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The case for BIM collaboration - going beyond coordination

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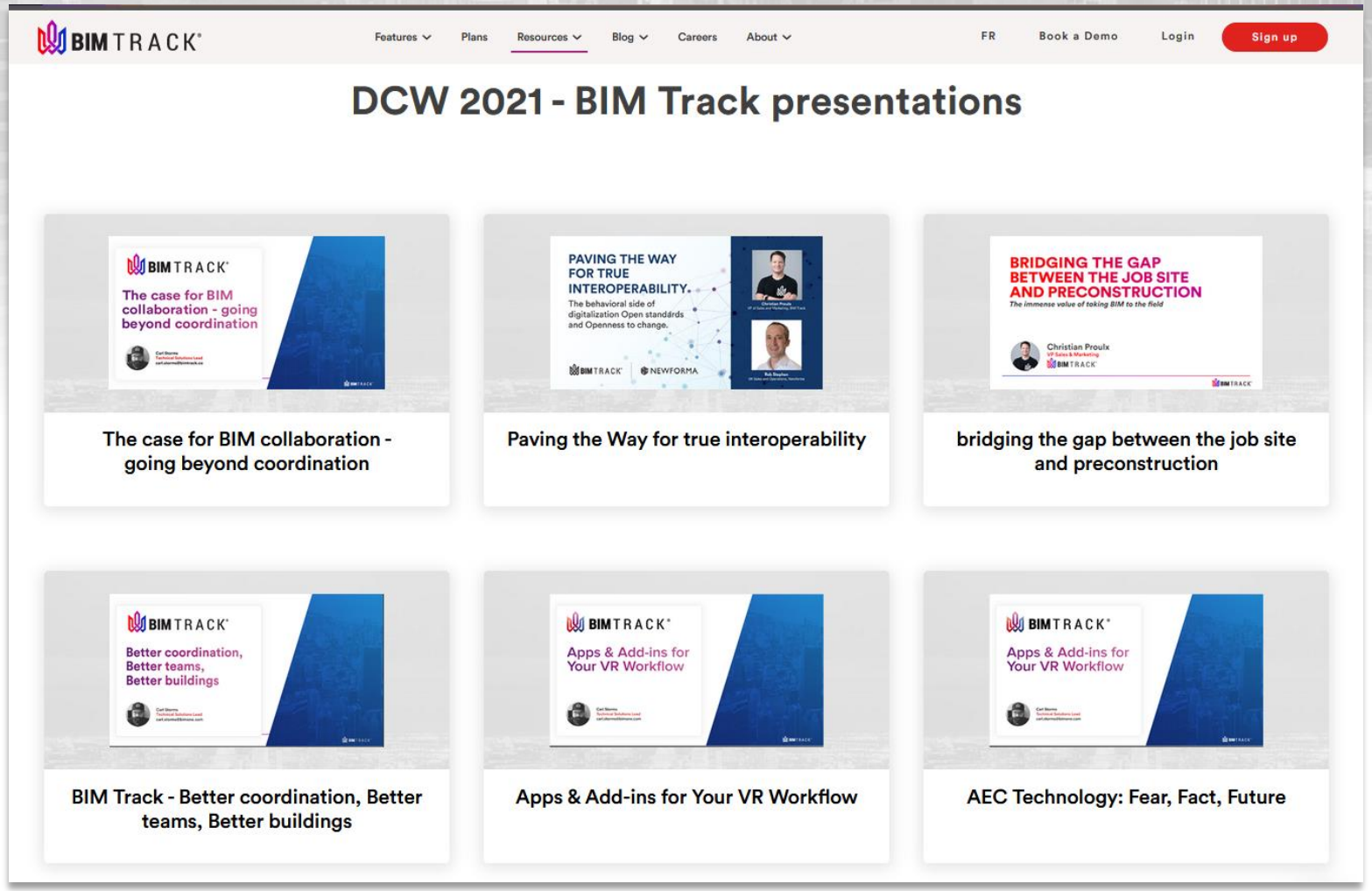
Session Presentation Available Here

bimtrack.co/dcw



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Agenda

- Introductions
- Tailored Expectations
- BIM Coordination
- BIM Collaboration
- Final Thoughts
- Questions

