

KlōudGin

MG&E
Madison Gas and Electric

EY Building a better
working world

Building A Modern Digital, Integrated, Utility of the Future



Agenda

- Current Utilities Landscape
- Madison Gas and Electric's Digital Transformation Journey
- Lessons Learned and a bit more on future predictions
- Q&A

Your Speakers



Kimberley Herrela
Director of Industry
Solutions



Shannon Paulsen
Program Director,
Enterprise Forward
Strategic Transformation



Clint Brice
Managing Director
Technology Consulting



About KloudGin



(VENTURE-BACKED)

HEADQUARTERED
IN SUNNYVALE, CA

Products:

Field Service Management Suite, Asset Management Suite, KloudPlatform

Industries:

Utilities: Electric, Gas, Water & Wastewater, Refuse, Telecom, Oil & Gas, Industrial Commercial Services

What's Unique:

Native Mobile 1st. Single Scheduler for both short & long cycle, AI/ML. Single Cloud. All Work. Real Time. Integration and Workflow Engines. Modern Configurable/ Declarative non-proprietary low/ no code platform

Megatrends Affecting Utilities

INFRASTRUCTURE & REGULATION



- Aging infrastructure
- Retiring workforce
- Tightening regulation

DIGITAL ENGAGEMENT



- Immediacy / service expectations
- Digital Natives: customers, field workers, contractors, suppliers
- Distributed smart assets Solar, Batteries, Charging Stations

ALTERNATIVE BUSINESS MODELS



- Marketplace and Smart Home
- Installation services
- Outsource Utility operations
- Data services
- New generation energy operators



Clint Brice
Managing Director
Technology Consulting
EY

Shannon Paulsen
Program Director,
Enterprise Forward
Strategic Transformation
MGE



MGE at a Glance

Vision: As a Utility of the Future, MGE will transform into a digital, integrated utility that relies on automation, cost optimization, flexibility, ability to provide new products and services, provides a 360 view of the customer, and becomes an employer of choice

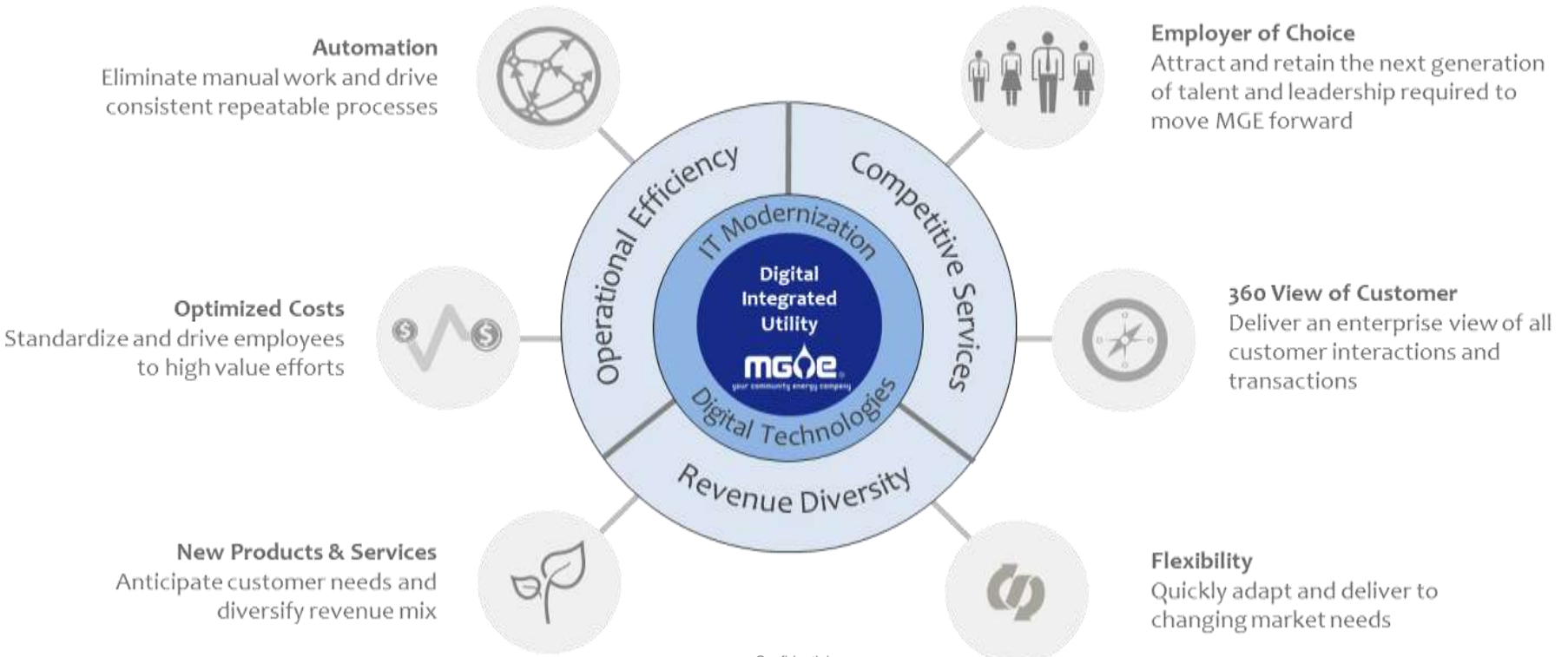
- Your Community Energy Company
- Located in Madison, WI
- IOU, Subsidiary of MGE Energy (NASDAQ: MGEE)
- 149,000 electric customers in Dane County
- 154,000 natural gas customers in seven counties
- ~700 employees





