

Willard **SMART** **EXIT**TM Solution

June 2020

Introduction - Presenters



Shane Kehoe

OT Ecosystem Sales Leader

Shane.kehoe@ibm.com



Scott Wallace

Solution Architect

swallacertp@us.ibm.com



Kevin Egge

OT Ecosystem Sales Leader

kegge@us.ibm.com

Agenda

Willard Smart Exit Signs. Why is this Important?

NFPA Regulations & Compliance

The Willard Smart Exit Sign value proposition

Solution Demo

ROI & Value

Partners behind the solution

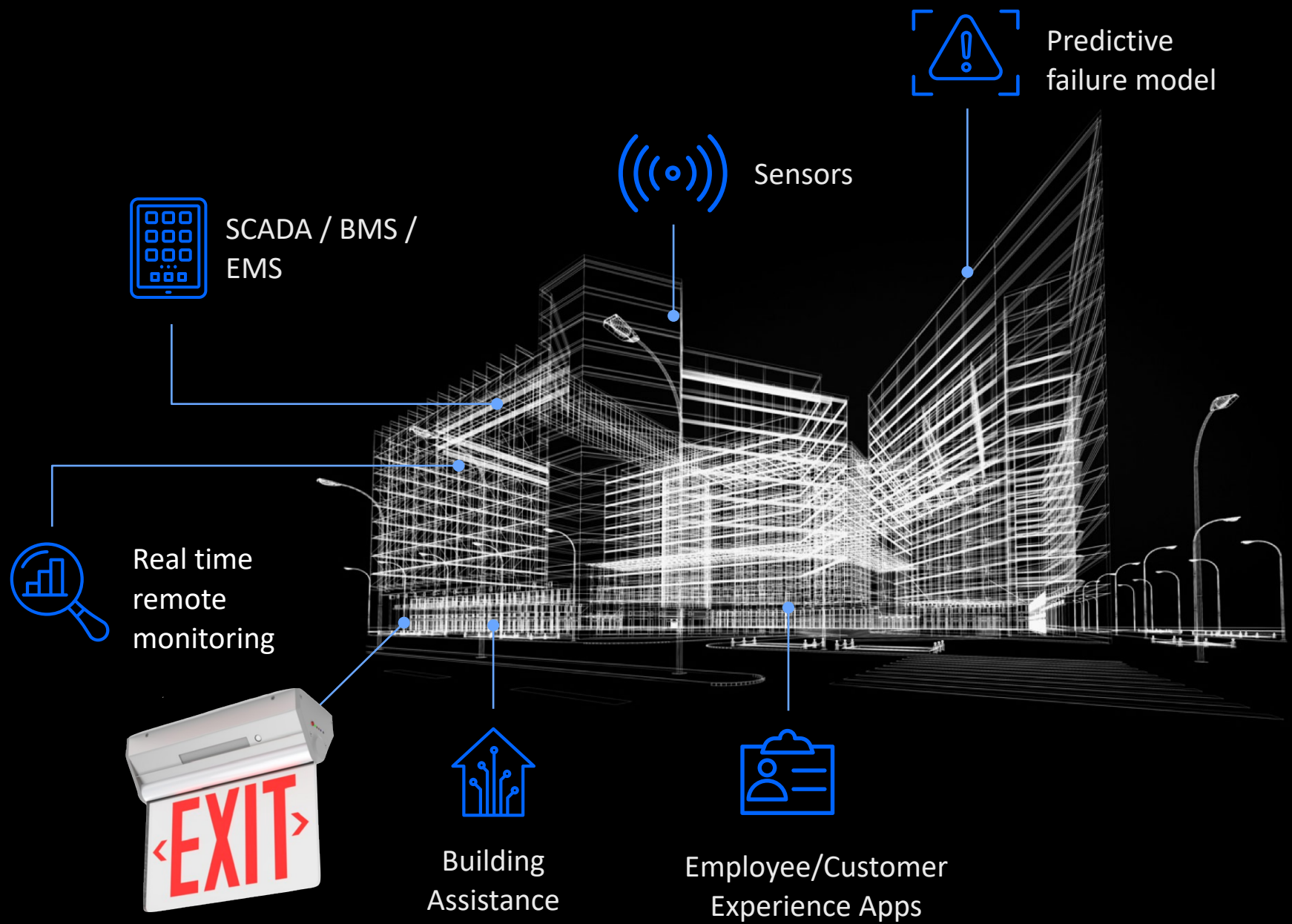
Wrap Up

Modernized Buildings / Stores – Factoring in Life Safety

50%
Reduced Operational Cost

80%
Improved life safety compliance and mitigated risk

20%
Increased Up time & Availability



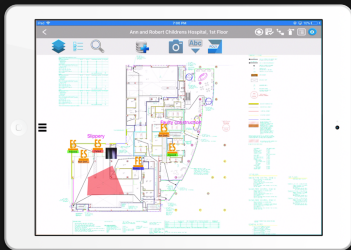
Smart Life Safety Platform

Automated Compliance Testing



Smart Exit Signs

Manual Life Safety Inspection



- Fire Extinguishers
- Fire Doors
- Sprinkler Systems
- Smoke Detectors

New Smart Life Safety Assets



*Smart Emergency Lighting**



*Enterprise Asset
Management Strategy*

*Smart Emergency Lighting is currently not available

Regulatory Environment for Public Buildings and Facilities

Governing body

NFPA requires public buildings to **maintain**, **inspect** and **report** on most equipment – including exit signs – in accordance with:

- Manufacturer's specifications
- NFPA regulations
- Local fire laws and regulations



Audits

- Expensive and obtrusive to facility operations
- Typically occur every 2 – 4 years

Inspecting bodies

- Centers for Medicare and Medicaid Services (CMS)
- The Joint Commission (TJC)
- Det Norske Veritas (DNV)
- Designated Authority Having Jurisdiction (AHJ)

