BUILDING A DATA STRATEGY FOR YOUR UTILITY

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PNWS-AWWA Quarterly Webinar - Oct 28, 2021

suez

WHO WE ARE

113 Idaho employees serving more than 250,000 residents in 3 cities

SYSTEM STATISTICS

+100,000 connections

100% water

7 plants

100+ pressure zones

80 wells

300+ Remote Facilities

2020 Production Plan 15.2 BG

2020 Revenue Plan $48 M

Miles of Water Main 1,308 mi (2,105 km)

Service Area 150 sq mi (271 km^2)

AMI Network Area 400 sq mi (1036 km^2)

68% Manual Meters

32% AMI Metering

Building a Data Strategy

This presentation will provide an overview of what goes into a good data strategy, and how this can improve operations for your utility.

Why does this matter?

Increasingly, data literacy is becoming essential to the operation, maintenance, and management of public water systems. This presentation will provide relevant background on how data can be used to improve maintenance planning and general operations.

Building a Data Strategy: Ground Rules

Ground Rules

1. Keep it simple
2. Provide timely access to information
3. Stay focused on clear objectives

SUEZ Idaho's Core Commitments

1	Do what is right for customers
2	Provide employees with a healthy work environment
3	Meet all regulatory obligations without exception
4	Be polite, be professional, and prepare for the worst

Building a Data Strategy: Keep it Simple

Clear Objectives

#1	Do What's Right for Customers
#2	Healthy Work Environment
#3	Meet all Regulatory Obligations
#4	Keep it Professional

Functional Areas for Utility Operations

Functional Areas	Performance Indicators
Customer Service	Service Complaints, Avg Wait Time, Abandoned Call Rate, First Call Resolution
Health and Safety	Hazards Identified, Near Misses, Recordable Incidents, Training Hours
Operations	Daily Production, Water Loss, Avg Workorder Age, Alarm Count, Service Disruptions (Planned, Unplanned), Leaks Repaired
WQ and Compliance	Samples Collected/Missed, Samples within 80% of exceedance, NON/NOVs
Engineering	Active Company and New Development Projects
Human Resources	Vacancy time to fill, Minimum staffing level, Grievances
Comms and Outreach	Customer Contacts (Notify, Social, Mail), Stakeholder Outreach, Employee Engagement
Finance	Labor Hours, OT Hours, Call Outs, Power & Chemical Expense, Fuel Use

Multiple Choice

What <u>was not</u> one of the 8 functional areas of utility operations?