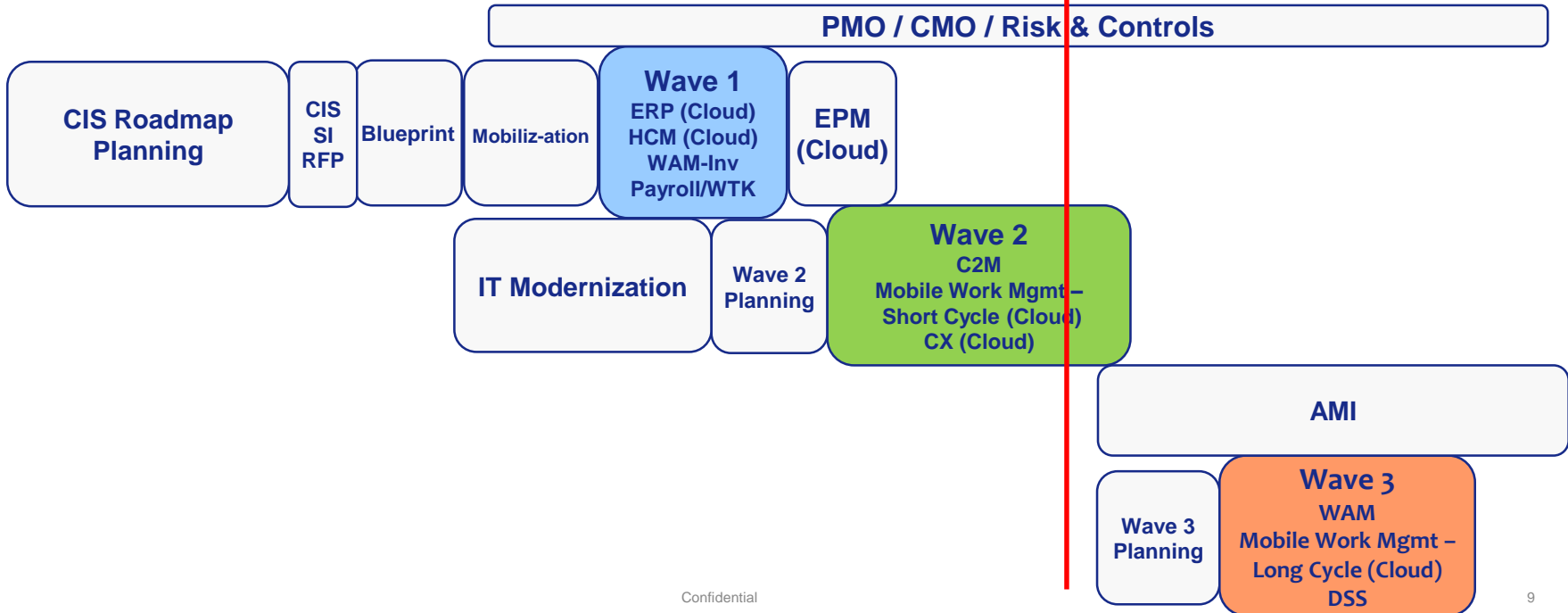
Transformation Program Background

Vision: As a Utility of the Future, MGE will transform into a digital, integrated utility



