

AVEVA PI WORLD

Infrastructure, Water, & Transportation Day Summary

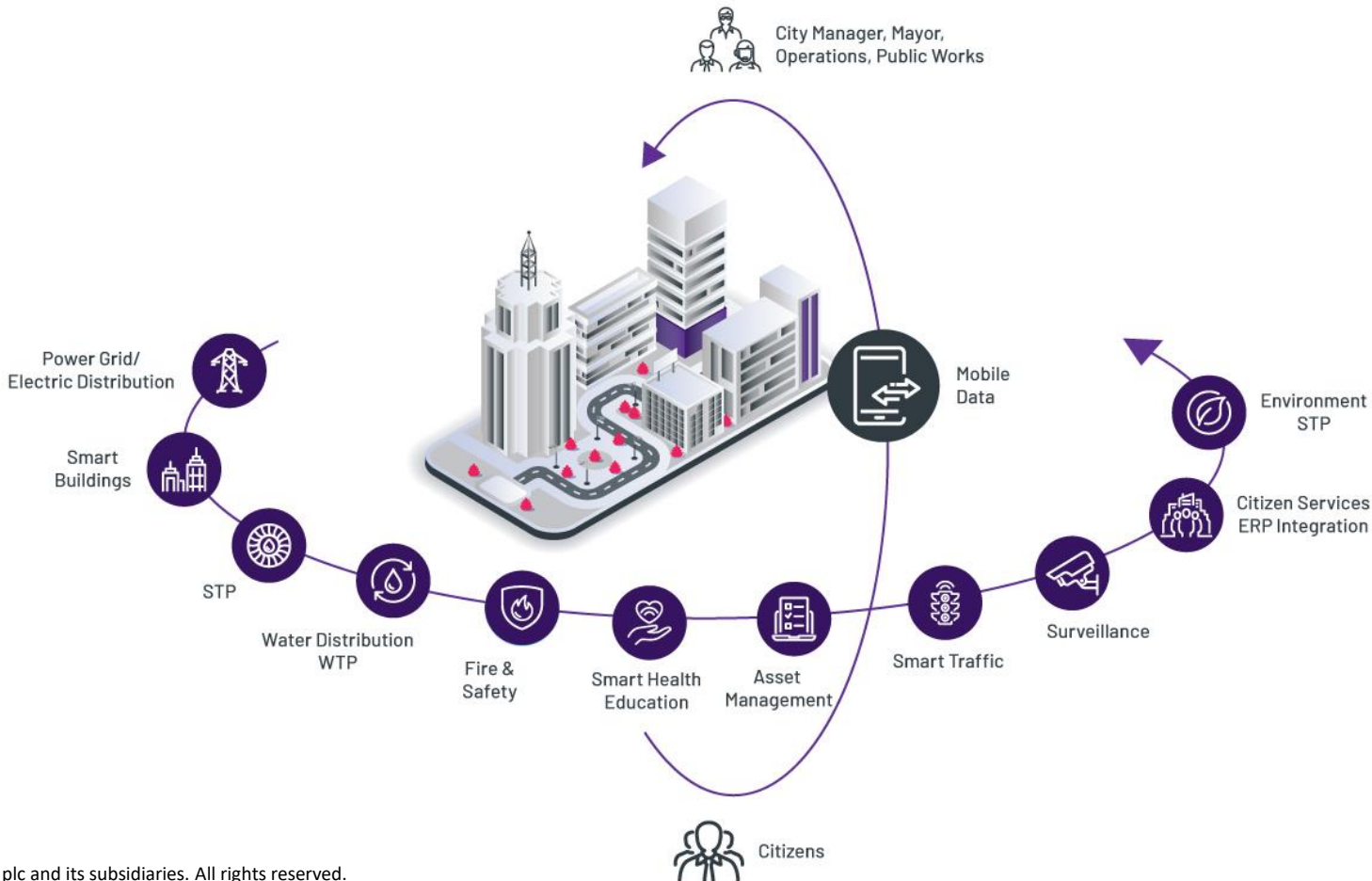
Industry Day

Presented By: Gary Wong, Global Industry Principal of Infrastructure & Water

AVEVA

Our Mission

We empower cities to deliver **safer, more reliable, and more efficient** services by digitally connecting **assets, operations, and people**.



