We think it's the Right Thing to Do: How to use PoE Technology to Create Future-Ready Schools

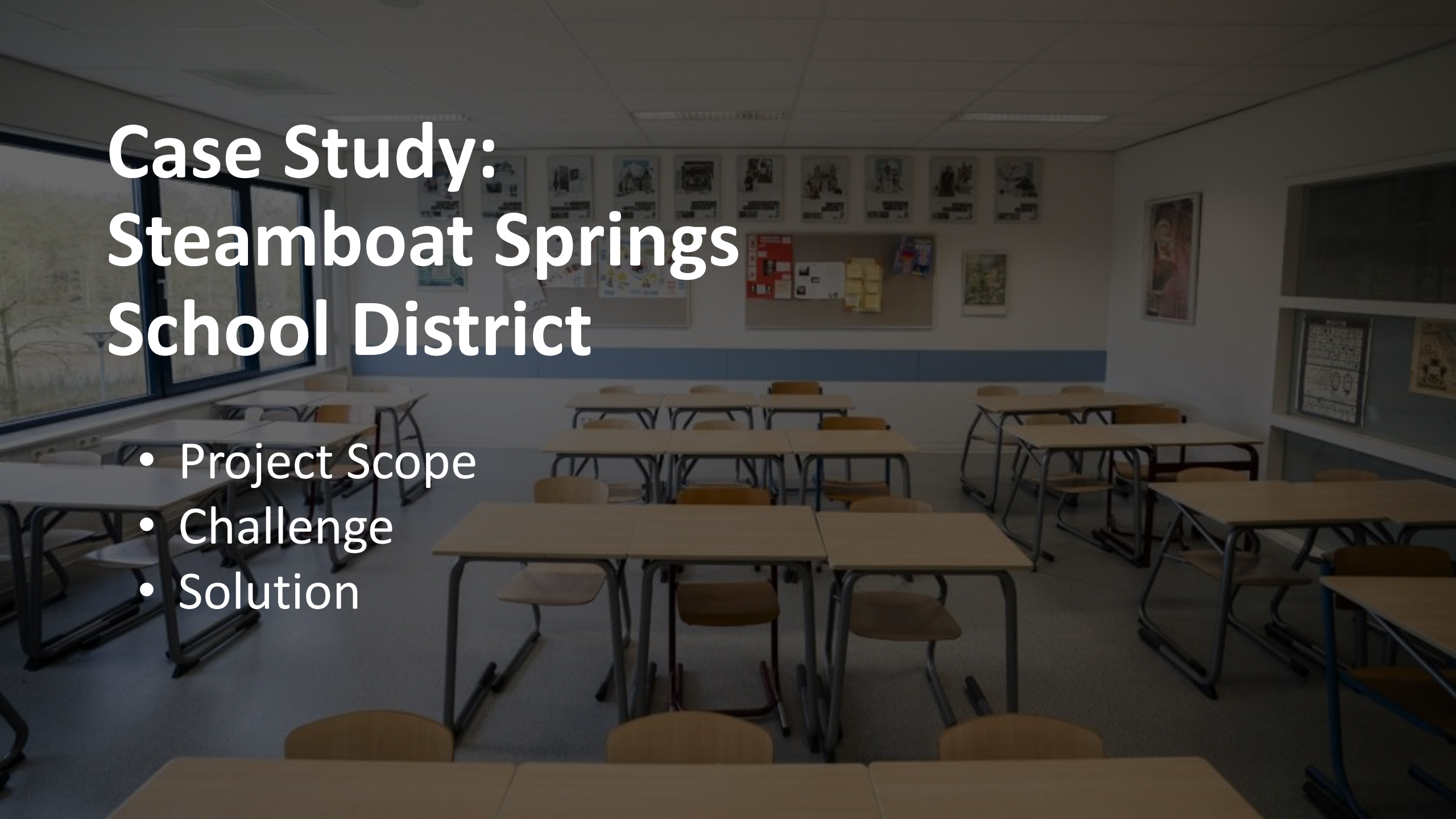
STEAMBOAT SPRINGS SCHOOL DISTRICT

igor

Why a future ready school?

- Schools are continuously adjusting to meet requirements of new teaching environments
- New energy codes are being adopted to combat rising energy costs
- Expectation of creating safe, comfortable, and quality learning environments
- Easily adaptable and IoT easier
- Integrate able and easier access

POE – Power over Ethernet (Network Switch)



Case Study: Steamboat Springs School District

- Project Scope
- Challenge
- Solution

Project Scope:

- 79.5 million Bond
- New School
- Remodel/Additions 6 other facilities
- Pandemic
- 2 School Boards
- 2 Everything, architects, design, contractor , …
- Already have POE

- Steamboat is over crowded in all facilities K-12. Passed a bond of 90+ million in 2018 to build a new PK-8 school and remodel and add additions to every other facility.