Introductions

HELLO
MY NAME IS

Carl Storms
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Your Speaker

Carl Storms

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Blog: The BIMsider
LinkedIn: Carl Storms
Podcast: BIMThoughts, BILT Academy Podcast
The Simply Complex Podcast

- Worked in Residential & Commercial Architecture
- Worked in Commercial Construction (BIM/VDC)
- 10+ Years as a Collegiate & Industry Instructor
- Working with CAD
  Since 1993, using since 1989
- Involved in the AEC Industry
  Since 1998
- Utilizing and Advocating BIM
  Since 2008
- Global Conference Speaker
  Since 2014
- Autodesk Expert Elite

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Tailored Expectations

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Tailored Expectations

Morning Caffeine

STARBUCKS COFFEE

ORGANIC COFFEE PRET NATURAL FOOD

1837 TWG TEA

McCafé

CAFFÈ NERO

Tailored Expectations

BIM Collaboration

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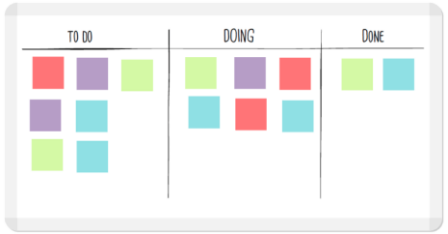
BLUEBEAM® REVU®

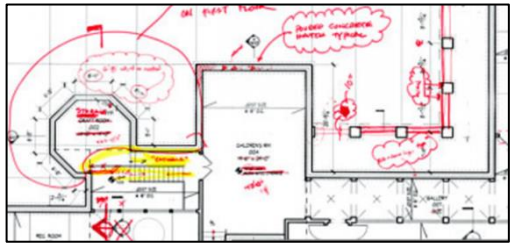
BIMcollab

PROCORE®



Bimsync

AUTODESK CONSTRUCTION CLOUD™



Tailored Expectations

I had help!

- **Panel Discussion:**
  BIM Coordination Meetings
  What's Your Secret Sauce?

- **Panel Discussion:**
  BIM Coordination Meetings
  What's Your Secret Sauce Vol 2:
  Collaboration for the Win!

A **HUGE** thanks to those AECO experts who shared their knowledge and formed the basis for this session!

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The AECO Expert Panelists

Katelyn Sanchez
VDC Coordinator
McVeigh & Mangum

Aaron Maller
Director
Parallax Team

Tom Maleski
Sr. Solutions Engineer
Newforma

Mirra Maheden
Director
MLC Digital Solutions

Alice Leung
Investment Associate
Brick & Mortar Ventures

Scott Chatterton
BIM Solutions Director
BIM One

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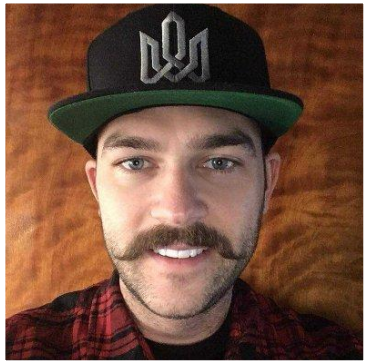
The AECO Expert Panelists

Ryan Camer
Director of VDC
Haskell

Darren Roos
Corporate BIM/VDC Director
Bernards

Jacob D'Albora
Director of BIM-FM Services
McVeigh & Mangum



Brodi Scott
Product Owner
MiTek

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What is BIM Coordination

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What is BIM Coordination?

Well it's not Magic

> "Any sufficiently advanced technology is indistinguishable from magic"

Arthur C. Clarke

What is BIM Coordination?

It also doesn't come with an easy button

What is BIM Coordination?