Penalties

- Serious Violations -- \$13K per Violation
- Failure to Abate – 13K per day
- Willful or repeated -- \$132K Per Violation

NFPA 101 Regulations – Exit Signs & Emergency Lighting

What does this mean?

NFPA 101 7.9.3.1.1

- Testing shall be conducted *monthly*, with a minimum of 3 weeks and a maximum of 5 weeks between tests, for not less than *30 seconds*
- Testing shall be conducted *annually* for a minimum of *1.5 hours* if the emergency lighting system is battery powered
- The emergency lighting equipment shall be *fully operational* for the duration of the tests
- *Written records shall be kept by the owner* for inspection by the Authority Having Jurisdiction (AHJ)



NFPA 101 Regulations – Exit Signs & Emergency Lighting

What does this mean?



Labor
Intensive



Expensive



Inconvenient



Liability



Paper Trails



NFPA 101 Regulations – Exit Signs & Emergency Lighting

What are the impacts?



Average cost to service an Exit Sign is
\$20 per sign per month*



*Based on data provided by Cache Valley Electric & interviews with Facility Managers / Building Owners

Willard Smart Exit Signs

Monitoring Life Safety Systems at Enterprise-Scale



Solution

- Physical Exit Sign Hardware
- Consolidated enterprise compliance view
- Data visibility and analysis
- Enterprise scale monitoring
- Self Diagnostics
- Maximo EAM Integration for maintenance of signs
- Mobile app for inspection of Signs and other life safety assets (IBM First Responder support for Smart Ledger App)



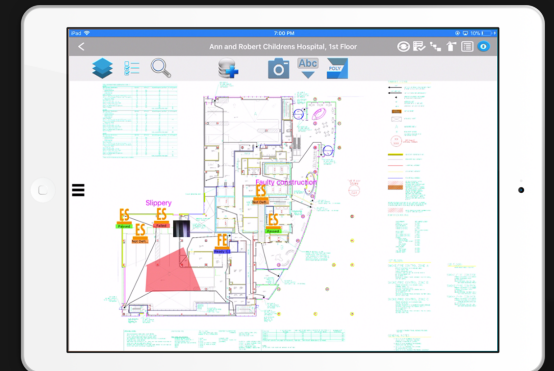
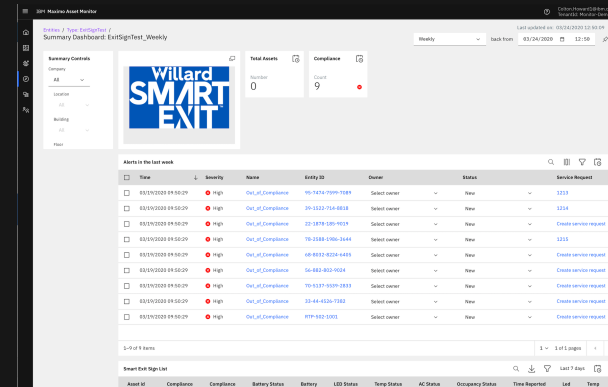
Capabilities

