#### **MODERN TECHNOLOGY** AND ITS IMPACT ON **CAMPUS M&O**



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Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.



#### Course Description

When technology is constantly changing, it's bound to impact your daily operations. Good news, the latest CMMS trends offer major benefits for your facilities management. Mobility, Geographic Information Systems (GIS), and the Internet of Things (IoT) to list a few. Limble's 2018 research indicates a rise in the adoption of CMMS software this year don't get left behind. Learn from your peers at Concordia University who leverage mobile and mapping CMMS capabilities to better their campus M&O.



#### Learning Objectives

- Review current CMMS software trends
- Learn about the benefits of mobile access for M&O
- See how GIS data can impact your operations
- Hear from peers who leverage their mobile app & GIS data



#### Presenters

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**Jerry Novak** Director of Buildings and Grounds Concordia University-Ann Arbor

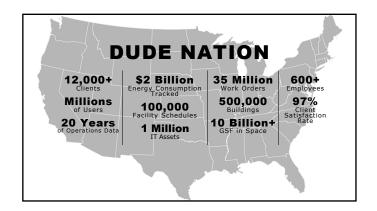
**Jon Zickermann** EHS Officer/GIS Administrator Concordia University-Wisconsin

#### Agenda

Owning Your Operations PART TWO IOT, Mobile & GIS PART THREE Concordia University Case Study PART FOUR How The Dude Can Help

PART FIVE O&A

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## OWN YOUR OPERATIONS



#### Quick Assessment

Does your organization...

- Have a CMMS that is asset-centric?
- Have technicians using mobile devices to track work in the field?
- Have a system to record data on time, costs, work performed, and integrate with other financial systems?
- Have a system that leverages APIs?
- Utilize PM schedules?
- Have the right CMMS?



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## FIRST STEP TO OWNING YOUR OPERATIONS...

...GET THE RIGHT CMMS

#### WHAT CAN THE RIGHT CMMS DO FOR YOU?



#### **Inevitable Benefits**



- > Saved time
- › Increased productivity
- › Less error
- › Higher employee satisfaction
- More strategic capital planning
- > Better communication & organization
- > Better use of budget resources

#### Does Your CMMS Include ...?

- , Good mobile app
- Ability to view work orders
   & assets on a map view
- Ability to pull in GIS data
- Integration with a capital planning solution
- Ways to help you reduce energy consumption & costs
- Data & KPIs to inform decision-making
- CHECKLIST
- Process to streamline event management
  - Option to manage inventory and purchase orders (POs)
  - › Cloud-based solution
  - Live support via phone, chat, email
  - Reports to justify requests for budget, staff, resources
  - IoT integration

#### CMMS Trends for 2019

- JoT (Internet of Things)
- , Mobile Access
- GIS (Geographic Information Systems)



#### LEVERAGING IOT



#### What is IoT?

- > IoT = Internet of Things
  - Simple definition: taking things in the world and connecting them to the internet
  - IoT allows CMMS to "talk to" your assets/equipment to measure & record related data



#### Benefits: IoT with CMMS

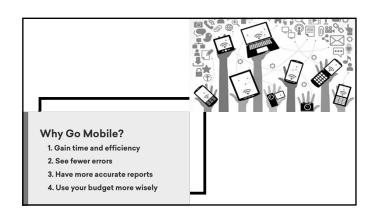
Monitor assets/equipment more effectively:

- > Increase data analytics & cost-saving opportunities
- > Predict asset/equipment failures
- > Become more proactive & less reactive
- > Track usage (ex: vehicle mileage, hours run, etc.)
- $\rightarrow$  Condition monitoring (ex: temperature change, vibration spikes, etc.)
- WOs automatically generate when asset/equipment readings fall outside of the threshold you set up



#### MAKING YOUR MAINTENANCE MOBILE





#### Benefits: Mobile App with CMMS

- Technicians can work freely in the field
- Create, view & complete WOs from anywhere
- Increase productivity & efficiency
- › Better managed workflows
- > Save on time & costs
- Easy to use
- > Fewer errors
- Attach photos/details from job to the WO
- > Enter accurate information on the spot
- Real-time updates & communication



## WHAT & WHY OF GIS



#### What is GIS?

GIS = Geographic Information Systems

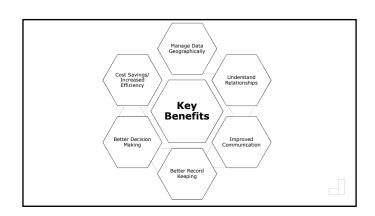
- Framework for gathering, managing & analyzing data
- > Analyzes spatial locations
- Identifies patterns, relations & situations
- ...or simply put, it's a map



#### Why GIS?

- Manage work orders, GIS assets & maintenance activity in one place using a map view
- View upcoming work spatially
  - Measure & plan effective routes
- > Connect work orders & work histories with assets in the field
- > Update work & assets in real-time
  - Mobile app
- › Access & manage living data to improve reporting
- > Store data for current and future staff

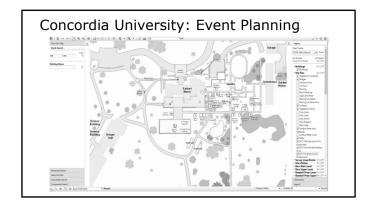


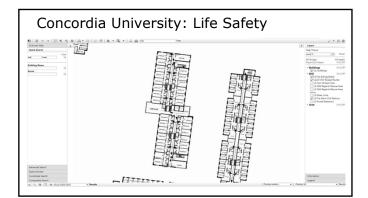


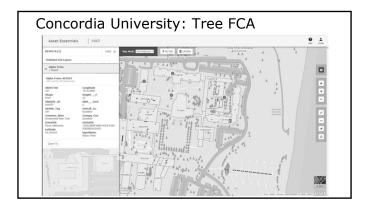
#### Concordia University: GIS Use Cases

- > Event planning
  - Measuring tool, find out square footage
- › Life safety
  - > Fire extinguishers, smoke detectors, inspections
- > Tree data/facility condition assessment
  - > Knowing how many, where they are, what condition they're in









# Benefits: GIS with CMMS Visually identify trends & clusters Maintain & update your data Faster knowledge transfer Filter for what is important to you Common foundation between systems Dude Solutions

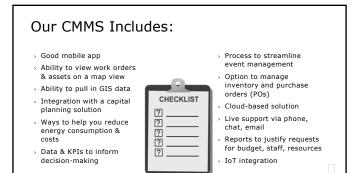
#### **Overall Takeaways**

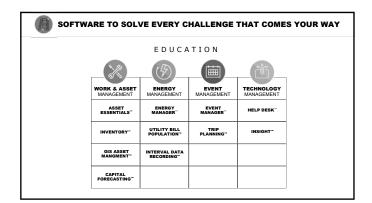
- Improve operations on your campus with modern technology – IoT, Mobile Capabilities, GIS
- Find solution(s) with the technology that will work best for your campus
- → Start small
  - > You don't have to do complete overhaul at once
- > Improve efficiency & service to your organization

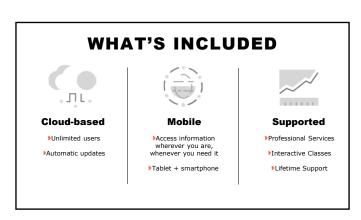
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## How might Dude Solutions help?







Q&A

This concludes The American Institute of Architects Continuing Education Systems Course



### **THANK YOU!**

Have questions? Get answers! 11000 REGENCY PKWY #110 CARY, NC 27518

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