2017 MCAA Technology Conference Tentative Schedule

Wednesday, November 8

4:00 PM  Registration Opens
5:00 PM  Opening Reception Begins
6:00 – 7:30PM  Gamification of a Panel Discussion

Thursday, November 9

7:00 AM  Breakfast
8:00 AM  Welcome and Introductions
8:30 AM  White Hat Cyber Security
9:30 AM  Break
9:45 AM  Breakout 1
   - Making Revit More Powerful with Cutting Edge Plugins
   - Fixing the Process Before Buying a Solution
   - CRM and Sales Software
   - Total Stations, 3D Scanning and Drones
11:00 AM  How to Build a Mad Scientist – Starting R&D
12:00 PM  Lunch
1:00 PM  60 Ideas in 60 Minutes
2:00 PM  Break
2:10 PM  Breakout 2
   - Using Augmented Reality in Construction
   - ERP Software
   - Comparing Service Software and Hardware
   - Fabrication Technology
3:15 PM  Hardware Rundown – Mobile Devices and BIM Workstations
4:15 PM  Break
4:25 PM  Breakout 3
   - Keeping BIM Costs in Check
   - The Evolving Org Chart
   - Security Best Practices
   - Mobile Device Management
5:30 PM – 7:30 PM  Reception and Exhibit

Friday, November 10

7:00 AM  Breakfast
8:00 AM  Recap Session and Takeaways
8:45 AM  Architect-Engineer-Contractor Forum
10:00 AM  Break
10:15 AM  The Paperless Contractor: Myth or Reality?
11:30 AM  Closing Remarks
Session Descriptions

Wednesday, November 8
Gamification of a Panel Discussion
To kickoff the 2017 Technology Conference, MCAA will have a session unlike any they have had before. In this discussion, four construction technology insiders will have to think fast on their feet as this panel turns itself into a competition. Gamification has been used to motivate people by turning routine tasks into a game. To make this session more entertaining, panelists will compete for points in an effort to win the argument and attendees will be judge. As the discussion goes on, the audience will be able to use their mobile phones to vote and ask questions.
Hosted by Sasha Reed, Bluebeam.
Panelists are James Benham, Nathan Wood, Josh Bone

Thursday, November 9
White Hat Cyber Security
Cyber security has played an increasingly important role for businesses today, but especially contractors. With access to infrastructure and connected systems, contractors are frequently targeted by hackers for malicious reasons like cyber-ransom and systems penetration. In this session, Nick Espinosa will inform, and possibly disturb, with his important message regarding minimizing risks to your privacy, data, and business operations in our connected digital world, while enjoying the benefits of technology. This presentation on cyber security will include a live hacking demonstration!
Presented by Nick Espinosa

Breakout Session One
• Making Revit More Powerful with Cutting-Edge Plug-Ins This session will discuss the impact that BIM has had on the mechanical contractors. As more contracts require full Revit MEP integration, new software tools are being developed to integrate with Revit and provide contractors with tools geared towards their specific trades. One of these tools is the new Complexity Measurement Tool (CMT), sponsored by MCERF and developed by Brett Young with BuildingsSP. Brett will explain how this new tool aligns with Revit along with other plug-ins including Sysque, ClashMEP and others.
  ○ Presented by Nathan Wood, Brett Young

• Fixing the Process Before Buying the Solution - Often times, contractors look towards software to fix a problem before looking at the underlying process. This session will talk about basic operations and how the right manpower, workflow, job processes are in place before using new technology. When it comes to moving on to new software or hardware, leadership needs to make a decision that can impact finances, schedules and manpower. How much will it cost, how hard will it be to train employees on
it, how much efficiency will I gain and what opportunities am I missing out on if I don’t change. What is the ROI of the technology and include case studies of examples.

