EPISODE 902

[INTRODUCTION]

[00:00:00] JM: If you work at a large enterprise, you probably interact with a lot of software that feels outdated. This is especially true when you compare enterprise software to consumer applications, like Netflix, Instagram and YouTube. With consumer applications, the interfaces are well-designed. The networking logic is fast and the software is pleasant to use.

When consumer software starts to feel outdated, consumers quickly abandon that software and find something better. As time goes on, enterprise software users are starting to have the same high-standards that consumers have. Enterprise software is going through a period called the consumerization of IT.

The consumerization of IT is led by newer enterprise software companies that build tools for common business applications, such as accounting, human resources, expense reporting and logistics. These newer companies build their software with an emphasis on user experience, performance and attention to detail.

Monday.com was started in 2012 with the goal of making software for managing business workflows. A business workflow is often something that is specific to a particular company. It might be some workflow involving a transaction system together with warehousing software, or a payment system together with a designer's workflow.

Monday.com is a flexible piece of software for managing these different kinds of workflows, and Eron Zinman is the CTO and cofounder of Monday and he joins the show to describe the vision for Monday and how the product fits into the changing enterprise software trends around APIs and low-code tools.

Monday has grown exponentially over the last 7 years with the most recent growth curve looking almost vertical. Eron's experience scaling the product and improving performance makes for some excellent storytelling, and I believe Monday is either the most or one of the most fast-growing companies in Israel. So this company is growing quite quickly.

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[INTERVIEW]

[00:02:31] JM: Eron Zinman, welcome to Software Engineering Daily.

[00:02:33] EZ: Thank you for having me.

[00:02:35] JM: You cofounded Monday in 2012. Was the initial vision for what the product would be the same as what it is today?

[00:02:44] EZ: I think it's the same problem that we try to solve since the beginning. Both Roy and I, Roy, my partner, we always wanted to solve core management issues for companies. We always wanted to be at the core, what business do, and we always wanted to be the tool that connects everything within the company.

When we started, the product was more focused around communication between people. But pretty early on in the life of the company, we realized that it needs more structure and we launch our boards, which is the core element of our product today. Ever since then, this has been the focus of the company.

[00:03:26] JM: When you say core business management, what does that mean relative to project management? Because this is like a different category.

[00:03:37] EZ: Yeah. I think when you think about workplace, collaboration and everything around that, the several solutions to different people. So, obviously, you got tools that deal with communication. Tools like Slack and Microsoft teams, and you have a different aspect of the business, which is managing projects and managing tasks. But businesses are much more than that.

Every business has a core cadence, a core process that happens every X-amount of time, and it's not projects exactly. I mean, everything you do is not a project. Project can be a one-time

thing, but what about everything that happens within projects? And even project themselves are very different from one company to another.

So at the end of the day, where we wanted to be is to be the core tool that manages your day-to-day work, I guess.

[00:04:33] JM: One trend I have noticed in some newer software products, very few products have gone this way so far. But another one that comes to mind is GitLab. So GitLab, kind of the idea is, "We're going to give you a big bundle of tools and you can use whichever ones you want and you're free to mix and match them with other external tools.

We're not going to prevent you from using any external tools. In fact, we're going to encourage you to use external tools. We're going to encourage you to use external APIs. But we are going to give you defaults that you're free to use if you want to." Does this seem like a newer software pattern to you?

[00:05:16] EZ: Yeah. I think that one thing that was very important for us as a company is to build a product that doesn't lock you in within Monday, for example. Our philosophy has always been that we want to play nice with everybody. We want to have the best imports in Monday and we want to have the best export to Monday. The way I look at it is that a tool as horizontal as Monday. So, basically you can do anything on top of Monday. People can manage projects and tasks, but they can also manage HR processes, that they can manage sales pipeline and they can manage almost any aspect of their business.

For some companies, it might make sense that they want to use different tools to do some of that, and it's fine. We don't want to be the one tool that does everything. We realized that bigger companies might have tools that specialize in the very specific part of the business. So, in that respect, we build our integrations platform, which basically allow you to share information from different tools into Monday. And stuff that happens within Monday can be synced to different tools outside of Monday.

So, it might be that you'll use Monday to manage every aspect of your business, but it might be that you'll sync some data into Monday and Monday will be more of a place where you can

visualize some of the data or collaborate on some of the data. And both use cases are fine with us.