According to Merriam-Webster Dictionary

> "The process of organizing people or groups so that they work together properly and well"

*Technically it's the definition for coordination

Coordination Questions

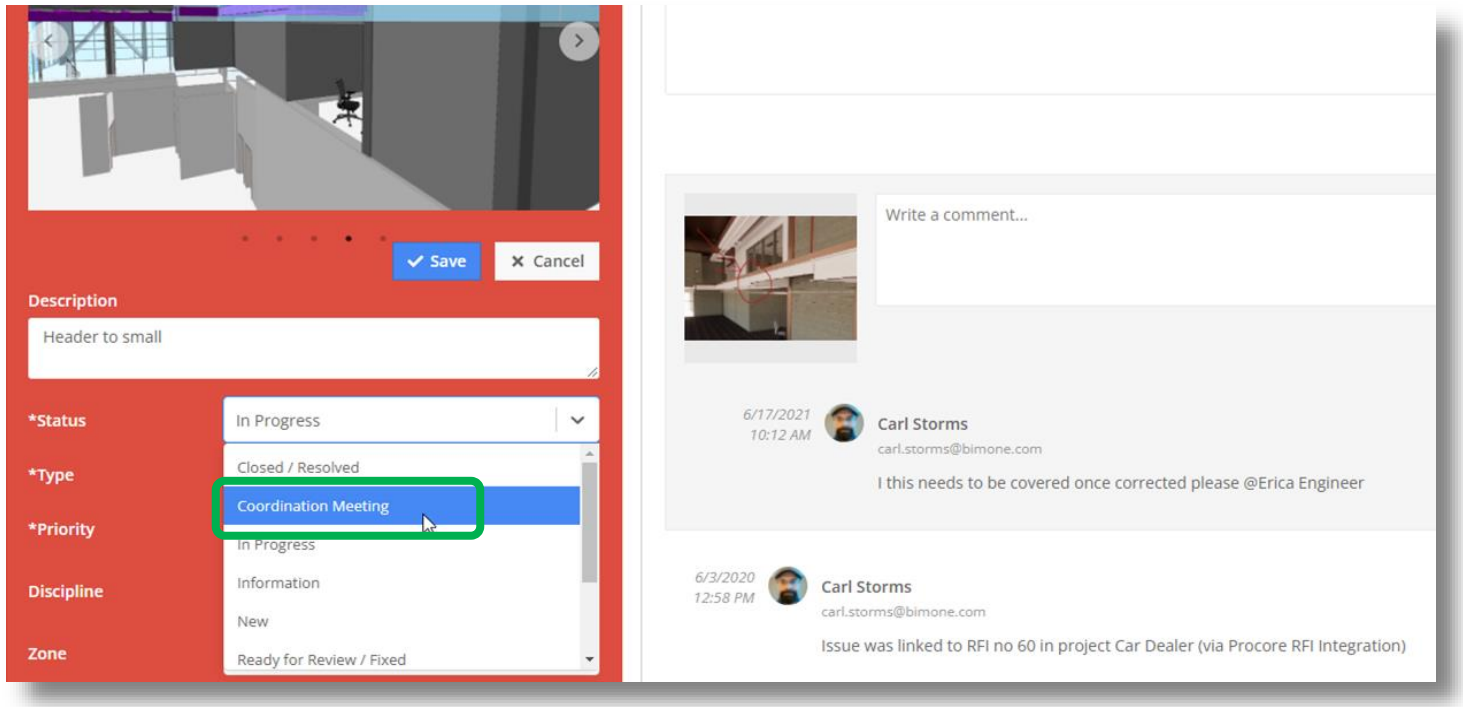
How do you get (and keep) your coordination meeting organized?

- Understand the project construction documents
- Set an agenda for the meetings and stick to it
  - Organized meetings are shorter meetings
- Distribute the clash report before the meeting
- Don’t review every clash during the meeting
- Record virtual meetings to accompany meeting minutes

Coordination Questions

How do you get (and keep) your coordination meeting organized?