Make faster, more
informed decisions and
speed crisis response

Minimize Risk to People,
Assets, and Operations

Reduce Energy and
Operational Costs

Optimize Performance
of Employees, Assets,
and Operations

Riverside Public Utilities

Marc Smith – RPU

Brando Crozier – RPU

Continuous Improvement

- Efficiency and time savings
- ROI of US\$1.3M / year
- Real-time geospatial view of water

Riverside Public Utilities

- Population - 324,000 residents
- Southern California - 60 miles east of Los Angeles
- Established in 1895
- Consumer-owned water & electric utility
- 81 square mile service territory
- 112,000 electric meters
- 65,000 water meters



AVEVA

2

Gippsland Water / Nukon

Darren Hickmott – Gippsland Water
Andrew May - Nukon



Gippsland Water

About Gippsland Water

- service area that covers **over 5,000 square kilometres** and stretches from Drouin in the west to Stratford in the east, and from Mirboo North in the south to Rawson and Briagolong in the north.
- supply clean drinking water to **72,000 households and businesses** across 39 towns and communities, and wastewater services to more than **64,000 households and businesses** across 29 towns and communities.
- maintain a **\$1 billion infrastructure network** which includes more than 2,000 km of water mains, 15 water treatment plants, over 1,700 km of wastewater mains and 14 wastewater treatment plants.

Pictured: Moondarra Reservoir, Gippsland Water's largest catchment and storage reservoir.

AVEVA

Real-time Water Leak & Burst Detection

- Many leaks are undetected
- Failure mode analysis
- Reduce impact to customers and environment

Georgia Tech

Dr. Paritosh Ramanan – Georgia Tech

Dr. Nagi Gebraeel – Georgia Tech

Global Insights without the Cloud

- De-centralized, Edge Analytics
- No need for Cloud
- Huge potential cost savings



Our Focus is on....

- **Decentralized Peer-to-Peer Industrial Analytics**
 - Simplifies adoption of analytics, ML and AI
 - Reduces operational costs
 - Does not require data migration
 - Reduces risks along digital transformation journey
 - Accelerates ROI
- **Empowers Data Scientists**
 - Provide easy-to-use analytic apps
 - Easy deployment of new analytics
- **Enriches OT Insights**
 - By asset class, across plants, across the enterprise
 - Real-time insights to improve operations and product quality, optimize energy consumption, and reduce downtime
- **Transforms IT**
 - From commodity provider to business enabler
 - Enables integration IT & OT
 - Improve efficiency of IT staff