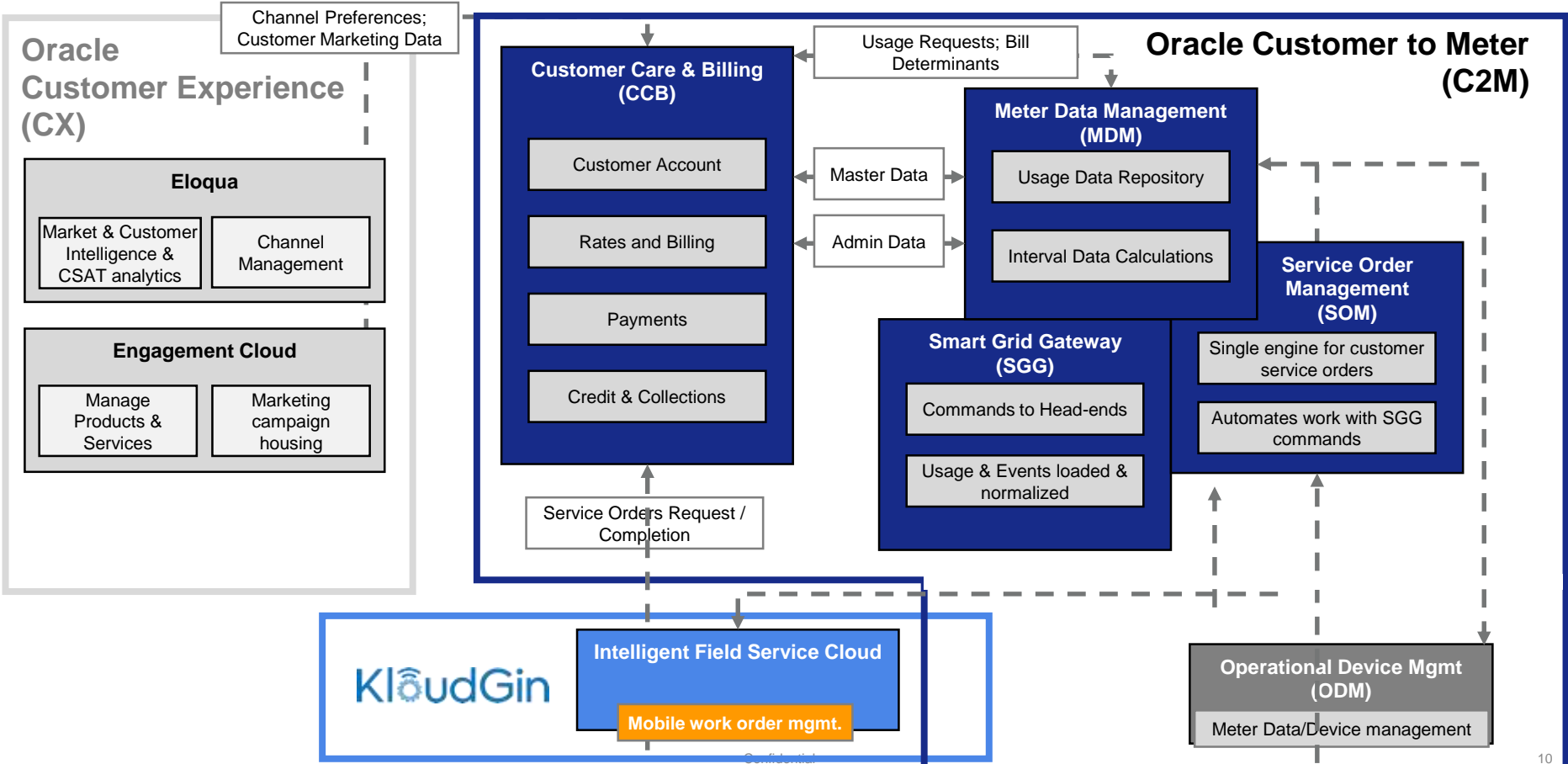


Transformation Program Timeline Overview



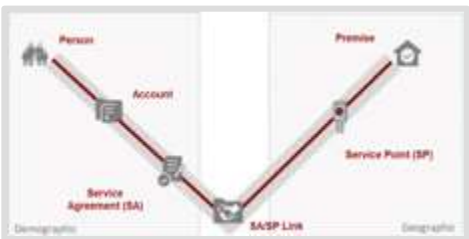


Wave 2 Application Integration Overview





FWM Workstream Systems (Field Service at a Glance)



Customer to Meter (C2M)

Customer Care & Billing (CC&B)
Meter Data Management (MDM)

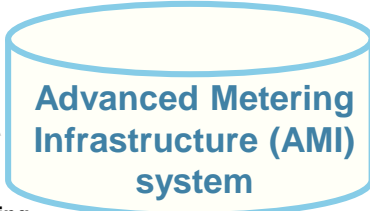
Returning information to update C2M

Request



Service Order Management (SOM)

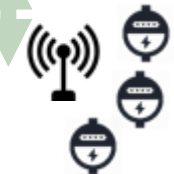
Request to headend



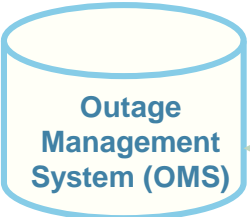
Advanced Metering Infrastructure (AMI) system

Returning information (reads and status)

Field activity
Status & Completion Data
Appointment Slots



Outage Tickets



Outage Management System (OMS)

Status



KloudGin

Field Service Module (FSM)

Time Data



Kronos

GIS Map



GIS



KloudGin: Cloud-First and Mobile-First Digital Solution

KloudGin

BEST-IN-CLASS FIELD SERVICE. ASSET. INVENTORY. MOBILE CLOUD PLATFORM.

