

- **Part 1 – “Effective Collaboration and Communication Strategies for Team Success”**- Session 1, Auditorium

Presenter(s): John Bowers, Icon Mechanical, jbowers@iconmech.com

Zach Kelly, Castle Contracting, zach.kelly@digcastle.com

Description- Operations will focus on how companies are ensuring proper collaboration between their field and office teams for all things construction operations. The panelists will discuss what systems they've implemented to promote clean and reliable flow of information between the office and field relating to project scope and changes, work planning and scheduling, team and owner correspondence, and any other construction "transactions." • Learning Objectives
o Gain knowledge of construction operations, specifically how documents and transactions including but not limited to subcontracts/POs, change orders, RFIs, submittals, testing reports, quality observations/deficiencies and schedules are shared between the office staff and field staff.
o Learn about efforts to implement field to office collaboration and ongoing opportunities for improvement
o Outline implementation and training efforts – what's worked, what doesn't, and what you could utilize in your own business(s)
o Hear examples where successful field < > office collaboration has improved project outcomes or avoided undesirable changes, delays, losses, etc

You're Not Irrelevant – Yet- Session 1, Seminar Rm. A, 2nd Floor

Presenter(s): Adam Lega, Apogee Consulting Group, P.A., alega@acg-pa.com

Dalton Goodwin, Henderson Engineers,
dalton.goodwin@hendersonengineers.com

Description- How do you stay relevant in a post-COVID, fast-moving, evolving industry? Between BIM, VR, AR, Reality Capture, Drones, Digital Twins, and even the production software we use day-to-day, the AECO industry is changing at an almost breakneck pace. What about finding the right fit for your career aspirations? And with the “Great Resignation” of the past couple of years, how do you determine what is best for your career? Based on experience, this session will focus on strategies for optimal improvement, to help you move forward in your AECO career.

We will discuss what it takes to stay viable for positions of significance in this propulsive, technology-centric Design and Construction industry. We will explore specifics from both the candidate's perspective and the company's perspective. This session will provide real life experiences from several people, on strategies for identifying shifts in both culture and technologies in our industry - how to learn those new technologies, adapt to the new post-COVID culture, interviewing with individuals and companies, how to identify a company and/or

individual that will provide the right fit for you, and what to watch out for; gotchas, if you will, that can lead to dissatisfaction in your position - and strategies to counter that situation. We will examine the topic from multiple perspectives - design, construction and owner, across different market sectors. Our session will be very interactive, seeking to engage the audience as active participants.

- Learning Objective 1

Identify learning (approaches, opportunities, styles) and develop strategies for optimal development on a continual basis for relevant industry topics, both for yourself and for others within your organization.

- Learning Objective 2

Learn how to identify the trends in both culture and technologies in our industry and find a way to capitalize on those trends within your organization.

- Learning Objective 3

Understand the differences in what owners are seeking in candidates versus what candidates are seeking and how that impacts your development strategy.

- Learning Objective 4

Obtain ideas and strategies for meaningful, productive culture change within your organization, without being disruptive.

Industry 4.0 – What is it and how will it affect me?, Session 1, Seminar B, 2nd Floor

Presenter(s): Moderator-Chris Link, CRB Group, Chris.Link@crbgroup.com

Panelists- Lauren Williams- McCarthy, LWilliams@McCarthy.com, Mike Lawless- IMEG, Michael.J.Lawless@imegcorp.com, Brandon Meinert- US Army Corps, Dan Wies- Wies Offsite, dan@wiesdrywall.com

- **Description-** Contractors often struggle with consistently seeing real gains and value using construction tech. Recent data shows how contractors struggle with tech adoption and where they get the most from their investment. In this session, we will dive into data on the past, present and future use of this technology in the construction market and the four levels of equipment management maturity that we see contractors fall into across the industry. Join us to learn more about how to leverage construction technology to mature your equipment management processes and drive meaningful improvements in your business.

- Learning Objective 1

Discuss how technology needs to benefit teams across all levels of a construction company, from the field to the shop to the office.

- Learning Objective 2

Illustrate how contractors are starting to integrate their entire mixed fleet of construction assets onto simple and single systems, that integrate with other software they already use.

- Learning Objective 3

Learn about the importance of construction technology integrations for connecting all areas of the business.

- Learning Objective 4

Learn how leveraging today's advanced construction technologies impacts finances and the bottom line.