[00:06:43] JM: I want to make this more tangible for listeners by giving some examples. So let's say I run some kind of ecommerce business. Let's say I sell t-shirts and I want to use Monday to integrate with my ecommerce frontend or maybe to build an ecommerce frontend or you want to do triggering on orders to send emails. You want to send text messages. You want to do these kinds of integrations. Can you describe to me some of the ways that Monday would facilitate those kinds of like backend processes?

[00:07:24] EZ: Yeah. This is a very interesting example. So, you mentioned you have a ecommerce website, and we have a lot of customers that do that. So, you might use a platform like –

[00:07:33] JM: So this is like they already have Shopify setup or something.

[00:07:36] EZ: Yeah. So might have a Shopify store or you're using that, and it's great to manage your inventory and to have people buying your stuff online. But then people will have a complete process after somebody buys something from the store. So, one of the integrations that we launched is a Shopify integration, where whenever somebody buys anything from your online website, it will sync directly into Monday. So you'll see the new order on Monday.

Then you might have a whole process that you do. Anything from manufacturing, or packaging. Anything in that respect, which you'll manage on Monday. But the interesting thing is that it doesn't stop there, because let's say that you've done all of that and then you want to send an email to the customer saying package is on its way. So you're going to add another integration inside Monday with Gmail or MailChimp for example, where whenever you set a status to be done, the customer will get an email notifying them that the package is on its way or just an SMS.

So, basically what happens is that you manage a whole workflow within Monday, but you basically facilitate a bunch of different APIs, a bunch of different software in order to do that. And

it's mind-blowing to see what our customers are building. So they're building entire operation and workflows within Monday that leverage many different APIs in one process.

[00:09:03] JM: So, if I've got Shopify. Shopify already has places where I can slot in those integrations. I don't know exactly how that works typically, but like how does that – It's just interesting, because you have this kind of thick platforms. Like Shopify I think of as kind of a thick platform. Monday I think of as kind of a thick platform. There's a lot you can do with each of them. And then you have things that a little more narrow, like Twilio or SendGrid, and it seems like you could put that integration on either of those thick platforms. Again, I don't know exactly where the integrations can slot in, but can you tell me more about like how the business user who's architecting this like integration point, like where should they put in the Twilio insertion point?

[00:09:55] EZ: Yeah, it's a great question, because I agree. Shopify makes a lot of sense for them to develop this kind of feature where you can notify the customer about a package being delivered. I'm not sure about the process, because each business of their process once the order has been made. So, I think this touches to a more basic kind of concept of what is Monday. So, basically what we do is we give people – The way we look at it is that we give them Lego bricks and we give them the ability to customize the software for their needs. I think this is super powerful in that respect.

So, it might be that Shopify or any other platform which you define thick might have those features. But at the end of the day, it might be a very specific rigid feature that they have that doesn't suit all businesses and they want to have this flexibility, which they have in Monday. So in that scenario, it makes a lot of sense to them not to use that specific feature in Shopify, but to sync the data from Shopify to Monday. Have a very customized process within Monday, which they built, and then kind of have the other side of the process sending an SMS using Twilio or sending an email using SendGrid. So the fact that we allow them to customize anything that they want and connect whatever they want at any part of the process is very empowering.

[00:11:20] JM: Can you give me another example of a business workflow that somebody has implemented or architected that has surprised you?

[00:11:29] EZ: Yeah. I mean, there's plenty, because one of the things that I love most about our platform is that I could never imagine what our customers are building on top of us, and we could never kind of come up with all the use cases that our customers are coming up with.

Another great ones that I saw are an integration. We have an integration with a tool called Zendesk, which you probably know. And one of the things that we found in general is that there's so much information hidden in different SaaS tools in each organization. You get so much feedback from your customers, but at the end of the day, most of that feedback is not available to other people in the company. People managing products, people doing development work.

One of the most beautiful integrations that I saw is when people connect Zendesk to Monday, so whenever a customer submits a ticket about a specific feature. So let's say that you launch a new feature and a customer mentioned that as part of their ticket, and you can have a role within Monday. So whenever a ticket is submitted with a specific keyword, it will be added to one of our boards. Then basically we can add additional columns in that board where we can measure the data and we can get like specific feedback on that feature. And this creates so much visibility into the feedback that companies get from customers.

