



# NS2022

ACCELERATING INNOVATION

# Mega HQ and Smart City Projects

Business Track BT3A // Room E217  
Tuesday, April 5<sup>th</sup> 2022  
3.30-4.30pm



# Mega HQ and Smart City Projects

*Introductions*

*Case Study Presentations*

*Q&A*



# Paul Price

*Business Development Director,  
Tridium.*

*Global Technology Partners &  
Global Key Accounts.*





# Brian Norris

*Integrated Facilities Management  
Director, Honeywell Inc.*

*Honeywell Global HQ Site Leader  
based in Charlotte, North  
Carolina.*



# Sanjeev v Bhatia

*Chairman of SB Group, Netix  
Global BV and ODS Global.*

*Based in Amsterdam, NL and  
Dubai, UAE.*





# Steve Crowe

*Director of Integration Services  
at Resolute Building  
Intelligence.*



# Paul Valente

*Facility Automation Architect  
for Chicago Public Schools.*





Brian Norris





# NS2022

ACCELERATING INNOVATION



Delivering IoT & AI based Sustainable Solutions

Netix Controls is the proud Platinum Sponsor of NS2022,  
Visit us at Booth #515



# NETIX

## WHO WE ARE

Netix is an **IoT & AI** based automation solution provider, leverages its innovative strategies, analytic algorithms and brand agnostic solutions to transform your facilities into safe and sustainable edifices.

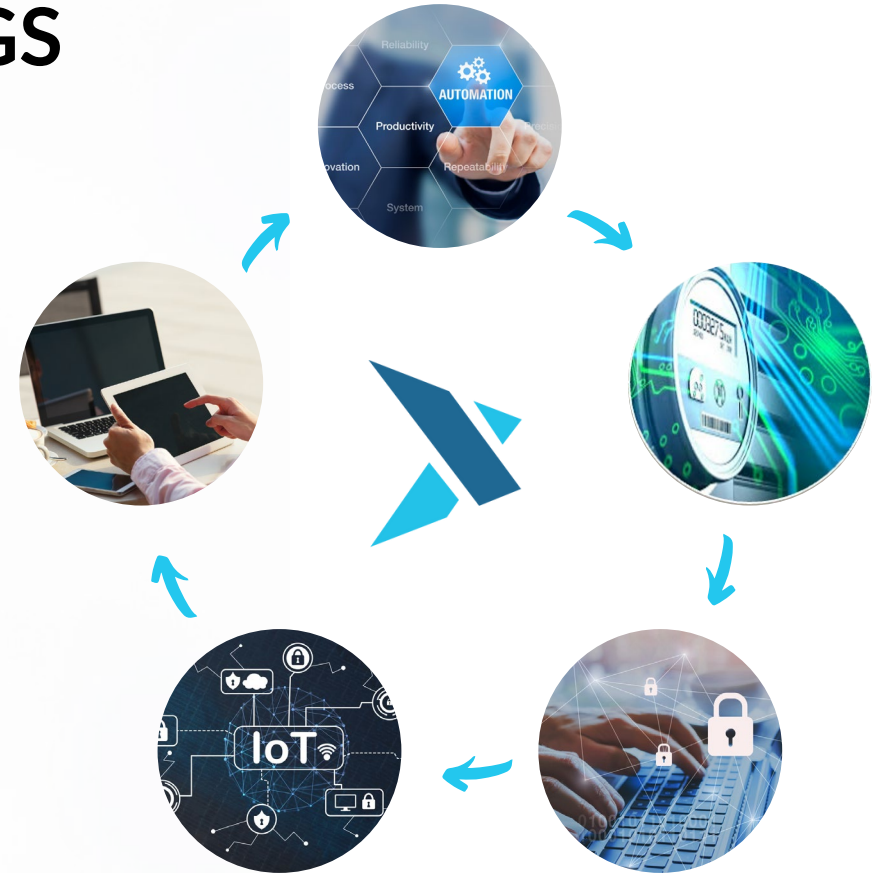
[www.netixglobal.com](http://www.netixglobal.com)



## INNOVATION AND SUSTAINABILITY

# OUR OFFERINGS

- ▶ Integrated Building Automation
- ▶ Smart Metering
- ▶ Enterprise Solutions
- ▶ IoT (Connected Buildings & Remote management)
- ▶ Netix Konnect iCCC (SaaS/SaaP-based Command Control Center)
- ▶ Netix Novus Partner Program - The Brownfield Revolution





# DAMAC

DAMAC Properties has been at the forefront of the Middle East's luxury real estate market since 2002, delivering luxury residential, commercial and leisure properties across the region, including the UAE, Saudi Arabia, Qatar, Jordan, Lebanon, Maldives, Canada and the United Kingdom.



