

Getting BIM into the Field

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SPW VDC Manager – DPR Construction





About the speaker

Nathan Menken – DPR Construction

- 9 Years of Construction Experience
 - 3 Years as VDC Enabled PE
 - 2 Years as VDC Coordinator
 - 4 Years as VDC Manager
- Previous Projects
 - Locations – Arkansas, Colorado & Texas
 - Core Markets – Commercial, Life Sciences, Advanced Tech, Data, Higher Education, Government & Aviation
 - \$ Amount Worked on – 1.65 Billion

What You Will Get from this Class

Getting BIM into the Field

This class will focus on the acronym CREW, which has four keys areas of bringing BIM (Building Information Modeling) and virtual design and construction (VDC) to the field teams. BIM/VDC has been established with our teams in the jobsite trailers but getting it to the people in the field has always been a struggle. We'll focus on what's been helpful for our teams so that you can use the same lessons with your teams. The four areas of CREW are the following: collaborate, research, engage, and work. Taking from what we've learned in our process, we'll go through the different steps, discuss the pieces that usually get missed, and expand on the areas that were helpful and successful. Join me so that all our field teams can step into fully embracing how BIM/VDC can improve their lives and help them be more successful.

Getting BIM into the Field - Objectives

LEARNING OBJECTIVE 1

Discover the areas that break down for our field teams to use BIM on the job

LEARNING OBJECTIVE 2

Learn about how the CREW acronym can be a workflow for bringing BIM to the field teams

LEARNING OBJECTIVE 3

Learn about who needs to be involved in the workflow to make it a reality for the field teams

LEARNING OBJECTIVE 4

Learn about the pitfalls and how to be successful with implementing CREW with your project teams

