# MONDAY LIVE!

Discuss the advances of smart buildings to improve built environments around the world.

- Panelist profiles are on <u>mondaylive.org</u>
- Views are personal, not of any org/company
- Post your Questions & Comments on Zoom Q&A/Chat
- This slide deck is available on mondaylive.org





# December: Wrap-up!



# Agenda

December 13, 2021

- 1. News & Trends
- 2. Monday Live! Holiday Party & 2022 Predictions
- 3. Discussion...

#### Ken Sinclair

Dec 13, 2021



Best of Season to You and Yours

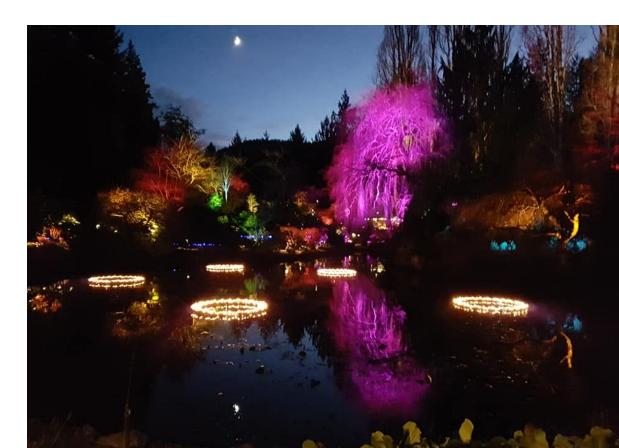
<u>AutomatedBuildings.com</u>

"Vetting Vegas" - AHRExpo

https://www.butchartgardens.com/christmas/



My LinkedIn Shares
My Twitter Tweets



#### Marc Petock

### December 13, 2021



#### **2022 Thoughts OVERALL**



#### GREAT RESHUFFLE. Out Of the Crisis into A New that Order Takes Hold

- -Achieving operations that balance economic, social, and environmental goals is one of the major challenges the building industry is facing
- -Pivot point" year for everyone---OEMs, integrators, and end-users
- -Continued movement to outcomes and business side driven not technology
- -The way a building is operated and managed is part a company's brand. The way a building is "COVID operated and managed" is part of the brand
- -Systems and equipment will be expected to do more
- -Better and more educated end user buyer
- -Hybrid workplace is here to stay
- -No more build it and they will come
- -Cybersecurity--increase in instances with one major one that will finally get people to wake up more
- -More cloud disruptions

Protocols other than the traditional ones (MQTT)

#### **Question of the Year**

To metaverse or not to metaverse----that is the question

#### Marc Petock

### December 13, 2021



#### **2022 Thoughts SPECIFIC**



#### -Convergence of building/facility operations with workplace and the way they are managed together

- -Platforms, Platforms, Platforms---THINK PLATFORMS FIRST. The tension between closed and open platforms will continue
- -The new Office Amenities--Air quality, Occupancy Control, space flexibility
- -More adoption of "The Edge," driven by IP
- -ESG -The moniker has done its part in challenging the mentality of profit-over-all and has put social awareness onto the business agenda. Driven public relations; shareholders, customers, employees and by its relationship to a company's brand
- -Return to siloed systems i.e., sensors connecting to their cloud and data use just for their sensors
- -Data will continue to reign as king
- -Increase in Players in Space-Google, Microsoft, Amazon (especially around the collection of data and applications); emergence of new OEM player
- -The Proptech \$\$\$\$ craziness will continue
- -Shortage of people related to the # of jobs and opportunities
- Supply Chain Challenges will continue
- -Hip and hype will reach an all time high
- -Sensor shakeout

#### John Petze

Dec 13, 2021



#### Two most impactful presentations of 2021:

**Joe Gaspardone** on Nexus Labs talking about the challenges of selling energy efficiency and intelligent building technologies to owners due to split incentives and financial models in CRE

https://drive.google.com/file/d/11TqFLe3fn6\_odfWT9r1rcfSlXBr5iJiB/view?usp=sharing

#### **Bryce Anderson**

In this video he discusses what may be possible if we all work together to integrate advanced technology with the true realities, and complexities of building systems.

https://www.youtube.com/watch?v=6xpUBCUtR\_U

#### Anno Scholten

Dec 13th



#### 2022 Predictions

- ESG will still be the 'Wild West'
- Digital Twin technologies will still be expensive to implement.
- "AI/ML" will be 'stickered' on everything.
- Interactive Grid technologies will grow significantly.
- M&A and Investment in Smart Building Technologies will continue to grow strongly.

## **Tracy Markie**

#### Dec/13



#### Everything going our way...

- The Perfect Storm:
  - More, smarter automation (driven by need for remote access/support of devices and desire for data collection)
  - More general acceptance by end users (more millennials, more consumer awareness, better implementation tools)
  - Proliferation of networking technologies (into products, buildings, people)

#### Until...

- Chip/supply chain shortages create impact
- Global economic correction (likely more like 2023)
- Excessive/key cyber security events



## Roger Woodward

Dec 13th





- Hybrid working effect
  - Slowing in new construction end of year
  - Increase in Retrofit and Refurb
  - Surplus of office space
  - Increase in Flex space
- Increase in the adoption of Cloud Services
- Big 4 stepping back from Systems to offer Products & Services
- Segmentation in the provision of solutions

## Roger Woodward

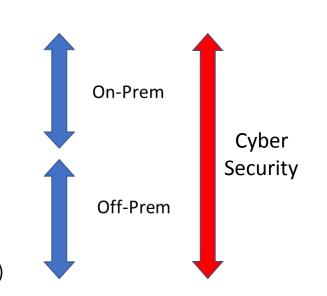
Dec 13th





#### **Segmentation**

- Smarter equipment
- Edge devices
- I/P & Wireless Connectivity
- BAS
- Integration
- Data Aggregation On and Off Prem
- BAS Supervisor moving to cloud
- Continued Convergence of IT/OT
- Consolidation of Cloud platforms (AWS/Azure/GC)
- Integration and Consolidation of cloud services
- Connected IWMS (W/O's, CMMS, AI, Asset management, etc)



#### Gina Elliott

#### Dec 13th



#### 2022 Predictions (Wish List)

- ESG will become a mandate like all corporate reporting
- Corporate real estate will downsize as its use and demographics change.
- Expect claims against owners/operators for impact to occupant health.
- "Alternative" energy sources will continue to grow and accelerate to meet carbon neutral mandates.
- Building management outsourcing will rise.

#### Bill Behn

#### Nov 15, 2021





GE and the Belief in Management Magic - WSJ

## Anto Budiardjo Dec/13



Digital Twin System Interoperability Framework



https://go.omgprograms.org/l/658223/202 1-11-29/5dv52b Anto's 2022 Prediction!



2022 - Focus on System-of-Systems



# JANUARY 2022

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# Div 2525 Specifications







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