

TRAILBLAZERS TALK

Ravi Kumar S,
President, Infosys,
with Matt Calkins,
Founder and CEO,
Appian

Ravi Kumar [00:00:12]

Hello everyone. My name is Ravi Kumar, President at Infosys. Welcome to this new chapter of Trailblazers. Today, I have a very fascinating founder and CEO of one of these new age software companies called Appian. Appian is a big partner of Infosys. Appian is a 'no-code' platform. It was actually born as a low-code platform, we'll talk about it today. It has been in existence for many many years. In 2017, they went on a successful IPO. Matt Calkins, the founder and CEO is our guest today. He started this company in his basement and is now one of the most successful low-code/no-code platforms in the market today. Matt serves on the Northern Virginia Technology Council and also on the leadership council of Virginia Public Access Project. He's a big enthusiastic player in the in the board games and his most times finished as a topper of the World Boardgaming Championships. Welcome to Trailblazers, Matt, thank you for your time today.

Matt Calkins [00:01:34]

Ravi, it's a pleasure to be here. Thank you for inviting me.

Ravi Kumar [00:01:39]

Thank you, Matt. Matt, you know, just before I jump into the business side of our show, just wanted to check, is there a connection between board games and writing software? You know critical thinking, I kind of think about pattern recognition, problem solving, they are so important fundamental traits of board games.

Matt Calkins [00:02:04]

There is, yeah, you're right. There is a connection, there definitely is. Of course, board games and software are both logic but more importantly there's a connection between board games and running a company. The way I like to write board games - I start with a historical situation and then I boil it down to the essential causal relationship. So, my last one, for example, was about building an airline in the 1930s. And in order to write that, I researched airlines and the evolution and how they made money and what they were afraid of and how they competed and that allowed me to give as a game a kind of a reduced map of what it was like to be an airline CEO in the 30s. And so, board gaming, creating a board game is like taking a complicated situation and realizing its essence. And I think that running a company is often the same way. You have to take a complicated situation and grasp the importance or the primacy of certain factors and steer your organization accordingly. So yeah, I find a lot of commonality and I'll also say that playing a board game is a great preparation that anybody can do, even if you don't want to write board games you could still play them and build your skill at finding feedback loops. I think that's something that everybody in business should be doing is finding the results, realizing the results of their own efforts. And a board game is better than anything at telling you the results of your own efforts because within a couple hours you've won or lost. Ideally, you'd be seeking feedback loops in everything you do, including your career.

Ravi Kumar [00:03:27]

And Matt, you know, just say, just following on this. Board games, historically, were very analogue, you know I grew up in India where chess is a very popular board game and we are now getting into an era of Roblox which is taking creativity to homes. Do you see board games going very digital and virtual and very disbursed into homes of people?

Matt Calkins [00:03:52]

I think so but I hope they retain the social element because I think one of the wonderful things about a board game is the interface with other people, you're not just interfacing with a mechanism, you're interfacing with people as you all mutually interface with the mechanism, the logical mechanism. And as such, it's a great social experience, a great interaction experience in addition to being a great mental challenge. So, I hope it retains that even as it makes the leap to the digital format which inevitably it is doing.

Ravi Kumar [00:04:20]

Thank you so much Matt. I completely agree with you. In fact, I do believe even if workplaces go virtual, they draw social capital from the physical interactions we do. So, I'm completely with you on the fact that board games almost actually draw social capital as well. Switching gear, you started Appian 20 years ago and you started when the low-code revolution did not exist. You, kind of, now are in a spot where the low-code revolution is happening and you are in the middle of it. How did that happen? How did you envisage a platform which is very counter intuitive to what enterprise software was 20 years ago?