Challenge:

PRE

- POE – no one, absolutely no one besides tech knew what it was.
- Two different projects and timelines
- Multiple systems and tied to facility
- COST ?
- Traditional ways of doing things
- Seriousness
- Why? and selling that
- Little to no install (Brand New)

During

- Seriousness
- Design
- Inflated Cost because of design
- Timeline of when my rooms need to be useable
- Construction Divisions
- Traditional ways of doing things
- Line Voltage concept vs Low Voltage
- Inspector/Code/EL
- Colors of wires, end of wires

SOLUTION

NexOs BY IGOR

PoE-Based IoT Platform designed to adapt to future iterations of new protocols and bring data into one central location for optimized decision making.

First school in Colorado and one of only a handful of complete buildings, in the country.

WHY PoE?

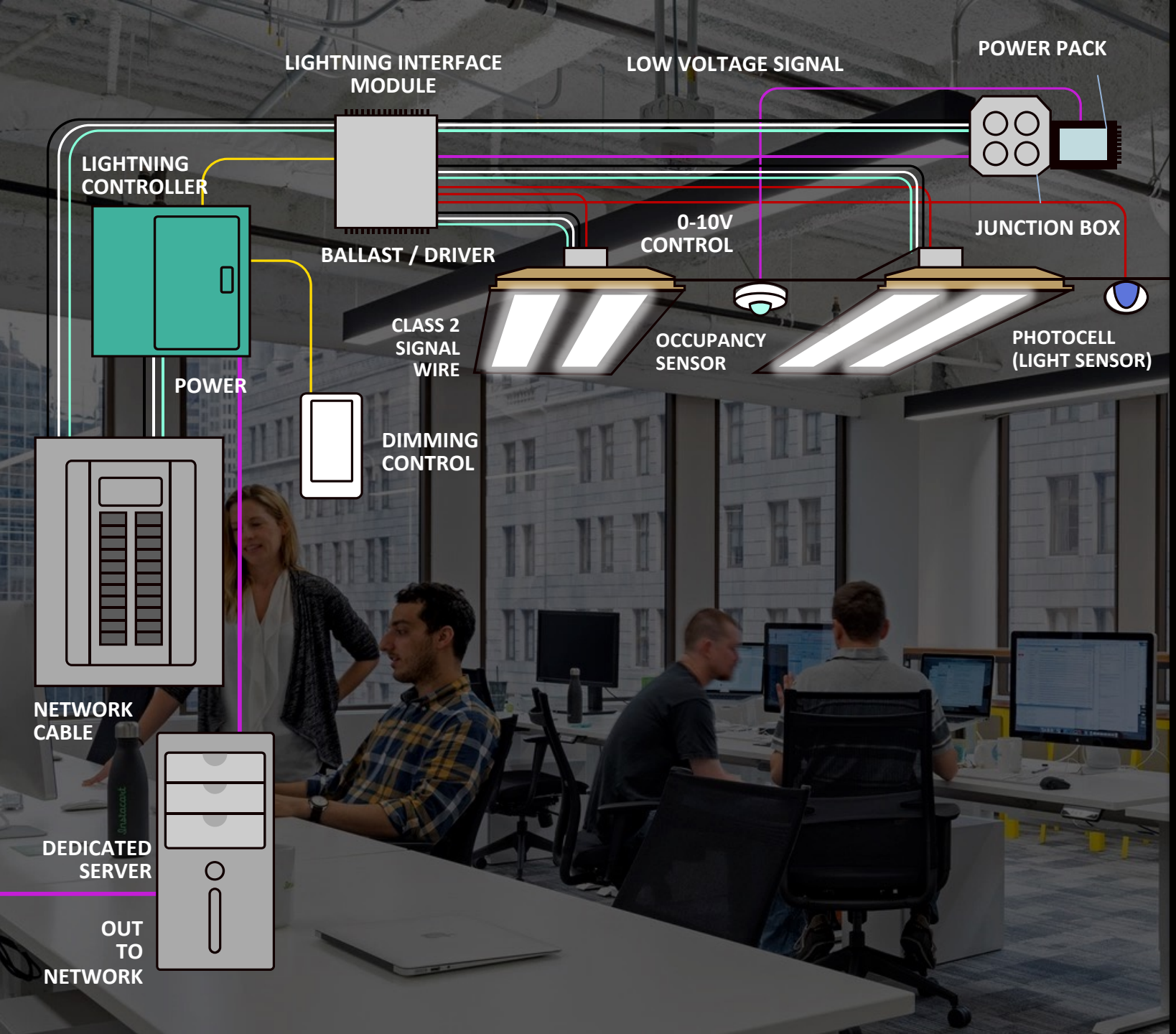
PoE is easier and cheaper - save money on conduit and installation cost