- Use custom Priority or Status in BIM Track like “Coordination Meeting”



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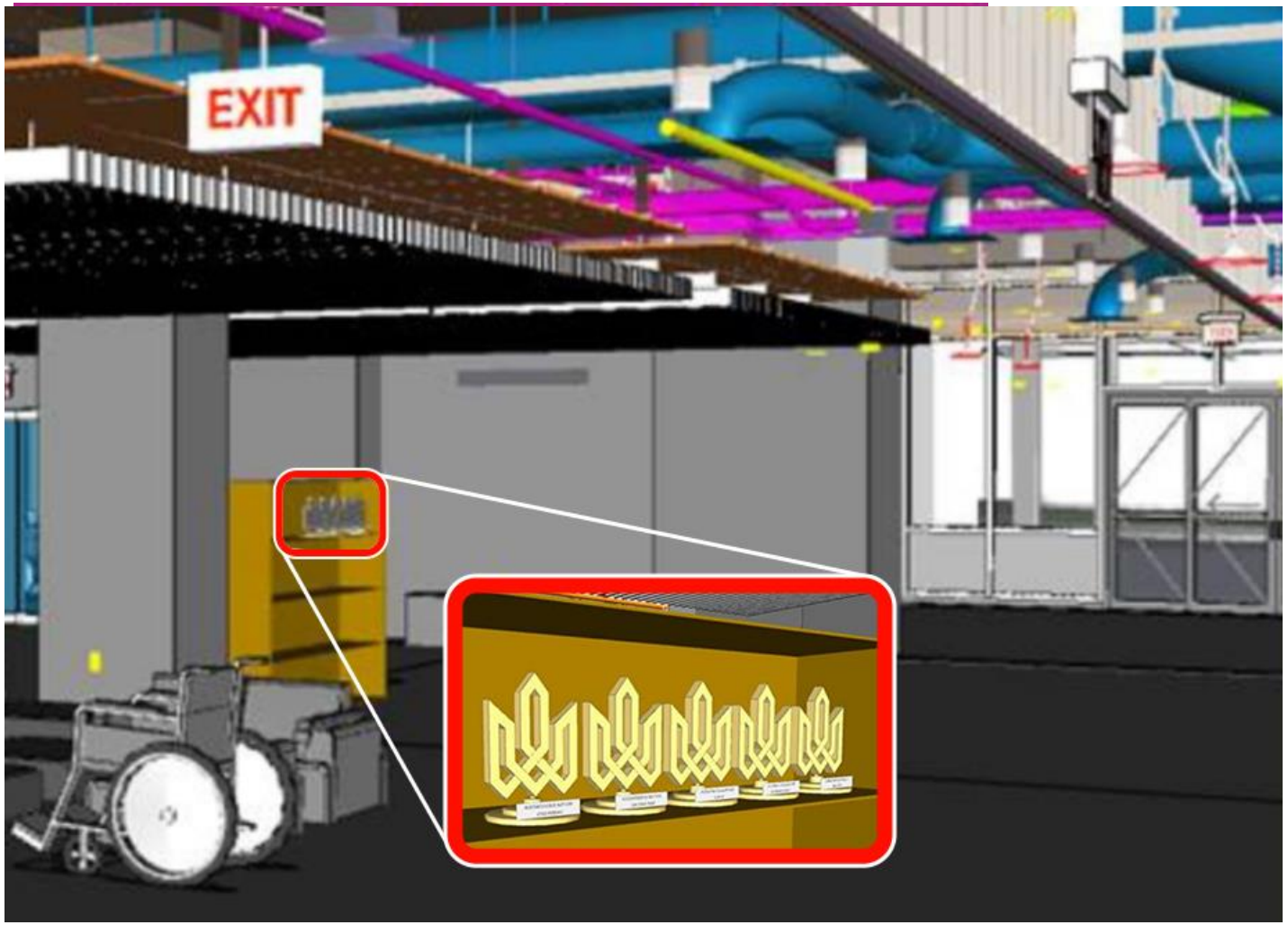
Coordination Questions

How do you get buy-in from all those involved?

- **Need a culture of collaboration**
  - The management of a coordination meeting is a soft skill
- **Positive reinforcement works best**
- **Make a list of what will improve the project**
  - Include the list in the BIM Execution Plan
  - Complete the list get a reward

Gamification Questions

How do you get buy-in 💰 from all those involved?