- Instant reporting of exit sign faults
- Auto-generation of work orders
- Reports necessary for compliance
- Management and Inspection tooling



Benefits

- Enterprise data visibility
- Lower lifecycle cost per sign
- Risk Reduction
 - Avoidance of expense penalties
 - Automation of compliance
- Maximo EAM provides automated service requests

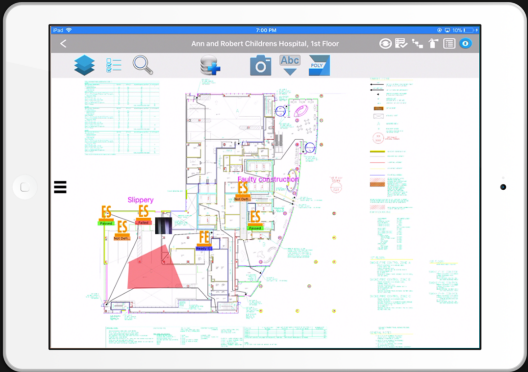
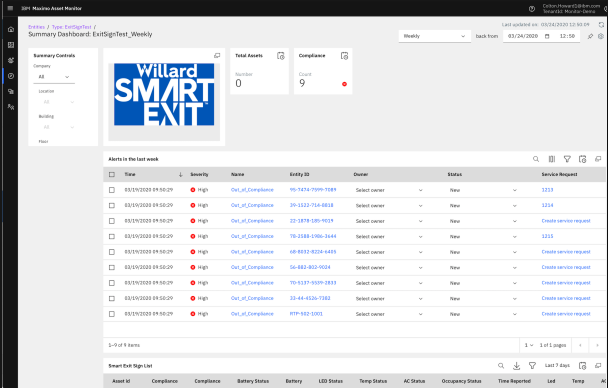


Willard Smart Exit Signs

Monitoring Life Safety Systems at Enterprise-Scale

Targeted Customer Price Point

*\$15 per sign per month**



*Pricing based on discount levels. Finance options available through IBM Global Finance. 60 month term. Installation **not** included

Smart Exit Sign

Solution Breakdown - Hardware



Critical Differentiating Features

- *4-hour battery*
- *Rated life of battery is 7 years*
- *Rated life of LEDs is 13.5 years*
- *Laser & manual push button tests*
- *Patented white LED floodlights (Emergency lighting)*
- *Embedded smart control board (13 active bits) & WiFi*
- *Compliance Standards : UL 924, FCC PART 15, NFPA 101, NEC, OSHA, IESNA*

Solution Demo

Why Consider Smart Exits Now?



