JAMES VANDEZANDE: All right. It's showtime. Hello. Welcome, everybody. Good morning.

AUDIENCE: Good morning.

JAMES VANDEZANDE: Let's try that again from this side. Good morning, everybody.

AUDIENCE: Good morning.

JAMES VANDEZANDE: Hopefully, we recovered all right from our social events from last night. Thank you for joining me today. I'm James Vandezande. I'm the Director of Design Technology at HOK. We're a global architecture and engineering firm, but it's not going to be too much about the company today. The class is called Habits of Highly Effective BIM Managers and it's something I haven't done that much, talk about the soft skills, the people skills, but hopefully, we're going to have some fun today, take away a few Nuggets of how you can conduct better business as design technology managers or support personnel. And we'll have a good dialogue. So let's get rolling. We're live streaming today.

Some of the learning objectives that I hope you take away from this class, when you get back to your office, you should be able to, in a rough sense, understand the role of a design technology leader or a manager or a specialist. Hopefully, you can create more effective training material, improve troubleshooting skills, develop effective plans, but the presentation is not specifically about these things. It's more of a core set of values that I modeled after the book *7 Habits of Highly Effective People* by the late Stephen Covey. It's one of my favorite self-help books. And when I was thinking about submitting this class, I really wanted to-- I had a whole lot of notes after my 20 something years of doing this as a profession, and I really wanted to capture that and share it with everybody. So I hope you get at least a few Nuggets of wisdom out of that.

With the handout, just a little note, I will post the slides rather with an addition to the handout on the site. And in the slides, you'll see every once in a while my little helper hand here. That's just a link to additional information and inspirational information. It might be a video, a document, so when you get the slides, if you want to reuse them, feel free to reuse them inside your company. Look for that thing and click on the link and you'll get even more

information from the slides.

A little bit about the logistics. With questions, I welcome questions at any point throughout the presentation. So you're more than welcome to come up to either one of the microphones we have in the center aisle. If you really don't want to get up and ask the question, raise your hand and I'll try and repeat it so that everybody else can hear it, but we are recording, we're live streaming, so we're going to have a lot of fun.

A little bit about me. I've been coming to AU I think since about 2003. I've been involved with lots of other industry efforts. I'm on the board of directors of BIM Forum. I helped write the LOD specification. I was chair of the exterior enclosures group from the design perspective. I was chair of the design group of the National BIM Standard, United States version 2. And along with two of my best buddies, Eddy Krygiel and Phil Read, we authored the Mastering Revit Architecture books for five or six years. That was a ton of fun. And along the way, I've met so many cool people at AU, in particular. One of the takeaways that I really recommend everybody do is meet at least two or three new people that you didn't know before at AU.

When I started looking through some of my-- to grab a few pictures from that first slide, I started looking way back and all the way back to when we had the Revit mixer. Anybody here remember the Revit mixer back in the early days before Revit was even an Autodesk product? And we did stump the chump sessions. I mean, that was all these people I consider my great friends and a lot of people you see in this slide are on my team at HOK. And I think I wouldn't have achieved enough success without having a team of some of the best people in the industry. And I'm sure if you have a similar team, let's give them all a big round of applause for my team and your team, please. They deserve a lot of credit.

[APPLAUSE]

And I'm a father of four. And I just want to onscreen say thank you, honey, for allowing me to succeed in my professional endeavors. She's manning the ship at home and I love her to death and I wouldn't be here and presenting in front of you if she didn't allow me to achieve that success. So thank you. And hi, mom and dad, too.

So one thing I have to set the stage here. I try not to make my presentations so dry. So one of the things we do, we talk a little about cats. All right? And you can get the QR code now or later. Don't all go online and check that out right now. I won't get into the full story, but if you

know me, this term saying BIM Model, I promise is the only time I will say that. It's like saying ATM machine or a PIN number. And there was this whole story behind fluffy kittens and I won't explain exactly what that means, go check the QR code out later. But what it turned into, my friend and co-director at HOK, Greg Schleusner, and I have this little fun game that we do when we give presentations. It's a topic plus cat search and we see how many different topics within our presentation we can match up with cat photos. What do I mean by that? Well, for example, if I was doing a category on models, I would say let's do an internet search for model plus cat and we just grab the first photo that pops up and you'd get something like that. So keep an eye on my topic transitions and you'll see what I'm talking about.

So I usually like to ask everybody where you came from, what your educational background. I decided to do it this year in a Google form, so thanks to the 50 or so people that responded. Give yourselves a round of applause if you responded to my survey.

[APPLAUSE]

Excellent. Excellent. There was a really good sample and some interesting results. The first question was what's your educational background? I wanted to know in this design technology management profession were we trained as architects or we trained as engineers, software programmers, management, other? I think one of the driving forces behind this course is understanding where do we get education as design technology managers or as BIM managers? It's hard to find, right? Surprisingly, or I should say not surprisingly enough, over 50% of us were trained as architects and engineers. That was in line with my hypothesis. And if we compare the educational background to what we're doing today, kind of interesting that the majority that's responded that they were trained as architects are now BIM managers, I think. That's at least without having to go back and do the cross checking of the data, but that seemed to be an interesting trend.

And then beyond your education, what segment of the industry are you currently employed? We have a really good mix of close to 40% architecture, 14% engineering, and the rest in construction management and trade and so on. And of your primary function, going back two slides ago, what you're doing today as a function I thought is interesting to understand how much of your time is overhead? This is a frequent question I get of how much time do you spend billable or do you have to be chargeable? And I was happy to see the results come in as about 14% of you said that none of your time is overhead. So in other words, it's all billable time and I think that correlates to the roughly 14 23ish percent of people that responded that

they're architects, engineers, or modelers. So I'd expect those folks to be billable, doing billable project work.