- Effortless connectivity
- System agnostic
- Pre-built adaptors

INTEGRATION

- Robust architecture
- Automated scheduling
- Mobile work orders
- Connected customer

AUTOMATION

- Real-time updates
- AI-wired dashboards
- Actionable business insights

VISIBILITY

Built on AWS for security, scalability and functionality

RUGGED MOBILE UX for NON-TECH SAVVY USERS



Why KloudGin for Field Work Management?

1

Business applications will be cloud-based, either SaaS solutions or MGE licensed software

Strengths:

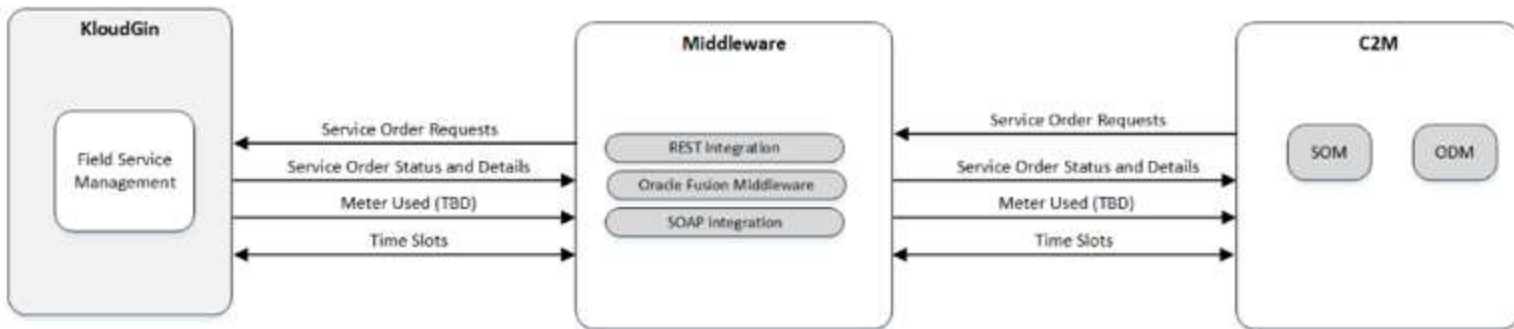
- MGE Enterprise Forward Program Standard #1
- Oracle solution at its current state did not meet our needs
- This application was built for the cloud
- Had to integrate with Oracle WAM 2.0 and C2M (CC&B) - 3 vendor options
- Positive short cycle references with CC&B integration, auto dispatching, timesheets, and inventory management capabilities
- Our SI had proficiency with this application

Opportunities:

- No Gas or Electric utility customers prior to MGE (more effort to build these specific workflows)
- Sophistication of ESRI GIS Integration (determine key use cases and impact)
- High likelihood of needing multiple devices based on current Windows based applications in use currently