Cost Takeout > Eliminate inspection and compliance efforts

Safety > Reduce risks and ensure a safe working environment

COVID > Return-to-Work considerations

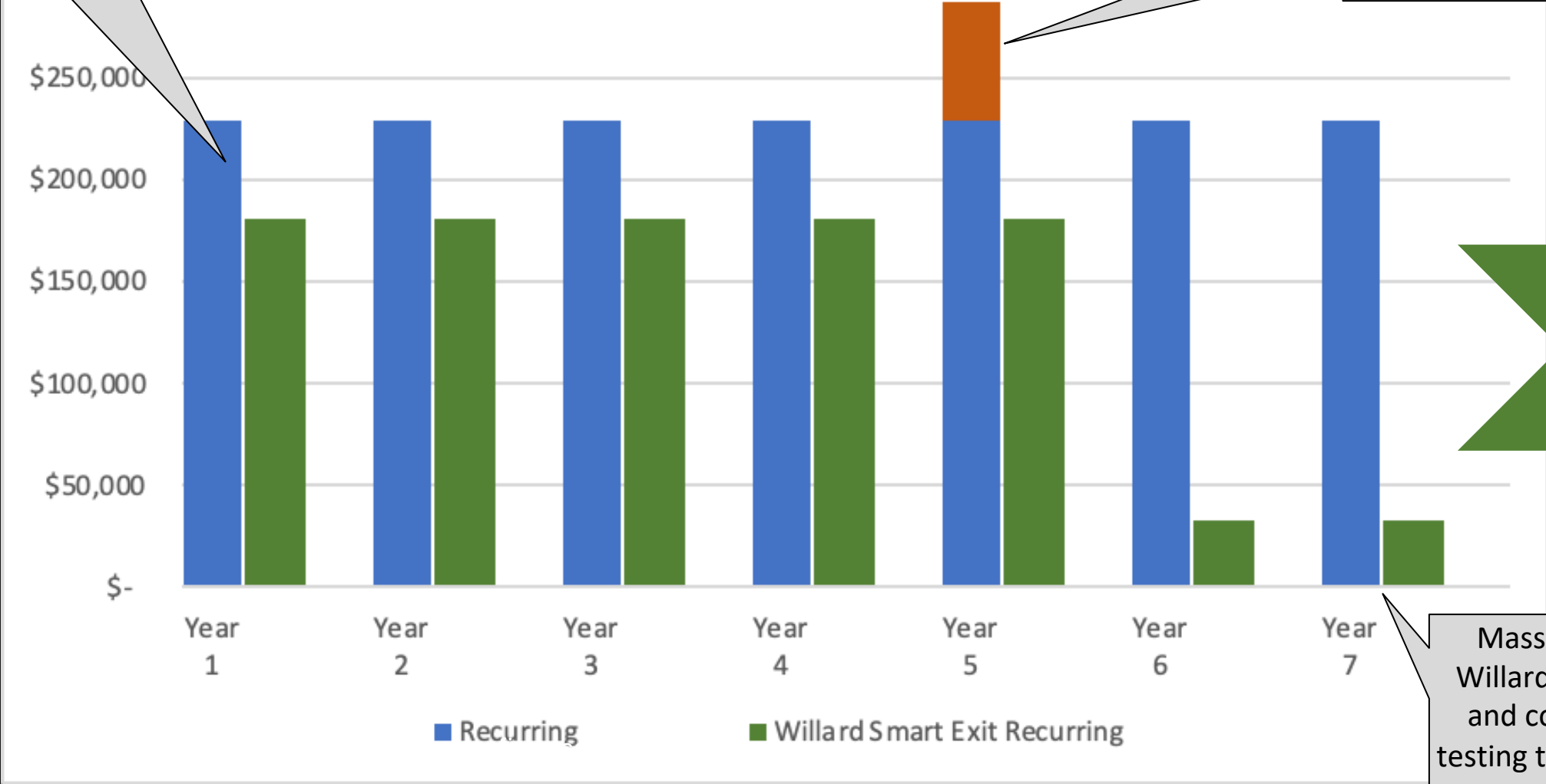
Immediate Savings with Long-term ROI

Immediate annual savings over manual testing**

Traditional vs Willard Smart Exit ROI

Battery replacement

- Fire Marshalls are requesting a 5 year replacement plan (batteries / signs)



15 Year Expected Life

Massive ROI after the Willard Exit is capitalized and comparing manual testing to ongoing software costs