VDC Adoption



Field

% of how many people in the field are utilizing VDC



Jobsite

% of how many people in the jobsite are utilizing VDC



Office

% of how many people in the main office are utilizing VDC

Concrete Numbers

8

PROJECT

Current project on going

35

JOBSITE TRAILER

Team Members working
from the Jobsite Trailer

16

LEAD CRAFT

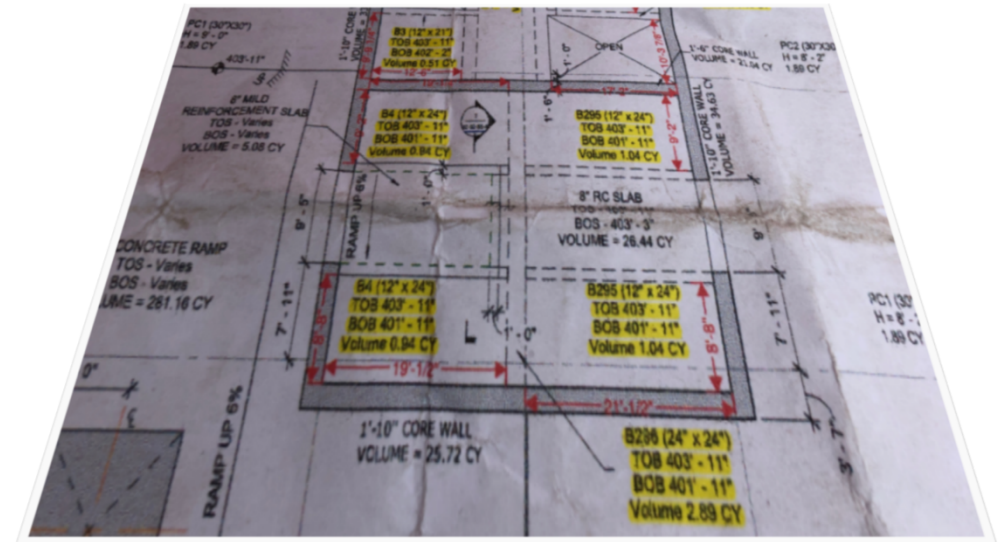
Concrete Lead Craft

130

CRAFT

Concrete Craft

CREW:
Collaborate
Research
Engage
Work



CREW – Collaborate

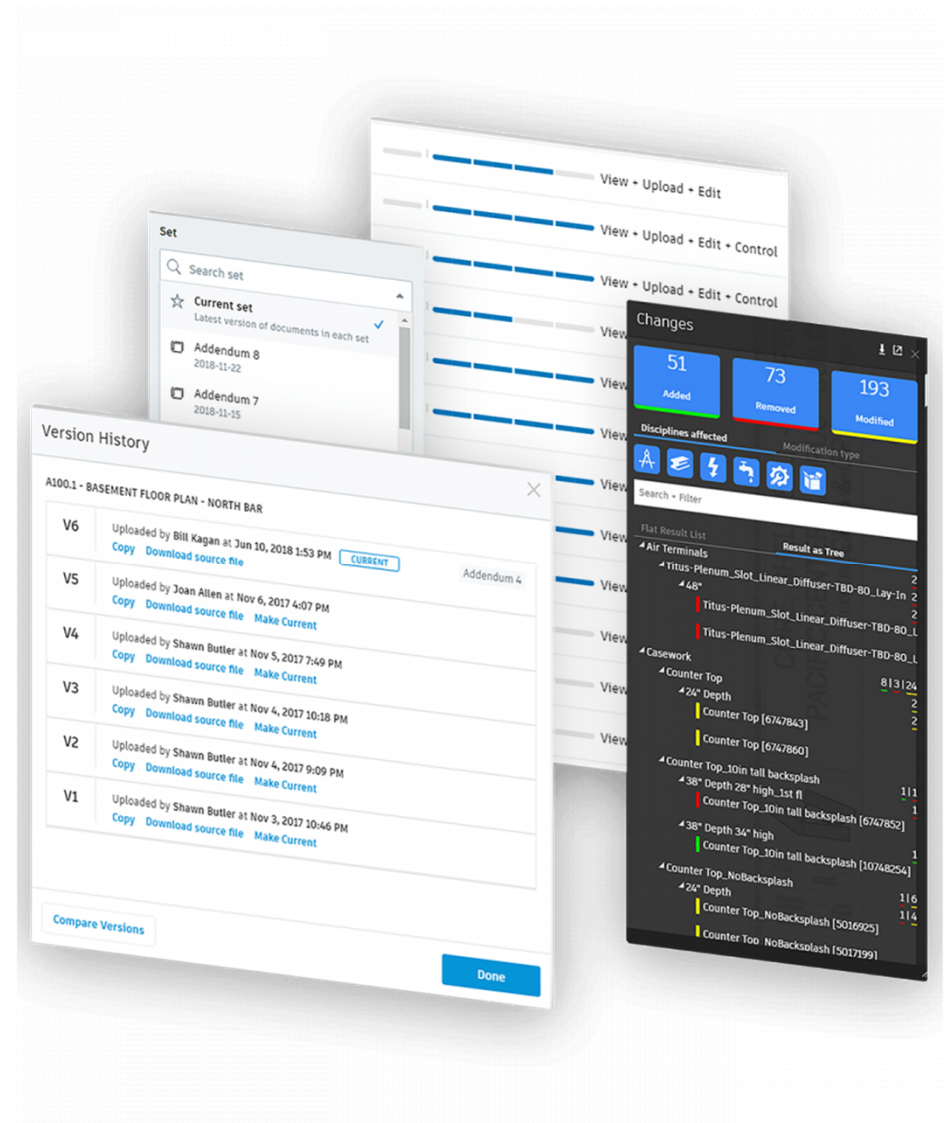
II. Sharing Information

Mapping out how the field teams will get information in a simple and efficient manner will reduce complications. Common complications:

- User interface
- To many clicks
- Multiple Apps or Folders

III. Keeping Information Current

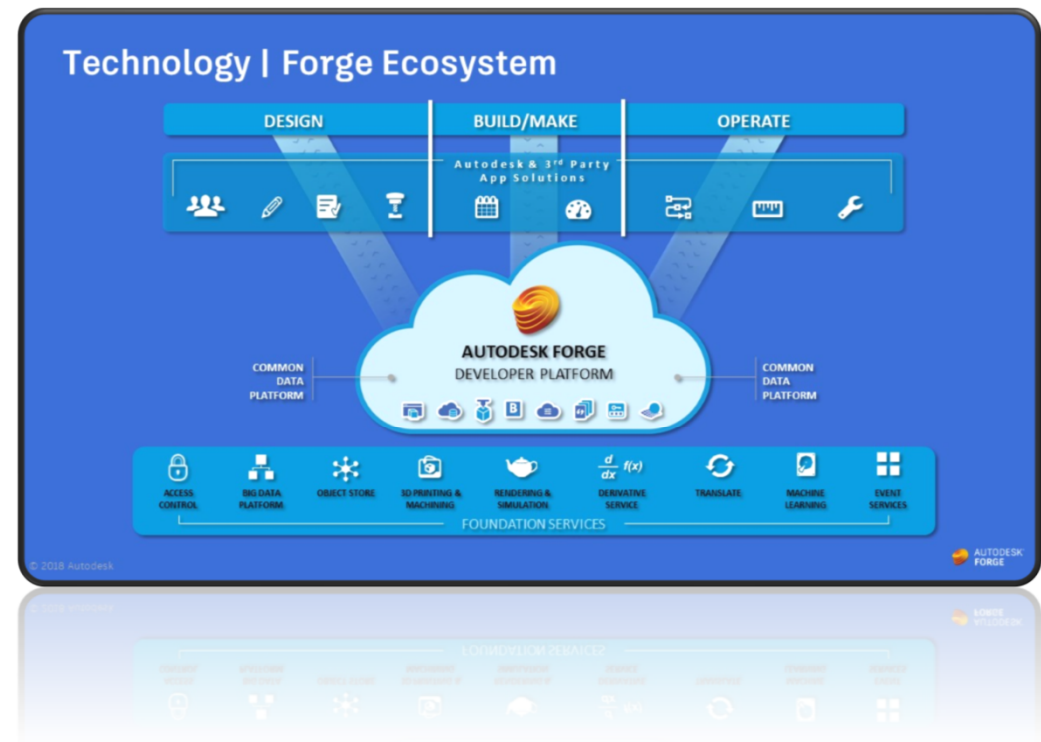
A critical piece to the technology focused approach is providing information in a live method so that teams are using current information.



CREW – Research

One of the focuses of Researching is making sure that the software for this VDC workflow allows for:

- I. Easy user interface
- II. Simplified set up
- III. Multi-User access
- IV. Multi-Cloud sharing
- V. Easily shared with the other team members



CREW – Research

The second focus of Researching is making sure that the hardware allows for this VDC workflow:

- I. Cellular
- II. Plenty of Storage
- III. Construction Rated Cases (Hand Hold or Strap)



CREW – Engage

Next Step is to Engage with the Project Teams through Training & Reinforcement.

- Best Tips for **Training**:
 - Onsite
 - Specific
 - Authentic
 - Multiple
 - Feedback



CREW – Engage



In conjunction with training, Reinforcement of the software, utilizing the hardware and best approach in the field on a continuous approach will help the teams utilize the new process.

- Best Tips for **Reinforcement**:
 - Provide consistent message
 - Allow for learning curve
 - Start small
 - Remain clear and concise
 - Provide continuous support

CREW – Work

CONTINUE TO COLLABORATE

Throughout the project continue to get feedback from the field team and input into the specific project.

ALWAYS STAY ENGAGED

Stay in constant engagement with the teams to get feedback, understand the training needs and be able to support as needed.

NEVER STOP RESEARCHING

Always be looking to see if there is something that could improve the efficiency and operability of the guys in the field through technology.

WORK HARD FOR THE TEAM

The process is never complete as the field teams deserve the best VDC approach for them to utilize in the field.

CREW

Phases/Stages

COLLABORATE

REVIEW WITH TEAM

- Needed Information
- Sharing Information
- Keeping Information Current

RESEARCH

FIND WHAT'S BEST

- Best Software for the Purpose
- Best Hardware for the Use

ENGAGE

TRAIN THE TEAM

- Onsite
- Specific
- Authentic
- Review Feedback

WORK

WORK HARD

- Continually Collaborate
- Never Stop Researching
- Always Engage
- Work for the Team



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