Georgia Tech

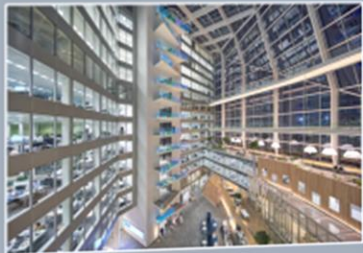
AVEVA

Bridging the Gap / Auros Group

Smart Buildings ≠ High-Performance Buildings

Smart Buildings

Connected IoT, transparent,
digital, whole-building
analytics



High-Performance Buildings

Low energy
consumption, high indoor
environmental quality



Current Tech—Courtesy of Hensel Architecture & Denver Vintner Associates

AVEVA

Derrick Tillman – Bridging the Gap
Craig Stevenson – Auros Group

The Science of Buildings

- Sustainable buildings
- Simulation data + building science
- Design up front

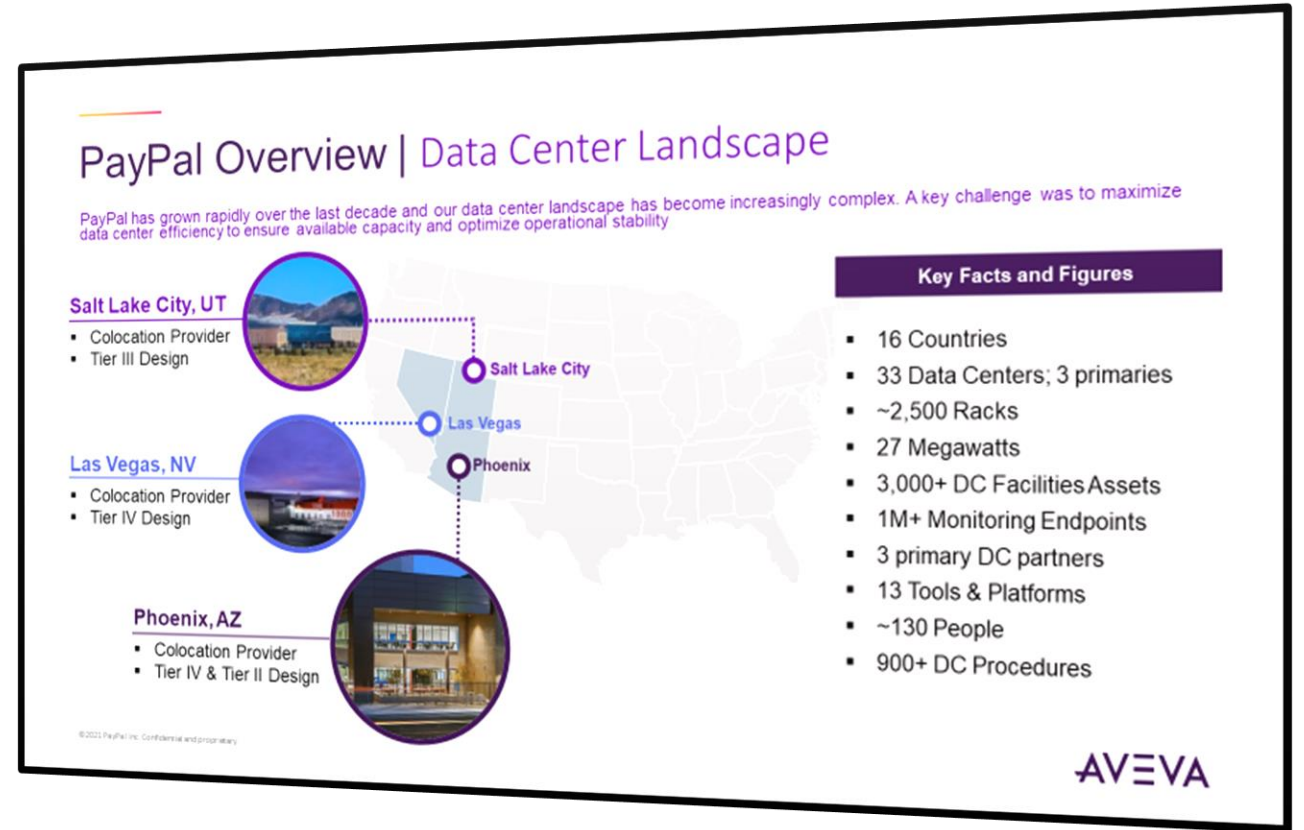
AVEVA

PayPal / Casne

Jessica Ewy – Casne Engineering
Chris Wozniak – Casne Engineering

Single Pane of Glass

- DC operations, BMS, assets
- Visualize and notify
- Simplify and automate everything

