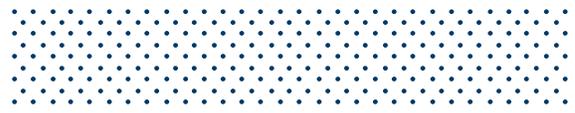


Successful Project Delivery During COVID-19

CAPTECH TRENDS | PODCAST | EPISODE 1 TRANSCRIPT



Vinnie Schoenfelder

Hello and welcome to CapTech Trends, a place where we meet with thought leaders and subject matter experts to discuss emerging technology, design, and project methodology. I'm your host Vinnie Schoenfelder, Principal and Chief Technology Officer at CapTech Consulting. Today, obviously we're in the midst of the COVID-19 pandemic. We're going to discuss how Agile, DevOps and Modern Architecture have prepared development teams to continue to deliver in this socially distant and remote work environment. I have with me Dennis Bowne, a Principal at CapTech who leads our services and who has built our Agile practice area, as well as Jack Cox, a CapTech Fellow who leads our innovation. Jack will help us go deeper into the tech areas and frequently joins me on these podcasts as a cohost. Why don't you guys take a second to say hello.

Jack Cox

Hey, good morning this is Jack Cox.

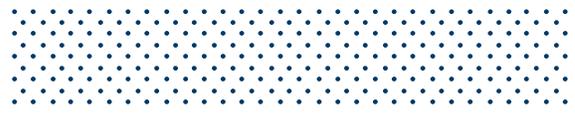
Dennis Bowne

And this is Dennis Bowne.

Vinnie Schoenfelder

Great. I'm going to get us started. Many of our clients and our project teams are looking for advice now on how to continue to deliver during this pandemic, which creates a very different work dynamic. My message has been pretty straight forward. It's that if you've been adopting modern architectures and methodologies like Agile over the last 10 years, and not just in the build phase that we're going to talk about today, but also in the plan and run phase, like operationally doing Kanban boards and borrowing some of those Agile principles. If you've been doing those things, then you are well positioned to weather the storm. If not, it's going to be a little more painful for you. This is kind of a reap what you sow story, right?

One of the interesting things about good methodology and good architecture is that it pays unexpected dividends. If you do the right thing then you get all these unexpected benefits. You know, 10 years ago we wouldn't have said to a company, you need to start thinking about Agile or moving to the Cloud because a pandemic might hit right. We didn't plan for that, but because we did things quote the right way, we find ourselves in an easier position to respond. So, if you are on the other side of that, if you're a little bit behind the curve in adopting these things, don't worry, we're not here to beat you up over that. Dennis and Jack will discuss how we can close those gaps and how we can do that quickly.



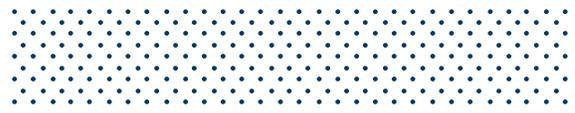
Dennis, I'm going to start with you. This may sound counterintuitive. Agile is a methodology that favors co-location, having people in the same room, daily stand ups. How can this set you up for remote work?

Dennis Bowne

Thanks Vinnie. That's actually a great lead in, and this is a conversation that's going on with pretty much everybody, across the country and across the world. We're all having to move very quickly to a new work mode. What I want to reemphasize, I think you pointed this out, but let's make it really clear. This is not an opportunity to say I'm going to go through a major Agile transformation. It's going to fix all my problems. Let's not inject more pain into a change curve that we're all going through right now. However, you're correct, Agile was founded on the principle of co-location, but the attributes of a mature Agile team translate well into remote work. So, let's go through what a couple of those are. I'm going to touch on briefly just scraped the stage and then the group of us can dive into what we're seeing in each one of these spaces.

So, for instance, when you're talking about Agile teams and, granted, these are properties of teams that have been practicing Agile, other teams that are not practicing Agile can and are doing these too. And I think that's an important factor for everybody who's out there. But the type of things we see are regular communication, a lightweight management structure, transparency and visibility are absolutely prioritized, especially important when we're all at home and we're not sitting together. Being able to rapidly estimate and break down your work into small pieces. And that's really going to help in this environment. We'll go into that in a little more detail as a group. But I'd also say that one of the big things that's out there is creating a regular cadence for delivery of work by your team.