So we might have – One of the use cases that I saw is one of our customers connect to Zendesk, got a ticket about a specific topic into Monday. In that case, it was bugs and issues that our customers reported on. Then the whole process of fixing the bug was on Monday. Then once the bug was resolved, they'll send an email directly to the customers saying that the bug was resolved and they're happy to get their feedback. So this whole process was baked into our platform.

[00:13:24] JM: Tell me about the initial architecture of Monday and the initial product surface area that you built back in 2012.

[00:13:36] EZ: Yeah. So, one of the main components in Monday is the board itself, which looks a little bit like a grid or a spreadsheet. It contains many cells, columns and rows. One of the challenges that we had was around how can you fit a grid that large into the browser? It was really heavy on the DOM, and one of the techniques that we used was to use a virtualized DOM

in order to display all the content. So might have a board with 100,000 of lines, and we were unable to load everything in one shot. So we basically loaded it into the client then render all of it.

Every time you scroll, you basically see only a portion of the board. So it's basically all virtualized by fills, like you have access to the entire board. It's kind of a way to trick the browser in a sense, but if you want to support such a massive record-base, you have to use these types of techniques in order to do that.

[00:14:38] JM: It's like what people do when they're building MMOs. You feel like you're walking around in this big virtual world, but actually only part of it is rendered on your screen. And like as soon as you walk slightly beyond the perimeter, it kinds of expands the world in that way beyond your horizon of view. It's kind of the same thing.

[00:14:56] EZ: Exactly. Yeah, because I think we're really inspired by what happens on mobile phones. Mobile phones, iOS and Android have – They call it recycle view. So, basically, recycle the same element. Just render different content inside those elements. So, we had to do the same thing for our web display just to support so much content and so many rows inside that board. One of the things that we care most about is the performance of our clients. So, we did above and beyond for it to be the fastest as we can.

[00:15:32] JM: And what were you doing on the backend? What kind of cloud services were you using? Tell me more about that.

[00:15:39] EZ: Yeah. So we're using a bunch of databases for our platform. We're using MySQL. We're using a really cool database called MemSQL. Have you heard of it?

[00:15:49] JM: Sure! MemSQL.

[00:15:50] EZ: Yeah, it's superfast. It works for us in production. Super happy with it. We use a lot of Redis databases, because it's superfast. Basically, one databases that we use is Elasticsearch, where we index all of our content and allows our users to search anything on the platform. So we're using a bunch of different databases with different use cases, and every time

we kind of stumble into another bottleneck, we try to think what's the best way to optimize that. Should we switch that content into another DB? If it makes sense.

[00:16:23] JM: MemSQL. So that's kind of – I would categorize MemSQL into the very, very broad category of new SQL. The broadly speaking SQL databases that can do kind of OLAP stuff and they can also do transactional stuff, and they've got a lot of engineering going on below the surface. There's a ton of these things. I think MemSQL's pretty early to this game. So maybe you started using it early on. But have you evaluated many more of these new SQL databases?

[00:16:58] EZ: Yeah. I mean, using MemSQL was after a long process of looking into a few databases. I agree, there might be – Whenever there's a new database coming up, there's some degree of hype around it and it's always kind of – You want to make sure that you're making the right decisions, because it's so hard to switch afterwards. But we're pretty much an early adapter with MemSQL and we knew we took in some risk with it, but we were in constant communication with them and it was really a process where we were partnering and helping one another.

We kind of submitted a few bugs for them, and they released a few features that we requested and we're super happy with it. I think from our perspective, as long as you have like a very good communication with the database software, I think it's kind of make sense to try new types of databases.

[00:17:48] JM: So, I want to give people even more of a mental picture for what this software looks like on the frontend and how it's kind of modeled on the backend. We've done a few shows with people who are developing spreadsheet-like products. Especially highly dynamic spreadsheet-like products, where the UI layer is really important. You really need it to be performant. I think building these things has gotten a lot easier as kind of React as become more prominent and the browser has just gotten a lot better.