- **CRM Sales Software** - CRM software goes beyond sales and into customer relationships. For service contractors that are trying to expand their client base, this is essential. For contractors that focus in new construction, it is more about developing and maintaining relationships. This session will explore different software out there and how contractors can use it effectively.
  - Presented by Carl Herman

- **Total Stations, 3D Scanners and Drones** - Jobsite robotics are helping contractors leverage more information to and from BIM models and the jobsite. This session will begin with an exploration of three of the most common tools, Robotic Total Stations, 3D scanners and Drones. It will discuss the processes involved in each solution and compare hardware, processes and costs for each. This session will include roundtable discussion on how contractors are using each of these technologies in their operations.
  - Presented by Chris Weaver, Jonathan Marsh

**How to Build a Mad Scientist and Starting up R&D**
Most companies do not know where to begin when it comes to staying on top of technology, but usually it starts by finding someone in your organization that has the intellectual curiosity, the knowledge of processes, and the budget to allow them to research. In this session, attendees will learn where to begin the process, how to recruit the right person or team and establish an appropriate budget. Mad Scientists have to fill many roles in an organization and in order to succeed, it is important to understand what their role should be, what processes need to be experimented with and how they can lead an implementation for new tools, devices and processes.
  - Presented by James Benham

**60 Ideas in 60 Minutes**
What are the best ideas or lessons learned from worst mistakes or greatest successes? In this fast paced session, the microphone will be thrown around (yes, thrown) so that attendees can quickly explain what ideas big or small have made a difference in their company. The moderator will do their best to help pull out details from the ideas in order to explain the concept to the entire group. The running list will be compiled in real time and shared with the group as a handout upon completion.
  - Presented by Nathan Wood
Breakout Session Two

- **Using Augmented Reality in Construction** - Augmented Reality has hit the mainstream recently with devices like the Microsoft Hololens and XOEye coming to the market. Over the last year, members of the MCAA Technology Committee have been evaluating the hardware and some of the software that is being developed for the construction industry. In this session, members of the MCAA Technology Committee will talk about positive and negative findings from their field tests and how augmented reality technology has real potential to make an immediate impact for contractors.
  
  o  Presented by Stacy Zerr

- **ERP Software** - This fall, MCAA will release its next installment of the Technology Research Series with a report on ERP Software. Kelly Doyle, the report’s principal author, will present his research and discuss the evaluations. Kelly will also moderate a roundtable discussion on current solutions and what needs you have from the software. Various software will be compared and critiqued and contractors will include input from their experience.
  
  o  Presented by Kelly Doyle

- **Service Software and Hardware** - In October 2016, MCAA produced a Technology Research Series Report on Service Software. This session will include a discussion of different software and hardware in the report, what software solutions service contractors are using, and processes that are effective. The session will continue with a discussion of new hardware used in service vehicles and by service technicians in the field to document jobsites with photo/video and thermal imaging.

- **Fabrication Technology** - Many contractors begin using VDC tools like BIM as a means to extend and enhance their fabrication capabilities. Technology is now emerging that goes beyond creating spool drawings for fabricators. In this session, Doug Smith, Corporate BIM Manager for Dynamic Systems will discuss how new hardware and software options are being used by contractors that allow to connect BIM to fabrication stations through automation, robotics and assisted manufacturing.

  o  Presented by Doug Smith

**Hardware Rundown: Comparing Mobile Device and VDC Workstations**

Contractors always want to find out what is the most effective tool for a variety of purposes. This session will explore the differences and effectiveness of a variety of hardware in two parts. The first part will evaluate mobile devices and how they are used today in service, the field and the office. The discussion will talk about the bleeding of lines of each category and how each are most effective on the jobsite.
The second part of this session will talk about what is required to run BIM platforms, 3D scanning software and potentially even 3D meshing software from photogrammetry. Included will be gaming laptops, BIMBoxes and other alternatives that have a high processor power.

*Presented by Josh Bone and James Benham*

**Breakout Session Three**

- **The Evolving Org Chart** - This session will discuss how the digital revolution is transforming standard processes and the corporate structure supporting it. Companies are now creating hybrid roles that share functions of estimators, BIM and project managers. These “strike force” teams may have three or four people working in tandem to support the others’ roles. The introduction of entire virtual design and construction (VDC) departments have created confusion between the roles of IT and Operations. The contractor’s org chart of the future will continue to shrink vertically and expand horizontally.
  - *Presented by Nathan Wood*

- **Security Best Practices** - With the rise of hackers and computer viruses, cyber-criminals are going after every company’s data. They go after it because although the data itself might not be valuable, it is valuable to your operations and thus worth targeting. In this session, we will talk about ways to prevent cyber threats and data loss through training, software and best practices.

