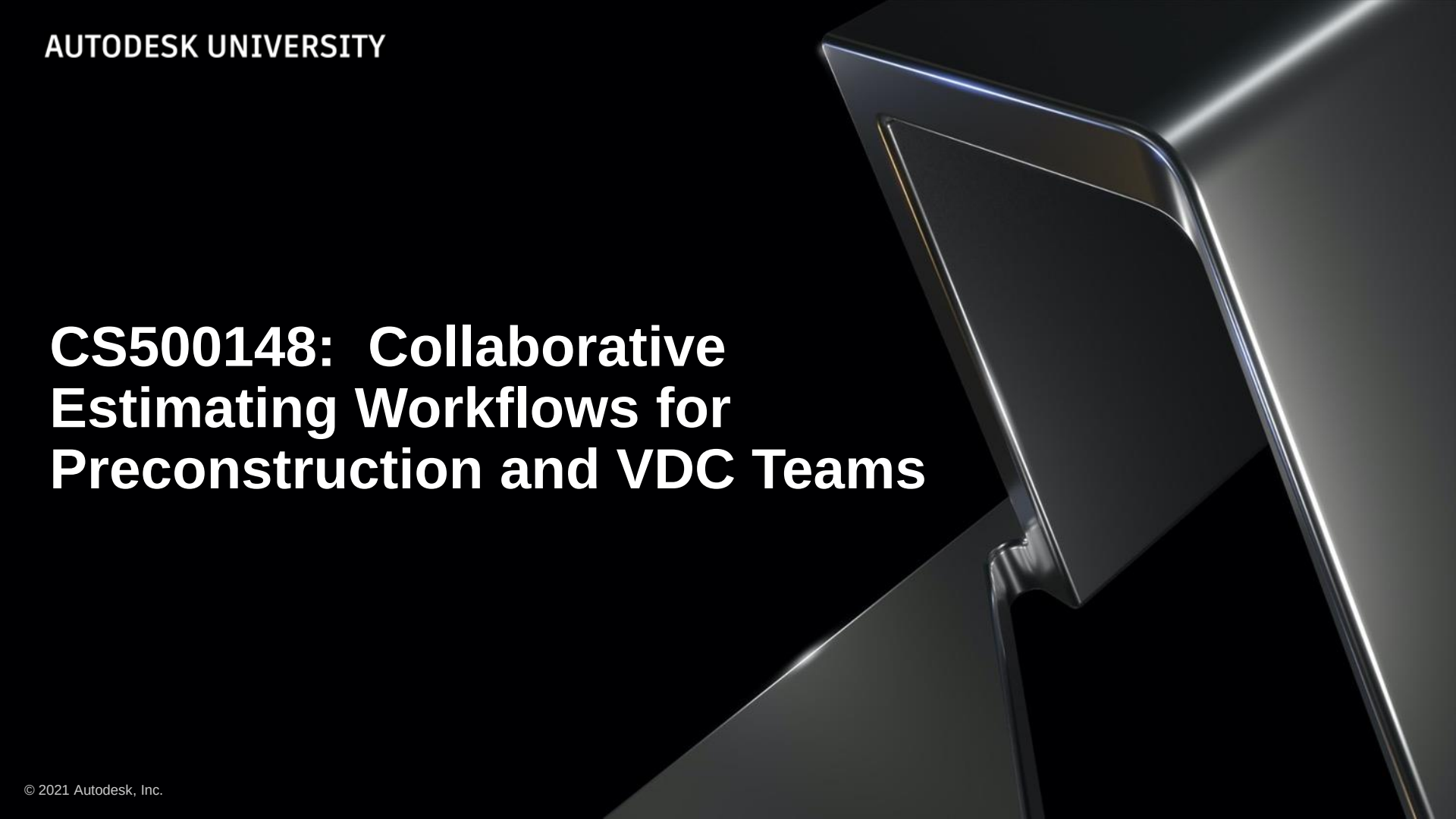
AUTODESK UNIVERSITY

CS500148: Collaborative Estimating Workflows for Preconstruction and VDC Teams



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About the moderators

Rachel Trocchi

Rachel Trocchi is a Technical Solutions Executive at Autodesk Construction Solutions supporting mid-size accounts in New England, Philadelphia and Michigan. Rachel supports the entire Autodesk Construction Cloud portfolio spanning from design through handover and operations. She works closely with customers to help them leverage the portfolio to increase their teams' productivity, reduce costly re-work and gather predictive insights across all phases of construction.

Prior to joining the ACS team, Rachel began her career as an Application Engineer at Assemble Systems. Assemble, now one of the Autodesk Construction Cloud products, is a cutting-edge 3D data management and model conditioning solution. During her time at Assemble, she was responsible for providing technical implementation and proof of concept for Assemble's customer base spanning the U.S., Canada and Europe.

Rachel holds a Bachelors degree in Civil Engineering from the University of New Hampshire and currently resides in Boston, Massachusetts.

About the moderators

Sarah Cunningham, P.E.

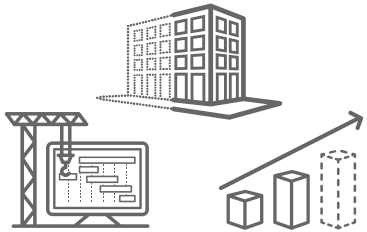
Sarah is part of the product management team responsible for Autodesk Takeoff, which brings 2D takeoffs and 3D quantities together in a single, cloud-based solution.