In this environment, where all of our processes have been broken and changed, we do have to think about how we keep running the machine and how we do so in an even cadence. And Agile is really set up for that frankly. To also add one piece of history and backgrounds, while Agile was founded more than 20 years ago with a strong emphasis on the on co-location, on working together and having that highest-quality in-person communication to avoid other forms of communication, like email that were slower and have people working together. We've been seeing for years that more and more agile teams are moving and valuing in-person communications where they can, but de-emphasizing it where they have to, to get the right talent in the right places. So, this is not new. What is new is that everyone's doing it together.



Vinnie Schoenfelder

Right. So, on the regular communication, people are feeling a bit isolated and it's not as easy. Right? I mean, even for those of you listening on this podcast, we're doing this all remotely. We're socially distancing the recording of this. And that awkwardness of who talks next, speaking over each other, who can get in... What advice are you giving your teams in this remote work environment where that communication is more awkward?

Jack Cox

One of the key things is, find the tool that works best for your environment. Depending on the systems you're using, depending on your network, maybe WebEx isn't the right tool. Maybe using Microsoft Teams chat or Zoom or some of these other chat platforms will work better in your environment than the standard corporate tool that was designed for more one-way meetings.

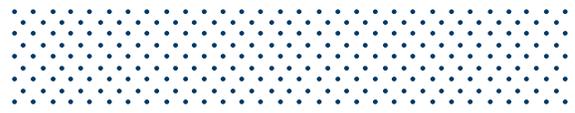
Vinnie Schoenfelder

Yeah. For that matter Jack, what we've recommended is that people turn their video on and I know from a bandwidth standpoint that may be more difficult and maybe you have to back off of that in some cases. But being able to see people's faces makes a big difference. Remembering to look up at the camera so it looks like you're looking at people and not down is helpful. Another thing I've recommended as well and coach people on it at home, in particular, is don't rely on your wifi. Most routers have an ethernet port in the back and just plug in directly. You know, wired is going to be better than wireless for video conferencing.

One of the other things I wanted to, to touch on a bit deeper, Dennis, is the transparency and visibility. And one of the things I remember from being a developer myself years and years and years ago and then seeing Agile come in was that when you do your sizing and your estimates of your work it becomes very obvious in an Agile world who's doing more work, who completes more tasks, who your strong players are. And that was scary for a lot of people, but what we learned was that people like working with people who are better than them, that they can learn from. So how does that continue to benefit us in this new environment?

Dennis Bowne

Yeah. So, if you're in an Agile team that's been going through that process of, as a team sitting down and estimating your work together, I think some of that has already played out in your organization. You get that. If you're not, you can still use some of those processes of planning as a group, what you're going to work on, how you're going to work on it, creating some regular communications and transparency among the team members about the progress



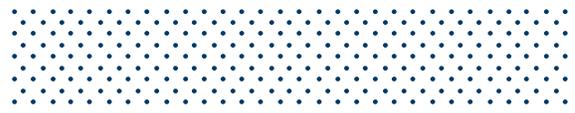
you're making. And that's the other piece that I think supports it, is an Agile principle that we're going to meet up every day, we're going to talk about what we did yesterday, what we're getting ready to do and what's been slowing us down – where our impediments are. I think doing that as teams will create, whether you're in a full-on Scrum or Kanban model, or you're just trying to figure out how to get more work done right now when you're all at home with kids in the background and dogs barking. Instead, think about having that open communication on a daily basis just like you would in an Agile team. This is what I've done yesterday, this is how much got finished, this is where I had problems, how can someone help me fix this? Having those communications creates the transparency in the team. And then I use the term visibility to talk about creating visibility outside the team. So, also reporting up to those stakeholders that are relying on you. Here's what we got done today. Here's what we got done in this period.