FWM Short Cycle Body of Work

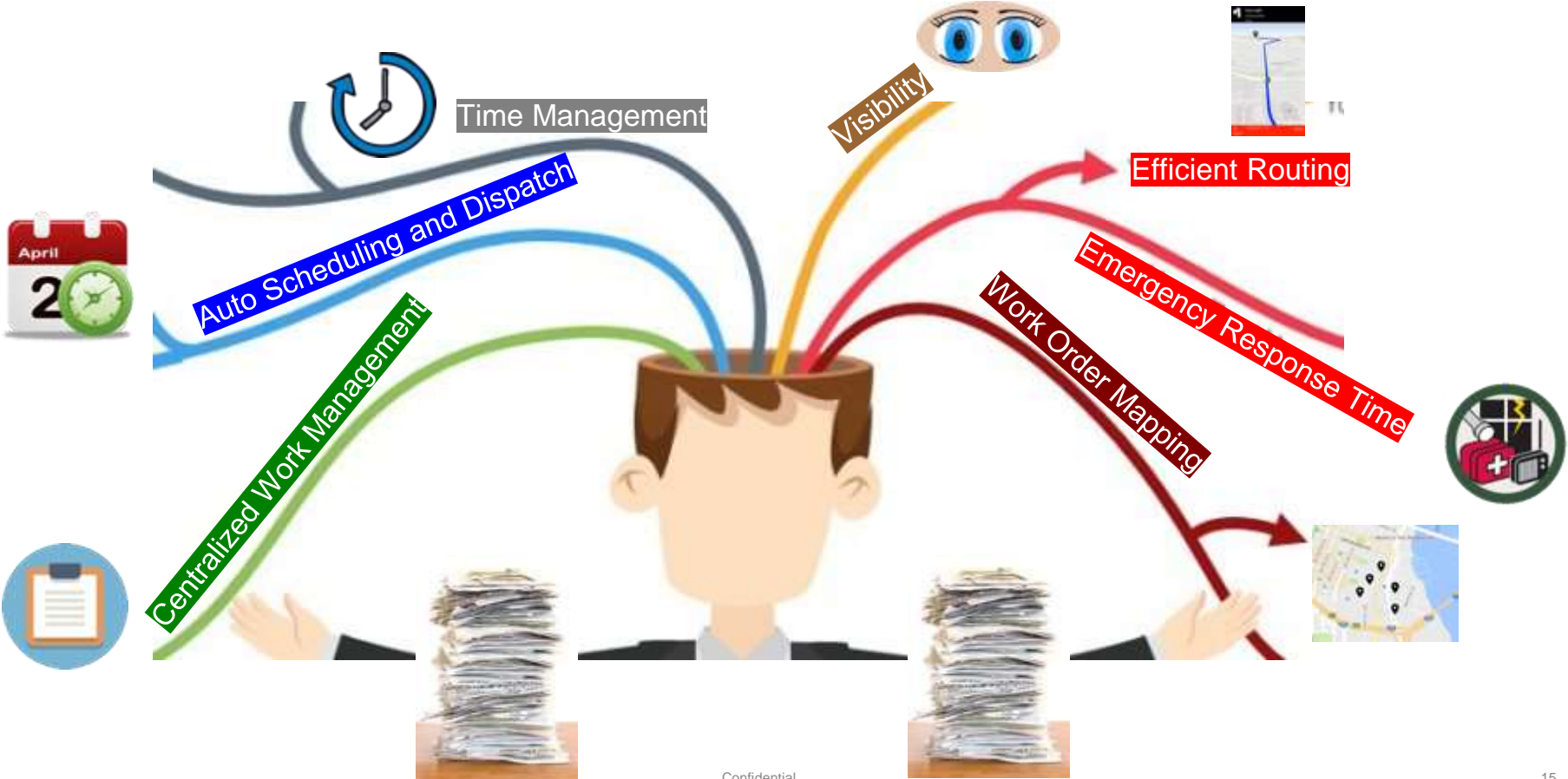


Order types:

- OMS Outage Orders
- Gas Leaks
- Annual PSC required Meter Testing (Gas & Electric)
- Gas & Electric Non-Payment Disconnect
- No Consumption
- Electric Contractor Damage



Pre-Project Operational Challenges Now Have Solutions





Integrations

#	Integration Name
1	IF - 038 C2M to KG Field Work Creation
2	IF - 037 KG to C2M Field Work Completion
3	IF - 095 OMS to KloudGin
4	IF - 096 KloudGin to OMS
5	IF - 097 KloudGin to Kronos
6	IF - 098 GIS to KloudGin
7	IF - 110 Appointment Services
8	IF - 122 Field Pick Up Orders

Enhancements

#	Enhancement Name
1	EN - 095 Key Assignment (MGE unique rather than standard keys)
2	EN - 097 Crew Details Dashboard to show crews zones, roles, resources, activity types, etc for multiple crews at a time
3	EN - 098 Custom Dashboard for Work with Same Address or Global Service ID (ties together meters at apartments, etc.)
4	EN - 099 Time Entry Enhancements: Structure the manual time entry field in KloudGin to fit the Project task structure
5	EN - 102 Assign Multiple Field Crews to a Field Activity (Mass Response to a single work order/incident)
6	EN - 105 Audible Alert for Dispatchers – Safety Benefit
7	EN - 106 Lasso Field Activities to be Assigned to a Crew (GIS related) for max efficiency
8	EN - 119 Screen Changes
9	EN - 121 Survey Validations (Ensure appropriate info is recorded)
10	EN - 122 Abort Customization

Reports

#	Report Name
1	RPT-075 Survey Validation Report
2	RPT-076 GMS 360 Dashboard
3	RPT-077 EMS 360 Dashboard
4	RPT-078 Meter Orders 360 Dashboard
5	RPT-079 M&C 360 Dashboard
6	RPT-080 Gas Leak Survey
7	RPT-081 Master Field Activity and Survey Response Report

All KloudGin reports are planned to be developed using KloudGin BI Tool (Quicksight)

The system was able to be modified to meet needs of our business. We expected some “customization” and believe these changes add measurable efficiency and drive out costs.



How are KG & EY Helping Accelerate the Digital Journey for MGE?