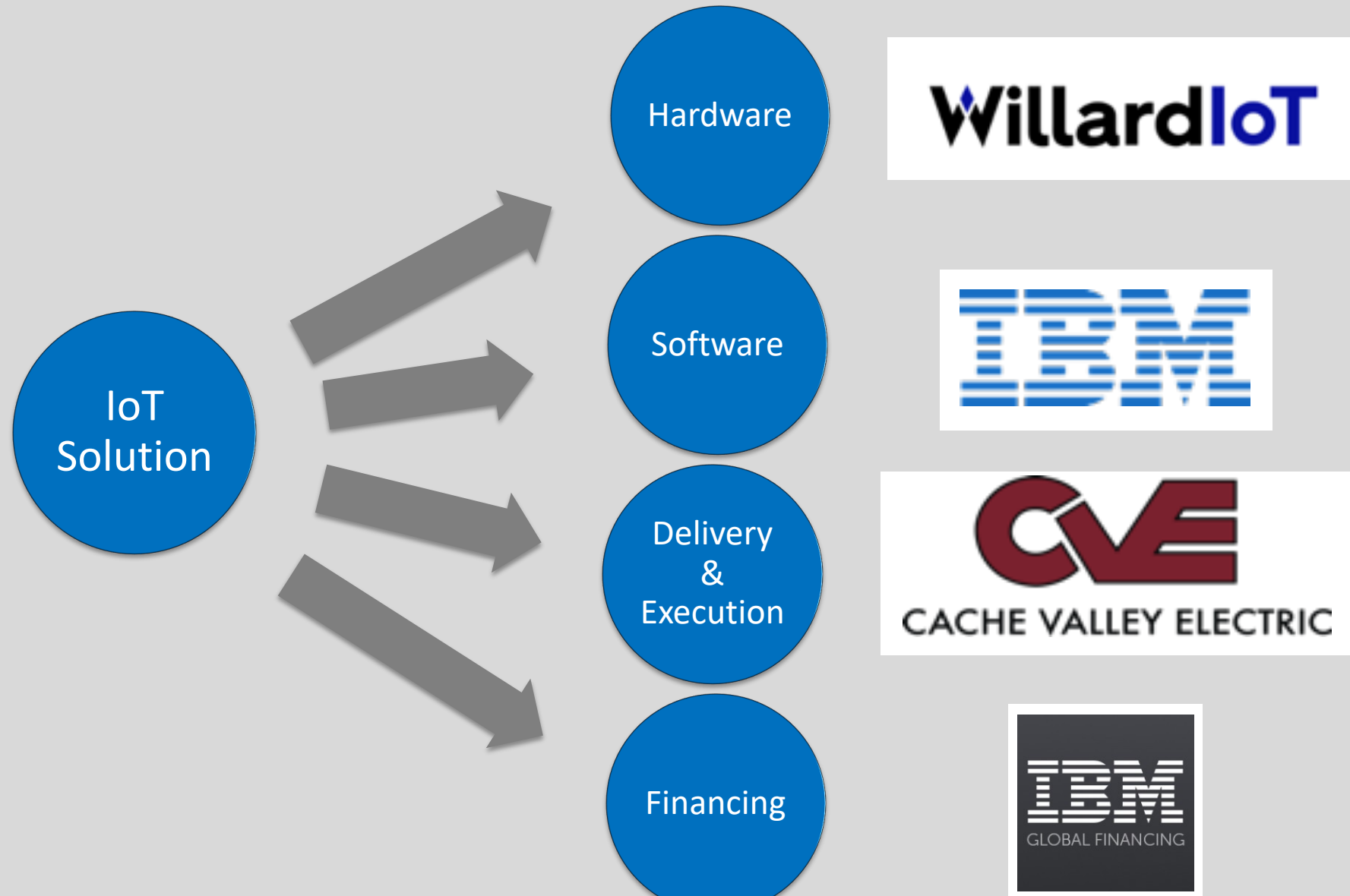
* ROI calculator example only

Getting to know your environment and needs

- 1) What are you spending per sign/month to test and meet exit sign compliance?
- 2) Are your exit signs tested with in-house personnel or by an external firm? If external, how much is that costing you?
- 3) Can you quickly produce an exit sign compliance report? Is it accurate?
- 4) Have you experienced any recent fire marshal inquiries / audits or compliance notices / fines?

IoT End-to-End Solution – Required for Success

Companies don't want to manage multiple service offerings from different vendors



Cache Valley Electric

Our Trusted Master Installer

104 year tradition of excellence in electrical construction & technology solutions