Jack Cox

There is a process that a team I'm on started several months ago before the pandemic and that is taking one of the regular standups and turning it into a show and tell. So, once a week, for this team, it's Friday mornings, they do a show and tell where every single developer demonstrates what they worked on that week. And through technical demonstrations, sometimes it's looking at an API, looking at a database schema. But every developer has something to show and every developer gets recognition for the work they did that week. Everybody's invited to attend. Only the developers present, but the stakeholders, product owners, the business, can listen in and see what, how things are going. It's not a high-production formal demo, like a sprint demo, but it's still giving developers recognition for what they built. And also, in a way, holding them accountable to have actual tangible deliverables during that period.

Vinnie Schoenfelder

That's a great point, Jack. I think it's a strong recommendation for people to follow as well. Dennis, the last thing you said on the attributes of Agile was the cadence of regular delivery. Most of our clients have something like a two-week sprint and I think that's really critical now to get to keep people in that rhythm. So, this is to you and Jack, because Jack, I know you're active on a couple of different engagements. Do we expect the number of story points to go down in this environment? I don't assume that we're going to change our sprints from two weeks to three weeks. I would assume that we're going to keep them two weeks. But how does that affect our estimation of what we can complete?



Jack Cox

I would expect story points to go down a little bit initially while people are finding their rhythm for working at home, for dealing with the work environment and the distractions like six-year-olds and dogs and stuff like that in this new work environment.

Dennis Bowne

Yeah, we're already seeing that. Vinnie. Jack's exactly correct. There are teams that you know, either their organizations or just because they chose to do so, moved to this model a little bit earlier. And we're seeing the model now that we have to think about the fact that people aren't just working remote, they're working from home and they have family that are also out of school. They have all kinds of things happening and we have to build in that time and just adjust that our velocity is going to go down a little bit. And that's okay.

Jack Cox

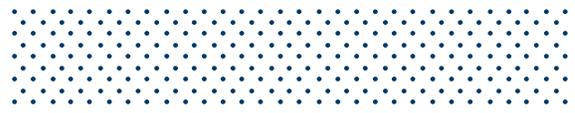
I think there's, there's one thing that teams can do to, to help with that and this is something that they probably should have been doing all along and that is providing known work hours for their developers. So, these are blackout hours where there are no meetings, there are no ceremonies; this is dedicated time that the developers can go heads down and build stuff without interruption. I think it's more important now because not only are they managing the interruptions of the work team, they're managing interruptions of their home team. So maybe they have home school, they need to deal with or family situations they need to deal with. If they have a predictable time during the day, like between the hours of two and five, that's heads down quiet time, then they can plan other things too around that so that that heads down time is truly heads down time. Keep in mind that it takes a developer about 45 minutes to get into a development flow and if he's getting interrupted within that period of time, that's that timer resets and they start all over again. So, give your developers at least two hours to really focus and then their development pace will pick up.

Vinnie Schoenfelder

I think that's a great point. That affects you internally as well because a lot of our clients are over-communicating now, and rightfully so. But it's developers managing more of those internal communications than we, than we used to.

Dennis Bowne

Yeah. The other thing I'll add is, you know, while Agile was founded as a developer methodology, this is going to help the business teams as well. So, the same things apply, thinking about how can we allow our business users that same work flexibility? Office hours is



a term that a lot of people are using right now. If there's a certain period of time where it's ideal for us all to work together, set that in your norms but also allow flexibility. There are, just as you said, with developers, there's a moment where you've built up that velocity. You're excited about doing work. Allow people to work when they have passion. They'll get the best work done in the shortest amount of time and understand that everyone's dealing with different situations. So those office hours shouldn't be binding. But they should be something that - here's our standard, let's try to have some overlap and work together as teams. And during those office hours, schedule actual activities. Schedule a paired program if you're a developer. Schedule a buddy system if you are a business user where you and another person or several people are working together actively.

Jack Cox

Yeah, I think there needs to be some definition because I've been on teams where office hours are defined where we're going to have a complete ongoing discussion constantly, versus quiet time, which is we're not going to have these discussions and we're going to give our developers time to go heads down.