So that seems to make a lot of sense. I was worried that that would be a lot more lopsided these days. I'm sure if I did the survey three years ago, it would have been much more lopsided because the industry really didn't understand what science technology meant and what the value was. Really nice spread of how many people we support. I'd love to dig into that 32% that responded that they were supporting more than 100 people and see is it more than 100 people in your company, or if you have multiple offices, do you personally support more than 100 people in all of this. I think that's the threshold when you're when you're doing direct support and training. It gets really tricky when one person is supporting like let's say 200 people. You start to lose that personal touch.

And overall, thankfully nobody said that they were completely unsatisfied with their jobs. Three of you said that you were somewhat unsatisfied so I'll get business cards out. We're always recruiting. But most of your are satisfied or extremely satisfied. So that that's great. That's a positive. Now this last question I attended an event, a technology leadership event, at RTC, which is now known as BILT without the u, so go Wes. We have a leadership summit and this was one of the questions of that leadership summit of are we in a BIM hangover? And I left it intentionally vague. I didn't explain what that meant. Surprisingly, 72% to 74% of you said, no, we're not in a hangover, but those of you that responded yes, I said please describe what you think I mean when I say a BIM hangover and the results were amazing.

I snapshotted a few of them here. You know, change management is a painful process. How do we do BIM bigger, faster, and cheaper? We started fast and furious, but now we don't know how to define the principle or practical purpose. The majority has moved past wanting to use or implement BIM. And upper management sees the need for BIM, but they are agreeing to more than what we're capable of doing. So I'm seeing lots of feedback from a project perspective, from a management perspective. Some of the stuff we talked about at the RTC Forum was you know about what the software is, the software development causing us to feel that we're in a hangover. Too much emphasis on the word BIM and not enough understanding on what it takes, how it changes the design and construction process. I love that one. People are getting fed up. They like the idea, but it should be easier and not disruptive to their traditional culture and process. I'm going to talk a little bit about that through my slides. And then the best one of all was a quote from Jurassic Park saying that Ian Malcolm's story of

we're so preoccupied with that we could, we didn't stop to think that we should. So I love that and I couldn't show the clip because we're streaming live, but you get the idea if you've seen that movie from 1993.

So before I jump into the habits, I did a quick scan of everybody's title that you submitted when you registered for the class and I was really surprised. I just did a quick sampling and we have BIM and CAD Managers, we have Design Technology Managers, Digital Design Managers, Integrated Process Managers, VDC Coordinators, BIM Technologists, Virtual Designers. I think one of the themes, I'm putting it out there-- I'm not suggesting that we all change to one single title, but it does create confusion in when we're recruiting, when we're hiring, when we're retaining people. I call this class effective BIM managers because it's an attractor and everybody kind of knew what they was. They identified with what BIM Manager was, but I think that term is starting to fade. Maybe it's pigeonholing some of us. So I encourage everybody to think about your roles in the definition and the description of your roles in a little bit more broad sense.

So what I like to do, and you could take away from this what you like, I like to describe my functional roles within my team in three broad buckets. There's a director role or a CTO, CIO or the ones that do the strategic work. They develop the plans, sometimes they develop standards-- that's what I do for my company-- they organize the team, but they're not necessarily in the trenches doing the work. A manager level is what I like to call the tactical approach or, in a simple sense, they're the ones that do broad, but shallow work. So in other words, they are responsible for broad implementation success, but they don't necessarily have deep technical knowledge about any particular thing and they don't usually do project work. And then we have specialists. These are the ones that are narrow, but deep. So they have deep technical knowledge about one or a few procedures or technology tools, but they're like the SWAT team, special weapons and tactics, right?

So hopefully, you can think about that, understand the framework and how you apply it to your professional development. And I think it's important because for us to be effective at delivering support, delivering training, supporting our users, management needs to understand what we do for a living, what the value we bring to the company. Again, when we go out and recruit, it's hard to recruit for a design technology manager. What is that? I'm a BIM Manager. I don't know, how does that translate to something that's more general? There's no educational background, there's no degree as a BIM manager, right? You know there might be some

certificate programs from some colleges, but you're not classically trained in that realm. And then unity, getting all together and saying, yes, hey, fellow designed technology manager, we do the same thing. Let's compare notes. Really important to helping us succeed as a community, as a growing community. I think it's very important.

I've gone out and talked to people in other industries, for example, health care. I have a friend who's a nurse and I asked her about this. I said, do you guys have technology people who are like nurses? Absolutely, they're critical to what they do. They help us with all the health care software that they have, the iPads, so they have to understand nursing, they have to understand the technology. They're not strictly IT people. So I think that there's real value for an industry specialty on around technology and process.

So let's begin with these Seven Habits. I wasn't sure whether it was going to get all Seven Habits matched up with what we do in design technology, but they match up pretty well. Habit one from Stephen Covey's book is be proactive. This is one of my favorite ones. And the simplest cat meme that popped up is the proactive cat. But what I mean by being proactive is really defining ownership and defining your own destiny. It's not about waiting for things to happen. It's the idea that you're in control of your own destiny. So let's talk about that.

This is my number one foundation of everything else that I like to teach and talk about with my teams, with my colleagues, with my competitors. It's this concept of ownership. I don't know if you've ever seen this diagram, this cartoon, of the folks in a rowboat and they're bailing out the leak on one end and the folks that are in the rowboat on the other side are saying, hey, I'm sure glad the hole isn't at our end. This is the classic illustration of ownership not from a sense of possessing things, but taking ownership of concepts. It's not having excuses because something is not in your domain. Right?