More about this HERE

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Coordination Questions

How do you choose who needs to be involved?

- Not everyone is required
  - But those that are required must attend
  - Make this happen by adding to BIM Execution Plan
- Virtual meetings & coordination tools make this easier
- Very import to have the field people part of the process
  - Make them understand the value BIM/VDC can provide

Coordination Questions

How do you use technology to your advantage, and not let it become a distraction?

- Cool Features don't help if they aren't practical
- To many "things" on a project can be a big distraction
  - If I deploy it will it help this project
  - Not all projects need all "tools" best tool for the job (current job)
- A tool that is helpful and efficient, but hard to use or understand will NOT get used
  - UI is very important here
  - Still problem with people not wanting to learn new things

Coordination Questions

How do you use technology to your advantage, and not let it become a distraction?

- The BIM & VDC people on the project are part of the “package” so how you share the tools and workflows can also play into the distraction
  - And vice versa with field people
  - Sharing knowledge between consultants and sub-trades is a Win/Win

Coordination Questions

What coordination meeting mistake have you learned the most from?

- Modeling something that “solves” the problem, but isn’t constructable
- Trying to micromanage meetings
  - Try to keep them 60 minutes or less
  - Make everyone at the meeting feel like they are part of it
- When you schedule your meetings is key
  - Friday afternoons - not a good idea

Coordination Questions

What coordination meeting mistake have you learned the most from?

- Relationships are key
  - Get to know the people on the projects, not just the project details
- One bad trade can derail the whole project
  - Make sure what they say they can do is truly what they can do
  - Have a list of resource available to help get everyone up to speed
- Make sure 3rd parties know the trades they are representing
  - People that don't know something, don't know they don't know it

BIM Collaboration

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What is BIM Collaboration?

BIM Dictionary to the rescue

BIM Collaboration Event

English

v1 | July 31, 2019

A meeting, presentation or workshop conducted as part of a Collaborative BIM Project. An event may be conducted in meeting room, Immersive Environment or online and includes at least two Project Participants

Labels: Event

Collaborative BIM Project

English

v1 | July 31, 2019

A multidisciplinary BIM Project which revolves around the use of BIM Software Tools to generate and exchange data-rich, object-based models. A Collaborative BIM Project relies on the availability of other enabling technologies (e.g. Model Viewers or Model Servers), collaborative workflows, Data Exchange Protocols and suitable contractual arrangements. Most importantly, a Collaborative BIM Project depends on the willingness of Project Participants to collaborate with each other

Labels: Conception

BIM Management Plan (BMP)

English

v1 | July 31, 2019

A formal document used to define how a Collaborative BIM Project will be delivered. A BIM Management Plan (BMP) includes model exchange templates and detailed guidance covering BIM Roles, Modelling Standards and Data Exchange Protocols. According to NATSPEC National BIM Guide, there are two types of BMPs: a Design BMP and a Construction BMP. In some cases, a BMP is considered part of the Contractual Relationship between Project Participants...Also refer to BIM Execution Plan (UK)

Similar: BIM Project Execution Plan, Project Delivery Plan, BIM Collaboration Guide, Design BMP, Construction BMP **Labels:** Document

BIM Collaboration Guide

English

v1 | July 31, 2019

A guide used at the start of a collaboration process to facilitate data exchange, identify modelling responsibilities and clarify project workflows

Similar: BIM Project Execution Plan (PennState), BIM Delivery Manual, BIM Protocol (UK), BIM Management Plan (NATSPEC)

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What is BIM Collaboration?

Coordination
is **Contractual**

Collaboration
is **Voluntary**

Collaboration Questions

What do you consider the most important difference between **Coordination** and **Collaboration**?

You need **Both!**

- Bring the people together (**collaboration**) not just the data (**coordination**)
- Coworking can foster this by building relationships
  - Note coworking can also provide a level of distraction - need balance
  - Coworking sites also need to function

    jobsite wifi can suck!

