2015

BEST OF NOW, BEST OF NEXT

Mechanical Contractors Association
MCAA
of America

OAK BROOK, ILLINOIS JUNE 8-9

EMERGING TECHNOLOGY FOR THE PROGRESSIVE CONTRACTOR

New technology is rapidly changing the mechanical construction industry. Keeping up with the pace of change is vital to maintaining your competitive edge. MCAA's Technology Conference: *The Best of Now, The Best of Next* offers a high-level look at how contractors are using technology now and what is on the horizon. It will showcase new technology in service, modeling, virtual construction, business development, collaboration, and productivity enhancement.

Whether you are already working on the cutting edge or seeking a deeper understanding of new technology before you invest, MCAA's Technology Conference will help you position your company to thrive in a high-tech world.

Technology—and its application to our industry—is constantly evolving. The challenge is to keep on top of the latest iterations and anticipate what is coming so that you can leverage the newest technology to benefit your company. The conference will

- showcase how leading contractors are putting innovative technology to work now,
- demonstrate new products and technologies, and
- help you understand the possibilities that exist now and in the coming years.

As mechanical contractors, you are the best suited in the AEC industry to capitalize on technology to manage the facility process from design inception through building operation. You will take home valuable insights to help you capitalize on that position.

WHO SHOULD ATTEND?

This conference is geared to the decision-makers who determine how your company uses technology (not those who service the technology) and your "technology champion." Instead of hyper-technical geek-speak, you will hear from other senior executives how the latest resources can help you remain competitive, productive, and efficient.

IF YOU WANT TO BE SUCCESSFUL IN TODAY'S MARKET-DRIVEN ENVIRONMENT...YOU WILL NOT WANT TO MISS THIS CONFERENCE, WHERE YOU WILL:

- see new technology in action,
- engage with peers, and
- learn how to implement new technology to maintain a competitive edge.

PROGRAM

Brian Helm

Brian Helm, President of Mechanical, Inc, in Freeport, IL, is chairman of MCAA's Education Committee and chairman of this conference. His family-owned company performs $150 million worth of HVAC piping, process piping, plumbing, sheet metal, and HVAC service work throughout the U.S. (primarily in the Great Lakes states). Brian's company spends 40 hours a week researching the latest technology advances to help them remain competitive.

The Rise of the Super Sub

Paul Doherty

Virtual design and construction is becoming a standard practice among the building industry. As it is included in projects more frequently, mechanical contractors who have taken the leap with collaborative design technology have positioned themselves to be leaders within design teams and taken control of the process.

Paul Doherty will describe what leading mechanicals are doing at the bleeding edge, the "innovation adaptive life cycle" and where technology is leading the industry.

Paul Doherty, CEO of The Digit Group, is a registered architect and a technology leader and innovator in the built environment. Among his successful ventures are the BIM software program Revit (sold to AutoDesk), the Buzzsaw data management program (sold to AutoDesk), and the facilities lifecycle management program TRIRIGA (sold to IBM). He is also co-founder of the AEC Hackathon.

PROGRAM

Technology-Driven Contracting

Two sessions were developed by contractors to discuss how new technology has impacted their businesses. These companies will share the ways new products and software have changed their processes and business models.

Session A: Integrated Databases

Rick Dustin

Shared, company-wide databases can have significant benefits, but most firms have not succeeded in implementing them. Rick Dustin will explain how McKenney's, Inc. uses a central BIM database to build estimates, design systems, and fabricate pieces—giving them an edge through consistency, workflow, and efficiency. Rick will describe the processes put in place, the successes gained, and the challenges faced.

Rick Dustin is vice president of Engineering at Atlanta-based McKenney's, Inc. A graduate of Georgia Tech, he leads McKenney's mechanical design, drafting, and BIM efforts. He presented on this important topic at the 2014 Autodesk U in Las Vegas.

Session B: 3D Laser Scanning

Adam Cartwright

Virtual design and construction is a powerful tool that can be leveraged throughout the entire process, but what happens when you are working on an existing building where new components need to fit in with existing equipment? 3D scanning gives you the ability to generate a virtual representation of the existing environment so that you can design your systems to integrate with them. Adam Cartwright will explain how H.T. Lyons has been using this tool for years to gain an advantage on complex renovations using existing equipment.