Has anybody gone anywhere, movies, the car repair shop, and said, hey, I have this problem with my window or something. And the guy says, well, I don't do windows, it's not my problem. Or you go into another guy, hey, I have this problem with my window. Oh, yes, absolutely. I don't do windows, but I know the guy and let me get you connected with that guy. And then a day later, hey, did you get your window fixed? Did he contact you? Two very different approaches that the second person didn't actually do the fixing, but they owned the situation because it was brought to them. It's a sense of ownership about yourself, pride in your company, pride in your work. That is the underpinning, I think, of every other habit that we have and something that is a critical takeaway from this class.

So two key things. Own the issues that are brought to you, so redirect, if applicable. You know some things-- I get this all the time. Hey, James, you know the video conference isn't working. I could very easily say, well, it's not my problem. Talk to IT. Or I could say, hey, all right, I understand it's critical. Let me go and find somebody. Hey, would you take care of this? And then an hour later I'll say, did they help you out? Are you satisfied? That's redirecting and following up.

Second is owning the decisions you make. So a lot of times, we'll be developing training material, will be developing standards, policies, procedures. So be honest. You have to be firm and concise and succinct in what you're trying to accomplish, but learn from your mistakes. Own, yes, I made that decision. It wasn't right at the time. I understand now. I got some feedback and we'll adjust our course and move forward. So that's the foundation of a more positive way of approaching this role.

The second thing is really talking up or working up to management. Right? So again, going back to owning your destiny. We're probably not the leaders of our company. Is anybody here a sole proprietor of your own consulting company? So most of us work for other people, right? So this is so important to be able to understand how to sell your value, how to sell a plan, how to convince your firm wide leadership to increase your budget for next year.

So there's a few key things here that I've learned over the years and I have to thank my partners, my leaders, and my company who have embraced me at HOK over the past seven years. Love them to death. I consider them my ultimate mentors. First thing is you don't ever go to the c-suite, you know the chief design director, and ask questions. You're the expert. You tell me. Always bring solutions to management. So you think about it. I think we need to do this. Again, owning the decision. It may not be right, but you have to commit to it and say, I trust in my expertise and I have a plan and this is the solution. Do you approve? Yes or no. That's really what management really wants to hear. They want a concise thing and they want to be able to sign off on it or not and tell you to come back and revise it.

Another interesting thing that I use a lot and I have to thank Patrick MacLeamy for this. He would be sitting around in meetings quite often and we're techie geeks and we're, oh, the work sets and the this and we have this tool to buy. Just say yes, he would say. He would lean across the table, just say yes. And we'd say, oh, but, what if we did-- James, just say yes. OK. Yes. Thank you. OK. Well, check in with me next week, and we'll see how that went. So that's

really what they want to hear. Think about that in your head when you're trying to rebuff some feedback from a management principal or director in your firm. Just say yes and move on and come back later. You may not agree with it right then and there, but just say yes. Agree and move on. They're not demeaning you, they just want to move on and their time is very valuable.

And the third thing is really knowing your audience. So for example, if you're presenting to your CFO and you're trying to get some new budget to test out some virtual reality equipment, you're not going to want to go to the CFO and say, oh, this cool thing and the goggles, you can see-- no, they want to know the dollars and cents. How much is it going to cost? What's our return on investment going to be? If you're taking that same pitch and going to the design director of your firm, you're going to be saying, oh, this is how we can showcase our feature spaces, how we can engage our clients better, how you can develop greater designs. So it's trying to sell the same thing to two different people. Knowing your audience is critical to channeling in that presentation or that pitch.

And one other sub note here. It's really understanding what your pitch or your presentation is about. I always start any presentation by understanding whether it's informational, inspirational. Am I trying to sell something? Am I trying to get somebody to buy something? Is it a training material? Those change the pace and the framework of your presentations or your pitches. So always start with what's the purpose.

Habit number two, begin with the end in mind. Anybody want to hazard a guess on the cat picture for this one? Reveal. Again, cat plus end. You get that. So really, beginning with the end in mind is understanding where you want to go. And I've put that in the framework of technology management in terms of planning and then working the plan. So let's dive into this. And again, if anybody has any questions, any questions on where we are so far? No? Good. We have the microphones, remember?

Dwight Eisenhower, General, President. I love this quote. Plans are worthless, planning the process is essential. So developing a 50 page document just to have a document as a plan, misses the point. It's really about the process of planning. So how do we do that? Every year my team gets together and we try to lay out a strategic plan. And we usually break it down into three chunks-- a three to five year outlook, so this is usually our shortest list, but these are the biggest and most audacious goals. We'll follow the trajectory of what the current trends are and we'll try to predict where we want to be as a firm and as a team three or five years from

now. This is really important. It sounds kind of fluffy and fuzzy when you're sitting down and jotting down these ideas, but believe me, when you start approaching the three year term and you can go back and say, wow, we actually put some things in place to achieve and push our firm forward in that time frame to get there. A lot of these big technology changes, especially if you're at a big firm, they take time to develop. So always look three to five years ahead and understand what that means.

We'd come back to a two year plan, so it's basically if we're planning right now for 2017. Our two year plan would say what do we expect to achieve in 2018? So this will be you're usually expected carry over of long tactical items. So if we were exploring a brand new BIM platform, we'd say, all right, there's going to be some sort of piloting in year one, and year two, there's going to be new pilots and follow up training and skills assessment and so on, so you kind of lay that out. Usually, at the second year plan, you're usually beginning your development of the three to five year big audacious goal items and you want to put in research of cutting edge technology, ideally, to kind of stay ahead of the curve on those things.