- **Mobile Device Management Solutions** - The most MCAA members deploy mobile phones and tablets to their manpower in the field. Mobile devices can provide access to job information, speed up billing and communicate with the team. Although most companies deploy these devices, few use mobile device management (MDM) software to manage the devices. MDM software not only tracks usage and location, but protects your company data from theft, pushes software applications to devices and can be used to cripple the device in cases of loss or theft. It is essential software to use if you are using mobile devices today.
  - *Presented by Steve Metzman*

- **Keeping BIM Costs in Check** - Although many contractors understand how using BIM or VDC on a project can save time and money, how do they track, manage and estimate the costs associated with managing the BIM process? In this session, Josh Bone, BIM Services Manager for JBKnowledge, will discuss BIM Execution Plans and strategies for limiting scope creep. He will also lead roundtable discussions on BIM estimation strategies, tracking and scope maintenance.
  - *Presented by Josh Bone*
**Friday, November 10**

**Architect/Engineer/Contractor Forum**
Our industry is evolving rapidly, driven by technology to produce ever-higher performing buildings. This focus on performance requires an integrated approach to design, construction, operation and maintenance. The building industry and, ultimately, society would benefit from a forum that brings together architects, consulting engineers and contractors to address the issues that revolve around high performance buildings. The purposes of the forum would be to improve the business working relationships among architects, engineers and contractors and to provide a venue in which the disciplines share information and discuss perspectives on building design, construction, operation and maintenance.

*Presented with representatives of MCAA, AIA and ASHRAE*

**Paperless Contractor: Myth or Reality**
Going paperless is a goal that a lot of contractors are working towards, but very few have actually achieved. The advantages are billing efficiency, organization, increasing data lakes for analytics, working on current drawings, documentation, and accounting to name a few. But few software work together seamlessly and fewer contractors have been able to eliminate everything. This session would include software solutions and management guidance. It will explore for to get beyond simple PDF’s and use specific software and databases that can be leveraged later. Finally, it will include real life case studies of how contractors have achieved this goal and those making the effort.

*Presented by Rob McKinney*
Attendee Information (Please fill out separate registration forms for each attendee)

Name ___________________________ Badge Name ___________________________

Company Name ___________________________ Title or Job Function * ___________________________

Street Address ___________________________ City ___________________________ State ___________ Zip ___________________________

Registrant’s Email * ___________________________ Work Phone ___________________________

Email address(es) to send meeting confirmation: *

* Indicates required field

Registration Fee

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☐ Check (payable to MCAA) ☐ AMEX ☐ MC ☐ VISA

Account Number ___________________________ Expiration ___________________________

Cardholder Name ___________________________ Billing Zip Code ___________________________

Signature ___________________________

Hotel Registration

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<td>Standard Room</td>
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Each additional person in the room is $20/night

Arrival ______________________________________  Departure ______________________________________

Marriott Rewards # ___________________________

Do you have any special hotel requirements? ___________________________________________________

Rooms at the Group Rate Are Limited And Subject To Availability

Reservations are made on a first come, first serve, space available basis. Every effort will be made to confirm bedding type, although, bedding guarantees are not confirmed. Hotel room rates are for Single and Double occupancy. Hotel room rates are subject to applicable local and state taxes; currently 14%. Taxes are subject to change without notice. Check in time is 4:00 PM and check out time is 12:00 PM. Cancellations within 24 hours of arrival may result in forfeiture of deposit.

*** If you are planning to pay the hotel room by a company card that is not under your name, you will need to fill out the Hotel’s Credit Card Authorization Form and bring it with you to the hotel when you check in. MCAA Meetings Department will provide the Credit Card Authorization Form with the registration confirmation email once you register.

☐ Credit Card is Same as Above ☐ Check (payable to JW Marriott Austin) ☐ AMEX ☐ MC ☐ VISA

Account Number ___________________________ Expiration ___________________________

Cardholder Name ___________________________ Billing Zip Code ___________________________

Signature ___________________________

Register online at www.mcaa.org/events

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

- By phone: (301) 869-5800
- By email: eventregistration@mcaa.org
- By fax: 1(240) 238-2699
- By mail: Meeting Dept., 1385 Piccard Drive, Rockville, MD 20850

Our business hours are 9:00 am–5:00 pm Eastern Time Monday through Friday

MCAA Cancellation & Refund Policy

If it becomes necessary to cancel your participation in the conference, please send written notification to MCAA as soon as possible. Please note the following refund information:

Substitutions are always accepted.

You will receive a full registration refund if you cancel by October 18, 2017.