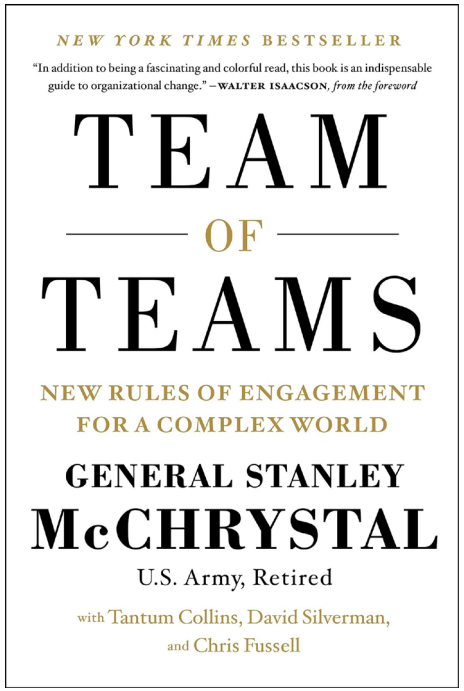
A) Customer Service

B) Operations

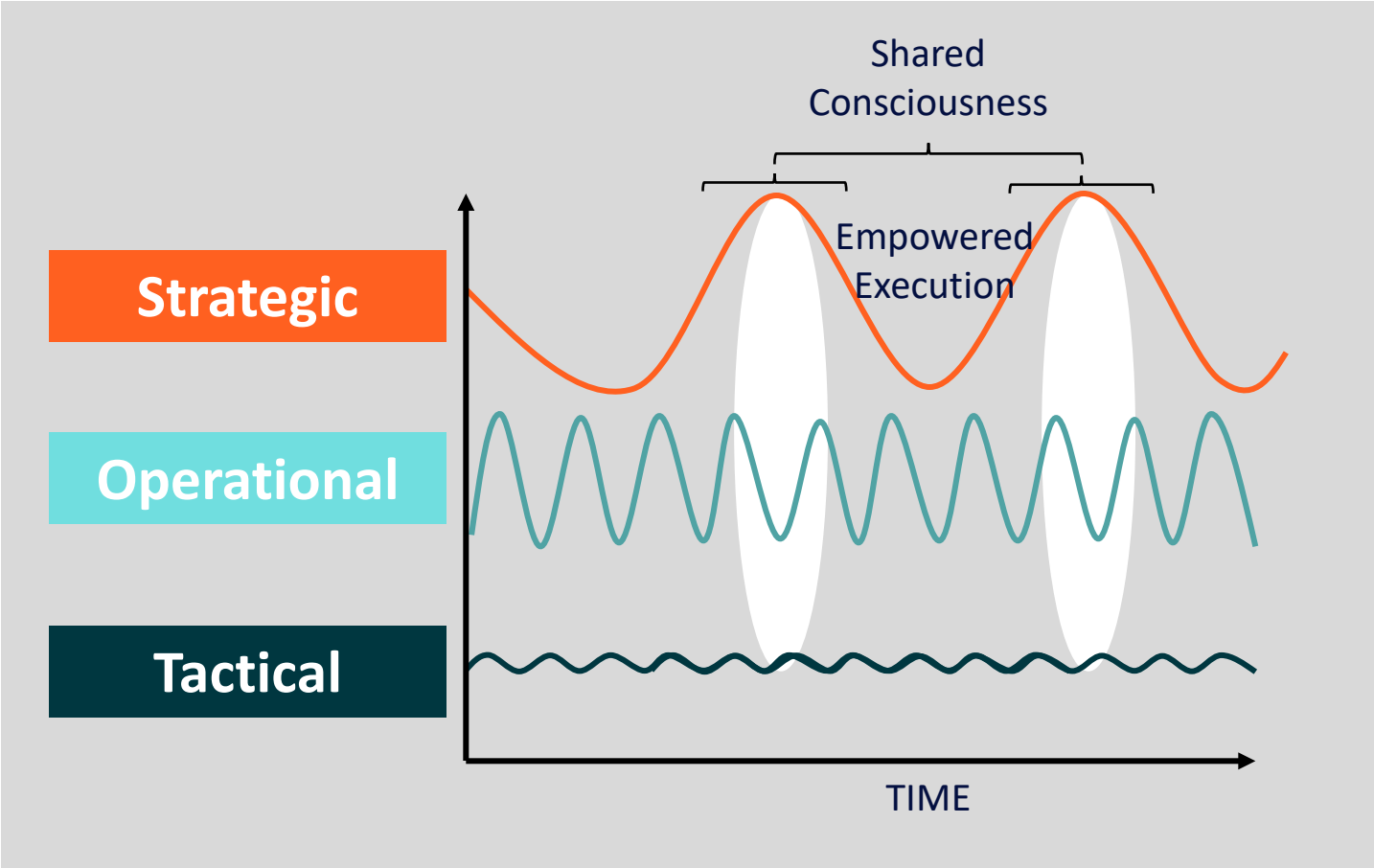
C) Finance

D) Regulations

Building a Data Strategy: Make it Timely



New Rules of Engagement
For a Complex World



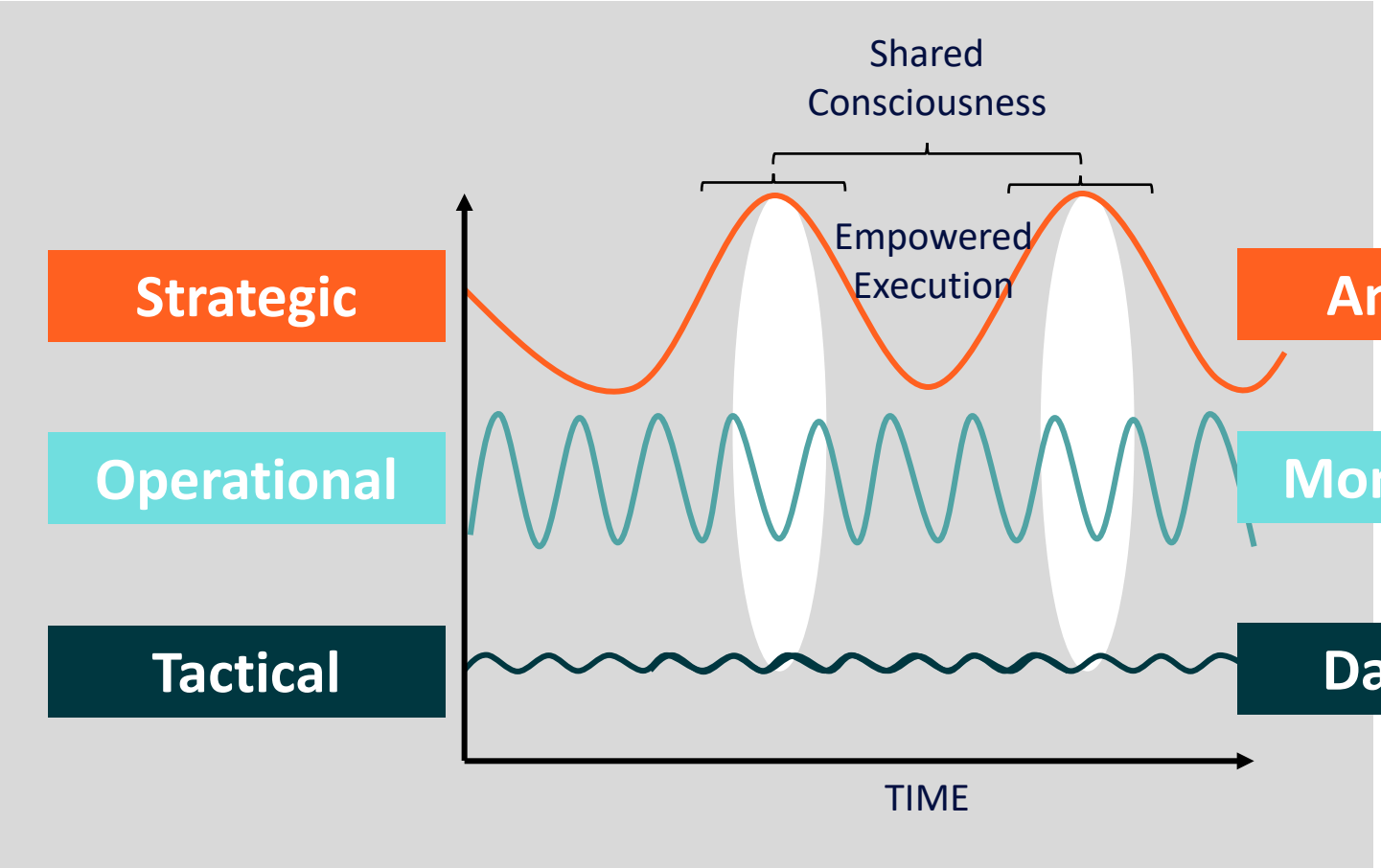
Building a Data Strategy: Make it Timely

Strategic Mostly Annual Reports	Operational Monthly Reviews	Tactical Daily-Weekly Updates
Consumer Confidence Reports	**Spending Variances**	Customer Service
Utility Commission Reports	**Overtime Summaries**	Health and Safety
Tax Authorities	**Safety Scorecards**	Operations
OCD - Risk Assessment	**Collections Backlog**	WQ and Compliance
Emergency Response Plans	**Monthly Operational Report** ←	Engineering
Budgets		Human Resources
AWWA Utility Benchmarks		Comms and Outreach
		Finance

Tactical Issues
Dominated by source system dashboards

Technology Can Change Timeliness of Reporting Tools	For many water sales and water loss are operational metrics. Advances in real-time monitored systems make these observations more timely and therefore more tactical.

Building a Data Strategy: Put it to use



SUEZ Idaho's Core Commitments

Annual Planning

Annual Budgets & Priorities

Monthly Exceptions

OPR Exception Report

Simple Metrics Tracker

Daily Operations

Weekly O&I Briefing

System Dashboards

Oct
28

Idaho: Operational Performance Review

MONTHLY OPR SUMMARY CONCEPT

Local Priorities

#1	Customer Service Chat Feature
#2	Job Demands Analysis
#3	Voluntary PFOS Sampling
#4	WFM System Enhancements

Performance Indicators

Tactical Daily-Weekly Updates	Exceptions
Customer Service	No exceptions: Sept Call Vol: 4,890, Abnd Rate: 1%, ASA: 13 sec
Health and Safety	No exceptions: 80% to year-end training goal
Operations	No exceptions: Production: 30 MGD (+5MGD above plan)
WQ and Compliance	No exceptions
Engineering	No exceptions: Project and spending on track
Human Resources	2 Open Grievances Vacancies with tight time to fill
Comms and Outreach	Delivery of rate case mailers next 7-10 days
Finance	No exceptions: Collections nearing pre-covid target levels