And then the more tactical things are next year. So we're going to be meeting-- our team's going to be meeting in a couple of weeks and putting in our plan for next year. And this is the longest list. So we know exactly what we didn't finish this year. That's really important to make sure you don't leave things on the table unfinished. We target very specific development. So this is not the we think we're going to need something in two years, we need to get to work and start. In quarter one, we're going to finish this. Quarter two, we're going to start this and finish up by quarter three and have a report and whatnot. And then pilot testing of the two to five year things. Ideally, you get like a single team or a couple of teams to do early, early pilot testing of things that are two, three, four years out.

So when you're developing a plan-- anybody heard of SMART goals before? Very, very important. You'll see this a lot. I'll talk about the checklist manifesto and things like that later, but when you're developing a plan, not just say, hey, we want to do cool stuff, we want to understand VR, we want to do more BIM, and that doesn't make sense. So specific, measurable, assignable, realistic, and time-based. So let's work through an example.

A specific goal would be we want to improve the skill level of our Revit users, stating that in the plan. Measurable-- we're going to bring our skills assessment levels to 85%, as a minimum. This is some kind of a benchmark so you know whether you achieved it or not. Assignable-- this is so crucial. Who's going to do it? Jane Jones is going to lead the assessment effort.

Realistic-- do we even use Revit? Does this make sense? That's often overlooked one, but really important. And then time-based-- the results are due by the end of 2016 Q3. So you have to have each one of these things to have realistic and achievable goals as part of your plan.

And then once you develop the plan and you get to work, what do we need to do? Well, one of the things you're going to do a lot-- I think I spend probably 40% to 50% of my time every week in meetings. Collaboration-- my team is amazing. We have two hour meetings every Tuesday that rotate from firm wide out and then we shift and say out from regional into firm wide, so we have that cycle of feedback. But what's the key to doing effective meetings? I've been at places where we just have a meeting just to have a meeting. And every meeting is, well, all right, what do you want to talk about today? Those are not good meetings. What you want to do is have a very specific agenda. Even on those recurring team meetings, you want to have a catching up on old action items, new business, support issues, new innovative things. We have that framework for all of our recurring meetings, even though it's not a specific plan for everyone.

Make sure that the topics are relevant. Again, you don't want to just say, hey, let's talk about BIM, let's talk about design. We want to have something specific about support or training or research and development. It should be targeted so you know what you're going to talk about and maximize the value of that team together. Having 10 or 12 highly paid people in a meeting for an hour or two hours, that's a lot of overhead or billable time. So you want to make sure that you maximize the value you get out of your meetings.

And having the right people-- that's another thing where don't be afraid to not invite certain people and own that decision. Sometimes, having too many people in a meeting dilutes the results. So understand say, hey, listen, I know I didn't invite you to this call, but it's really important. I just want to get a critical decision and then we'll debrief the larger team in the coming weeks. That's totally OK to do that as long as you're open and honest about it and transparent. You're totally successful that way and you get more better results.

Always keep good notes. There are lots of new tools that I'll talk about a little bit later about managing your plan, jotting down notes. If you use WebEx or GoToMeeting or something similar, record it and make sure that people that aren't in the calls can, at least, listen to it later. We're debating right now whether we should be actually writing notes since we record everything. So we're going to hopefully decide that in our summit whether somebody has to be

a designated note taker, but that's important to understand what the trail of your decisions were. Keeping it categorized and I won't postulate whether it's keeping notes in categories or timeline based is better. I have seen it done all ways and I don't know whether one way is better than the other.

One important concept that I've learned over time is conversations can go astray really quickly. And whoever's moderating the meeting or leading the meeting has to understand the value of a parking lot or this ELMO concept. Anyone know what ELMO means? Enough, let's move on. We had a really great-- I think it was Phil Bernstein's wife that was moderating a meeting for BIM Forum and she actually had a little Elmo doll. And we would start going off on tangents and she'd throw the Elmo to say, all right, enough, let's move on. Very important.

And then finally, assigning tasks. Don't just have a meeting and say great, good meeting, we'll talk next time. What were the actionable items to take away? Again, going back to SMART, they don't have to be all the full five aspects, but at least time based and assign them to a person from a meeting. OK, you said you were going to follow up with this person. OK, you go do that and we'll keep this as an open action item for the next call to follow up. That's how things get done.

Habit three, put first things first. Any guesses on this one? First Cat-- that's what I got. Timely and these days in the United States. But putting first things first is managing your time, managing your time wisely and understanding how to plan the efforts around your team. This is different than a plan. This is more about I have so many things to do, how do I get them all done and how do I prioritize? One thing I like to do is when I'm planning a budget, looking more at the one year plan out, the highly tactical plan, how do I know how long it's going to take me to develop a completely new educational manual for dRofus, for example.

What I like to do is plan it in 20% chunks. So I'll kind of have a rough idea of how long it's going to take and 20% chunks is five days in a week a day. So I'll look at, all right, I'm probably going to be working on this for two months and I'm going to put in, let's say, every Monday, I'm going to devote to developing that content. So it's going to be you know eight days of total time, but it's going to be spread out over eight weeks. 20% chunks, I like that. It's very simple. You don't have to subdivide it into two hours for this and three and a half hours for that. That helps me plan a lot and understand whether I'm being overtaxed. That's really crucial, too. Has anybody here ever set up an MS Project for their support team? In the back, a couple of you. And you start to do the utilization factors. I think I did mine and I came up with like 450% utilization.

Whoa, all right, pull the reins back. Let's figure out what's wrong here, so 20% chunks.

Another thing, WoW time. Not World of Warcraft, it's really work on work. So this helps me a lot. If you don't put in work on work time in your calendar, people are going to look in your calendar if you have that ability with Outlook or what other ever software are you using for calendar or time management in your companies. Oh, you're free Wednesday and Thursday morning. Not really, I have a lot of work to do. So I have to develop my budget right now so I put in a couple of chunks of two hours each that people think I'm in a meeting, but I'm really just kind of I got my headphones on working and I try not to answer my phone, I try not to look at the web. Focus on a single task and get that done, work on work time.