PEOPLE

- KG product and project team open to feedback on product growth (security, ARCOS, GIS)
- Encouraged thinking outside the box of current process
- Centralized Scheduling
- Workforce transformation

TECHNOLOGY

- Managing the field through one system
- System of record for scheduling
- Connected to OMS to manage emergencies in one place



PROCESS

- Automating work orders for the first time
 - Flexibility to balance between old requirements and new best practices
- Provide data for Operational reporting events and the power of integrated data will provide more analytics over time (crawl/walk/run)

ECOSYSTEMS

- Connecting ecosystems across the business enterprise
- Enabling cross functional collaboration through simplicity
- Setting the foundation for incremental capabilities for utility of the future



Single Face of Work

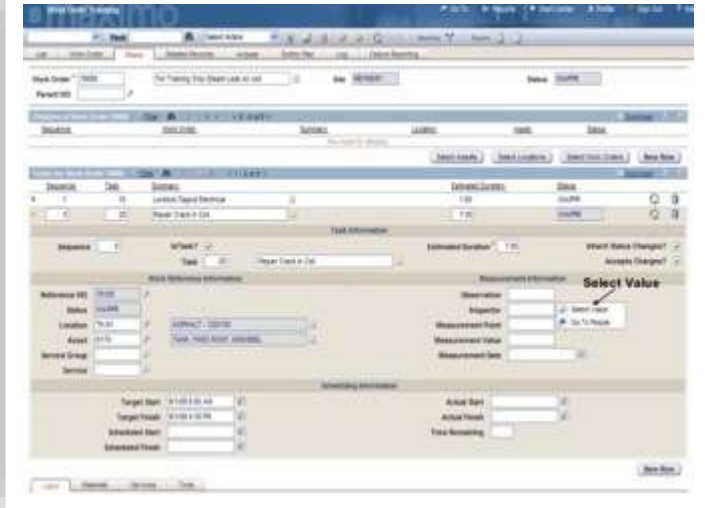
KlōudGin

Designed for Field Workers

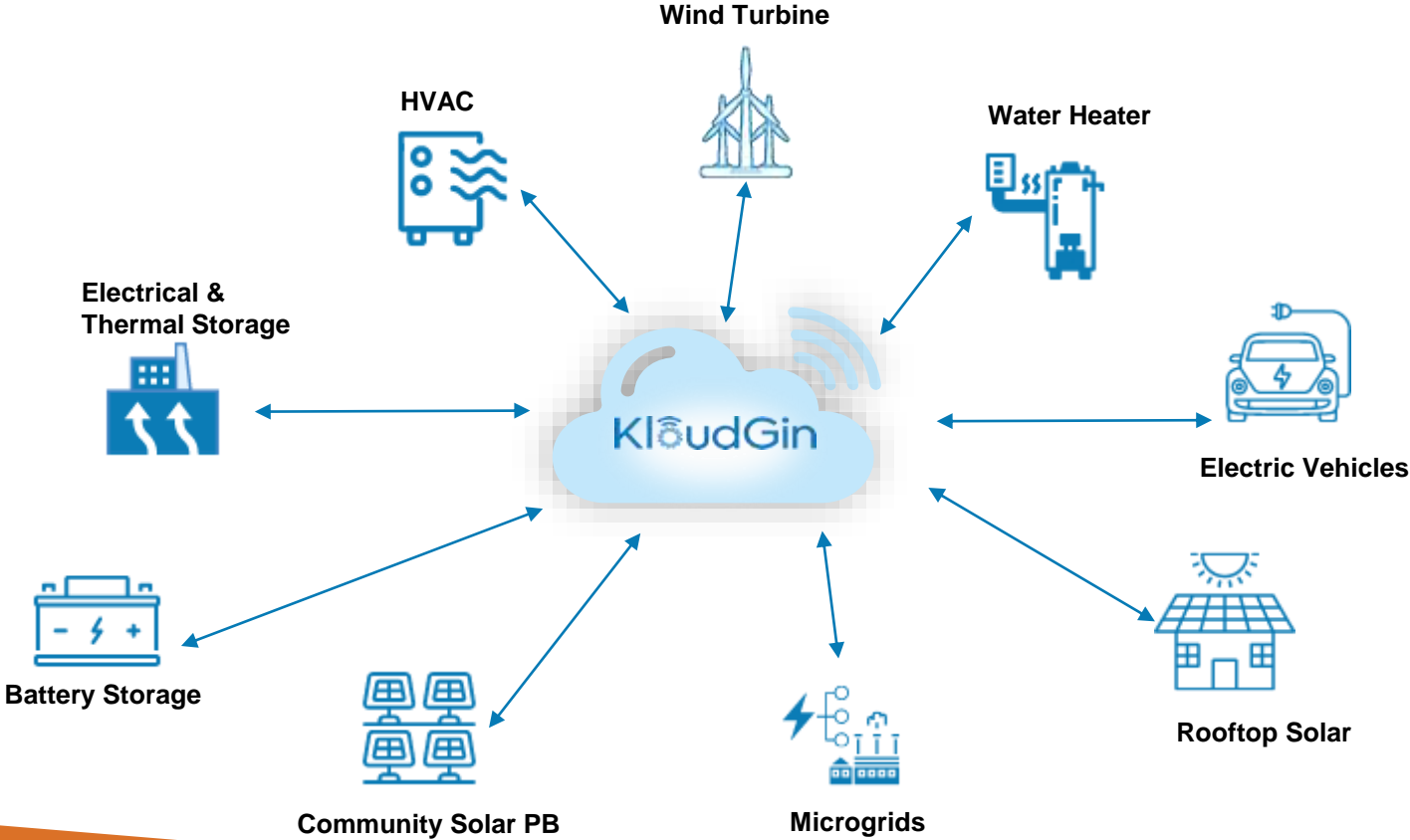
do rugged, mission-critical work



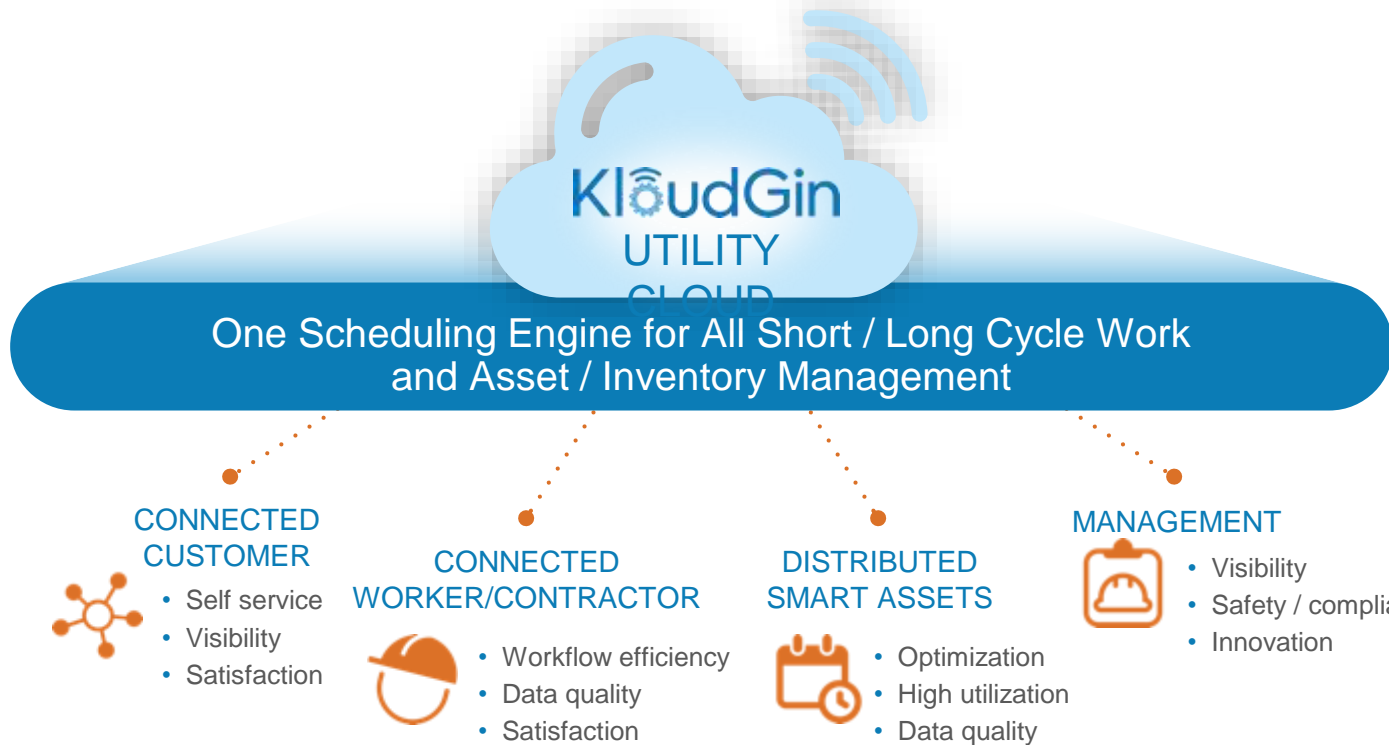
Yet their tools are hard to use



Optimize the Management of Distributed Energy Resources



Single Cloud Enabling the Future of Work



Municipal Gas Authority of Georgia: Beyond the Meter Solution



NATION'S LARGEST NON-PROFIT NATURAL GAS JOINT-ACTION AGENCY

Serving 79 Members in
Georgia, Alabama, Pennsylvania,
Tennessee, and Florida

Meeting gas needs of
246K+ customers

Services to 16 other agencies
and public systems

KloudGin Results

Integrates with **Shopify** marketplace, enabling MGAG customers to search, compare and order appliances. Runs entire ordering and fulfillment digital processes:

- Vendor catalog, price lists
- Auto inventory replenishments
- Warranty management
- Purchase orders
- Post sales service via gig workers like **Uber**
- Connected contractor
- Integrated with accounting



KloudGin provides MGAG a modern cloud-first and mobile-first platform that is highly integrated with our existing infrastructure.

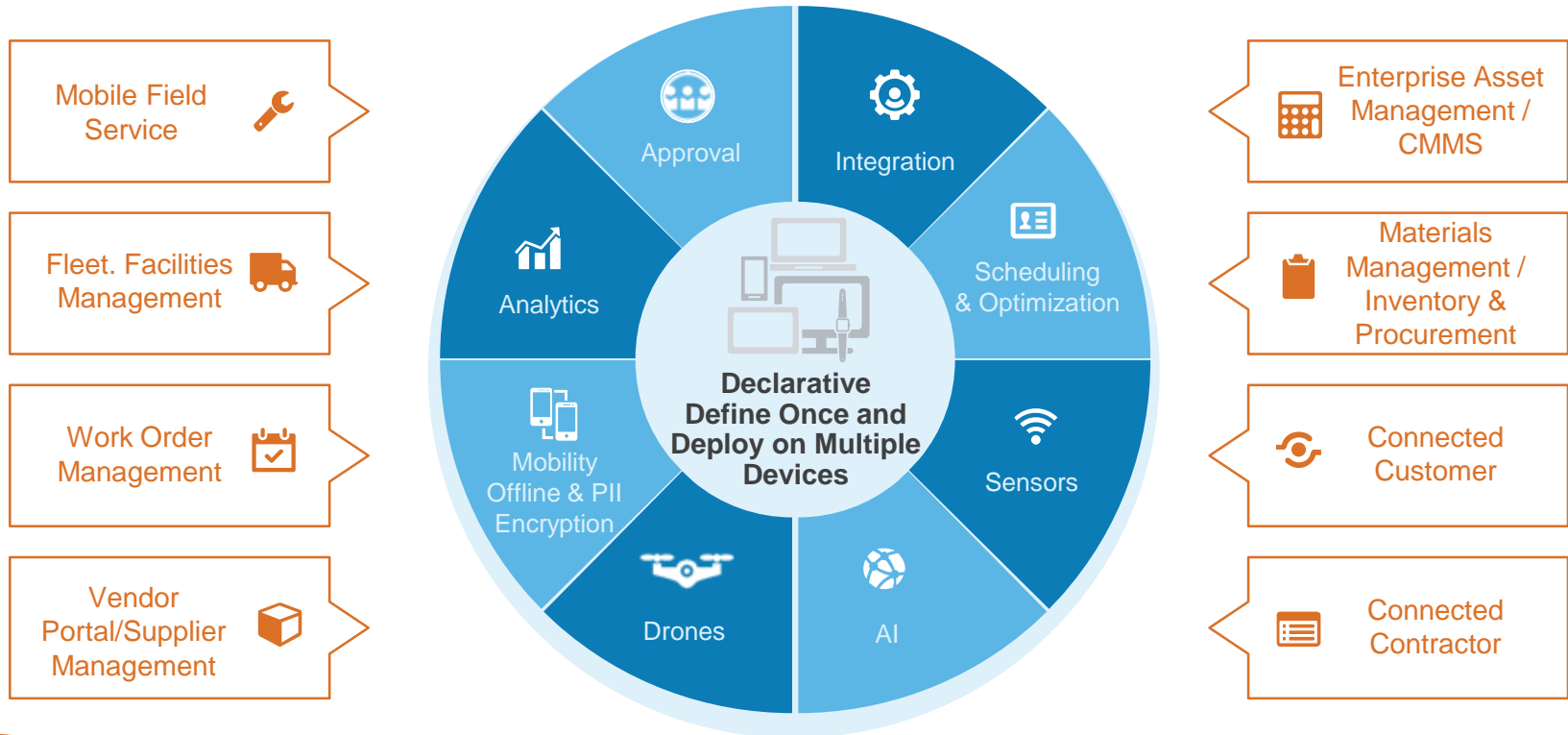


Tara Lecroy
Manager IT, MGAG



IRON MUNICIPAL COMPLEX

KloudPlatform & Solutions



KlōudGin

THANK YOU



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