Learning Objectives

- Learn what Industry 4.0 is and how it applies to Design and Construction
- Identify some key technology differentiators that are driving this change
- Develop strategies for technology evaluation and adoption
- Learn from industry experts on rewards and challenges of technology adoption

Leading the Way: An Operations Perspective on Tech Business Value, Session 1, Rm. 303, 3rd Floor ***Debut Sessions*******

Presenter(s): Moderator: Jeff Sample, President, Join Build, jeff@join.com, Doug Mangers, Senior Vice President, McCarthy, Allen Bolt, COO, Icon Mechanical, Dave Gralike, President, Guarantee Electric, Russell CEO?

The 10th Annual Design & Construction Technology Conference is debuting this year an exclusive session for executive level leadership from around the Midwest region, with the focus on business operations and the value technology is bringing up and down various organizations. This exclusive, closed session will feature the opening Keynote Speaker, Jeff Sample, from JOIN as the moderator and a panel of senior-level executives from regional leaders in construction to discuss what challenges, solutions and opportunities technology is bringing their organizations from the office to the jobsite.

Fueling the Future of Safety: Deliver Compelling Results with Technology Based Safety Platform- Session 1, Rm. 308-310, 3rd Floor

Presenter(s): Kaitlin Frank, eMOD, kfrank@emodsafety.com, Brent Miller, eMOD, bmiller@emodsafety.com

- **Description-** Although the importance of safety is commonly spoken about within the

industry it is typically poorly executed and impossible to manage. During a 45-year career, there is a 1 in 200 chance of a fatal construction work-related incident. Built for the field, by the field, eMOD is working with teams to change the conversation around jobsite safety.

Leading the conversation is Kaitlin Frank accompanied by contractor Dome Construction, and insurer A.J. Gallagher. Our panelist will discuss how their impressive safety rating continues to improve. By digitizing their safety program, benchmarking their safety data and implementing eMOD on their projects they have seen new collaboration among trades, produced transparency from the field to the office, driven accountability and shifted the fundamental safety conversation on their job sites. Despite being a rapidly growing company, their number of incidents has not increased, they have seen improved safety ratings and decreased insurance premiums.

- Learning Objective 1
Respect for people and how it impacts both psychological and physical safety
- Learning Objective 2
Importance of connected data and eliminating siloed information
- Learning Objective 3
Use data to focus attention and resources on the areas of safety that need improvement
- Learning Objective 4
How data driven decision to impact other aspects of your business

Enable True Data-Driven Decision Making with Business Intelligence and Analytics- Session 2, Seminar Rm. A, 2nd Floor

Presenter(s): Matt Gelb, Wipfli LLP, mgelb@wipfli.com

- **Description-** Many organizations face barriers in striving to enable true data-driven decision making with Business Intelligence (BI) & Analytics. In the midst of labor shortages, rising costs and dwindling margins, the availability of accurate and trusted real time data in an easy to use (and interpret) format is paramount. See how many of your peers are meeting these challenges and leveraging these solutions today.
- Learning Objective 1
Keys to access and consolidate all relevant data
- Learning Objective 2
Overview of types of data analytics - descriptive, diagnostic, predictive and prescriptive
- Learning Objective 3
Review of solution sets leveraged in the construction space

- Learning Objective 4

Importance of change management, communication when deploying BI to the organization

Glorious Success vs. Epic Failure: A Case Study in Offsite Construction-

Session 2, Rm. 308-310, 3rd Floor

Presenter(s): John O'Herron, Epsilon Industries, john.oherron@epsilonfab.com

- **Description-** This case study presentation will discuss the effects of modular prefabrication on various project aspects, including timing, labor concerns and cost certainty of the project. Specifically, the following will be addressed.
 - Understanding the context of the project: why was the supplier brought on early and what was their scope of responsibilities?
 - Exploring how an integrated supplier can better assess the implications of a design change on cost, schedule or constructability more quickly than a team of independent trades.
 - Appreciating how a design assist approach with an integrated supplier can ease the adoption and maximization of prefabrication.
- Learning Objective 1
How to determine when a modular prefabricated approach makes sense - and when it doesn't
- Learning Objective 2
If it makes sense, how best to integrate and optimize the modular prefabricated scope based on the nature of the project
- Learning Objective 3
How Design Assist can maximize the impact of modular prefabrication
- Learning Objective 4
How to shorten construction timelines with prefabrication options

Equipment Management: The Next Frontier of Construction Technology,

Session 3, Seminar A, 2nd Floor

Presenter(s): Russ Young, Tenna, ryoung@tenna.com

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- Learning Objective 3
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- Learning Objective 4
Learn how leveraging today's advanced construction technologies impacts finances and the bottom line.