Idaho: Operational Performance Review – Detail Dashboard

OPR Detail Dashboard

Simple Excel Model

Intended as prep/backup for Monthly OPR Summary

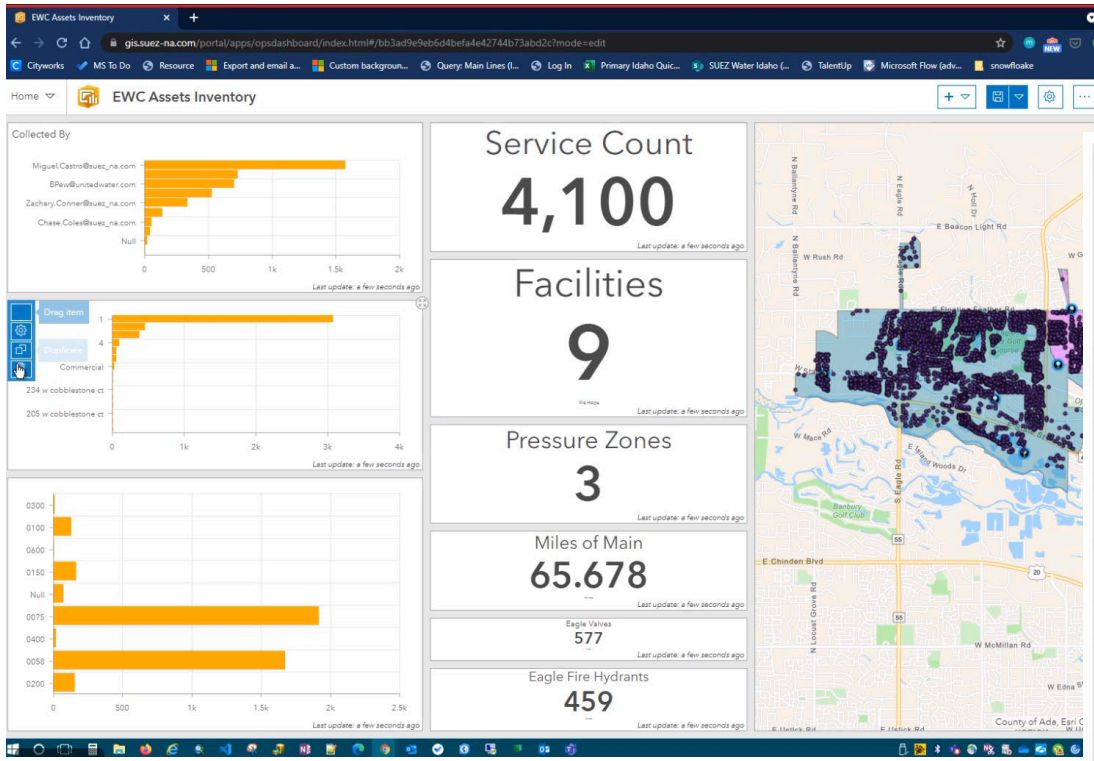
Metrics selected for ease of automation

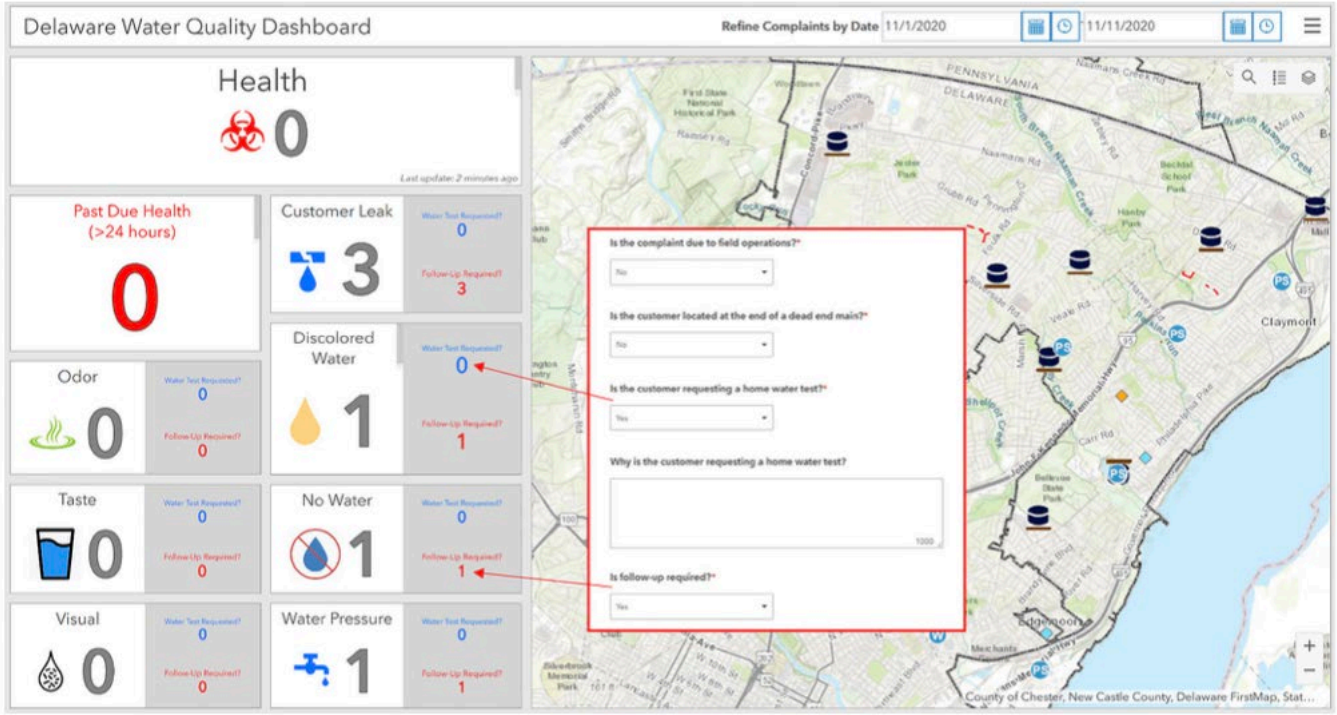
Fed from Functional Dashboards & Source Systems

Idaho Utility Score Card	2020				January				February			
Activity	Source	Target	Reported	Units	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	W
Customer Service & Billing												
Service Requests	**CW**											
Field Service		600	Weekly	Count	564	600	550	585				
Locate Tickets		280	Weekly	Count	220	280	225					
Other Types (WQ, DW, Leaks, etc)		115	Weekly	Count	112	109	120					
Company Issue (% of other type)		65%	Weekly	%	50%	65%	70%					
Payment Plans Created	**CCB**	50	Weekly	Count								
Abandon Call Rate	**IVR**	3%	Weekly	Percent	3%	2.00%	3.50%					
Avg Wait Time	**IVR**	45	Weekly	Avg Seconds	44	42	43					
First Call Resolution (SAME NUMBER CALL BACKS 2x)	**IVR**	2	Weekly	Original Calls	3	3	1	1				
Health and Safety												
Hazardous Condition Reports	**Intelex**	7	Weekly	Count	6	8	10	6				
Intelex Near Misses	**Intelex**	0	Weekly	Count	0	0	1	0				
Intelex Reportable Events	**Intelex**	0	Weekly	Count	0	0	0	0				