Dennis Bowne

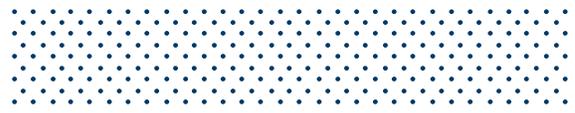
Yeah. That may have worked, Jack, for certain environments with certain teams, especially when they're all in different offices, but they're still in the office. It definitely doesn't work right now when people are at home.

Jack Cox

Yep. One thing that we have found for that environment is creating what we've termed a wormhole where you open up a video chat or a channel and people just come and sit on the channel. There's no meeting agenda. People are just doing their own thing. They've got the video up there. Their mic is muted. If they want to chime in on something, they unmute and chime in and people can respond. But it's like having a virtual office and it's just up and running for a period of time.

Vinnie Schoenfelder

My son does that anyway. So, he'll put his headset on and watch videos and do homework and play games and he's got 10 other friends on there doing the same thing. And they just have their conversations when they have their conversations. So, we could learn a lot from that generation for sure.



So, Jack, let's turn a little bit here because we've been talking a lot about Agile, DevOps or Cloud architecture. Let's talk about some of the more technical side of things and how that has set people up to be successful.

Jack Cox

Okay. I think the DevOps workflow and GitFlow is really setting up people to be successful in this environment. It provides teams ways to very quickly produce deliverables that get rolled into either development, integration or production without having to go through a lot of coordination across the team. So, developers merge their code and suddenly it shows up in some environment. That can be a great benefit, especially if you're at home over a slower network and you don't want to be uploading these large binary assets to a production system.

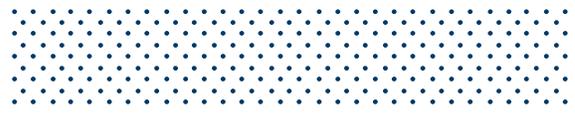
Another thing we're seeing that that can really help people and that's having local work stations. We have some clients where the developers have to remote desktop through a VPN into another environment. That's a very rough environment to work in. Your mouse pointer is about a quarter to a half a second behind your hand. Your typing is about a quarter to half a second behind what you're typing. It becomes very difficult and actually it creates a lot of stress and an internal tension to work in that environment. That slows people down and makes people more frustrated, it creates more friction within the team if at all possible. Let them do development locally where they're pulling the code to their local workstations, doing all their editing and their testing there, or the unit testing there, and then checking in remotely. They shouldn't have to remote desktop to run an editor to actually make modifications to their code.

Vinnie Schoenfelder

Sounds like you have some personal experience and frustrations with that model Jack.

Jack Cox

Yes, I've been on that on clients where we've had to remote into desktops and after about 20 minutes you just want to, you want to throw the computer through the window because it's always frustrating. And then these days with social distancing and everybody working from home, corporate VPNs are getting crushed. So that late, see that was a quarter second on a good day, is now sometimes multiple seconds. We have one client where you've got to be online before 8' clock in the morning to get a VPN slot and then things just slow down from there.

**Vinnie Schoenfelder**

You want to be a responsible user of that VP and a network also. Because if everyone is doing work that way, then you're going to be impacting other people's ability to do their internal conferencing. And so, if you're complaining that your conference video feed is lagging, it may be because your developers don't have remote workstations.

Jack Cox

Yeah, it's the whole, scarcity creates hoarding. Just like toilet paper. If your VPN is scarce, people are going to hoard it and there won't be any for anybody. So, stop hoarding the toilet paper, stop hoarding your VPN.

Vinnie Schoenfelder

Yeah. I can also see how the automated builds automated testing the check. And these are things that just reduce the need for communication as well. So, there's fewer touch points, fewer reasons to reach out. Also, on the automated testing. And I'm thinking, you know, mobile devices, Jack, IOT, things in the field. Does this also help with social distancing that you're not having to physically interact with people for the testing?

Jack Cox

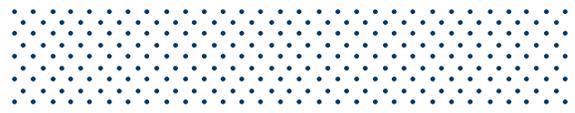
It does help to have automated testing where you're not having it say I'm going to go look at the test, or the tester has to show me his screen. We have a longer test cycle to work through a problem. If you're doing it automated, then you get automated feedback and that that can improve your velocity. It may not increase your team interaction, but it improves your velocity.