Collaboration Questions

Coordination

Can be done by yourself
(in a silo)

List that needs to get done

Dealing with the issue

Collaboration

Needs a team

Working as team

There is feedback

Team works together towards the bettering of the project not the individual

Communicating the effort to solve the issue

Collaboration Questions

How do you handle projects where not everyone is on board the Collaboration Train?

- You want everyone on the Collaboration train
  - If the project is 90% On & 10% Off then everyone else needs to make up that missing 10%
- Why are they not willing to collaborate?
  - Sometimes they are just new or unsure so offering help from others on the project that have BIM/VDC experience is a win/win for all
  - Make them feel comfortable in trying something new

Collaboration Questions

How do you handle projects where not everyone is on board the Collaboration Train?

- Make sure you have the right people for the project
  - Might mean looking outside your tradition circle of consultants/trades
- Sometimes you just need to work around them
  - Or though them
- Take advantage of new cloud based tools & emerging tech
  - Make it easy

Collaboration Questions

How do you handle projects where not everyone is on board the Collaboration Train?

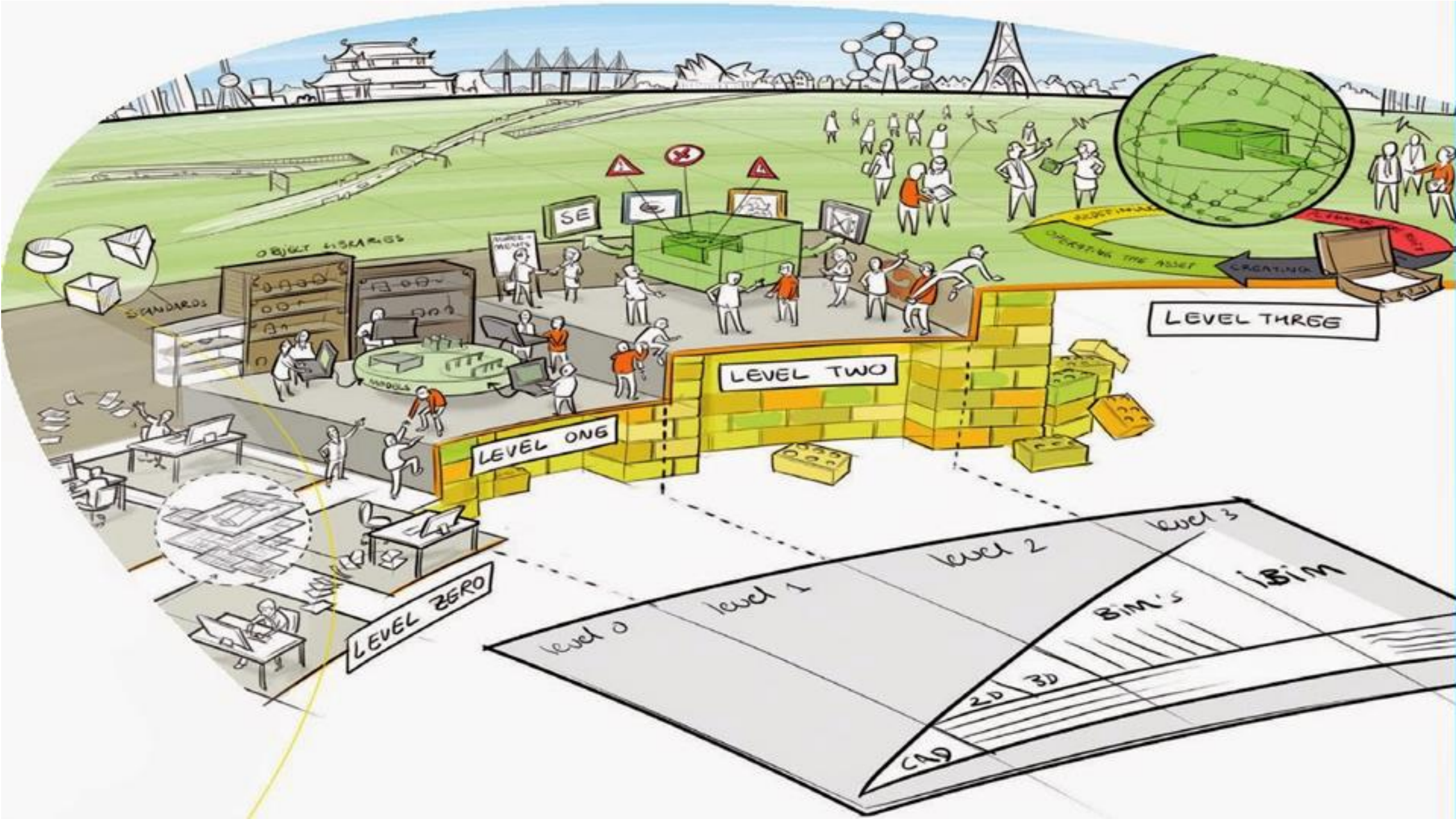
- People skills and soft skills are needed for a collaborative project
  - Not everyone is good at the “People” side
  - How do you get people skills when all your experience in digital or virtual?