Training Hours Accomplished	**Talent'Up**	5	Weekly	Count	7	20	8	12				
Operations												
Daily Production	**SCADA**	varies	Weekly	Avg MGD	20	22	23	24				
System Alarm Count	**SCADA**	50	Weekly	Avg Daily	25	24	51	35				
Non-Revenue Water	**Calc**	4.50%	Monthly	NRW				4.60%				
Maintenance Projects	**CW**											
Scheduled Events		50	Weekly	Count	5	6	7	2				
Water service disruptions (sustained drop < 20psi)	**CW**											
Scheduled		5	Weekly	Count	5	6	7	2				
Unplanned		0	Weekly	Count	0	0	2	0				
Construction and Repair	**CW**											
Scheduled Projects		5	Weekly	Count	5	5	5	8				
Unplanned Repairs		0	Weekly	Count	1	0	1	0				
Avg Workorder Age	**CW**	85	Weekly	Avg Age (Hours)	85	87	90	92				
Meter Readings	**CW?**	10,000	Weekly	Count	9,500	9,750	10,000	11,000				

WEEKLY OPR DETAIL CONCEPT

SUEZ Regulated Utilities: Daily Operational Dashboards





Coordinated operations provide immediate visibility into system events and activities.

Multiple Choice

What is not an example of a tactical level reporting tool?

A) Daily Staffing Board

B) Dashboard of Open WQ Calls

C) Annual WQ Reports

D) Locked Out Equipment List

THANK YOU!

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