Matt Calkins [00:05:05]

Years ago, I came across an idea, maybe 15 years ago and I steered the company right at it because I loved the idea and the idea was that you could build software by drawing a picture, by sketching a flowchart and then that flowchart would become an application. I thought this is so powerful. This is a humanizing, liberating, empowering concept, we're going to make it easier for people to specify how they want the machine to operate, how they want software to run and how they want to change that software. It's just such a liberating, powerful concept. I thought that's what I want this company to be about. And so, as soon as we found out about this idea, we developed it and we pioneered it. We led that industry, that industry used to be called BPM and some people call it workflow now but it is, it has become low-code. The essence of low-code is workflow, which is to say drawing a flowchart and making that into an application. It's a very human way to communicate with a computer. And it's a highly efficient way. By communicating with a machine in human terms instead of in machine terms, we liberate people to make fewer mistakes, to move more quickly, and to make changes later on. It's a, it's a very human concept and we've been on it for 15 years and we've been a pioneer and a leader, even in the market that was the precursor to low-code, but we're also the leader in low-code. We're the first and I think still the only company to go public as a low-code firm, four years ago and we own low-code dot com. So, that proves it. And we also, I think out of the pure play low-code firms, we got the most revenue, we got the longest history. So yeah, we're right in the middle of it right now.

Ravi Kumar [00:06:41]

So, Matt, thank you so much, you know very fascinating, very fascinating story. In fact, I would come to fast and speed in a bit, the way you described it. But tell us a little bit - how does this work in terms of the internal mechanics? You almost say, a user can tell what the app needs to do and the Appian ecosystem or the toolkit will get the app done, which essentially is talking to the machine. How does that work, in the sense very contrarian to enterprise software in a way?

Matt Calkins [00:07:17]

There's a reason why low-code is the new way to build applications and why it has become so popular after the tumultuous year of 2020, when businesses learned how important it was to be able to adapt to change. Low-code does two simple things for you and they're both based on the fact that low-code is workflow. Number one is low-code is fast - it is quick to draw a workflow flowchart and to change it and that speed allows you to get to market far faster with your application than you would have otherwise. The second thing you can do with low-code is you can bring together all of the resources in your enterprise. You've got different kinds of workers and different kinds of assets. The workers now not just people anymore, now you've got AI, you've got RPA and you can bring all of those into your flowchart as easy as dragging and dropping. And then you can also bring into your flowchart things like data, no matter where it exists in the enterprise. External systems - we make that easy. The flowchart paradigm makes it easy to drag and drop new connections, new data sources, new worker types and low-code ends up being a unifier of the enterprise and an actualizer of latent assets. Those are the two primary things that you get from low-code today.

Ravi Kumar [00:08:37]

And Matt, help me understand this. When you meant faster you meant maybe 10 or 20 times more faster. (Yeah, up to 20. That's what analysts say.) 10 to 20 times?

Matt Calkins [00:08:49]

Yeah, that's right. And I believe that's accurate, from what we've seen that that is correct. You know and this is so necessary. I made a prediction a little bit more than a year ago. At our end of 2019 meeting, I said in the decade that is about to start, the majority of the world's applications will be written in low-code. At the time that sounded pretty bold, I'd say one year later that's not bold at all. The analysts are lining up to say similar things. Forrester says that by the end of '21, three quarters of companies are going to be writing in low-code. Gartner is predicting most applications being built in low-code with just a few years from now. I think that now that's come to be acknowledged as mainstream. There's really two reasons. One is the crisis of 2020 and the need for speed that it taught all businesses. But the other is simple trends. The world keeps wanting more software, the world doesn't have more developers and so we're gonna have to make more software with the developers we have. We have to be more efficient. One developer has to equal more applications than they used to. And so, we're just going to need an increase in the efficiency function and low-code is that increase. So, I believe for both reasons because of the crises last year and because of the long-term trends and the shortage of developers and the need for more software. I think both trends necessitate low-code.

Ravi Kumar [00:10:13]

In fact, Matt you know you picked on an important point. 2020 is an inflection point in a way because businesses have to change faster. But businesses are also tested on the boundaries. So, when you write something which is tight, you cannot actually test to the boundaries, you cannot actually be sentient enough to dynamic changes in the market. And the 2020 health crisis has really pushed enterprises to completely stretch to the boundaries so power to change as you spoke about is equally important. And most companies are wanting to be prepared to the next unknown

unknown as I call it. And as much as it may be fast, it has to be power to change. Just pivoting on one of the other topics you picked up, enterprise software 20 years ago had guard rails because they had a small set of developers which built and a large number of consumers. You are setting up a new revolution where producers are going to be consumers, consumers are going to be producers and that means there's a huge amount of work needed for a common user to be a power user, if I may, who has the ability to self-serve software. How do you see that change being enabled?