# DAMAC

When ODS Global started the project, as **Netix Novus Platinum Partner**, multiple towers had their BMS systems offline. **The Novus Platinum Partner** has successfully managed to bring the systems back, online, with minimal cost impact to the client. This enabled DAMAC to save a considerable amount on the energy bills of these properties.

- Optimized operations and preventive maintenance for 30 buildings
- Performed maintenance for 7 different brands of BMS, resulting in streamlined and centralized asset management.
- Honeywell | Alerton | Siemens | Sauter | Saia Burgess | Schneider | Centraline
- Improved the life cycle of fixed assets.



# INTRODUCTION

DAMAC Maison Cour Jardin is a stunning 19-storey mixed-use tower, located on the Marasi Drive in Business Bay.



DAMAC Suburbia – a multistorey twin tower residential complex is situated in Jebel Ali, very close to Sheikh Zayed Road.



# CHALLENGES

- Non-Operational BMS for over two years
- Higher energy costs, lower system performance & reliability, and decreased equipment life
- Increased Man-Power Utilization
- Compromised well-being of occupants during lockdown
- Multiple Diverse OEMs proposed proprietary disruptive solutions with exorbitant costs during the pandemic
- Diverse properties each with a unique BMS, across multiple timelines were charged a premium for maintenance by the respective OEMs



#RIGHT TO REPAIR

# ADPATIVE NOT DISRUPTIVE SOLUTION

A unified solution, Netix iBMS powered by Niagara was deployed by the Novus partner

All integrated systems were back online with minimal latency and high computational capabilities

All legacy systems were integrated without completing uprooting and replacing the system

Various levels of alarms, notifications, event logs, and trend analysis were configured which delivered detailed, actionable insights into the establishment's performance and support operational efficiencies, occupants welfare, and sustainability

#BROWNFIELD REVOLUTION

# RESULT

- Advance front-end Netix iIBMS integration powered by the Niagara Framework, delivers ultra-low latency and high computational capabilities
- Legacy third party system were not replaced, rather integrated into the existing system with top-level algorithms written to optimize the system as per the current standards and regulations
- Various levels of alarms, notifications, event logs, and trend analysis were configured which delivered detailed, actionable insights into the establishment's performance and support operational efficiencies, occupants' welfare, and sustainability
- Energy profiles were minimized significantly by up to 8%, thus saving the end-user significant amounts of capital by reducing operation and energy costs.



# Current Scenario of Siloed BMS

©2022 | NETIX CONTROLS



# Netix Konnect – A Smart City Solution

©2022 | NETIX CONTROLS

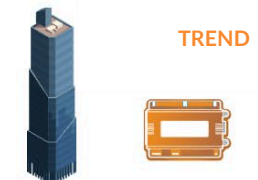
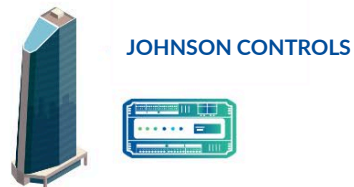
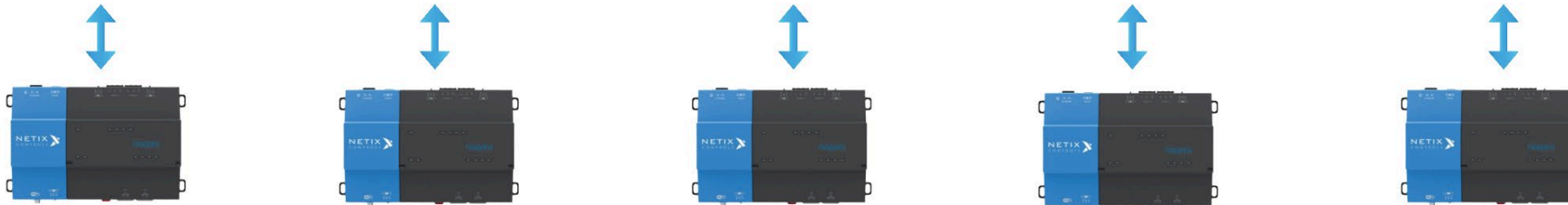


