

Episode: 56

# Ajoy Krishnamoorthy



## Mike Merrill:

Hello, and welcome to the mobile workforce podcast sponsor by AboutTime Technologies and WorkMax. I'm your host, Mike Merrill. Today we're sitting down again with Ajoy Krishnamoorthy. Ajoy is the executive vice president of products and chief strategy officer at Acumatica, a leading cloud ERP provider.

In case you missed it last time, Ajoy and I spoke on episode number 40 about the internet of things, otherwise known as IOT. We're going to talk a little bit more about that today and how it's impacting the construction industry and also its relationship with not only AI, but how companies can best approach investing in these types of technologies going into 2022. Thank you Ajoy. Appreciate you having on again.

## Ajoy Krishnamoorthy:

Awesome. Good to be back again, Mike. Thanks for having me. I'm assuming I might have said one or two things that are reasonable last time.

## Mike Merrill:

You did. That's why we have you back. Good for you. This is all your fault.

## Ajoy Krishnamoorthy:

There you go.

## Mike Merrill:

For the listeners that maybe don't know what IOT is, could you give just a little bit of a background or explanation of that?

## Ajoy Krishnamoorthy:

Absolutely. In a simple way, if you think about IOT, it's all the sensors that we see everywhere. We are all starting to see sensors even come up in our home

environment. Going back to the garage door, we had a sensor that detected if there's any object in the way before you can close the garage door, for example. It's as simple as that in some cases.

But if you think about organization, if you think about the commercial industry, if you will, the analysts are predicting a huge takeover of use of sensors in different ways. We're seeing this across multiple industries, construction, agriculture, manufacturing, distribution, so on and so forth. Whether it's for simple things like sensing soil moisture level or the level of fertilizers in the ground to tracking particular machinery. We've seen this in some form of electrical occupants, in HVC units where it has sensors to keep watch on the temperature of the unit. If it goes above a certain threshold, you want some notification to go on so we can do preventive maintenance rather than having to wait for the machine to go down and then come back and do a firefight at the point in time.

At the end of the day, the sensors is all about giving you data and insights that might help you prevent an accident or prevent machinery failure or in the case of agriculture, understanding the moisture level in the soil and decide whether you need to put more water turn on your irrigation system or turn it off.

IN the case of construction, we're seeing that as well, where companies are starting to use it, even simple things like putting tags on them on the big machinery and equipment to start tracking, like I said, health of the machinery, calibration needs, utilization in some cases and so on.

## Mike Merrill:

That's a great explanation. That really boils it down good. I think most people will get a better sense of that from your explanation there. Thank you for that.

Tell me this, for construction heading into this coming year, I mean, we've had an interesting year. What's your

hot take on 2021 and kind of where things have landed here coming into Q4?

### **Ajoy Krishnamoorthy:**

I mean it's been an interesting year, but also a pretty coming out of the pandemic, I don't know if you can say coming out of pandemic, but obviously the challenge we had in 2020, and then transitioning into 2021, a lot of the organizations have definitely realized the importance of investment in technology as a whole. What we have seen organizations in the past that takes a lot of time, it's like the decision by committee, for example. They can't get to any, and prioritize the investments if you will. That shift has happened where a lot of the organizations have moved forward.

I may mention this in the last time we chatted about, or maybe not, but what we have seen a lot of the organizations go through this, and it's one of those silver lining with the unfortunate events that we had with the pandemic, is that organizations are now very nimble in making some of those decisions. One of the things I had, I was doing an interview not too long ago and the person asked me the question, what are one of the key takeaways out of this? My suggestion to the industry is that don't lose that mentality. It's almost like running a two minute drill in football.

In a lot of cases, we have seen coaches use the two minute drill when it's least expected. That takes the defense completely is all confused because you're not used to that. Sometimes getting that type of strength, building that, of course, we all have to do it out of necessity. We have seen restaurants go through this transformation after having the same experience like you and I, now we go to restaurants. Now it's all QR code. You scan the QR code, menu shows up, and then you pay within your mobile phone.

Imagine that even 18 months ago, something like a restaurant to go through would be a 3, 5, 10 year process. Same thing in education. My kids were all doing online schooling and they had all kinds of infrastructure and technology put in place and all within a span of six months. Something like that would've taken a decade. I mean, this is the school system work for fundraising. They were still doing a bake sale. They can't even accept PayPal.

Then going through this pandemic, they adopted a lot of this technology at a rapid fashion. That's what we are seeing and that's true for the construction industry as well. I mean, construction traditionally have been later from a technology adoption, but we have seen companies adopt, obviously from Acumatica standpoint, it's the cloud ERP and then obviously the systems like automated time entry system, back into payroll, core job costing and field operations and so on.

We've seen a good traction and we expect that to continue even more going into 2022. Then the generation coming in is demanding newer technology in terms of experience, how they interact with the system at mobile, with the stuff like we are talking about with IOT and machine learning and so on.