Vinnie Schoenfelder

I would imagine, though, at some point we still need to test in the field, right? We can't fully rely on automation.

Jack Cox

Always need to test in the field. Automation is much harder if you're developing new functionality and new screens, because then you also have to write the test for those same screens at the same time.



Vinnie Schoenfelder

So, Dennis, back to you on the Agile stuff. We got specific early on about the attributes of Agile. What are some major themes that real easily summarize, that people can take away and bring back?

Dennis Bowne

Yeah, so the one we talked about already is daily coordination. People are not sitting with their “managers,” they're not sitting together with their team. So, having these dailies allows you to agree on what priorities are, make commitments, and report back on progress. So, they're solving different aspects of the triangle of getting things done as a team. But it also really fights the human impact. The loneliness factor, as you've seen people talking about. Working from home is a new normal for a lot of people. So having at least a daily and, if you need more, have more touch points throughout the day so you're making sure you're supporting the team and keeping them productive – not just driving for velocity and the code and the outputs that they're creating.

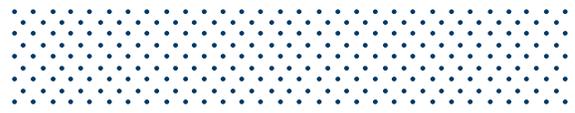
Another piece is that we talked about briefly, but we didn't get into, was having both a flexible and a predictable structure. So, we make commitments, we show progress, we self-inspect, and we improve or make changes. I think that's an important aspect of delivery. There's going to be changes that need to happen. There's going to be impediments like your VPN going down and no one getting in to do development work. How do we adjust for that? Not just say, “I've made a commitment and I'm going to drive to that. Even that means I'm not spending time with my family and my children and taking care of what I need to take care of.” But also, accept those changes, minimize change orders and change pain and create a cycle with your team where, when we have problems, it's not a negotiation. It's, something's wrong, let's make an adjustment, and being very flexible with how you adjust to the change that's going to come down the pike. It's there. It's real. I've got a couple others, but I want to see if either of you have something you want to jump in on.

Jack Cox

Are there Agile ceremonies that you see just not working in this distributed environment and that we need to find work arounds for?

Dennis Bowne

Yeah, that's a great question. So, especially for the more mature organizations that are in some form of scale. So, there's multiple, there's scaled Agile framework, there's Scrum at scale, there's lots of different frameworks where we have more than one team working



together to build something bigger. In those environments. They're used to having very large co-located events, sometimes with over a hundred people working together to figure out what they're doing. Unless you make tweaks to that process, it's obviously not going to work. You cannot fly everybody together. Now I will say that...

Jack Cox

I can't see PI planning with 300 people over a WebEx for two days. That would be a horrible experience.

Dennis Bowne

It's funny because I actually interviewed a client of ours two days ago who's been doing this for two and a half years. They have a safe release train, which is, you know, that's where you have multiple teams working together. I think they have five to seven teams. And they have never met as a team because, in their business, it was extremely hard to get talent, so they got their talent wherever they could get their talent. They don't have a single team that's not distributed and they've never pulled the art together in two and a half years. And there's certain techniques. So, for instance, what they do is they have, every team has a virtual room running all the time. In their case, it's a WebEx room, and they have a single session for when they have – they have a very strict schedule, much stricter than you might in other events. At this time, we're all going to come into the main room and we're going to hear from product leadership on what we're working on, and then we're going to break out because all sitting in a room together, that's not going to work. We're going to go to our team rooms, we're going to plan and come back at regular intervals.

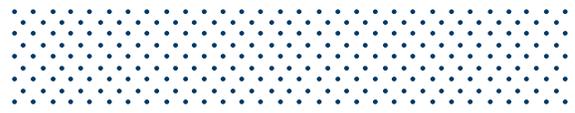
So, there's a lot of techniques on that and both, you know, CapTech, but lots of other people, including the scaled agile framework, have published new models for how you can make these things work remotely. We don't have time to go into all of that. But PI planning and large coordination events are one of the huge pain points we're seeing right now. And you have to change the process.