Global solution for advanced connectivity and universal compatibility

PoE enables 2-way communication with each fixtures for advanced control and data analytics

Possible integrations in the future without needing to rewire or retrofit

More wattage to integrate more devices and go into more spaces

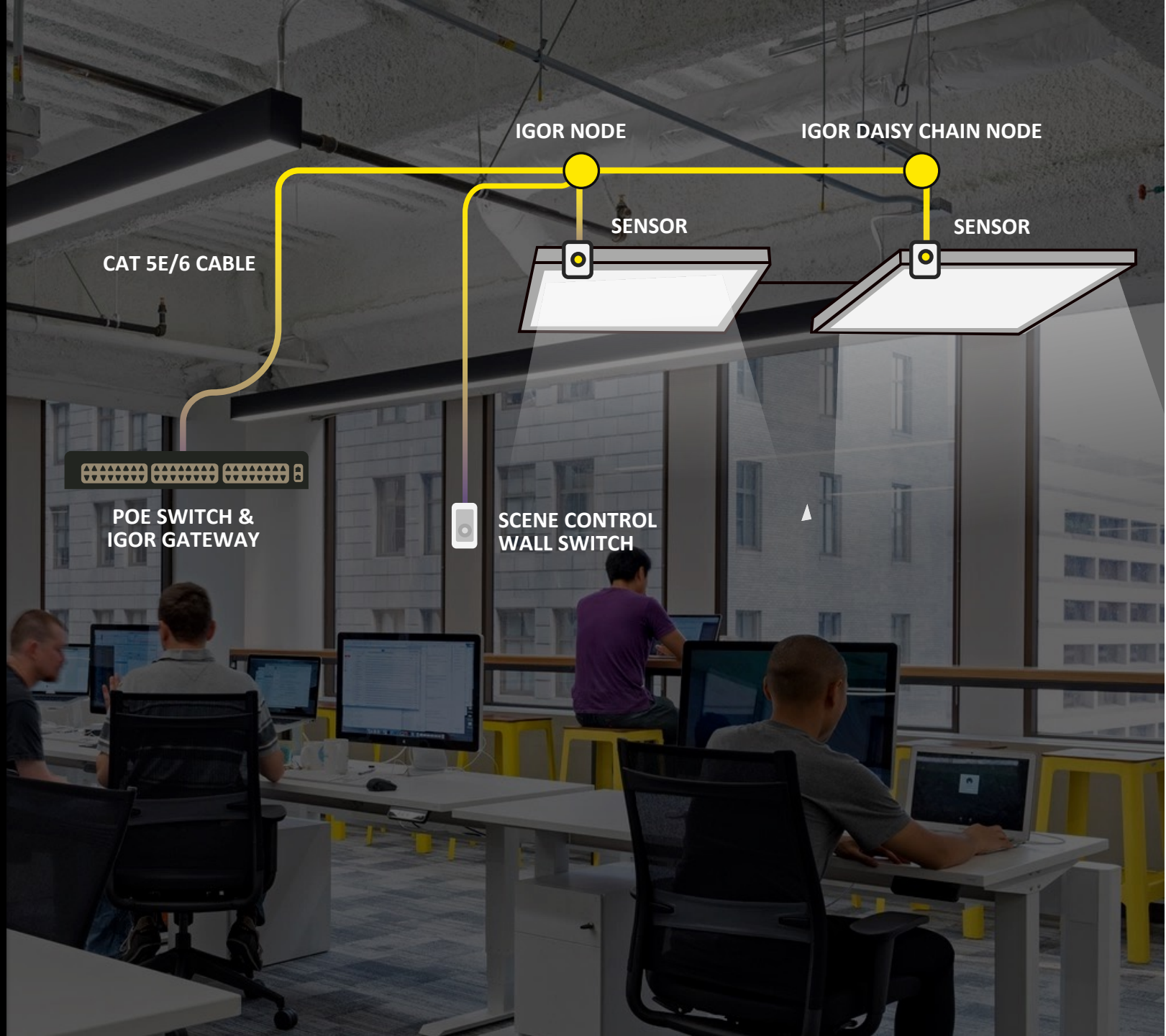


Traditional

- x Costly
- x Complex DALI system
- x Overlay architecture (separate power, control, & monitoring systems)
- x Inflexible
- x Limited Intelligence