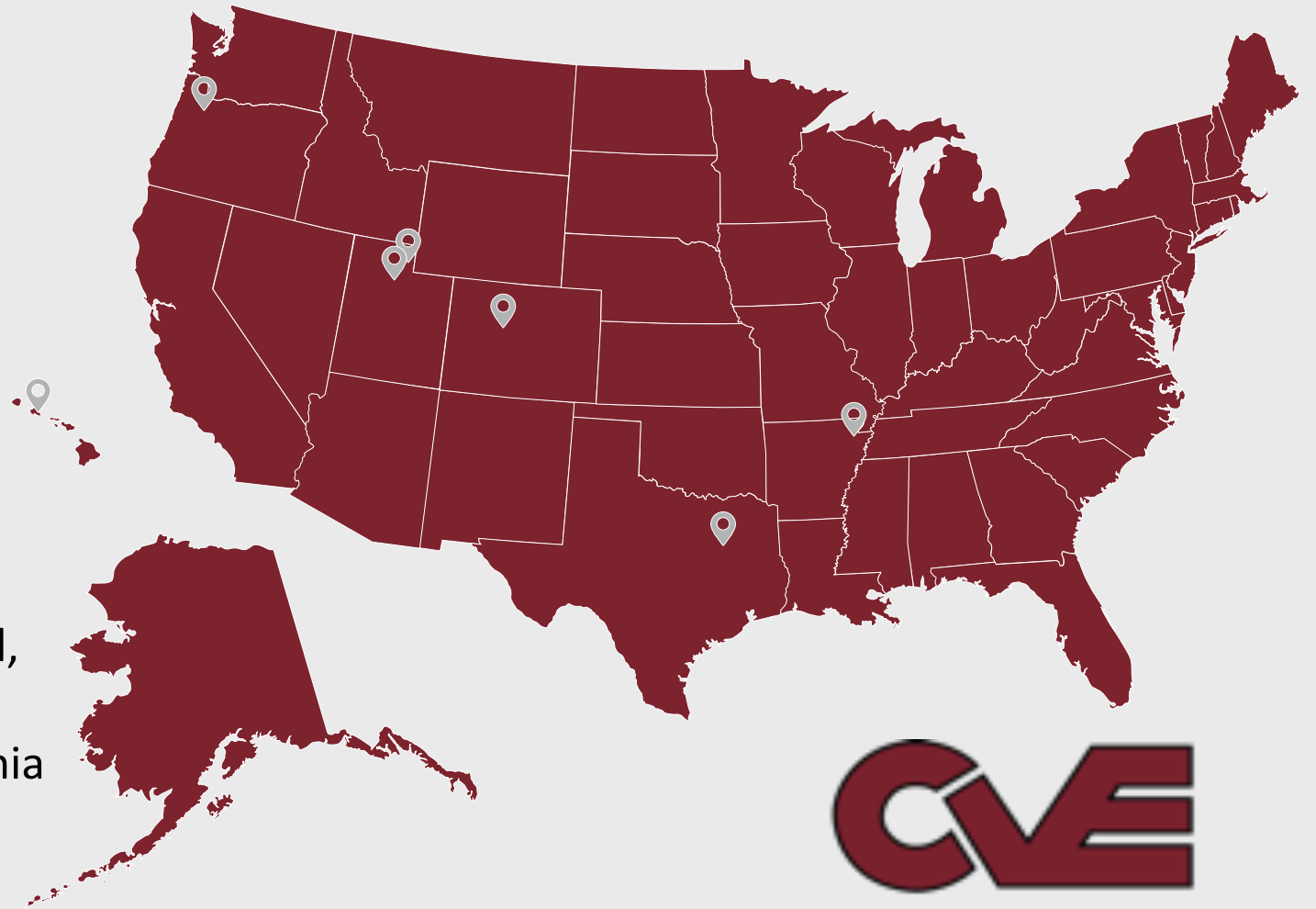
As technology changes, CVE expands its services and solutions

Established network of electrical contractor partners throughout the US

7 CVE offices nationwide

Professionally licensed in all 50 states

International projects in Singapore, Thailand, Australia, Hong Kong, Japan, China, Canada, Mexico, Trinidad, Italy, Germany, and Romania



CACHE VALLEY ELECTRIC

IBM Global Financing Available

- Immediate savings without the capital outlay for hardware
- Allows customers to pay monthly, over the five-year term
- Flexible contracting to support phased sign installations
- Finance rates are market competitive and based on credit worthiness