Prior to joining Autodesk Construction Solutions, Sarah spent 10 years in Autodesk's infrastructure products group, where she was part of the user experience and product management teams for Civil 3D, InfraWorks and Collaboration for Civil 3D.

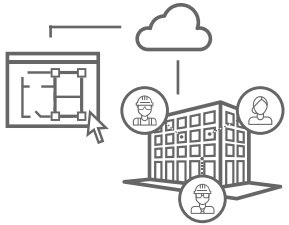
She is a registered professional civil engineer and has a Bachelor of Science degree in civil engineering from the University of Massachusetts at Amherst and an MBA from Northeastern University.

A view into what we'll be discussing today

The construction industry is changing quickly with technology leading the charge.



- Projects are becoming more and more complex with tighter deadlines.
- BIM adoption and implementation is gaining momentum
- BIM provides a competitive advantage to AEC companies by enabling them to offer new services to owners
- In a survey*, 82% of BIM users reported a positive return-on-investment



Trends that we are seeing when it comes to BIM and Estimating

- BIM/VDC teams are playing a key role in preconstruction initiatives
- Companies are looking for connected 2D/3D takeoff workflows
- Real-time access with cloud-based document management is a must
- Multi-user access with improved collaboration and transparency

*SmartMarket Report by Dodge Data and Analytics

Let’s meet our panelists

Prashant Sharma

Sr Estimator
DPR Construction

Prashant has over 12 years of experience working on Preconstruction for projects in various markets (Education, Commercial, Advanced Tech, Life science, Entertainment and Retail). The bulk of his experience has been in the San Francisco Bay area, involving multi-year preconstruction efforts on primarily negotiated work. He has a deep understanding of estimating workflows involving target value design, design-build work, phased procurement, prefabrication, and 3D-based take-off / estimating.

Prashant has a keen interest in new preconstruction technologies and processes. He is passionate about making estimates more efficient, accurate, and informed using building information models Prashant has a Civil Engineering Bachelor’s degree from Delhi University and Master’s Degree in Construction Engineering & Management from Stanford University (Civil Engineering).

Jacob Skrobarczyk

Central Region VDC Leader
DPR Construction

Jacob has over 14 years experience working as a Project Engineer, Estimator, BIM coordinator and VDC leader for construction firms in the greater Austin, Texas area. He currently leads development, implementation and support for the Virtual Design & Construction Team in DPR's Central Region. The team includes onsite and offsite resources specializing in setup, model creation and model-based workflows for precon, operations and self-performed work. The teams primary goal is to enable DPR's people to use data-rich models to coordinate, quantify, plan and track work. He strives to open minds to new ideas and promote creative solutions for simplifying the construction process. Jacob has a Bachelor's Degree in Civil Engineering from the University of Texas at Austin.

Core Markets





Advanced Technology

Healthcare

Higher Education

Life Sciences

Commercial

Expertise






Virtual Design & Construction

Preconstruction Excellence

Special Services Group

Sustainable Construction

Self Perform Work

Prefabrication

Amr Raafat

Vice President of VDC & Technology
Windover Construction

Construction leader and expert in the industry's leading-edge technologies with more than 20 years of experience combining architectural, construction, and engineering expertise. Amr received the global 2019 Innovator of the Year award at the Autodesk AEC Excellence Awards.

Amr leads Windover's Virtual Design and Construction team and the IDEA™ Innovation platform providing 4D animations, BIM coordination, laser scanning, drone mapping, virtual and mixed reality, digital prefabrication, robotics, automation, and 3D printing to enhance planning, change management, scheduling, site logistics, and safety throughout all construction phases. Working collaboratively with clients and project teams. Amr received his Master's Degrees in Architecture from the Boston Architectural College.

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- Building for life sciences and healthcare, academic, senior living, commercial, nonprofit, hospitality, and residential clients
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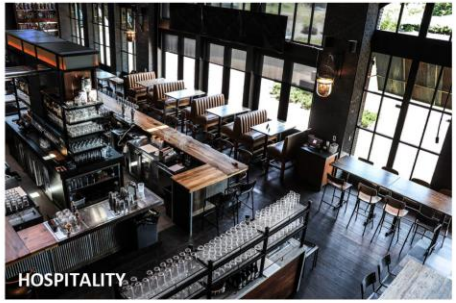

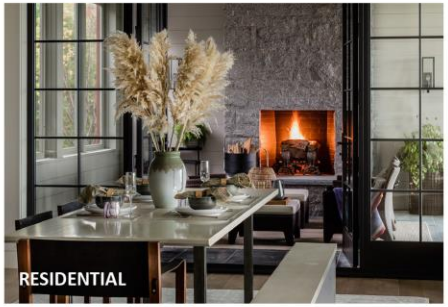

A view into the VDC Strategy

Overall, how does VDC technology fit into your companywide digital strategy?

As times have changed, what has it been like to adapt to cloud-based SaaS solutions?

A view into quantification workflows

Describe the quantification workflows used at your company?

How do you go about working with internal/external teams to share models? What works well? What challenges do you run into?

Do you have examples of how your organization has overcome resistance to trying new technology and workflows?

Imagine you have the opportunity to join a new firm to implement a VDC practice from the ground up. How do you approach it?

Looking to the future

It’s 2030. What does the day-to-day of preconstruction work look like? What do you hope it looks like?

Q&A

Closing Remarks


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