Matt Calkins [00:11:35]

Yeah, I think that as we empower people to create applications with less and less impedance, you're going to find more and more people who wish to create applications. Now, I want to clarify where Appian belongs in the low-code universe. We belong at the top of the pyramid; Appian serves the largest organizations. We're the platform for the most important, most scalable applications. We are, therefore, not the platform for the applications that would immediately be used by citizen developers or, I'm sorry, are created by citizen developers. If they had the keys, this is not the first thing they would build. However, that's the trend of the market. And someday we're all going to be there. We're going to be empowering everybody to write their own applications. I also want to address what you said right before that - you talked about speed and how 2020 was a test, a difficult time for organizations, pushed them to the boundaries, as you said. That is true. It was a speed test. Many organizations failed. All organizations learned how incredibly important it is to be prepared to change your behavior in times of crisis or opportunity, or shifts in regulation, or whatever it is. We will never go back to not expecting agility from our organizations. But it was an essential year for a technology that facilitates speed. For example, when the pandemic first hit, we were, to my knowledge, the first organization to have a Covid safety application on the market. And I say on the market because we were giving it away. We gave it away to a 1000 organizations and because low-code is fast and because we are leaders in low-code, we were able to create a Covid safety application immediately, and then we gave it away and we disbursed it as broadly as we could - to organizations hoping that they could protect their own workers and keep their workplaces safe. With this application and it was broadly used, right, many examples, the National Health Service in the UK used it to protect their health workers and their patients in London and many other places. I'm really proud of that, but it just showed the importance of responsiveness, how important speed is. I don't think we'll ever go back. I think speed became in 2020 an expectation, agility became an expectation for software and that's never changing. From now on, software must be flexible and that's an exciting new world, because for a long-time software has held organizations in the past, locked them into old patterns of behavior. And I think that's broken now.

Ravi Kumar [00:14:03]

And Matt, just to follow on on this and I just wanted to squeeze in one last question on this. As this space becomes more mainstream and more ubiquitous as we evolve, do you see consolidation in 'low-code, no-code' platforms and do you see a sub-category evolving, because there is so much fragmentation in the market today already? Where do you see this going from here?

Matt Calkins

Well, that's a good point. There is going to be consolidation and I don't mean so much consolidation in terms of vendors acquiring each other, though I suppose there's going to be some of that as well. I mean consolidation of concepts. Low-code is already consolidating, like what used to be BPM, and what used to be workflow, that's low-code now. But I see one more essential consolidation happening right now. In fact, I even said it as part of my definition of low-code. I said you've got to be able to unify the assets in your enterprise and bring them into the workflow. What good is a workflow if you can't bring things into it? The ability to coordinate the various assets in your enterprise is an essential expectation of low-code. You haven't realized the full power of low-code until you can use it to access, utilize the many assets in your organization from people, RPA, AI to data to external systems – low-code is going to be a vehicle for bringing together the various assets in your organization, which heretofore has come under the term automation. In fact, sometimes when I say what Appian is, just to emphasize the importance of this kind of cross enterprise unification I say, Appian is in the low-code automation business because automation implies this accessing of various assets and bringing them together. I believe that's the next major consolidation we're going to see. Low-code and automation are going to be effectively the same thing 12 months, 24 months from now and we're going to continue because this is a big new idea and big ideas tend to expand to fill the space available so low-code is not finished but that's the next convergence you're going to see.

Ravi Kumar

Thank you, Matt. That's such a fascinating conversation we have had today and what a fascinating company you're leading at a time when we are at an inflection point where 'low-code, no-code' is going to be more mainstream, enterprise software is going to be embraced and consumed much more. And I actually believe that we're going to find ourselves in a world where producers are going to be consumers, consumers are going to be producers of software and the guard rails of traditional enterprise software is going to be unleashed. And you're going to see infinite value and infinite consumption of software with this phenomenal journey you've started on and I'm hoping more enterprise software companies follow suit. And thank you for spending time today with us.

Matt Calkins [00:17:16]

Ravi, it's always a pleasure speaking with you.

Ravi Kumar [00:17:19]

Thank you so much. And thanks for your partnership. Thank you.