Technology Adoption in the Field, Session 3, Seminar B, 2nd Floor

Presenter(s): Moderator: Tracy Bell, Associate Vice President, Tilson, tbell@tilsontech.com,

Panelist: Street Brown, VDC Manager, Alberici, slbrown@alberici.com,

Panelist: Russell Leesmann, Superintendent, Paric, rleesmann@paric.com

Panelist: TBD, ARCO

Panelist: Tomislav Zigo, CTO & Vice President, Clayco, zigot@claycorp.com

Description: Traditionally field-based construction jobs were not highly reliant on computer usage, but technology transformation has reached the field, impacting the tech involvement of some field positions. Join us for this panel discussion on how local construction companies are handling the roll out of technology transformation to their field teams. Panelists will include field representatives from local construction companies as well as office trainers, representing both office and field perspectives on the best practices and strategies to create engagement and a positive experience for those involved when rolling new technology out to your field crews.

Learning Objectives:

1. Understand the job changes taking place for field staff as technology usage in construction increases
2. Understand the unique challenges of requiring technology usage in non-office and traditionally non-computer dependent roles
3. Understand what has worked and not worked for other construction companies in rolling out new technology to the field
4. Learn tips and techniques for successful field training and implementation that create a positive experience for field adopters of technology

Python in the Build Environment, Session 3, Rm. 308-310, 3rd Floor

Presenter(s): Dalton Goodwin, Lifestructures and St. Louis, Dalton.c.goodwin@gmail.com

Description- Python is a powerful but "easy" to learn programming language that can be used for various things in AEC. For example, we can leverage Python's many machine learning libraries to build an intelligent app that could help us in design or construction. We can use Python within Dynamo to automate those tedious workflows in Revit. We can also use Python to interact with Forge to collect data and build a real-time BIM execution plan that pulls data from various locations and automates project setup. This class isn't to teach you Python but to inspire you to think about what is possible with Python in your company. Everything I show will be hosted on GitHub for you to use however you like.

- Learning Objective 1
Knowing how to apply Python in AEC
- Learning Objective 2
Basics of Python
- Learning Objective 3
Process Automation with Python
- Learning Objective 4
Python practical uses

CMMC 2.0: What You Need to Know: Session 3, Rm. 303, 3rd Floor

Presenter(s): Rion Kolosieke, Gadellnet, Rion.Kolosieke@gadellnet.com

Description – Understanding the CMMC certification levels is not an easy task, even after the major changes made by the US Department of Defense (DoD). With the release of CMMC 2.0 in late 2021, and the latest updates to the timeline in August of 2022, many companies are struggling to understand CMMC. Many are asking the question: What is required for my organization when it comes to CMMC and the 3 levels of certification now that CMMC 2.0 is expected to be completed May of 2023.

- 4 learning objective (needed to submit for AIA credits for the class)
 - What CMMC Requires
 - Steps To CMMC Compliance
 - Does my organization need Level 1, Level 2, or Level 3 compliance?
 - Complete Level by Level Requirement Break down.

BIM! Is the New Four Letter Word, Session 3, Rm. 303, 3rd Floor

Presenter(s): Adam Lega, Apogee Consulting Group, P.A., alega@acg-pa.com

Description- “Why am I wasting time creating a BIM Execution Plan – no one will look at it anyway.” “Are you serious – yet another checklist for implementing the BIM process? This is going to take more time to fill out than I have for the entire project?”

“Automation is not working, we need to go back to AutoCAD and how we used to do things.” If these are some of the phrases you are encountering, this session is for you.

How many people are tired of the word BIM!? So much so, that it is a new stand-in for all the other four-letter words in your vocabulary?

With all of the “false-hope,” “over-detailing,” and “extra time” that goes into executing the BIM! process, there are a lot of people and organizations out there ready for a change.. or a reversion.

In this session, we will look at why BIM! has become so challenging to AEC organizations and rant ~~a little~~ A LOT about the process overall, as well as many specifics. We will discuss methods to mitigate those issues. And I hope, we will have a little bit of fun along the way, helping to re-direct people to a more open mind for how BIM! works with design and construction technology.

- Learning Objective 1

Attendees will review the many obstacles to implementing BIM! in the industry.

- Learning Objective 2

Attendees will take a deeper dive into the psychology of design and construction technology users.

- Learning Objective 3

Attendees will learn methods to mitigate the challenges posed by implementing BIM! at both a small and larger scale.

- Learning Objective 4

Attendees will gain a focused understanding of keeping an open mind when exploring change within an organization.