intelligent integrated  
Command & Control Centre



SaaS Netix Konnect  
Hosted on the Hybrid Cloud

Dedicated Client TCP/IP Network





Optimum manpower utilization

Equipment performance monitoring

Early Detection of problems

Increased asset life-cycle

Compare asset performance

Environmental responsibility

Data analytics & machine learning

Energy Optimization & Cost Saving

Predictive asset maintenance

Auto diagnosis and correction

Trend analysis & intelligent alerts

Eagle eye view for decision makers

Work order integration with CAFM - Netix Konnect

Implement SOPs for all assets

Event records

Ability to integrate with mobile application



## Real-time Fault Detection and Diagnostics

Optimize your operations with fully automated, context-aware monitoring

Real-time Alarm Management

Intelligent Workflow Automation

## Energy Performance Analytics & Reporting

Portfolio-wide centralized insights

Drill-down Performance

Fully customisable Dashboards and Reporting

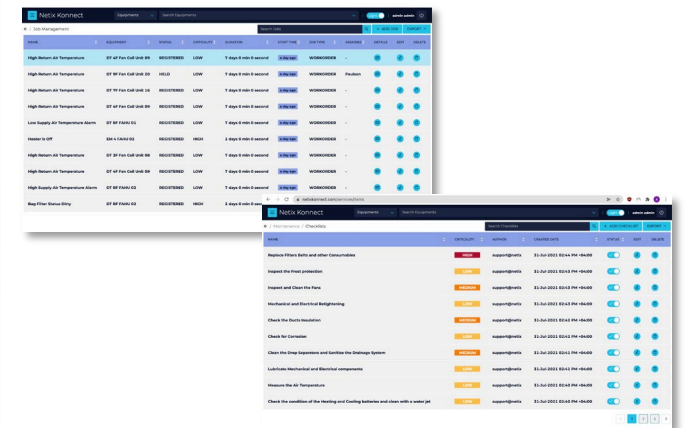
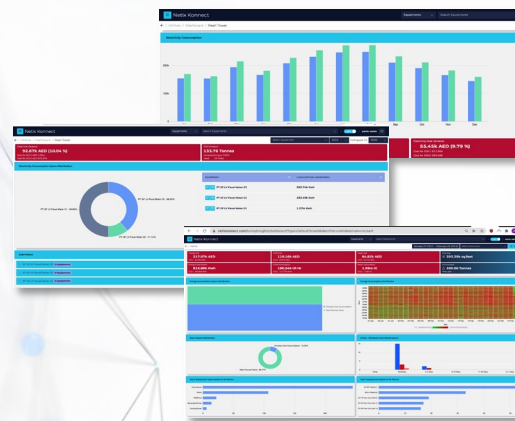
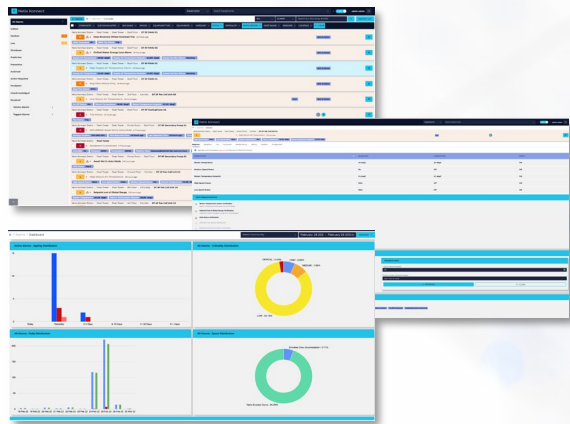
## Digitization of end-to-end maintenance and operations