Back in 2012, things were harder. You had to do these things, like what you said, with the virtual DOM and all these performance constraints and whatnot. In order to understand like why you had to do all that work to improve the performance, can you just describe like what is a – Let's

say there's a very complex business who has been a power user of Monday. Maybe they've got like 4,000 on their team and you've got to do all these data syncing across a big team and across a really big board and maybe they're using this board for something really complicated. Can you just paint me a picture of a very complicated business case and how their team is interacting and what ramifications that has on the frontend?

[00:19:17] EZ: Yeah. So, basically, some teams might have hundreds of boards in one account and using them for different use cases. Some boards might have hundreds of thousands of rows. Some boards might be just a few rows. Just to add on top of that, everything is being updated in real-time. So if two people working on the same board, everything will be updated in real-time. We're using sockets for it to be like instant updates.

So, you want to support on one hand huge boards with a lot of data, a lot of complexity, but you want them to be lighting fast and you want everything to be updated in real-time. This presented a lot of challenges, because one thing for sure, you can send huge amounts of data every time you make a change. So, we designed a platform. So any change that you do is atomic to that specific cell. Send a minimal amount of data between different clients.

Every time you make an update, we send minimal amount of data back to the server. We do on the client side. So we have very complex columns within Monday. Anything from a formula account, which is kind of a formula that you can see in Excel, which takes data from multiple columns and generate new value into the column.

So we have dependency between columns and a lot of other stuff going on. One of the key things that we changed along the years was we started with a backbone, JS, as our core kind of library for our client side, and we were pretty much an early adapter for React. And this has been a game changer for us. Ever since we moved to React, it was much easier for us to kind of separate each one of our components on the client side and reuse each one of the components that we created, because we wanted to display different columns in different locations inside a platform. So, React I think really supports this kind of grid application, which you mentioned, because of the nature of the components inside of it.

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[00:21:23] JM: I remember actually some early React demos where the way that they would display just how performant it was relative to other JavaScript frameworks was literally rendering cells in kind of like a spreadsheet-like table view and they were just like see how many of these can we render and how performant is it. And React was pretty good at outstripping those other ones.

[00:21:48] EZ: Yeah, I think it's designed for that. The fact that it renders only what changes in the user interface is a big part of enabling application like ours to support huge amounts of data on the client side.

[00:22:01] JM: So, I was looking at your growth. You've been around for almost 7 years, but the growth really started to get insane around 2016. Was there something that accounted for that inflection point in the business?

[00:22:19] EZ: So, we launched our product in early 2014. So it's been 5 –

[00:22:24] JM: Oh, really?

[00:22:24] EZ: Yeah.

[00:22:24] JM: Wow! So you started in 2012 and you didn't launch till 2014.

[00:22:28] EZ: Yeah. We started the company end of 2012. This is when we raised our seed round, and we spent about a year in the product market phase. Kind of figuring out what's the best thing to build. We met with a lot of managers and kind of trying to figure out what's the best solution that we're looking for. And we launched the first version of the product beginning of 2014. We had amazing growth since then. We kind of tripled almost every year since then. This year we're going to cross the 100 million in ARR. So it's super exciting.

[00:23:08] JM: So, when you were talking to those managers and you were interviewing and just kind of figuring out what this product should look like. What did you hear? I mean, this is kind of a – I mean, I think that's a great approach. I don't think that's necessarily a super common approach. I mean, to some extent common, but I think more often these days you kind

of see the simultaneous building of a product while talking to people. It sounds like you spent more time talking to people upfront before starting to build the product.

[00:23:39] EZ: Yeah. I've been developing all my life, and I was also managing developers prior to starting Monday, and I've used almost any tool that I could find, all the usual suspects. I found that I'm always frustrated from using those tools, not because they weren't good enough. Because I found that whatever works for me right now in a few weeks or in a few months once the company changes or the team changes, so they just don't fit anymore.

So, this was kind of the inspiration behind starting Monday, is to build something that allows people to build kind of their own tools. And we came this approach to civil managers that we met throughout our product market fit stage and asked them what kind of software are you guys using? Everybody was using a different software. But when we asked them, "So, how do you communicate? How do you really communicate with your team and with your manager? Are you using that software?"

It was funny, but like 99% of the cases, everybody had a secret spreadsheet file that they use. So, I asked them, "Why are you using that spreadsheet?" They said, "I just built it. It makes sense for me. I change it all the time, and this is the best way to communicate." We thought, "How about we use that as a base of our product?" that spreadsheet way of thinking. This was kind of the foundation of how we kind of first thought about our product.

