

# METERING WITHOUT A HITCH


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## Metering-as-a-Service Redefined

September 29, 2020

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## WEBINAR MODERATOR



**Billie Emas**  
Sales Associate  
American Water Works Association

**Billie Emas is the Sales Associate to the NE and SE territories in the Sales Department at AWWA. She has been with AWWA for six months and she has been corresponding and building relationships with the members, advertisers, exhibitors and sponsors with AWWA. She has over 20 years of experience marketing, sales, event planning and membership. Billie has a BS in Business Administration from Bowling Green State University.**

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## Panel of Experts



Morrice Blackwell  
Senior Solution Architect  
Badger Meter



Jackie Baumann  
Chief Engineer  
The City of  
Gonzales, LA



Joey Mitchell  
Vice President  
UMS



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# METERING WITHOUT A HITCH

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- 01 Badger Meter – How Metering-as-a-Services Drives Accurate Data Integration and Meter Installation
- 02 The City of Gonzales, LA -- Deployment Insights and Lessons Learned
- 03 Utility Metering Solutions – Holistic Approach to AMI Deployments
- 04 Q &A

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**Metering Without a Hitch**

- The Critical Role of Data Integration & Meter Installation



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# AMI LANDSCAPE

### Benefits

- Accurate data for accurate billing
- Improvement of customer service-related business processes
- Reduction of truck roles
- Water loss efforts and conservation
- The power of data analytics/ ROI

### Trends

- 400M smart water meters to be installed WW by 2026
- Market estimated to reach \$9.6B by 2024
  - CAGR of 10.3% during forecast period
- Moving to a Metering-as-Service delivery model



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# WHAT IS METERING-AS-A-SERVICE



### PLAN



### INTEGRATE



### DEPLOY




### MAINTAIN

Business Process Review	System Integration Requirements	Hardware, software installation	Immediate Access to Technical Assistant Center
Technology Impact Analysis (Current & future state)	Scrub Data & Perform Gap Analysis	Integration Testing	Annual Meter Testing
Design of AMI, Communications Network, Overall Architecture and Requirements	Network Installation Plan	Inventory Management	First Line Support from Your UMS Dedicated Team
Define Software and Application Requirements (customer portals, CIS, WOM, etc.)	Integrate new AMI with other Applications (Customer Engagement Portal, CIS, GIS, Billing, etc.)	Public Awareness Campaign(s)	All Software Upgrades
Establish Subscription Terms and Cost	Validate & Troubleshoot Integrations	System Training	Post Deployment Business Process Analysis



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**METER INSTALLATION  
...THE GOOD, THE  
BAD AND SOMETIMES  
UGLY**

**It's More than Just a Meter-for-Meter Exchange**

- Continuous technology transition
- Wastewater treatment plant priority

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The Number One Pitfall Is Typically Around Data and Data Integration



**DATA INTEGRATION**

- Billing systems
- All systems used by utility

**IT'S ALSO YOUR BIGGEST ASSET**



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THE UTILITY

SUBMITS TROUBLE TICKET TO SERVICE PROVIDER

SERVICE PROVIDER DIAGNOSES ISSUE

QUICK RESOLUTION

### POST IMPLEMENTATION AND LONG-TERM SUPPORT

**Maintenance = Optimal AMI Performance**

- Service/trouble-shooting – partner to diagnose performance issues
- Training & evaluation
- Software upgrades

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THE CITY OF GONZALES, LA DEPLOYS netAMP

### Metering Without a Hitch

- Removing Barriers to AMI Deployments & Improving Customer Relations with Metering-as-a-Service

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## METER READING & BUSINESS PROBLEMS

- 1 Inaccurate Billing
- 2 Excessive Customer Service Issues
- 3 Limited Budget



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## Selected netAMP for Ease and Speed of Deployment

One Solution to Address Billing, Customer Service Issues and Budget Hurdles

		
All Equipment, Meters, Software and Services Provided in One Solution	netAMP Metering-as-a-Service Integrated All Planning, Installation, Integration & Support	Provided a Solution We Didn't Even Know Was Possible with Our Budget



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## DELIVERING REAL RESULTS & SOLUTIONS



### BILLING ACCURACY & CUSTOMER SATISFACTION

- Reduced meter reading time by 71%
- Improved accurate & timely monthly billing
- Minimized labor, gas and vehicle maintenance costs associated with the manual meter reading
- Detected leaks proactively & reduced lost revenue
- Decreased calls to customer service