Extra's

Tech Petting Zoo- Open during all Breaks and Lunch.

The Technology Petting Zoo is a fun event that brings design and construction technology from several local practitioners to one central location, allowing conference attendees to interact with, touch, pet, and ask questions about the different technologies. Examples of technology stations will include drones, reality capture, virtual reality, and more!



Alex Belkofer, CM-BIM

As a regional leader and national collaborator at McCarthy, Alex is responsible for the overall strategy, implementation, and execution of the virtual design and construction (VDC) lifecycle process between all project stakeholders. From corporate office to construction site, the VDC Team promotes, trains and guides McCarthy Project Teams through VDC processes/practices over the course of a building's design and construction lifecycle. Alex works closely with Project Directors, Project Managers, Owners, and A/E partners to establish early expectations and project deliverables at all project phases. Alex is a key contributor serving on McCarthy's National VDC Leadership Group to enhance the delivery and consistency of VDC/BIM-enabled strategies and best practices company-wide.

Alex's passion and drive for construction technology is to push the industry to leverage best-in-class solutions focused on effective project delivery and lean principles for value-added outcomes. He is actively involved with various national organizations focused on construction technology such as AGC of America's BIMForum, AGC of Missouri's Design & Construction Technology Advisory Committee, ABC National's Student Construction Management Competition (CMC), Campus FM Technology Association (CFTA) and Junior Achievement (JA of Missouri).



Tracy Bell

Tracy manages the Construction Technology consulting division at Tilson, overseeing 40 consultants providing business and technology services to construction companies of all sizes up to the top 10 of the ENR. Tracy has 17 years of business experience in the construction industry, managing complex projects and multimillion-dollar budgets. Prior to consulting, Tracy served as the top technology leader in a billion-dollar general contracting company. A CFMA member, member of the AGC Missouri Design and Construction Technology Conference Committee, and active St. Louis Viewpoint User Group Member, Tracy has served as panelist, panel moderator, and keynote speaker at a variety of construction technology events.



Adam Lega, CM-BIM

Adam is BIM Manager for Apogee Consulting Group, P.A., where he focuses on training, standards, technical support, BIM, project planning, and digital design.

He graduated from University of Kansas in 1997 with his Bachelor of Science, double-majoring in Architecture and English. He eventually found his focus in Information Technology and BIM/VDC.

Adam has been in the Design and Construction industry since his graduation. He worked at Revit Technology Corporation (before acquisition by Autodesk), as well as some notable design and construction companies. He has helped with video production for the Oscars and managed the EJAF Oscar Viewing Party design and

construction.

Adam has created and developed standards, workflow processes, and established deliverables for BIM across the AECO industries. He co-founded the AGC St. Louis BIM Committee and was a member on the USACE/Industry BIM Consortium. Adam is also a registered AGC CM-BIM instructor.

Adam likes to spend time with family, and he likes doing pretty much everything, or he tries everything twice to make sure. His favorite food is an In & Out burger.



Chris Link

An experienced 3D modeler and technology enthusiast, Chris is an expert at identifying the right tools and technologies to bring facilities to life, virtually. With more than 20 years of experience in building information modeling (BIM) and virtual design and construction (VDC), Chris approaches every project with the end-user in mind. He enjoys getting to work with clients early in the planning process and helping them visualize their space as the design progresses.

In addition to traditional 3D modeling using Autodesk Revit and other Autodesk Construction Cloud tools, Chris is also an expert in reality capture, field vdc tools, 4D and 5D modeling.

As a LEED Accredited Professional, Chris is passionate about sustainable design and construction solutions.

In his free time, you may find Chris flying drones around St. Louis landmarks or teaching a class at a St. Louis Revit Group Meeting.



Lauren Williams

Lauren Williams is a VDC Manager at McCarthy Building Companies Central Region in St. Louis, MO. She graduated from Stanford University in 2005 with a BS in Civil Engineering and has since established herself as an ambitious Construction Management professional who demonstrates a strong passion for construction technology, process management, and virtual design and construction. At McCarthy, Lauren is responsible for leading the VDC team for the \$1.7B new National Geospatial-Intelligence Agency western headquarters construction project in St. Louis, MO – an effort managed and executed in partnership with the U. S. Army Corps of Engineers and a team of Design-Build partners – in which she and her team will advocate for and implement integrated VDC solutions for the lifecycle of the project, from design through handover and

operation. Lauren holds a Certificate of Management – Building Information Modeling (CM-BIM) from the AGC of America and is the current Chair for the AGC of America's IT Forum Steering Committee.