Smart Life Safety Platform

Automated Compliance Testing



Smart Exit Signs

Manual Life Safety Inspection



- Fire Extinguishers
- Fire Doors
- Sprinkler Systems
- Smoke Detectors

New Smart Life Safety Assets



*Smart Emergency Lighting**



*Enterprise Asset
Management Strategy*

*Smart Emergency Lighting is currently not available

Smart Buildings Need Smart Life Safety Systems

You are investing in a Life Safety Platform

Smart Emergency Lighting Luminaires

Smart Stairwell Emergency Lighting



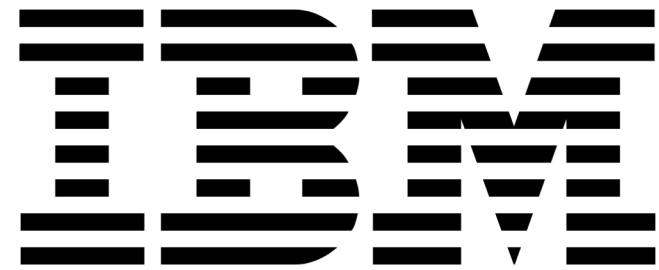
Double Headed Emergency Egress Lighting



Ceiling Surface Mount Emergency Lighting

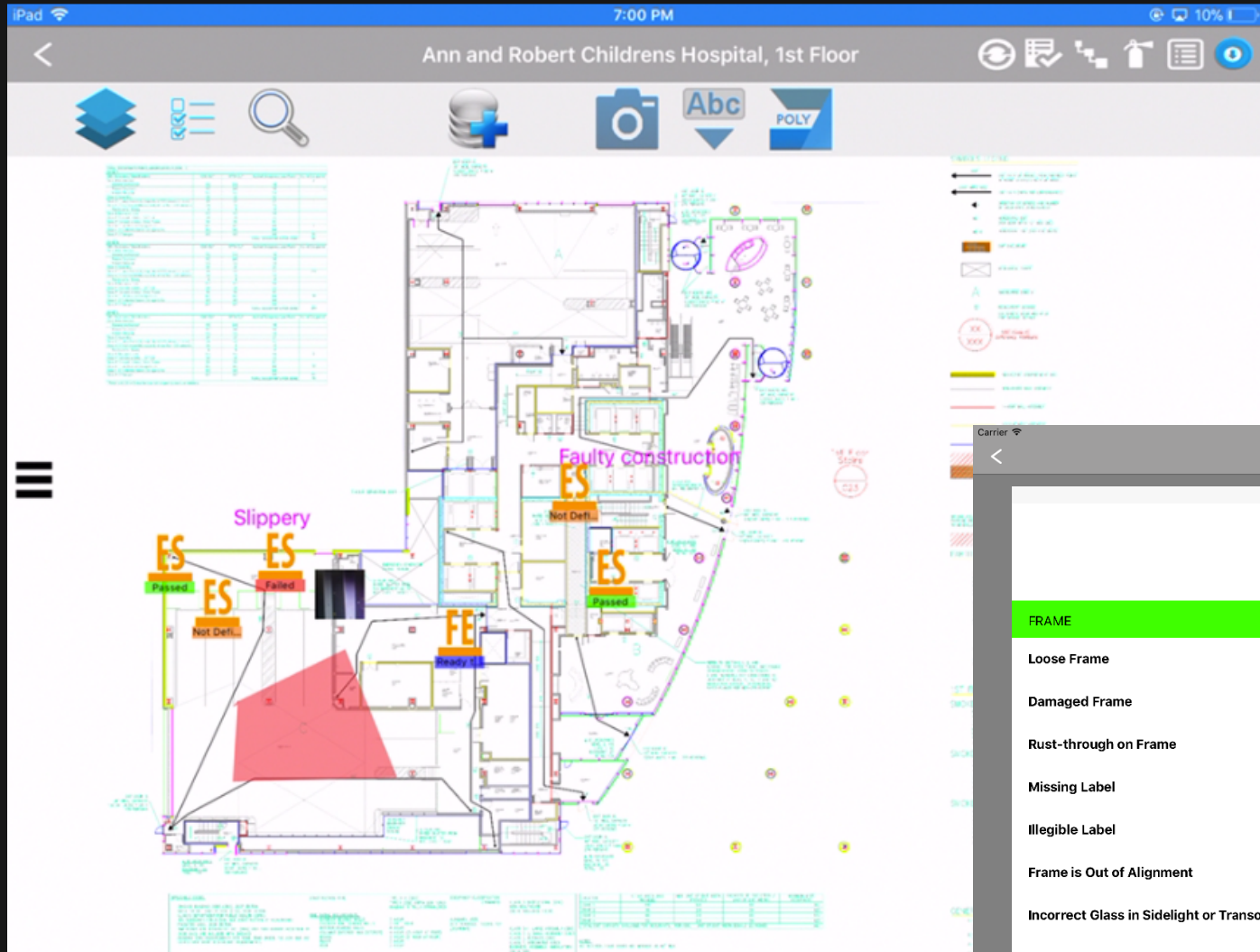


Thank you for your time today!