Adam Cartwright is a project manager in the Design Build Group at H.T. Lyons in Allentown, PA. Following service as an instructor in the U.S. Army's heavy equipment program, he received degrees in construction management at the Pennsylvania College of Technology and a master's degree in construction management at Florida International University.

Smart Buildings

Smart buildings deliver useful building services that make occupants productive at the lowest cost and environmental impact over the building lifecycle. Reaching this vision requires adding intelligence from the beginning of the design phase through to the end of the building's useful life. Smart buildings use information technology to connect a variety of subsystems, which typically operate independently, to share information and optimize total building performance—even looking beyond the building equipment within their four walls. They are connected and responsive to the smart power grid, and they interact with building operators and occupants to provide new levels of visibility and actionable information.

This session will cover smart building basics; the contractor's role in their installation, service, and performance; and some case studies.

PROGRAM

A GC's Perspective

Atul Khanzode

As director of Construction Technologies, Atul Khanzode has been leading DPR Construction's strategic technology initiatives related to virtual design and construction. He tests new technologies in the field, including radio-frequency identification (RFID), augmented reality (AR), and unmanned aerial drones. In this session, he will offer his perspective on the implementation of new technology in the industry, the challenges that general contractors face, and collaborative methods to improve projects.

Atul Khanzode, PhD, leads DPR Construction's Construction Technologies and Consulting groups in the USA. He completed his doctorate in construction engineering and management, focusing on integrated practice, virtual design and construction (VDC), at Stanford University. He has worked on highly advanced technology projects and currently leads many initiatives, including VDC, operations and preconstruction technologies, strategic technology initiatives at DPR, and consulting engagements. During the past 10 years, Atul has focused on improving critical business process.

Tech Toys Test Drive

Matt Abeles

MCAA has partnered with BuiltWorlds, a Chicago-based company that strives to connect innovative tech companies with the built environment. Matt Abeles of BuiltWorlds will describe and demonstrate new technology of particular relevance to MCAA contractors from its partner tech companies:

- **DAQRI Smart Helmet** – The DAQRI Smart Helmet is where augmented reality (AR) meets the construction site. This helmet uses a world-class sensor package to know where it is on a jobsite and what it is looking at, then overlays critical information on its AR visor.
- **SmartUse** –SmartUse is a cross-platform collaboration application that allows multiple project players to communicate, modify designs, and work from a central design. The software is meant for mobile use but is embedded in 55" touchscreen workstations.
- **IrisVR** – The IrisVR platform allows you to take your virtual design and construction and transfer it into a virtual reality environment. Using either Occulus Rift or Google Cardboard headsets, IrisVR allows you to walk through your designs in a presentation or collaborative meeting.

Matt Abeles is the managing director of BuiltWorlds, a Chicago company that catalyzes technology companies as they relate to the built space. His presentation will include representatives of each of the tech companies, who can provide greater detail of each product or service.

DEFINITION: *TECHNOLOGY CHAMPION*

The person in your company who is on top of all of the latest software, tools, tech and understands how you can use them to solve your real-world problems. Your technology champion works to overcome obstacles to putting new technology in place to meet your company's overall goals.

PROGRAM

Dude, Where's My Pipe Wrench?: RFID Driving the Future

Reginald Hunter

Reginald Hunter will explore how Fiatech, a leading innovation-oriented organization, is cultivating pragmatic solutions for the construction industry with an exciting focus on RFID. Fiatech's Technology Roadmap, RFID case studies, and real-world solutions from across the industry will be showcased.

Reginald Hunter is a recognized industry change agent, with hands-on engineering and business expertise and a proven ability in developing innovative solutions to complex problems. He's been granted over 30 patents and is the principal author of the Fiatech Innovation Guide for Capital Projects Industry Productivity Improvement book series, volume 1, "RFID for Material Management and Productivity Improvement."

CONFERENCE LOCATION

The Hyatt Lodge at McDonald's Campus

The conference is being held at the Hyatt Lodge at McDonald's Campus in Oak Brook, IL. It is conveniently located between O'Hare and Midway airports. The hotel offers exceptional amenities including a spa and health club. Located close to Interstates 88 and 294, it offers easy access to those of you driving. Although the program will be at Hamburger U., you won't be eating Big Macs and fries.

