

Mastering Advanced Metering Infrastructure:

Keys to a successful implementation for utility staff and customers

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Moderated by Dominique Gómez | WaterSmart Software

Agenda

- Brief AMI Trends Overview
- Introduce our Panelists
- Brief Background on AMI Journey in:
 - Fort Collins
 - Eagle River
- Moderated Q&A

Who is working on AMI?

Table 9. Utilities reporting fully implemented technologies and/or implementation is in progress ($n = 676$)

Rank	Technology	% of Utilities Fully Implemented	% of Utilities With Implementation in Progress
1	SCADA	79	17
2	GIS	64	28
3	Hydraulic models	53	25
4	Billing services	46	31
5	Maintenance management system	40	33
6	AMR	37	24
6	Productivity (e.g., email, file sharing)	37	33
7	Treatment plant	34	43
8	Customer information systems	33	31
9	Cyber intrusion	31	29
10	Enterprise management software	30	27
10	Mobile-based applications	30	38
11	Meter reading	29	47
12	Data management	22	49
13	Distribution / collection system operation and optimization	21	43
14	AMI	17	25
14	Cloud-based applications	17	30

Source: AWWA State of the Water Industry Report 2018

AMI—advanced metering infrastructure, AMR—automatic meter reading, GIS—geographic information system, SCADA—supervisory control and data acquisition

What are they hoping to achieve?

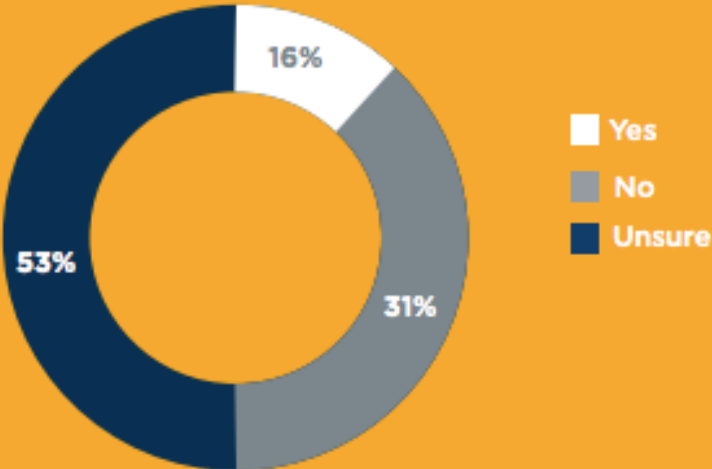
- Detecting leaks and occurrences of water theft
- Promoting education on conservation at the residential and commercial levels
- Building a sense of ownership and accountability among customers
- Reducing operational costs from outdated methods of data collection and billing
- Revenue realization through accurate billing
- Targeted water efficiency messaging
- Overcoming billing shock or surprise

Source: Mulki et al, The Science Of Public Outreach — And Successful AMI Deployment, Water Online, May 2017.

Will they be able to use the data?

**FIGURE 9:
WATER UTILITIES LACK CONFIDENCE IN THEIR ABILITY TO
MANAGE AND USE AMR/AMI DATA**

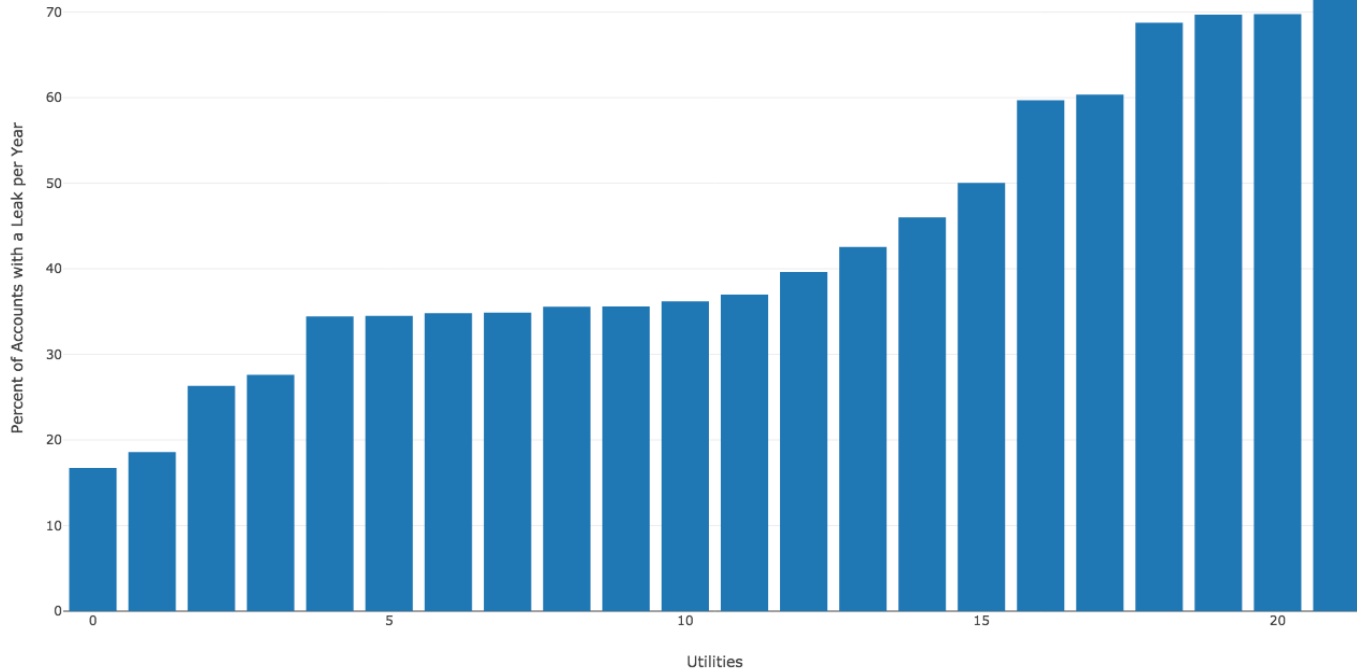
**Do you believe you have the organizational infrastructure
to manage and analyze data from AMR/AMI?**



*Source: State of Advanced
Metering Infrastructure and
Data Analytics Adoption in the
US Water Utility Industry, West
Monroe Partners, 2017*

What we've learned...

22 Utilities - 467K Accounts - 386K Leaks - 43% Average Percent of Accounts with a Leak per Year



- If you define a leak as 24 hours of continuous use, on average account will have 2 “leak” events per year on average
- If you define a leak as 168 hours of continuous use, on average account will have 1 “leak” event every other year
- Either way, enormous burden for alerting compared to monthly data

Source: WaterSmart Software

Meet our Panelists

- Dr. Liesel Hans, Water Conservation Manager
 - 3 years at Fort Collins Utilities
 - Serves 35,500 accounts

- Maureen Mulcahy, Customer Service Manager
 - 2.5 years at Eagle River
 - Serves 9,800 water accounts



AMI & the Colorado Energy Office

Statute change in July 2017:

Allows public jurisdictions in Colorado use performance contracting to finance new water meter projects.

For more information:

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Thank you!

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