So some of the tools we like to use in the past, I don't know, year, year and a half, we've experimented with many new tools that I think are coming out of the software and the agile development industry. And I'm just going to show you a couple with you today. A lot of them are mostly free to try and to use for small teams. We haven't decided on which one is best so I'm going to put them out there and if you use one or two of them, great, you're going to improve your team effectiveness right away.

First one off we like a lot is called Trello. It's based on this Kanban style of management where it's visual boards and cards of organizing your information. It's really easy to use. It's like zero training. The mobile apps are exactly what they look like in the web site. So we use this a lot. We've shifted away from doing Excel spreadsheets of task lists to this, at least for these. So this is our most used tool right now. But we're looking at other things. It has checklists so you could basically create a card. Within the card, you say, OK, we need to do something. We have that checklist of do this first, then follow up with this person, complete this, convert that. And you can see I think some of these have like zero of two, one of four, two of three. It gives you a little visual cue as to how done these things are. And you can filter them and sort them as you like and go in and comment on the cards and your team has a dialogue and it's all stored within that system. All these tools have in common, they're getting away from email. None of these things are really email based.

Asana is a new one that we saw that's very much like Trello, but has more specific tasks and sub task management. Trello doesn't have a good sense of timing. You can assign a due date to a card, but you can't close it out ever. That's the one thing I don't like about Trello is you have to kind of go in and delete the due date to actually make the thing go away and stop bugging you about overdue things. Asana's a little bit nicer, a little less intuitive from a user

interface perspective, but it has much better control over your tasks and it gives you dashboards and what are my tasks, what are my team tasks, what are my project tasks. Really nice buckets there. Same thing, common threads you can attach files to issues, PDFs, images, whatever.

Slack is a slightly different tool that's more about team communications. This is really just go away from email and have threads of conversation with your teams and people outside your team. Interesting tool, we're not using it as much as I think we'd like because a lot of other tools have this communication function built into it, but it's really simple to get started with this, spin up a thread and some channels and invite some people in and it's quite interesting.

Microsoft Planner is a relatively new thing that Microsoft developed from Office and this is almost identical to Trello and Asana. If the two of them got together and had a baby, I think it would be MS Planner where it has the cards in the very simple interface. It has the dashboarding for tasks-- show me my tasks, show me my team task, my project tasks. It integrates nicely with your calendar. You can put a OneNote notebook right integrated with a particular project. So that's kind of cool to develop a project and collect notes with it as you go along. Obviously, you have to have an Office 365 subscription to do this so it's not in the category of the free tools.

SmartSheet is something interesting and imagine a spreadsheet on steroids that's on the web. It's as simple as I can say about it. Our Salt Lake City team in San Francisco, Salt Lake City Airport uses this a lot and they like it and it's literally that. Excel to setup tasks and whatever you want to do with Excel and it's on the web and highly collaborative.

And then finally, another note about taking notes and documenting your processes. Use in Word, I love using the navigation panel or the outline view. You know, whenever I'm documenting my processes or taking notes, I'll outline everything first. I'll use the headings and then you use the pop open the navigation pane and you just drag and drop your headings and then you go in later and start filling out the details. So that's a really effective way of taking your notes.

I, for a long time, have been searching for do I want to go completely paperless? For a few years, prior to now, I went completely paperless. I was an Evernote user then I switched to OneNote. I use Google Docs a lot to develop more polished things and sharing that with others outside of the company. But recently, I said, I'm not always on my phone, I'm not

always with a tablet or my laptop, so I got myself a little mole skin journal thing and I love it to death. It just compliments what I do. I don't keep all my notes in it, but I just keep a little log of who I talk to, high level tasks that I did that day, and then on the right I have something that I'll talk to you about this Ivy Lee method.

This was an article that was posted on Fortune's web site a little while ago. Is anybody familiar with Ivy Lee? Was a revolutionary business procedural mogul in the early 1900s. So Charles Schwab, Charles M. Schwab, not Schwab of financial, but he was the chairman of Bethlehem Steel in 1918, 10 years after the Cubs won their last World Series, just to give you context. So he was looking for ways to have his leadership team be more effective in what they do every day. So he brought in this consultant, Ivy Lee, and he said, what can you do for me? He says, all right, just give me 15 minutes with each of your executives. And Charles Schwab said, well, what's your fee? How much am I going to pay? He says, just give me 15 minutes and then you pay me, you send me a check for what you think it's worth based on the results.

So he went and spent 15 minutes of each executive and he said, write down six of the most important things to accomplish tomorrow. Prioritize those six things in order of their true importance. In the morning, only focus on the first task until it's done. And work your way down through each remaining tasks in the same way. And then move any unfinished items to the list for tomorrow and then repeat each day. You know what? Three months later, Charles Schwab sent a check to Ivy Lee for $25,000. In 1918 and the equivalent today would be about $400,000. They thought that was so revolutionary and so simple in getting things done. I use that with my little journal now. I do it more on a weekly basis. It's hard because we have so much going on these days, but I try to do this every week to say here are my six things and what didn't I finish this week and then move that on to the next week. Love it, love it, love it.

I mashed up habits four and six together. I call it Think win-win and Synergize and this is probably one of my favorite memes so far, the synergize cats. And how I'm relating these two habits together is in developing standards and doing quality control. So quality control is the measurement and compliance with your standards development. So how does that relate to thinking win-win and syngerizing? Synergize, just to be clear, is this concept of I think Stephen Covey called it uniformity is not unity. Uniformity is boring. We don't all have to act the same, but we need to work together towards a common goal. So that's really synergization.