### **Mike Merrill:**

That's a great parallel to draw between the kids learning in school and how quick that happened and restaurants. I love how you mentioned construction is taking advantage of some of those changes that have been made within the rest of our lives. I'm excited to see that happen just as much as you are coming up.

Tell me this, in terms of Acumatica, obviously being a cloud ERP provider and your large focus in construction, what are you seeing companies enjoy the most now that Acumatica is really got a good footing in the industry?

### **Ajoy Krishnamoorthy:**

I mean, I think the key value proposition is obviously running in the cloud and this is what we see a lot of companies come to us through the transformation. The fact that they could have organization in a team members run and have access to the data from anyplace, anywhere, especially as we went through remote work requirements and so on. That impacted the construction quite a bit as well because of construction is onsite. There's no remote. You got to be onsite. You're building stuff.

But then the back office, which is where ERP comes in, how do you deliver that value from a remote setting? Majority of the organizations haven't thought through that because they were always used to being in the office. The crew meeting happens first thing in

the morning and the crew leaves to the job site, and then you're sitting there finishing up all of the back office work.

But then when this whole remote requirements put in, a lot of the team members have to work remotely. One of our customers talked about the challenge that they went through and how they have to go and get IT provider for VPN access and so on and so forth.

We're seeing obviously a lot of construction companies coming on and taking advantage of the being in the cloud and having ability to access the data from mobile, from a web browser and so on. But then more importantly, if you look at in a construction as an industry, it's not just about the ERP, but it's also other services and applications like the application that you've got, Mike, with the time entry.

We have a scheduling system, we have a weekly equipment tracking system. We've got project management and field operations. One of the thing that they appreciate as a value is the ability to connect with all these systems seamlessly. Acumatica supports open open API, provides an easy way to connect and use all of the system.

One of the things, I don't want this to sound like a sales pitch for Acumatica. One of the things that we take pride in is being very focused on technology, not technology for the sake of it, but applying that to specific business problems that our customers have.

One of the things that we have done as part of that is investment into in a machine learning and AI. I mean, data is king. We've all seen all of these white papers that talked about how data is the new oil and all that good stuff. But at the end of the day, we all are exposed to a lot of data, but then what do we do with that data? How do you separate the signal from the noise? You can take some insights and that becomes really a key value asset for you to go take some actions on.

Traditionally a ERP used to be called system of records. I want that to be called a system of results. System of records is old way of thinking. No, seriously. You get all these data into ERP, now how can I help our organization be more successful with it?

We have started doing work on things like we brought in machine learning to do recognition of documents, for example, with AP. When somebody submits an AP document via an email as an attachment, typically what employee does is they have to manually key it in. Now you can just literally drag and drop into Acumatica and we have a recognition system, not only takes a simple invoice, but a complex invoice with Taber listening. It can automatically detect, identify the vendor and then attach it to the PO as well with the PO identification. That saves time for somebody.

**Mike Merrill:**

Sure.

**Ajoy Krishnamoorthy:**

Same thing with expense. You can take the expense receipt, capture an image, automatically get into our claims process. It saves time for the person who's creating it. It also saves time for the accounting team because they don't have to review and audit a lot of them because they know what comes in is actually at a very high quality, from a recognition standpoint. There's no fat fingering going on, if you will.

We are constantly doing a lot of that and then continue to push. One of the things that we're working on right now is the anomaly detection, ability to look at standard transactions coming in. Let's say, if I'm a construction contractor, I've got a particular project and there's a line item where the cost is completely out of whack. Maybe it's a fat fingering, maybe it's a wrong assignment of code. The system be able to alert and say, "Hey, Mike, this doesn't look right. You may want to just go look at it," rather than having to spend 40 hours reconciling all the records, put your focus on the main ones that have the most impact to the business.

**Mike Merrill:**

That sounds like system learning or machine learning really. Right?

**Ajoy Krishnamoorthy:**

Exactly. Now machine learning and it's augmenting people. I mean, a lot of people are concerned about AI and how AI is replacing people and stuff. We view

this as an augmenting thing. It's not replacement. Computers are good at calculating much, much faster than we can. They can identify patterns much quicker. How do we put that to a good use where so that way I don't have to worry about those mundane activity? Whereas as an user and as an employee, I can go work on some high value tasks rather than having to look through line by line and identify any errors.

**Mike Merrill:**

I saw recently I got a notice from Acumatica about an enhancement of functionality of interacting with the PDF. I think you can annotate or get some data from a PDF and work within Acumatica. That was kind of exciting to see. I know there's a lot of companies that'll enjoy that.