### Easy Subscription-Based Solution to Fund Deployment

- Upgrade all 5,000 endpoints with a fixed, monthly subscription
- Favorably passed fee to our customers



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## LESSONS LEARNED



### The Importance of Ongoing Support & Maintenance

- Implementation from the meter in-field to integration with billing system is the most important aspect of the deployment
- There will always be bumps in the road with a new AMI deployment
  - Select the right team
  - Establish a strong deployment plan and processes
  - Strategy to tackle surprises



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**HOLISTIC APPROACH TO AMI DEPLOYMENTS**



**Metering Without a Hitch**


- Getting It Right The First Time



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## ADVANCED METERING UPGRADES ARE COMPLEX

Field Devices	Networks	Utility Services
		



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## ASSESSING THE ORGANIZATION

- Develop a clear understanding of changes required to existing systems
- Understand organizational changes required with systems, personnel, processes and policies
- Define organizational requirements to support a new communications network, establish interfaces for billing reads, and develop a plan to manage & leverage all the data from your new system

Technology **doesn't**  
solve problems

**People**

Solve problems

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## INTEGRATING & IMPLEMENTING YOUR AMI SYSTEM

- If a project is going to go off the rails, it will happen during implementation
- AMI: Installing a transmission device that needs to be properly configured, activated and validated to work over the network
- AMI installations require very tactical and specific planning efforts

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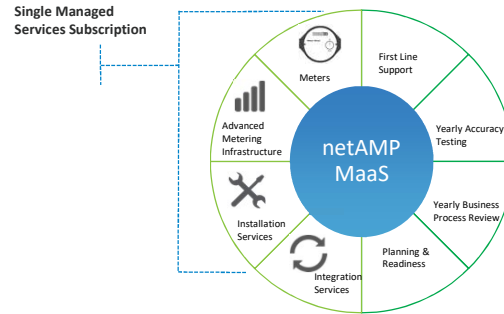
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## SIMPLIFIED PATH TO METER UPGRADE

### DIY Metering Program

1. Design a meter replacement program
2. Design a technology upgrade program
3. Obtain funding for capital purchase
4. Purchase meters
5. Purchase radio communication devices
6. Install / configure meters & radios
7. Install / configure software interfaces
8. Decommission old metering technology and old processes
9. Install new business processes
10. Read meters and evaluate the data
11. Transfer to billing system to bill meters
12. Maintain and troubleshoot metering and communication devices
13. Conduct meter accuracy testing
14. Train new employees

### Metering-as-a-Service



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## METERING-AS-A-SERVICE

### What It Should Include

- Planning and readying the organization for the upgrade
- All meters, AMI endpoints and software
- Professional installation of equipment
- Electronic transfer of new meter information into billing system
- Training
- Maintenance services such as testing, training and holistic technical assistance

### Benefits

- Upgrade entire metering program at once
- Zero capital outlay
- Zero debt with no effect on bond rating
- Eliminate implementation risk
- Delivered as a subscription service



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## PRESENTER BIOGRAPHY INFORMATION

Morrice Blackwell - Morrice is a recognized industry expert in water technology products and has over 26 years of experience in the areas of engineering, marketing and sales. Morrice joined Badger Meter in 1994 and has gained depth of knowledge and experience through his broad spectrum of positions including senior manufacturing engineer, production manager, customer solutions manager, application engineering/training manager, and marketing manager. Morrice offers this experience to water utility customers to assist them in effectively meeting and exceeding their short-term and long-term improvement objectives throughout their organizations. He holds a bachelor's of science degree in mechanical engineering from Marquette University and a master's degree in engineering management with an emphasis on marketing and operations from the Milwaukee School of Engineering. Morrice is also the founder and host of the water utility video podcast, The Smart Water Show. Check out past episodes at [www.smartwatershow.com](http://www.smartwatershow.com)

Jackie Baumann - Jackie is a professional, civil engineer. She graduated from the LSU College of Engineering in 2000 and began her career designing residential and commercial developments. Thirteen years ago, Jackie transitioned from private design work to municipal project management as Ascension Parish Engineer. For the past 10 years, Jackie has been dedicated to the City of Gonzales as Chief Engineer, where she manages storm water, drinking water, sewer, natural gas, and roadway infrastructure projects. Jackie serves on numerous committees representing Gonzales and works to improve environmental health.

Joey Mitchell - Joey has more than 15 years of technical and real-world experience assessing, defining, and deploying Advanced Metering networks for water, gas, and electric utilities. He has held executive leadership positions developing multi-million-dollar sales channels and has been responsible for building software integration and professional services teams.



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