Vinnie Schoenfelder

Can you guys define a "PI" for us?

Dennis Bowne

Program Increment. And that's where, in most cases, it's about a 12-week cycle. When you have a sprint and you're only working towards sprints, you can often fall into a model of having a very short-term view. So, what we try to do is we try to plan work for longer-term periods of



time where we can see what the roadmap is going to look like. And that's where you're putting multiple sprints together back to back to back. Typically, there's also even an innovation and planning sprint at the end of that where you let your developers spend time working on technical debt, or creative solutions, or thinking about how would I change the customer's experience in the future if I had that bandwidth.

Vinnie Schoenfelder

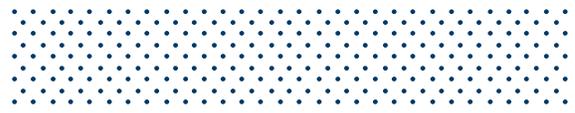
Gotcha. Okay. So, we spun off the summary a bit, which was good. It was good detail. But to get us back on track. Daily coordination, flexible and treatable structure. What else?

Dennis Bowne

Clear expectations. I think we've all seen this when we're working with offshore. That, they're remote. They're not able to interact with us. Often, they have the worst-case scenario of a major time zone difference. You have to be extremely clear and concise in your description of what you need to do. We now need that for all of our work. Maybe not to the same level of detail. We're still mostly in the same time zones if you were used to working together. So, you can get on a call, you can get on a video. But being extremely clear on what you're expecting and using all the collaboration tools that you're exposed to. So, especially during this emergency, think about how do you combat that distance by being very clear on what you're looking for and giving people the ability to actually develop the things you or you as a business customer are looking for when you're not in the room with them.

Another piece is, and it's part and parcel with that, is break your work down into small chunks. A big work block like you would see in a traditional project plan that might take six weeks, that's going to be extremely hard for folks to work against. It's like the big mountain. Instead break it into smaller rocks that your teams can work on. Agile has been pushing people to do this for years, but this is a new concept for some, some groups we're working with. So, think about what's the smallest unit of value I could drive? Can I get some value in two weeks? Can I break this down into something that can be done in a day so they can come back tomorrow with a feeling of accomplishment and I can see the output?

And then, obviously, the last thing, and we're all talking about it now, is highest-quality interaction possible. I think we talked about this briefly earlier of, how do you take turns when you have got 15 people all on an audio call? It's very difficult. Default to the highest quality. And so, for instance, high quality in person is always going to be highest quality – you can't do right now. Video is next because you get visual and audio cues, then audio, then chat because it's synchronous, and then you get all the way to the asynchronous side with email. Email's



probably the enemy right now. We're all getting tons and tons of it. Move upstream from that.

Vinnie Schoenfelder

Great. So, I'm going to read back my notes on that so that we can be very clear with the summary, a daily coordination, flexible and predictable structure, clear expectations, small achievable blocks of work, and default to the highest quality interaction today. Did I get those?

Dennis Bowne

That's my advice and that's what we're seeing working right now.

Vinnie Schoenfelder

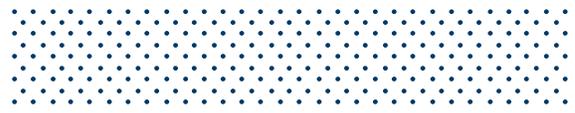
So, what tweaks then? Because you know, we've discussed doing the right thing with regards to methodology and architecture and that puts companies in a very strong position. And some of the things you're talking about now relate back to how you started, Dennis, where you said you don't have to undertake a huge Agile transformation if you're not there. But you can listen to the summary we just reiterated and start to pull some of those things in. I'm thinking about the role of leadership. I'm thinking about the emotional state of our employees feeling isolated. What are some other things we can do as leaders, as project leaders, as teammates, to go one step further understanding that this is a really difficult time for a lot of our workers?