Whenever I start to develop standards and we're doing some new technology and we're trying to refresh and revise our graphic standards, our procedural standards, I'm always reaching

out to different leaders at different-- we have many different market business units within HOK-- aviation, health care, sports and entertainment, interiors. And I understand what they're driving passions are, what they need to achieve. Quite often, I see the efforts fail from a technology leadership perspective because you're just trying to push the technology, you're not fully understanding what the needs are of the people you're serving.

So going out there and saying, all right-- has anybody ever had that conversation with leadership? Revit's not going to tell me how to make my construction documents. Revit's not going to tell me how to do the revision process. We do it with two lists and one goes from the bottom up-- and you say, all right, I understand that, but doing that is all manual and it probably triples the amount of labor we have to do that process. If we just adjust the graphic quality of that table a little bit, it could be completely automatic and we can get it done in five minutes instead of five days. What do you think? Oh, all right. I guess we can change the 200-year-old process of documenting revisions on sheets.

But you have to be able to compromise and think win-win. It doesn't always have to be win-lose or lose-win. There could be something in it for everybody-- extra profitability or higher quality. It's getting away, breaking out of the traditions, that inertia, and saying we can achieve common goals here together. Work with us a little bit, I'll give you something on some other side, we'll do a little manual tweaking of line styles or whatever, but we're going to do this a different way and we're going to reap the efficiencies and the quality control of this other way of doing it, even though it graphically might look a little different.

So when we go out and develop standards, a few key things that I've jotted down in my notes over time. First thing is when you understand the difference between a standard and what is considered education and training. So when you're developing a standard, remember that a standard is something that you can measure. So a standard is not you will launch Navisworks, you will open the file, and you will do this, and you will conduct that. That that's more of an education. The way I look at it is how our firm does things. So education are the things that are more loose. You want to make sure that it's usually not generic training. I like to put it that way. You should have some basic knowledge if you've never touched a tool like AutoCAD before, we'll send you out to a basic class, but then when you come in, we're going to teach you how to use AutoCAD or Revit. We really don't use autoCAD that much in our firm. How to use Revit at HOK.

So that's really like the educational part and the standards are the work sets shall be named

this, the file names are this, we have these settings, we have these quality control things, things that we can follow up and do an audit on a project and provide a report to the team to say, these are the things that you are out of compliance. It can't be out of compliance with how you open something. It's really when you separate the two, it becomes very clear on what you're trying to achieve.

And again, own your decisions. When you're doing standards you might not know completely how your standards are going to affect your workflow, but say, yes, we made that decision and we're going to track how you revise it later on. We'll talk about that next section. Be collaborative when you're developing standards. Allow people to express different opinions-- the young staff, the senior staff-- but agree to a fair process on reaching a conclusion. So we got all our input, somebody is going to be the final decision maker, document it.

Establish a process for revision proposals, so this is really important. Can't just be like, oh, I decided to change the standards so we have the New York standard and the LA standard. No, it's the firm wide standard and there's a process for suggesting a revision to that and make sure everybody understand that and it's clear and you engage all the right people to get to that final conclusion. Document this process so that it's clear. You have a review process. If you want a committee to vote on it, how you're going to implement it. And then remember, only one standard. There's no such thing as this standard in that office in this region. Sometimes that applies if there are regional legal reasons, but for the most part, it's the HOK way of doing things throughout our firm.

And then quality control when you're going back to check the issues that you set forth in the standards is really important to understand and I highly recommend my second book. It wasn't about the content of this course, but real inexpensive book, real easy read, really inspiring for me, *The Checklist Manifesto* by Dr. Atul Gawande. He goes in and he did some initial work for the World Health Organization to try and come up with a simple surgery checklist to eliminate or reduce surgery borne infections that were killing thousands and thousands of people around the world. And you think surgery, one checklist for surgery? He boiled it down to I think 24ish items for all surgery types. Amazing. Simple, simple, simple.

He talks about aircraft. He has a case study about the construction site. So I learned a lot from that in developing a standard so that you can check it, my mantra is that the standard that you develop should be easier to follow than not following the standards. That almost guarantees you implementation across the board. So you could do it your way, but no, our standard way is

three steps shorter. So just do it our way. And you'll save some time.

Ideally, I know that's not always the case, but ideally, if you think that way, you'll get success. And then measure it, measure it, measure it-- audits, easy checklists, what are the key things? It doesn't have to be an exact mirror of your standard, but what are the key aspects that you want to check when you're checking in with a team, when you're checking in with management, what have you. Always measure and then you can have stats and show where you're failing, where you need more attention. And then when you're developing new standards, those measurements will help you.

Habit five-- seek first to understand, then be understood. Listening and speaking skills-- tell me more, oh, human. This is really critical in terms of supporting your ownership concepts, supporting the synergizing and the working win-win. I'm going to give you just a few tips. I could probably do an entire hour just on listening and speaking skills, but I highlighted a few of them here that I hope you can take some nuggets away.

First off, be seen. Now you don't want to be seen like Lundberg here where you have to hide, he's coming. Yeah, I need you to come in on Sunday. No, you want to be seen in a positive way and what I mean by being seen is physically seeing, your physical presence in your office with your staff, with your team. We have a lot of remote tools, we have video conferencing, chatting, and whatnot. It totally does not even match the effectiveness of going out and just looking over the shoulder of somebody and saying, hey, what are you working on? That looks pretty cool. Oh, yeah, I was doing this thing and you know I had a question and I never asked you and it's been on my mind for months now. Now that you're here, let's have a chat about it. Wow. So you'd be surprised.