Collaboration Questions

True collaboration is more than just communication it requires a process, commitment and the tools to get you there.

How do you help others get there?

- Offer support and shared wisdom to team members not from your discipline or company
  - Offer short little lessons, keep them growing and learning
  - They will take those lessons on to the next project
- Helping everyone up to the same level is good for the whole AEC industry


SE
LEVEL ONE
LEVEL TWO
LEVEL THREE
LEVEL ZERO
level 0
level 1
level 2
level 3
BIM's
BIM
2D
3D
CAD

Collaboration Questions

True collaboration is more than just communication it requires a process, commitment and the tools to get you there.

How do you help others get there?

- Create a BIM coordination schedule like a construction schedule (lean/pull planning)
  - If you coordinated “just in time” like you do for construction schedules effort is wasted or duplicated
- A good BIM Execution Plan (BEP)
  - There has to be accountability

Collaboration Questions

True collaboration is more than just communication it requires a process, commitment and the tools to get you there.

How do you help others get there?

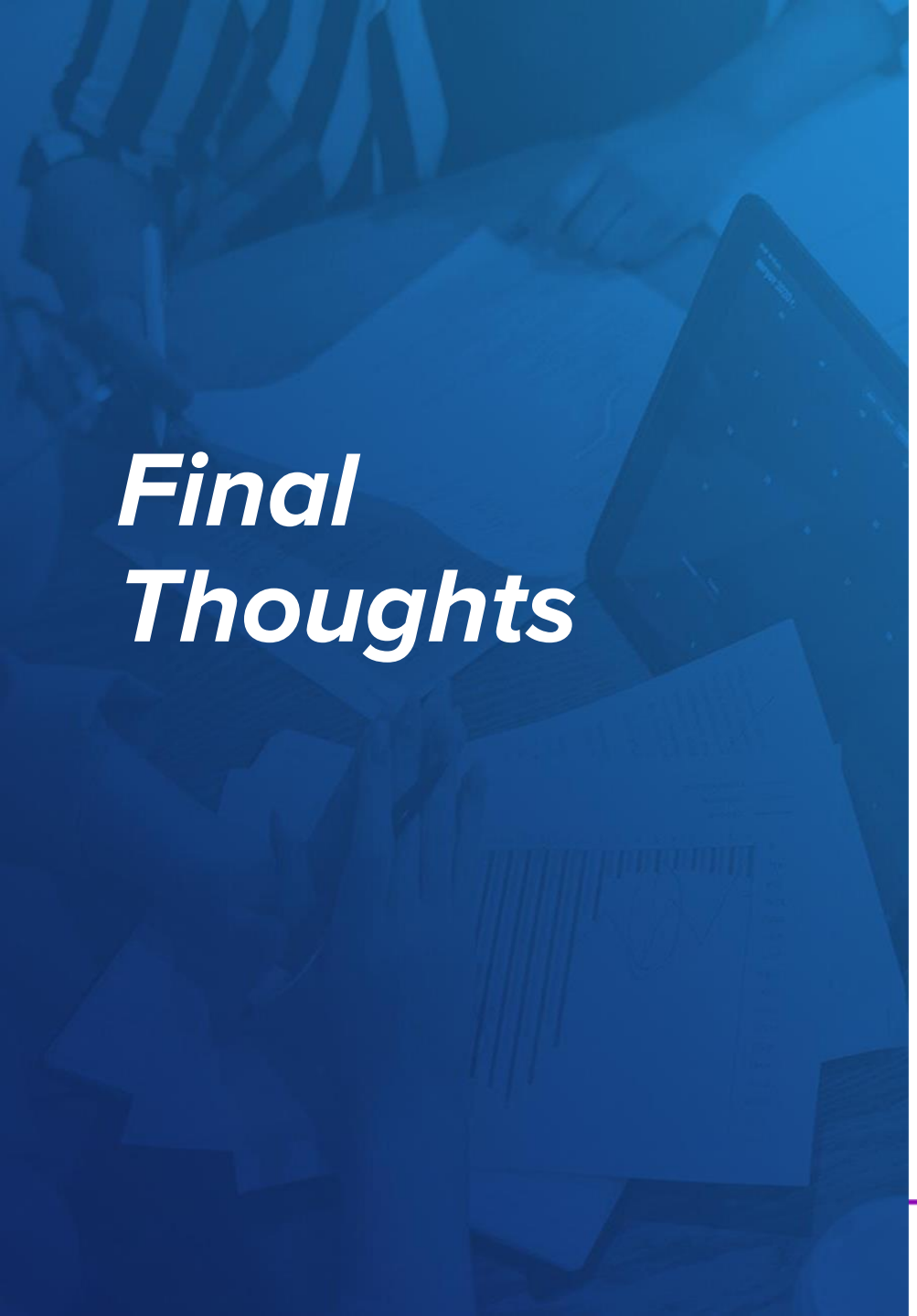
- Sometimes owners ask for “Buzzword BIM” without actually knowing what they are asking for or if it is actually needed
- There needs to be more BIM/VDC education for the owners
  - *You get what you pay for not what you ask for*