Willard Smart Ledger Mobile App

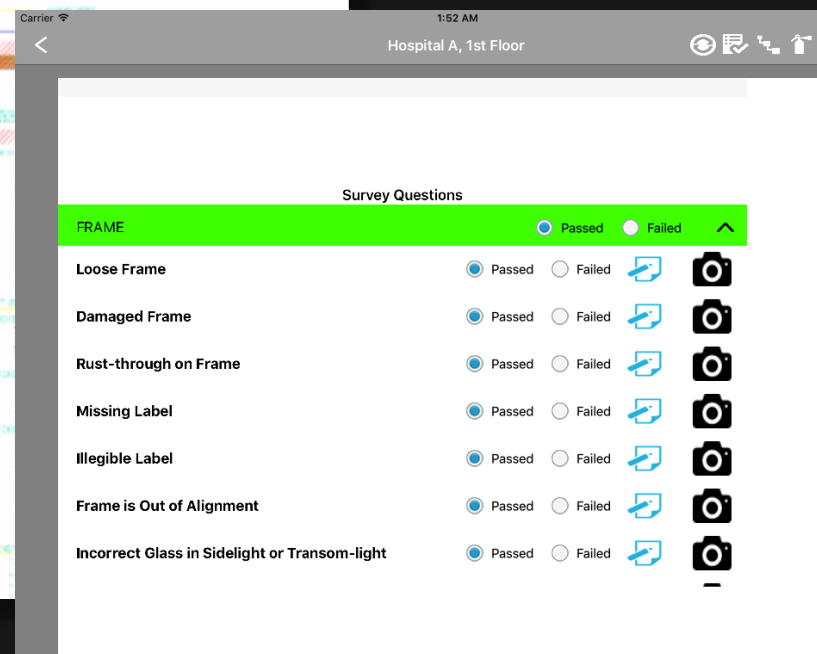
An inspection dashboard for technician and facility admin. (*for iOS only)



Digitize all Life Safety assets

Integration to Maximo

*Capture equipment code
(barcode)*



*Create business
defined inspection
checklist*

Digital signatures

Import CAD files

IBM Maximo Asset Monitor

Determine current status & produce compliance reports

IBM Maximo Asset Monitor

Colton.Howard1@ibm.com
TenantId: Monitor-Demo

Entities / Type: ExitSignTest / Summary Dashboard: ExitSignTest_Weekly

Weekly

back from 03/26/2020 17:02

Last updated on: 03/26/2020 17:02:19

Summary Controls

Company

All

Location

All

Building

All

Floor



Total Assets

Number

9

Compliance

Count

9

Alerts in the last week

☐	Time	Severity	Name	Entity ID	Owner	Status	Service Request
☐	03/26/2020 15:38:10	High	Out_of_Compliance	RTP-502-1001	Select owner	New	Create service request
☐	03/26/2020 15:37:19	High	Out_of_Compliance	RTP-502-1001	Select owner	New	Create service request
☐	03/25/2020 11:48:14	High	Out_of_Compliance	RTP-502-1001	Select owner	New	1218

Smart Exit Sign List

Asset id	Time Reported	Compliance	Battery	LED Status	Temp Status	AC Status	Occupancy Status
RTP-502-1001	03/26/2020 15:38	Critical	Critical	Low	Low	Critical	Low
95-7474-7599-7089	03/26/2020 15:38	Low	Low	Critical	Low	Low	Low
78-2588-1986-3644	03/26/2020 15:38	Low	Critical	Low	Low	Low	Low
70-5137-5539-2833	03/26/2020 15:38	Critical	Low	Critical	Low	Low	Low
68-8032-8224-6405	03/26/2020 15:38	Low	Low	Critical	Low	Low	Low
56-882-802-9024	03/26/2020 15:38	Low	Low	Critical	Low	Low	Low
39-1522-714-8818	03/26/2020 15:38	Low	Low	Critical	Low	Low	Low
33-44-4526-7382	03/26/2020 15:38	Low	Low	Critical	Low	Low	Low
22-1878-185-9019	03/26/2020 15:38	Low	Low	Critical	Low	Low	Low

Executive dashboard:

- Floor
- Building
- Campus

Current status of assets:

- Temperature
- Battery status
- Motion

Maximo Integration for Service Request creation

On-Demand Compliance Reporting