings and discussion groups. (And don't forget the tech-trendy, cutting-edge branding opportunities created with this smart grid program.)
- » Giving your CSRs more visibility into customer accounts. (This will let them dig into usage data to answer questions about high bills and make smart recommendations for customer programs.)
- » Considering a non-wires peak demand management solution that leverages smart meter data and behavioral science for an easy customer and grid win.
  - Motivate your customers to save energy during peak demand with Oracle Utilities Opower Peak Management. Learn more at [oracle.com/industries/utilities/products/opower-peak-management-cloud-service](https://oracle.com/industries/utilities/products/opower-peak-management-cloud-service).





## 5 APPLY ADVANCED ANALYTICS TO UNLOCK YOUR NEXT-GEN BENEFITS

With smart meters, you are embracing the data revolution. The transition to smart meters provides utilities with at least 3,000-times more meter data than before.

Like other industries with similar data explosions, this deluge presents utilities with huge opportunities to improve operational efficiency and identify new business opportunities. Across the board, utility execs now see analytics as a critical capability for the future.

AMI data offers unprecedented visibility into the way people use energy and how your network is performing, but it takes powerful analytics to go beyond new billing models and incremental customer service benefits to really extract deep insights and disruptors from those numbers.

How are you planning to equip your organization with analytics capabilities?

## THINK ABOUT

- » Circling back to that team you brought together for installation planning and using them to brainstorm analytics applications for smart meter data. (Consider how you can bring data together from across lines of business to solve business problems.)
- » Mapping use cases on a chart with value on one axis and complexity to implement on the other and using that to prioritize and develop a roadmap of phases.
- » Reviewing data retention and archiving. (It's tempting to want to save everything, but that's costly and may hamper performance.)
- » Realizing that this isn't the end. As your analytics capabilities mature, you will want to bring in new data sources and add new use cases.
  - Cloud software is a great fit for storing large volumes of data, particularly if the sizing needs to change over time, and for areas of rapid technology and market development. It's a good way to future-proof a business system. Learn more at [oracle.com/industries/utilities/products/analytics](https://oracle.com/industries/utilities/products/analytics).

# ABOUT US

Oracle Utilities develops and deploys industry-specific, analytics-driven software and services, covering power, gas and water utilities from grid and pipeline to the customer. Find out how we can become your trusted advisor—visit [www.oracle.com/utilities](http://www.oracle.com/utilities).

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