**Ajoy Krishnamoorthy:**

That's a classic example where we can do this today in two different systems. You can obviously open up PDF and annotate separately, and then you can dump it, bring it back into Acumatica. What we did was we basically provided that experience within. If you attach a drawing log, for example, into Acumatica construction, you can open up the drawing log or a sales order or a purchase order and start making note, annotations and comments and corrections. Not only that, it automatically saves a version with audit can control so I know who made the comment, who made the changes or updates or a strikeout or whatnot. Again, it's all about saving time and making the employee the superhero. We want our users to be the superheroes.

**Mike Merrill:**

That's great. This is a great real world example of again, more of machine learning and where the system is actually trying to determine whether something looks right or not without a human brain having to decide on their own right or find it.

**Ajoy Krishnamoorthy:**

That's right.

**Mike Merrill:**

That's great. As we're going into 2022, what do you think some of the more impactful things that are coming down the pike that companies can be leveraging that maybe they're not right now?

**Ajoy Krishnamoorthy:**

I mean, I think the key one, especially given we're talking to the construction industry and the customers in that space, I feel like we're still not as data driven as we need it to be. There's still a lot of tribal knowledge, if you will, whether it's like I talked about the anomaly detection, tracking, project expenses, labor hours, even things like estimating a project, how do we course, identify errors if a particular estimation comes in at a higher value and you close the project, how do you go back and do a 360 loop on that to say when we completed the project, this is what it costed?

Of course, there's lots of change outers going in, which is obviously a key thing for the construction as an industry. I think I expect to see a lot more of that starting to happen in 2022 with us being in a more data driven. I think applications like Acumatica is going to play a key role in bringing that value to market.

**Mike Merrill:**

I think what I've enjoyed most about our relationship with Acumatica so far again, is that you are so forward thinking and progressive. I think you're helping lead that charge to get the industry out of the prior decades of technology and getting them into the future and into the cloud where life is better.

**Ajoy Krishnamoorthy:**

I mean, there's a lot of initiatives like that. It's not just unique to us. I appreciate you saying that. That means a lot. You've spent a lot of, couple of decades. Maybe I'm showing your age here by saying that, but you've spent quite a bit of time in the industry. You've seen what has and has not happened in the industry. It's great to see the adoption.

Some of that is driven by the workforce coming into the construction space as well. We're seeing a lot of young workers coming in, taking over for their uncles and aunts and moms and dads, and they're demanding

certain level of experience behavior coming out of these applications. That's what we as a software provider and I'm talking collectively here we have to commit to that, to this industry.

Again, the bottom line is there are many initiatives that are happening, and I'm aware of that are obviously coalitions that have formed, that are setting up industry standards, which we are also participating in. It's the rising tide lifts all boat. We need that as well, where we need to bring up the industry from a technical adoption standpoint so it makes the organization function more efficiently.

That's what I think we are contributing a little bit to that, and we are pretty bullish about this as well, because there's so much to do in front of us. I think in 2022, you will see us specifically taking a move towards investing and providing feature set that considers the big data and the machine learning capabilities into the solution set. I expect a lot of the other software publishers and our partners to do the same.

#### **Mike Merrill:**

I think one of the things that I do appreciate working closely with Acumatica on is that you really do have more than a decade of experience in other industries. You're bringing that domain knowledge and that expertise into the construction space while you're making the product itself construction ready as well. I think when those two meet in the middle, it's going to continue to be something special and something that's much needed within the construction space.

#### **Ajoy Krishnamoorthy:**

We have people in the team that have decades of construction experience that I've been working on this for the last six plus years. We launched a construction edition in 2018, like you said. The core financials, project accounting, we've been working on it for about 13 years now, since the company got started. That's what forms the foundation. We've got successful customers have taken on GC subcontractors, specialty trained contractors, live one Acumatica and continue to accelerate and drive adoption. It's fantastic to see.

You're right, this is not just about looking at this from a feature function. You talked about different additions

and so on, we're starting to see our customers, a lot of construction companies, they also have inventory. We have a very strong strength in auto management purchasing requisition. We've got that capability and we are starting to see good traction with the companies that are doing prefab. They're manufacturing and then going into onsite and building and assembling.

Now you can have manufacturing and construction all at the same database, same application behavior. It's a lot easier for organization to say from a production order all the way down to a project delivery, can I promise the schedule and can I keep up the promise of the schedule when I'm actually doing a prefab work before? That's the type of stuff that we're seeing adding a lot of value to our customers.

#### **Mike Merrill:**

That's fantastic. Well, we appreciate the good work you're doing, and we look forward to continue to work with you into the coming decade.

#### **Ajoy Krishnamoorthy:**

Awesome. Well, thanks for the opportunity again, really appreciate it and great talking to you all. I know it's the episode in the Q4 end of quarter is always crazy and fun and so on, but wish all your listeners a great finish to the year and an amazing 2022.

#### **Mike Merrill:**

Thank you, Ajoy. I appreciate having you on again and we'll do it again in the future.

#### **Ajoy Krishnamoorthy:**

Sounds good.