[00:25:08] JM: Hilarious. We have that spreadsheet. We have two of those spreadsheets. We have two of those. Yeah, it's like part social network, part spreadsheet to what it's become.

[00:25:18] EZ: Yeah. So you should use Monday.com then.

[00:25:20] JM: Well, I mean, I took a look at – I have tinkered with the product. I'm scared. I'm scared of the migration path, right? We've been using this spreadsheet for like two years. Got a bunch of tabs, got a bunch of comments with Google, my Google identification and it's like, "I'm kind of afraid to move it and change my workflow," which is not the same opposed to like using it for my next business. I'm certainly not – If we were talking about like starting this thing today.

Like if I was building a media planning system today. There's no way I would use like Google Docs for my media planning process. But it's like I feel so locked in at this point.

[00:26:08] EZ: Yeah. I mean, spreadsheets are great. I have nothing against spreadsheets. But at the end of the day, you find out that it's not a tool that multiple people can work together and you lack a lot of layers of communication and history, tracking –

[00:26:22] JM: You lose messages.

[00:26:22] EZ: You lose messages. Somebody make a change and nobody knows about it. You lose data for some reason. One thing that we built into the platform, which I realized, I sympathize with how you feel, is an ability to input data from different tools. One thing that's very unique about how we build it, and this is pretty cool, is that it's not a one-time import. It's import and sync, which I've never seen anywhere.

So, just imagine that you import data from that spreadsheet, but still connects to that spreadsheet. If you add more data into it, it will be reflected into Monday. So it's not like a one-time import. So you can feel pretty safe to try it out and give it a go. If it works for you, great. If not, next project is also fine for us.

[00:27:13] JM: Well, now I'm scared of like eventual consistency, right? Because if I make a change like now, what guarantees do I have on the latency for that change? What kind of middleware am I trusting to enable that change?

[00:27:27] EZ: Yeah. You have to have some degree of trust into that. But I think from what we saw when we launched this import feature, it reduced a lot of the friction some of our customers had. Because changing – I mean, moving from one software to another is definitely not easy to do. It changes a lot of the behaviors that people have they've got used to. So we try to make it as easy and as smooth as possible by doing that.

[00:27:52] JM: Yeah. You'll get me eventually. I mean, I've obviously done software migrations before. I've definitely done tooling migrations. I mean, it always feels good on the other end of it.

It's just like beforehand you're always scared. Or maybe it's get easier overtime. Maybe I just need to do more of them.

So in that period of time from 2014, you launch with this thesis that people are communicating around spreadsheets and maybe we should expand on the abstraction of a spreadsheet. Turn it into a board. Make the board more dynamic. Make it have API integration, flexibility, better UI, more social system. It sounds like it gained traction pretty quickly.

Then in that period from 2014 to 2019, there's been a ton of change in the market for business software, and there's also been a ton of change in the – I think the roles are changing. I think the level of abstraction that like kind of a non-programmer can work at has expanded. If I'm a fairly technical software user, but I'm not a programmer, I can do a lot these days. So how it that market for business software changed in the last five years?

[00:29:12] EZ: I think it changed dramatically, and I saw experienced it from our perspective, seen how the market has changed. You have tools today like AirTable, for example, or Notion, that my feeling is that we all have kind of the same mentality around giving people the freedom and the flexibility to build their own tools. Each one is taking a very different approach. So Notion is more around – From what I saw, documents and personal use. Airtable is more around building in database and more for developers. Where we, we want to give people a platform that they can have their entire work processes on and basically manage every aspect of the company on our product.

But if you look at kind of the core principles that I think guide all those products is giving people more freedom and giving people the ability to build their own tools in a sense, which didn't exist a few years ago. A few years ago, you would use a software that's specific for every specific use. You had almost no degree of flexibility using that tool. If you had a change to anything, you were stuck.

The way I look at the market and the way I see the software market evolve in the next few years is that it will gradually shift to tools that give you a higher level of freedom and more ability to customize your own processes. Because people realize that everything is so dynamic.

Everything changes so fast, that it doesn't make sense to build a tool that does only one specific thing that it was designed for.