Dennis Bowne

Well, I'll start, I know Jack has some opinions on this too, but I think role of leadership is one that's very important right now. Lead by example, you should be making commitments just like you're asking your teams to make commitments. Resolve problems quickly and think about your role as a leader. You're not driving the team, you're driving *with* the team through this journey. And I think that changing that mindset and focusing on that kind of relationship with your team is going to help them through this journey. So be positive and move with empathy. Jack, I know you've got some thoughts here too.

Jack Cox

Yeah, on the technology side – get your team the tools they need to be able to work well remotely. Again, that goes back to good VPN, developing locally, having network capacity to do this kind of video chatting. If people don't have, if your standard laptop has a crappy microphone, get people good microphones or good webcams so they can have that high-quality interaction.



Vinnie Schoenfelder

Yeah, Jack, I'll add – because we didn't get too much into Cloud or architecture as much – but let's talk a bit about allowing people, especially if they're innovating or doing new projects or doing MVPs, being able to spin something up in Azure or AWS is far easier than acquiring and partitioning on-prem hardware.

Jack Cox

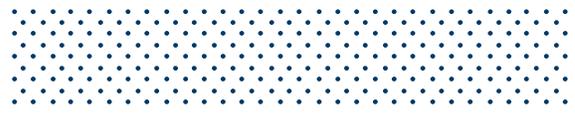
Yeah. Now is a great time to just try it starting or try out the Cloud if you haven't already. And now is a great time to look at containerization so that your developers can stand up, locally, versions of your environment within dock containers and not have to worry about getting into on-premise machines or setting up a lot of infrastructure. There are ways that you can provide every developer their own AWS account with full privileges in that account, but with a limited budget so that they don't accidentally go off and spend thousands of dollars copying the entire internet into the AWS region, know to enter their Cloud region. So, look at interesting ways to give your developers those tools and that access to the resources they need to quickly spin up environments to quickly do tests - to do load testing. A lot of times we need to do performance testing on systems. That has always been kind of an on-premise thing because you need lots of network and hardware. In this environment, you can use the cloud for that if you have your infrastructure running in the cloud.

Vinnie Schoenfelder

Yes. Another example of doing things in a well-structured way, paying unexpected dividends. You know, I'm thinking containerization, microservices, serverless environments. Gosh, that makes it a whole lot easier now to work on what you need to work, test what you need to test, and deploy what you need to deploy without all that added complexity.

Jack Cox

If you have a microservice environment where every container is half a gig instead of 16 gig, you can stand those up locally and stand up a small subset of your system locally to run those tests. There's another thing that I've seen; we have clients who have IT management processes that require certain IT processes to be done when physically connected to the corporate network. Those processes can't be done today because of their corporate offices are closed and the need for social distancing. So, if your employees need to be on a corporate network to change their password, that's something that needs to be corrected extremely quickly because, in a couple of weeks you'll have people timing out passwords and they can't get back to the office to change them.



Dennis Bowne

Yeah, I haven't even thought of that, Jack. That's a really good point. I think one of the other things that we're saying is, and to take it back to the non-development teams. Using the collaboration tools you already have in place. Expecting your organization to bring in a whole new set of tools right now – it's going to be difficult. So, thinking about, what are the tools that you have? An example that we had just a few days ago I was, I was working with a client that they were emailing back and forth documents and changing and having to merge. When we're in this environment, having active collaboration tools, if you have them in your organization, start using them so that more than one person can work on a document. It's managing that version control for you. That can be anything from an Excel file, wikis, whatever you're building right now, use that tool instead of creating more work on the integration side. It's incredibly frustrating for a business analyst if they've been working for an hour on a file and they go to check it in and someone else has already done it and they have to go through that file.

Jack Cox

I would suggest that you poll your teams to find out what they're currently using public because they've probably already found their own solution to that problem. So, find out what they're using, what works for them, and then look at making that a more of a corporate standard for, for solving these tactical problems for working from home.

Vinnie Schoenfelder

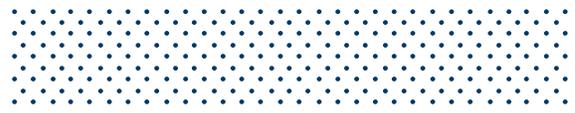
Let's be specific and name some. So, what tools are you using, Jack, from a collaboration standpoint?