One of the things I do is going around to every office-- I'm going to go back to this third one-- and when we have our-- I used to have, we kind of tapered off a little bit because our team dynamic is changing, but I used to have regular calls with each individual design technology manager, the regional manager. So we'd have like a one or two hour session and we'd say, tell me all about what's going on in your office. And I would keep notes. And then every once in a while, I'll go and visit those offices. And I started to compare the amount of notes that I had from the phone calls, the amount of notes I'd have from a one or two day visit to the office, and it was at least triple, sometimes four times, the amount of notes with the physical visit. So we were talking about the same things, it's just being there, it just opens up the floodgates of something that you wouldn't chat about on the phone or through a video conference.

So don't underestimate the power of your physical presence. Spend the time. If you have multiple offices, get that budget, get to those offices, get that face time in front of everybody, and be in regular communication. A lot of times, at least from a firm wide perspective, we have 1,800 employees. If I'm not regularly communicating, I notice a lot of my monthly emails are probably deleted a lot of the time, but we keep going, we keep making it flashy, we have monthly briefings for the entire company. We try to just keep it fresh and every once in a while, you get those couple of sparks and they say, wow, I never thought of that before. I'm going to go engage some of my design team members and do something new. It's very critical.

And always seek feedback. When you're developing standards, training material, always get the young staff, the up and comers, tell me what you're thinking. Do you think this is terrible? Tell me about it. I'm OK. Don't have a thick skin. It's nothing that we do is personal. It's all business. It's all going towards improving our bottom line, improving our design quality. So get those suggestions. Say, yeah, I think this is terrible and I think I have a better way of doing that. Great. Share with me. Let's go out to lunch. Let's go grab a beer or something, but take those suggestions, act promptly. Don't sit on it and say, oh, I'm really busy. A month goes by, hey, what happened to that idea? Do something about it. If it's complex, you may not get through to finishing it, but act promptly and always acknowledge those people. You know, that symbiotic relationship of, hey, I'm on stage, I'm sharing this new idea, and John in my office, well, he came up with this idea and I thank him profusely. They love that. That's so critical to everybody's personal development that you understand your worth at every different level in your company and in life, quite frankly. So act promptly and acknowledge the contributors.

That was listening. Moving on to the outgoing communication, the speaking. Another Patrick MacLeamy gem, the five by seven rule. When you're doing presentations, he always says, no more than five bullets on a slide, no more than seven words per bullet. I try to stick by that, otherwise it's just words and you wind up reading the slides. So that's a real simple thing to remember. It's like a photograph, but five by seven.

I mentioned this before. The purpose of your presentation, your pitch, know why you're giving it. If you don't know why you're giving the presentation, it's just going to be rambling on for an hour or an hour and a half. And if you're presenting to managers, you're pitching something, they're going to check their phone and, OK, thank you. We'll see you next week. But if you're engaging them and you know why you're there, you'll see the eye contact, the phones will be away, and you'll drive home that message. I encourage you to link to Simon Sinek TED Talk

about the power of why. I think it's called *How Great Leaders Inspire Action.* Really, really powerful video.

And when you're doing these communications, be firm and succinct. When you're either giving a presentation verbally, PowerPoint, Prezi, Britain standards, avoid fuzzy terms. Avoid the indirect terms like we should do this, we may do this, this is a best practice. Say, this is the standard, you will do this. It's not being a dictator, it's just this is our process and this is what it is. When you introduce language like should or may, people tend to say, well, all right, I should do it, but maybe I'll interpret and do in a different way. So be firm, succinct in your instructions.

And then other forms of communications-- this is my youngest son of four. He likes when I work from home. He's kind of loves mimicking what I'm doing. I did a class many years ago from our legal department of my former firm about email management. And one of the biggest things is proofread your emails. Take some time, I know we live in an age of text, text, text, text, text, send. If you're sending out an email or on Slack or Trello or whatever, before you hit the send button, take a deep breath, look, read it back to yourself. You can even set sometimes a delay in sending the message, but think about the ideas, the things that you're communicating. Don't ever mix emotions with business. You might be angry at somebody. Business environment is not the place for that. Keep it professional and you'll get respect and people will not say, well, he's just an angry old man. Keep it professional, on point, and very succinct.

The last thing I find is very critical when you're sending an email, particularly to leadership or management, keep it succinct, get to the point, but also highlight any actions. If you're writing paragraph upon paragraph upon paragraph, I think most management people will stop at like the second sentence of the first paragraph. And if you have some really important question buried in the third paragraph, they'll never even know it was there. So I like to keep my e-mails to management succinct. I'll use headers styles. I'll say here's idea number one, here is the action, and I'll bold it in red with a bullet and say I want your response by this Friday to these four questions. Very important.

Then I see version control as another form of communicating with your team. Maybe not even so much communicating with the team, but communicating with your staff, in general. So when you're developing standards, it's not sufficient enough to just keep cranking out stuff. When you have a large organization, many active projects, and you make a subtle change to a folder structure or a naming convention or work set naming standards, you have to understand

before you do it, understand why you're changing it. We're revising our folder structure because we've received feedback that there are too many redundant folders and there's confusion about where to put things. OK, that's a reason. How did you change it? What was it before? What did you change now?

And when you communicate the change, you could say here's why we changed it, here's what to look for, and how. And then document what the changes are and keep that record. It could be part of your training material during the change, but then when you go back historically, you say, why is this the way it is now? Well, you might be go for three versions back and say, oh, OK, these people are reporting problems. That's why that it is the way it is today.

When you're doing the actual action of doing these modifications, you want to keep a version number or a modified date in your standards, particularly. Oh, this is version three of our document development manual or version four or just a date. When was it published? We'd like to take our major procedural standards and just put years them. So, all right, this was the 2015 document development standard and we have list of what changed from year to year. Keep a table in your document. If you're working with files like with every one of our family folders in our library, we keep a changelog.txt file. It's a quick way to open it up and say I changed this with these families and then you have that log right there.