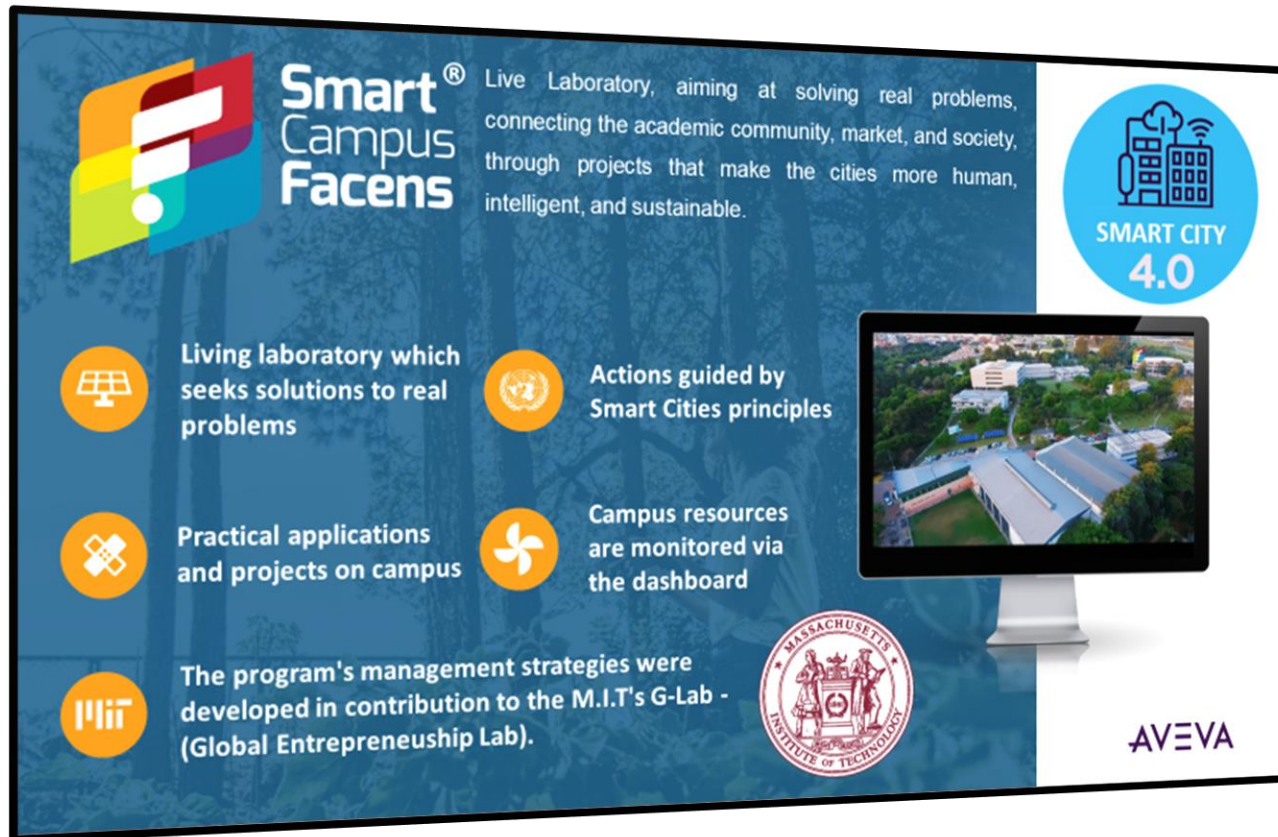


Smart Campus Facens

Dr. Regiane Relva Romano - Facens

Technology as a Means

- Solving real world issues
- Utilities, security, highways, smart city...
- 40+ kinds of sensors



North American Construction Group

Dallas White – NACG

Brett Zon – NACG

Real-time Fleet Analysis

- Wide fleet across multiple sites
- Hundreds of data loggers
- Real-time situational awareness of machinery from HQ

About NACG

- Safety is primary goal
- Heavy civil contractor
- 65+ years in business
- 650+ pieces of mine mobile equipment
- Operates throughout North America
 - Primarily in Alberta oilsands
- External equipment and component rebuild services



ProRail

Juliette van Driel - ProRail

Higher Availability of Netherland's Rail Network

- Integrated data silos
- Predictive maintenance of 5000+ switches
- Increased rail network reliability and uptime

About ProRail

ProRail

Infrastructure manager Dutch railway network

- Connecting people and freight by rail
 - Safe
 - Sustainable
- What we do
 - Maintain the network
 - Traffic control
 - Divide the capacity over different operating companies
- Facts and figures
 - 3000 km track and 5000 centrally controlled Switches
 - More then 3 million trains per year

AVEVA



© 2021 AVEVA Group plc and its subsidiaries. All rights reserved.

This presentation may include predictions, estimates, intentions, beliefs and other statements that are or may be construed as being forward-looking. While these forward-looking statements represent our current judgment on what the future holds, they are subject to risks and uncertainties that could result in actual outcomes differing materially from those projected in these statements. No statement contained herein constitutes a commitment by AVEVA to perform any particular action or to deliver any particular product or product features. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect our opinions only as of the date of this presentation.

The Company shall not be obliged to disclose any revision to these forward-looking statements to reflect events or circumstances occurring after the date on which they are made or to reflect the occurrence of future events.

 [linkedin.com/company/aveva](https://www.linkedin.com/company/aveva)

 [@avevagroup](https://twitter.com/avevagroup)

ABOUT AVEVA

AVEVA, a global leader in industrial software, drives digital transformation for industrial organizations managing complex operational processes. Through Performance Intelligence, AVEVA connects the power of information and artificial intelligence (AI) with human insight, to enable faster and more precise decision making, helping industries to boost operational delivery and sustainability. Our cloud-enabled data platform, combined with software that spans design, engineering and operations, asset performance, monitoring and control solutions delivers proven business value and outcomes to over 20,000 customers worldwide, supported by the largest industrial software ecosystem, including 5,500 partners and 5,700 certified developers. AVEVA is headquartered in Cambridge, UK, with over 6,000 employees at 90 locations in more than 40 countries. For more details visit: www.aveva.com