Jack Cox

We've been using Teams, which is built based on SharePoint. Teams is SharePoint all the way down, kind of like Turtles, Turtles all the way down. So anytime the document is stored in Teams it can be instantly collaborated on by multiple people. Using a lot of Git and doing it our source code in Git, because then we have a very strong capabilities to do conflict resolution. Some of our clients are using Slack. Slack doesn't have, I don't think it has as robust document sharing and document collaboration as Teams does. Google Docs has great collaboration tools. Sharepoint.

Vinnie Schoenfelder

Confluence.



Jack Cox

Confluence. Yes, there's setting up a Wiki and using the Wiki features to rather than Word.

Dennis Bowne

Yeah. I think one thing I'll add is even if you don't have some of these tools, we're seeing that some of the manufacturers like Microsoft are making their tools available to people in this time of need. So, it's worth looking into. I will say Teams is an example. They hit multiple touch points. So, you can do document storage and sharing, you can do chat and collaboration, you can also do video. So, we're seeing a huge push. A massive number of organizations that have Microsoft licenses are jumping into these tools in a new way where they hadn't before. But you also have those point solutions. You've got WebEx, Skype, Zoom, Google meetings, Go To Meetings. There's lots of tools out there. But assemble what you have is the advice I'm giving folks. Use the best tools that you have in-house. If you do have a tool like Teams that allows you to go to one place and build a community of collaboration, do that.

Vinnie Schoenfelder

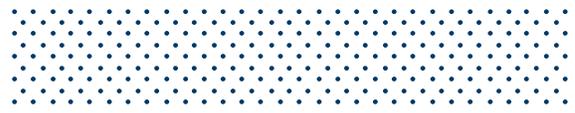
Great. So before we wrap up, are there any points, additional topics Jack or Dennis that you guys wanted to touch on?

Dennis Bowne

I've got two. So, one is we can often think about our team unit itself, like the group that's working, in other words, a development team or a business team and not include up and downstream stakeholders. So, they don't have visibility into what we're doing. They have less access. So, really think about that interaction. Value the ecosystem within your organization. See how you can make sure that those stakeholders are aware of what's happening and can be involved when they need to be. And additionally, record decisions. What's happening now is that we're having a lot of decisions that happen between two people who get on a WebEx or get on a phone call and it's not communicated out. So, think about if you're an Agile team being very religious about updating your story cards. If you have chat, Notes, a Wiki, keep track of decisions that are made by different members of your team throughout the day and throughout the week. Social distancing is going to decrease group awareness and you need to plan for that.

Jack Cox

I would also say that as far as your processes, your internal processes for managing your equipment need to be very consistent and group based. What we see at some clients is that permissions on laptops for missions inside the environment aren't given onesie twosie and



every person has unique configuration and that creates problems. And when you're in a corporate environment and everybody's sitting in their cubes, it's easier to resolve those problems. At home when somebody suddenly can't get to a certain resource because they don't have the same permissions as their coworker who is doing the same job, that's a lot harder to resolve remotely. So, really look at how you're provisioning people, how you provision permissions, make sure they're group based, makes sure that you're providing people consistent environments so that you don't have weird one-off problems occurring with people who are isolated.

Vinnie Schoenfelder

Great. I'm going to wrap up with my final thought. And that is, don't panic. We have the right tools and methodologies to allow us to continue successful delivery. If you're a bit behind the adoption curve in some of these areas, treat this as a wake-up call. This can be a catalyst to start introducing some of these things into your project teams. As Dennis has said a couple of times, you don't need to do a full transformation either on the methodology or the architecture side. But by putting these things in now, you can demonstrate success. These are things that we won't pull out when the pandemic is over. These are things that will continue. These investments will continue to pay dividends beyond our current situation. So, it's a good time to take stock of what you have, what you're doing to improve it, and then get that cadence going and you'll be better for it in the long run.

Dennis and Jack, thank you for joining us today and for everyone out there, please be safe. Take care of your families and we'll get through this as best we can.