## How BIM managers are delivering success with BIM

Using collaborative workflows to unlock productivity and unite multidisciplinary teams.



### Architect

### Structural engineer





BIM managers at multidiscipline firms are in a tight spot.



So BIM managers need to give their teams the right tools – and skills – to work better together, and to be more productive and efficient.



## Without additional complexity.

We spoke to BIM managers from multidisciplinary firms that are doing more with BIM workflows.

## Here's what we learned.



### Structural engineer



Pssst... hit this button any time you're ready to talk with one of our experts about accelerating your BIM journey.



They're producing more and doing it better, without working harder

They find working in 3D easy and effective

Visualization is helping them spot errors earlier

They're working smarter with automation

"Working in a single model-based environment helps find conflicts during the design process and settle them before the design goes out to bid. This saves us a lot on change orders and addendums."



Barry Beauchesne, CAD Program Manager, Wright-Pierce

"Clashes between pipes and columns get caught up front in the 3D model so you can make adjustments before the model goes out."



Randall Mattingly, Civil Designer, Moffatt & Nichol



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"Our deliverables show more information now but take the same amount of time to complete as before."



Nick Kovach, BIM Manager, BOKA Powell

"Before with AutoCAD, we drew lines for pipes. We would draw lines carelessly, and we would say 'everything can be fixed in construction.' Now we solve clashes before construction phase."



Fabio Sato, BIM Manager, Filippon Engenharia



They're producing more and doing it better, without working harder

## They find working in 3D easy and effective

Visualization is helping them spot errors earlier

They're working smarter with automation

### "I've seen how much more effective design that makes sense can be."



Barry Beachesne, CAD Program Manager, Wright-Pierce



They're producing more and doing it better, without working harder

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## Visualization is helping them spot errors earlier

They're working smarter with automation

"Creating a 3D model forces people to think about how a building will be built. For example, I can walk through the model and physically see clashes."



Brian Mackey, BIM Consultant, BD Mackey Consulting



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Visualization is helping them spot errors earlier

## They're working smarter with automation

"When we compare to legacy projects, we see benefits of BIM today. We are able to automate quantity takeoffs and calculations that we used to do manually."



Abe Morris, BIM Manager, SSR

### "It's just easier to use 3D tools whether it needs to be in 3D or not."



Tim Kelleher, BIM Manager, Brinkman Construction





They also shared their golden rules for driving BIM adoption.



## Mobilize the grassroots...



"I wanted to inspire people to use Revit rather than push them. I built a team of BIM champions who were passionate about the transition to support me. I have a few in each discipline. The champions help define our standards, identify trends and issues and needs going forward. These are people with a passion for technology and innovation. This made the transition from CAD to BIM successful and quick."





Dan Dankert, CAD/BIM/VDC Manager, Mead & Hunt





"You need to have top down consensus on the move to BIM. Leadership needs to support the move and set the direction. Be careful about how you market the shift internally. People need to understand the why."



Abe Morris, BIM Manager, SSR



# ...but only after getting buy in from the top.



### Start small...



"Take it in baby steps. Choose the most profitable baby steps first. This will help show results quickly. Listen to what people are struggling with and find something that will save your team time immediately. Do that first."





Brian Mackey, BIM Consultant, BD Mackey Consulting





"Be smart about your first BIM project. Give responsibility for the project to the best person on your team who can think in 3D. You need the right people on the project who can champion BIM. Make this first project a model for future projects."



Toon Beyls, BIM Modeler, BAM Contractors



## ...and smart.



## Be thoughtful about training...



"We hire a Revit-specific trainer to do an intense training session with our team members. Then we place them on a Revit-only project and leave them there. This kickstarts their Revit skills."



Doug Smith, Corporate BIM Manager, Dynamic Systems





"I find just-in-time training to be more effective – when a team needs to be able to do something, I teach them. That way they will apply the knowledge immediately."



Brian Mackey, BIM Consultant, BD Mackey Consulting





### "BIM managers need to be flexible and learn more about what their architects/engineers want. Give up your control issues. Don't dictate how they do their job, just help them do their job."



Nick Kovach, BIM Manager, BOKA Powell



# ...and give your team the tools to try their new skills.



# Document results and best practices...



"Every time we complete a project or at key milestones, we do a brown bag lunch and learn to show the progress of each project. We build a spreadsheet showing how it's progressing - getting better, more accurate data, same amount of time or less and we're getting a cleaner product. Everything is self-contained in the project."





Randall Mattingly, Civil Designer, Moffatt & Nichol





"We have a committee for each discipline with representatives from each of our offices. The mission statement is to bring everyone together and gather thoughts and ideas: Is our content working well? What's missing? Are our processes working? We always seek to improve our workflows by asking 'what if?'"



Abe Morris, BIM Manager, SSR



# ...because you can always be better.



# So why did these highly effective BIM managers choose Autodesk Revit to help transform their firms?



It offers maximum flexibility

The Revit API allows for custom add-ons and plug-ins, to complete workflows and automate work

All disciplines can work together on one model with discipline-specific functionality

"Revit is a more productive tool for drafting. The benefits are clear – produce more work for less money."



Doug Smith, Corporate BIM Manager, Dynamic Systems



### It offers maximum flexibility

The Revit API allows for custom add-ons and plug-ins, to complete workflows and automate work

All disciplines can work together on one model with discipline-specific functionality

"We use Autodesk products for all our processes – it's our one stop shop. The integration between products helps us get our work out the door faster."



Doug Smith, Corporate BIM Manager, Dynamic Systems



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All disciplines can work together on one model with discipline-specific functionality

"I build my own add-ons to Revit and share with the office. I created an 'align views' add-on to align view ports so when you are flipping through multiple sheets the plans and legends stay in the same place. People were doing this already manually, so I made it easier for them. See what people are wasting time on and automate it."



Nick Kovach, BIM Manager, BOKA Powell



It offers maximum flexibility

The Revit API allows for custom add-ons and plug-ins, to complete workflows and automate work

All disciplines can work together on one model with discipline-specific functionality "With Revit, we see more coordination and collaboration between disciplines. Most people involved would never go back. Architects can visualize their work like never before. Structural engineers can do their work faster than in a non-BIM environment."



Dan Dankert, CAD/BIM/VDC Manager, Mead & Hunt





## Want to know more?

Talk with one of our experts about where BIM can take you next.

**Get in touch** 



### Mechanical engineer

### Electrical engineer



Architect