Manage operations and maintenance, at the touch of your finger

Real-time Context-aware Maintenance

Paperless, Synced Collaboration

Fast and Highly Responsive Team





# DRIVE SUSTAINABILITY WITH NETIX

40-50%

Reduction on  
Building  
Operational  
Costs

10-15%

Reduction  
on Building  
Energy  
Profiles

80%

Reduction on critical  
breakdowns using  
predictive condition  
algorithms

30-40%

Enhancement of  
manhour utilization  
through fault  
detection  
diagnostics





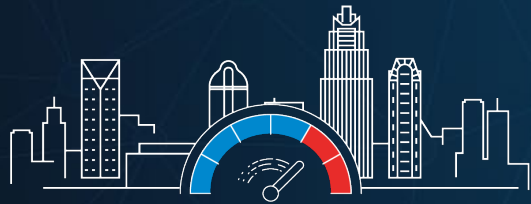
Delivering IoT & AI based Sustainable Solutions

Netix Controls is the proud Platinum Sponsor of NS2022,  
Visit us at Booth #515





# Striving for Best-in-Class Facility Performance



# Operate-to-Fail

## Old CPS



350k students | 55k staff



450 different building automation systems of all makes and models in local servers.



No centralized management, centralized visibility, or maintenance agreements.



Outdated procurement process unable to effectively evaluate cost vs. value.



# Transformation

Mission



Optimize equipment and operation performance across the portfolio to best ensure that every school provides its students and staff a safe, healthy, and productive learning environment.

# Challenges

## How To...



Connect hundreds of heterogeneous schools into a centralized ecosystem?



Analyze performance data from a multitude of HVAC systems and equipment of varying condition, age, and manufacturer?



Use this data to proactively and consistently improve and optimize facility performance across the network?



Get it all done quickly and cost-effectively?

# Leverage the Power

Step 1

niagara  
framework®



Majority of the schools within the portfolio were already leveraging the Tridium Niagara Framework® as the core of their building automation and control infrastructures.



Thanks to Niagara's open-source protocol and structured data-tagging scheme, the ability to connect these buildings into a single, centrally managed ecosystem while accessing standardized data sets was readily available.



Best disparate building system unifier on the planet.



# Time to Value

## Step 2

**RESOLUTE**  <sup>®</sup>  
**BUILDING INTELLIGENCE**



Analytics-powered (FDD) building performance software with direct connection to Niagara without the need for intermediary devices.



Patented and automated building-integration technology, enabling rapid connection, configuration, and use.



“Straight out of the box” functionality and engineering services support allowed the project “to hit the ground running.”

# Proving It Out

## Step 3



Pilot project that included 43 schools (JACES) rolling up to a centralized Niagara Supervisor.



Remotely installed Resolute's Niagara connector in minutes and, within the hour, began seeing actual building data flowing into the system.



Configured all 43 buildings (70,000 points) in less than two business days.



Automatically generated and rapidly applied complete set of pre-defined, ASHRAE-based rules across all 70,000 points to deliver immediate performance insights.



Insights programmatically fed into 150+ building and equipment reports pinpointing equipment problems, prioritizing them based on impact, and identifying likely root causes.

# Results

## ROI

65

CPS facilities  
currently  
connected to the  
system with  
65 more planned



Centralized visibility into operational performance across the connected portfolio.



Real-time and reliable data pinpointing and prioritizing performance issues based on impact, coupled with root cause identification to streamline troubleshooting and expedite resolution.



Proactive monitoring and management of performance initiatives to track progress and verify results.



Validate and reward performance based on fact—not opinion.



Rapidly transitioning from tactical necessity to strategic imperative.



# Obstacles

## Reality



Change, especially transformative change, is hard, because it threatens the status quo and spawns pervasive fear of the unknown.



Stay the course. Alleviate the fears. Clear up the confusion. Do whatever it takes to become a data- and mission-driven organization.



The results are well worth the effort—we know from experience.

# Lessons Learned

Let's Talk



niagara  
framework®

**RESOLUTE**▶  
BUILDING INTELLIGENCE





# NS2022

ACCELERATING INNOVATION



# Mega HQ and Smart City Projects

THANK YOU







# NS2022

ACCELERATING INNOVATION