POE

- ✓ Igor gateway and PoE switch convert AC to DC, then power and controls
  led fixtures over one low-voltage cable
- ✓ Low voltage cable = more cost effective, flexible install
- ✓ Two-way communications to each fixture for HVAC control, daylight harvesting. Security. Meeting room booking systems and much more



TODAY

Connected Lighting

- Easy to control lighting to improve engagement and focus
- Customizable lighting options for unique spaces
- Tracking of energy usage and data

FUTURE

Access controls

Asset tracking

HVAC controls

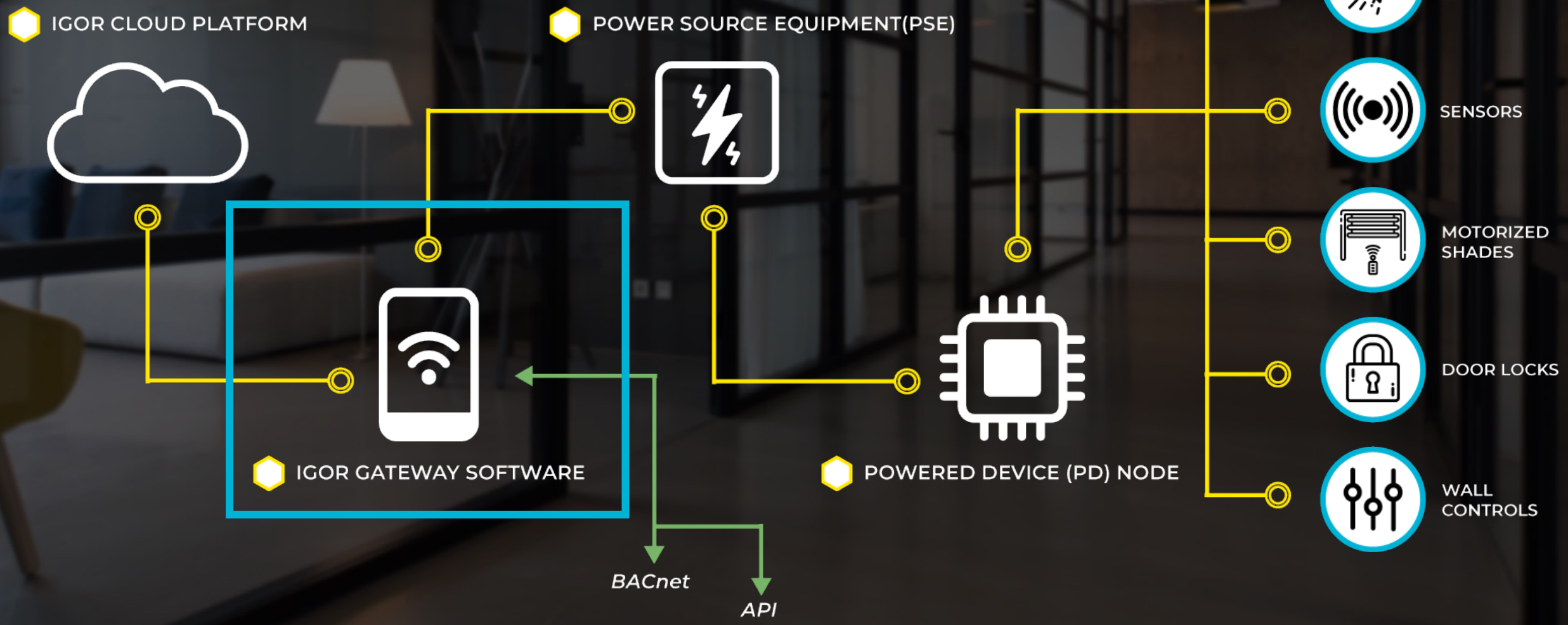
Occupancy sensors

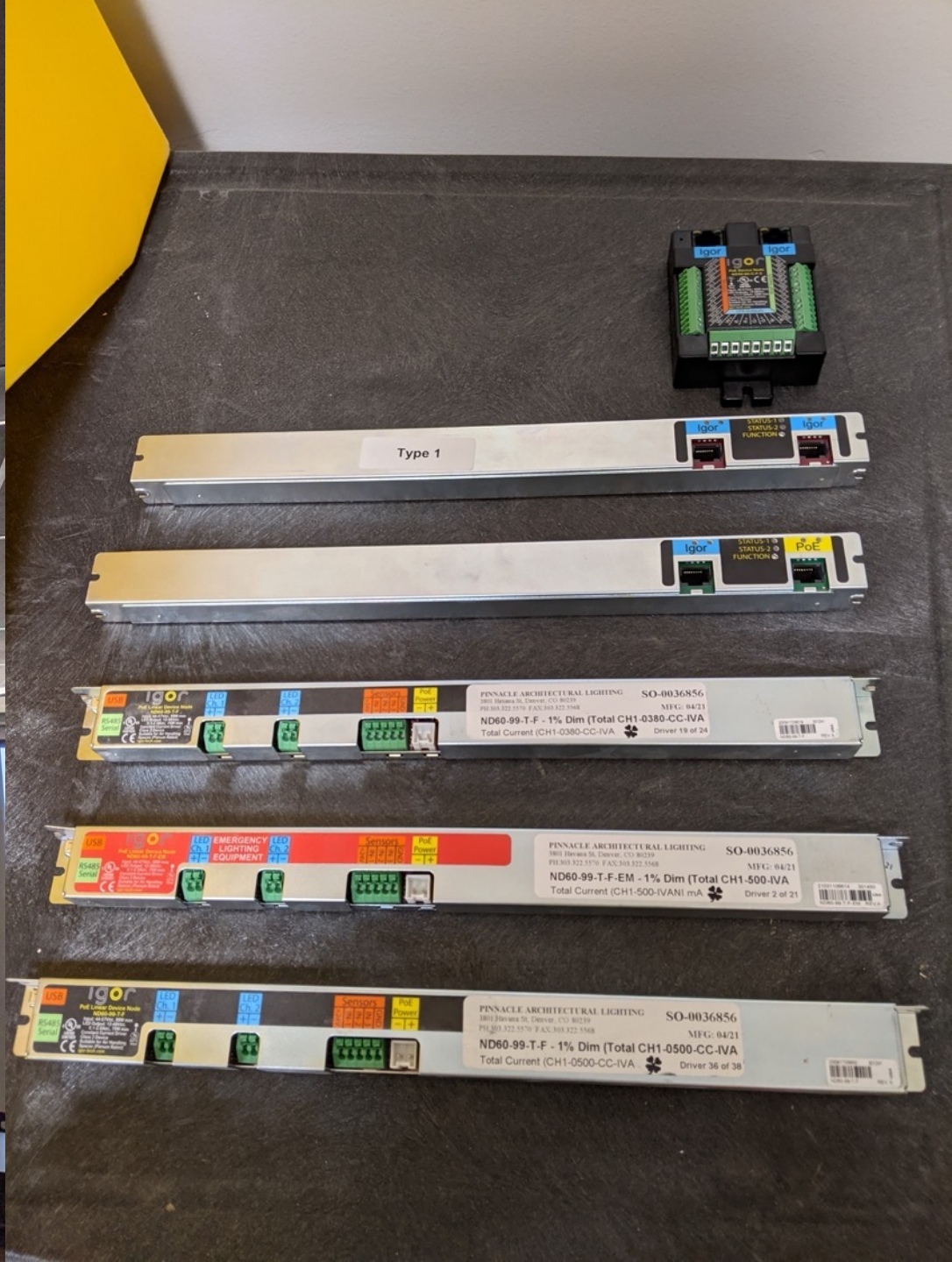
Air quality sensors

Cameras

API

HOW NEXOS WORKS




Type 1
PINNACLE ARCHITECTURAL LIGHTING
SO-0036856
MFG: 04/21
ND60-99-T-F - 1% Dim (Total CH1-0380-CC-IVA
Total Current (CH1-0380-CC-IVA
Driver 19 of 24
PINNACLE ARCHITECTURAL LIGHTING
SO-0036856
MFG: 04/21
ND60-99-T-F-EM - 1% Dim (Total CH1-500-IVA
Total Current (CH1-500-IVANI mA
Driver 2 of 21
PINNACLE ARCHITECTURAL LIGHTING
SO-0036856
MFG: 04/21
ND60-99-T-F - 1% Dim (Total CH1-0500-CC-IVA
Total Current (CH1-0500-CC-IVA
Driver 36 of 38

DOUGLAS FIR
DOUGLAS FIR
KDAT 21

Q&A

STEAMBOAT SPRINGS
SCHOOL DISTRICT

Tim Miles
Director of Technology
tmiles@ssk12.org

Pascal Ginesta
Director of Operations
tmiles@ssk12.org

Craig Getchell
Director of Business Development West
craig.getchell@igor-tech.com

Visit igor-tech.com for more information.