Collaboration Questions

True collaboration is more than just communication it requires a process, commitment and the tools to get you there.

How do you help others get there?

> *"I'm fine with having RFI's increase during the coordination process if it means less change orders during construction"*



Final Thoughts

Coordination is about pulling it all **together**

Collaboration is about getting the **best from each player!**

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Final Thoughts

Resources

- BIM Track Blog: 50 tips for better BIM coordination meetings
- BIM Track's Ultimate Guide to BIM Coordination
- BIM Corner - BIM Coordination blog posts on the subject
- BIM Corner's Practical BIM Coordination Guide

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Questions?

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Thank You

Stop by Booth **F70A** and say Hi! 👋

For More Info

www.bimtrack.co

Start your free trial today!

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Technical Solutions Lead

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Presentation 👇

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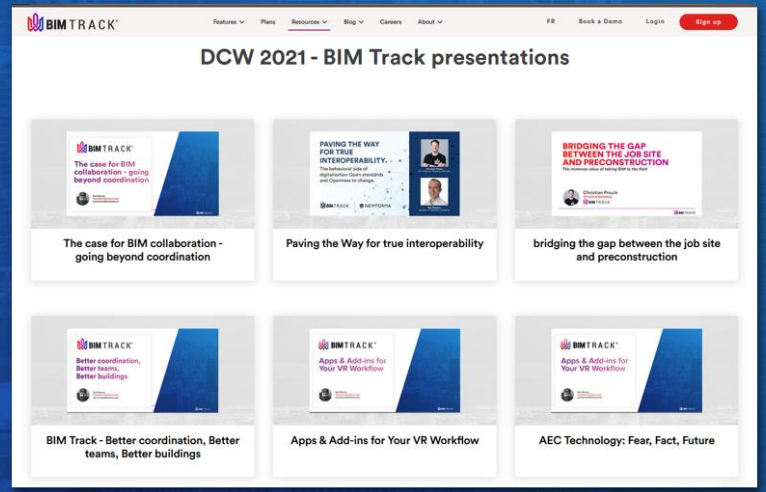

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