If you're doing web based information, you know like SharePoint or something like that, use the check in process that most web sites, professional web sites, intranet sites, have visibility to when you check in something, it prompts you for a comment, so use that. You can always go back and look at the full version history and see when you changed things on the web. Or if it doesn't have that, develop a sidebar or a frame on the side that just says version 3, date, James changed blah, blah, blah, blah, blah. It will give your users a better sense of why things change.

And then don't delete stuff. You're tweaking a family or a block or whatever, create an Archive folder, take the old one, put it in the Archive folder, and do the new one, because in case something goes wonky, you want to be able to just recover that pretty quickly. And you don't have to-- all users don't have to have access to the archived material. We don't sync out our archive folder to all of the users, it's just there in case we need to retrieve it.

And the last habit here, habit seven, sharpen the saw is really about preservation, renewal on a personal level, on an emotional level, on a physical level, but also in terms of your

professional development. What I like to tell my team is-- and this goes all the way back to our roles, I think the term BIM manager has come to be synonymous with Revit manager and does anybody here really want to be a Revit manager? Probably not. I mean, hopefully not. I don't. I'd rather be a design technology leader. Give me the ability to research new technologies, research new procedures. Always try to teach yourself new things. You're probably going to go up the ladder in your careers, become CTOs, directors. I got my Google Cardboard, I've got my VR tools, I'm experimenting with all those. I'd love to have a drone, but apparently there's some FAA regulation that says I can't have one. But staying relevant is really critical.

Another thing that I like to do is read all the industry standards and owner guidelines that come out. They're almost like a crystal ball of telling you what's going to come with the RFPs in the next year or two. Right? So if you're not focusing on COBie and you say, well, I'm reading three owners guides that were published this year that are all asking for COBie. I better prepare myself and understand what that means. So always be aware of those owner guides. And then get involved, get involved outside of your company. You're here. great. Get involved in your local user group, run a local user group. I founded the New York City Revit user group a long time ago. It was amazingly rewarding. To put it together, it's a lot of work, but getting in touch with so many people on a local level that share your interests and seeing what they're doing is amazing.

Come to a BIM Forum event. I'm the Chair of the BIM Forum content committee. We do two a year, spring, fall. Next one coming up is in the spring in San Diego. So I hope to see a lot of you there. And then get involved with industry efforts like buildingSMART International. They're developing open standards. You can really understand what the international community is thinking that's very, very different from what we're doing in North America. So don't be so insulated, get involved at a local, regional, international level. There are lots of opportunities for you to stay engaged.

So with that, I'd love to open it up to everybody else. We have a few minutes left if you have questions. How are you effective in your day jobs? What can you contribute to this conversation? Love to hear your thoughts. Yes. And we do have a microphone if want to get up, otherwise I'll repeat it.

AUDIENCE: So how do you handle flex scheduling and working remotely?

JAMES VANDEZANDE: That's a great question. Flex scheduling-- what I tell my team all the time, my design technology team, as long as you're getting your work done, I don't care when you do it. Now, my team is all told with other involved people is about 17 people. With my tech team, we have a schedule where if somebody needs to take a day off, we do buddy system. So if our New York design technology manager is on vacation, we'll make sure we have a whole procedure that assign a buddy whether it's DC or Houston or Chicago and they fill in for that day and we help each other out.

Working off hours is something that we're lucky enough to have wide range of office locations. So we cover time zones pretty well. So I don't know if the question was more geared towards general staff and flex time or is it just about our teams?

AUDIENCE: So if you have a team set up, we're trying to support the field, so if they show up at 6:00 AM like the field, if you do a flex schedule where you can have some overlap.

JAMES VANDEZANDE: Yeah, so those that didn't hear that, the follow up was really how do we support the folks that are working at 2 o'clock in the morning when we have more regular hours? So what we do, we try to set up a web. There's no perfect answer there so we have our IT staff runs our helpdesk. So we always tell people that, again, the time zones, we have IT managers that rotate on our internal helpdesk. So if there's a design tech issue, go to the helpdesk, they'll field it and assign it to whoever is available. So if somebody is in Chicago working at 2 o'clock in the morning, they have a critical issue, that issue might be picked up and assigned to our manager in our Hong Kong office who we can do remote. Having the remote tools to be able to support with VNC or remote desktop are critical, but it's understanding the web.

Autodesk we have our web support. So if there's a critical issue, we're enterprise, priority customers to go that way. So it's figuring out that web and making sure you have coverage. One more question?

AUDIENCE: You talked about the director level and then the BIM manager level being more broad, but shallow, and then the specialist. At what point in firm size does that cease to be a one man job covering all three? And then, you cease to be a BIM manager covering all at one and then breaking it down to the HOK level.

JAMES VANDEZANDE: I've seen that in so many different flavors. It's hard to say where the breakdown occurs. It really-- understanding your own workflow and saying, all right, I need to do strategy, I need to develop training, I need to provide support. When you start doing your block of time analysis

and saying, wow, I'm really doing the job, the work of three people, then you need to go to management, and say, here's the case for bringing in a dedicated support person or a dedicated training person. These are all the things that I do on a daily basis. These are how they affect team functionality. And putting a cost ROI plan in place is critical there. So there's no magic formula, but understanding the roles and being able to assign a value and understanding where you are taxed and overtaxed is critical to getting that done.

So thank you for your questions. I'd be happy to follow up with you afterwards. I'll be hanging around for a little while, but thank you for giving your time today and thank you for those of you watching the live streaming. Have a great rest of the conference.

[APPLAUSE]