The hotel fee is a separate charge of $159 for a standard room plus tax, per room, per night. MCAA's room block is limited, and early registration is recommended to secure your hotel room. To reserve your room, please complete the information on the conference registration form—MCAA will make the reservation for you.

MCAA'S REGISTRATION CANCELLATION AND REFUND POLICY

If it becomes necessary to cancel your registration for the conference, please send written notification to MCAA either by e-mail (eventregistration@mcaa.org) or regular mail (MCAA Meetings Department, 1385 Piccard Drive, Rockville, MD 20850-4340). You will receive a full registration refund if you cancel by May 22, 2015. Other refunds will be handled on a case-by-case basis. Substitutions are always accepted.

REGISTRATION AND FEE INFORMATION

The MCAA Technology Conference curriculum is interactive—we encourage you to bring your key "strategy team members." The registration fee is $495 per person and includes the Monday evening exhibit, opening reception, breakfast, lunch, refreshment breaks, and educational program.

For real-time registration, go to **www.mcaa.org/education** and click on the "Register Online" button. You will receive an immediate e-mail confirmation of your registration. If you prefer to pay your registration fees by check, please use the form enclosed with this brochure. Please fax your completed form to 301-869-3520 and allow two weeks for confirmation of your registration. If you need additional forms, you may print them from our website at www.mcaa.org/education. MCAA will forward your room reservation directly to the hotel and send you a confirmation shortly prior to the conference.

QUESTIONS?

If you have questions, please contact the MCAA Meetings Department:

By phone: 301-869-5800
By e-mail: eventregistration@mcaa.org
By fax: 301-869-3520
By mail: Meetings Dept., MCAA, 1385 Piccard Drive, Rockville, MD 20850

PRELIMINARY SCHEDULE

MONDAY, JUNE 8, 2015

5:00 - 7:00 PM	**Exhibit and Reception**

TUESDAY, JUNE 9, 2015

7:00 AM – 8:00 AM	**BREAKFAST**
8:00 AM – 8:15 AM	**Introduction** *Brian Helm, Mechanical, Inc.*
8:15 AM – 9:30 AM	**Overview "Rise of the Super Sub" and State of the Industry** *Paul Doherty, The Digit Group*
9:30 AM – 9:45 AM	**BREAK**
9:45 AM – 10:30 AM	**Technology-Driven Contracting Session A: Integrated Databases** *Rick Dustin, McKenney's*
10:30 AM – 11:15 AM	**Technology-Driven Contracting Session B: 3D Laser Scanning** *Adam Cartwright, H.T. Lyons*
11:15 AM – 12:00 PM	**Smart Buildings**
12:00 PM – 1:30 PM	**LUNCH AND TRADE SHOW**
1:30 PM – 2:30 PM	**A GC's Perspective** *Atul Khanzode, DPR Construction*
2:30 PM – 3:30 PM	**Tech Toys Test Drive** *Matt Abeles, BuiltWorlds*
3:30 PM – 3:45 PM	**BREAK**
3:45 PM – 4:30 PM	***Dude, Where's My Pipe Wrench?: RFID Driving the Future*** *Reginald Hunter, Fiatech*
4:30 PM – 4:45 PM	**Conference Wrap-up** *Paul Doherty and Brian Helm*

MCA MECHANICAL CONTRACTORS ASSOCIATION TAKING ON TOMORROW!

MCAA WISHES TO THANK THE MCA OF CHICAGO FOR ITS ASSISTANCE IN DEVELOPING THIS CONFERENCE.

AS MECHANICAL CONTRACTORS, YOU ARE THE BEST SUITED IN THE AEC INDUSTRY TO CAPITALIZE ON TECHNOLOGY TO MANAGE THE FACILITY PROCESS FROM DESIGN INCEPTION THROUGH BUILDING OPERATION.

Mechanical Contractors Association of America, Inc. 1385 Piccard Drive, Rockville, MD 20850-4340
800-556-3653 or 301-869-5800 Fax 301-869-3250 www.mcaa.org