So I've seen these changes dramatically over the past few years. When we started people asked, "Oh! You are just another project management tool." And we said, "No. We're much more than that," and people didn't get it. But I think they get it now.

[00:31:04] JM: What's interesting about this trend and some people call it low-code or no code, and I almost think that's like doesn't fully grasp what's going on here. I mean, those are fine like stand-in terms for whatever the heck is going on. But something really important is happening with these sets of tools that allow non-programmers to build very technical, very abstract, very high-leverage workflows. It's something that's really important.

If you think about that Conway's law, Conway's law is this idea that your communication structures within the company reflect the business software or the business systems that you have, and the business systems that you have will reflect the communication structures. What happens when the business software becomes so modular and so high-leverage that basically like you can hire a smart worker, a smart, somewhat technically enabled worker and then they can basically do everything.

I mean, they can help build sales workflows. They can help with the marketing automation. They can help build some backend Twilio thing. What changes in roles should we be doing team structures entirely differently?

[00:32:36] EZ: Yeah, it's a great question. One thing I didn't mention about Monday is the fact that more than 70% of our customers are non-tech. So, the vast majority of our customers are non-technical people with no development background or even advanced technical background.

[00:32:53] JM: But they have Excel background or Photoshop background, something like that?

[00:32:55] EZ: Yeah, they might have used Microsoft Office or a bunch of other tools, but nothing that you would consider to be super techy. But then you see those people building unbelievable stuff on top of Monday, which back in the day, it will be considered to – You have to

use a developer to do that. I've been talking with customers – I'm talking with customers all the time, and some of the customers that I speak with are non-technical at all, and you see them building this very complex workflow where they eventually send an SMS automatically using Twilio. And they have no idea what Twilio is and they have no idea Twilio has an API.

But for them, using Monday is just – I feel we're kind of setting all APIs free. We're making APIs accessible by using a user interface that makes sense to them, and at the backend, connecting a lot of different APIs for them. So it just excites me to see how people that haven't written one line of code in their lives create very complex workflow that they couldn't do before.

[00:34:08] JM: But how is it changing? Do you think we need a formal change in team structure? Because the ways teams are organized today are so rigid. We have like the sales team, and the marketing team, and much like we had this disjunction between development and operations that got unified in the dev ops movement. That's not to say that we don't really have dedicated development and operations people. But by breaking down the explicit silos we had, there were some advantages. Anyway, I mean what do you think about team structure?

[00:34:48] EZ: I think software like Monday enable teams to be more independent. So you mentioned a sales team. I'll give you a little story about our sales team. So, our sales team – And this is a real story from our company. They wanted to have a forum on our website that people can leave their details for them to contact. So if somebody wants to contact sales, they will have a forum inside our website and then they get back to that person and have a sales call.

The R&D came back and said, "Oh, we're pretty busy this week, and we'll probably do it kind in the next 3 or 4 weeks." So one of the guys in the sales team said, "I'm not going to wait." We have a functionality within Monday called Monday forums, where you can build your own forum. And whenever somebody submit the forum, it will go automatically into Monday. You build it in Monday. You put the link into our website and we build a bunch of automation on that forum, where if the company is above a certain size, it will open and you take it in Salesforce. If it's below a certain threshold, to open a ticket within Zendesk.

When I saw that, my mind was blown, because what I saw is that somebody had a problem within sales team. We didn't have a developer resource in order to fix it, and he found a way to

fix it himself. It was mind-blowing to see that, because just a few years ago, they didn't have any opportunity to do that on their own. They had to use a developer to do it. But the fact that they did without any kind of technical background was amazing. So, I definitely think that software like ours will enable teams to be more independent and risk reliance on tech developers.

[00:36:28] JM: For sure. Another thing that comes to mind, you mentioned to me that you had heard the episode with Tom from RedPoint, the episode about IPOs. That's actually the second episode I did with him. I also did an episode where we talked about a he wrote, he co-wrote, with the cofounder of Lookr, which was called *Wining with Data.* And part of it was about Tom's experience at Google and like the early days of when a data analyst, if they want to find out about like how did ads do yesterday. They have to literally go to the data engineering team and say, "Hey, can you please run a MapReduce for me? Can you just do that? Can you get it for me tomorrow? Please?"

Or you get an email every morning and then you need to say like, "Hey, can you actually add this extra column to this report, please?" Then you have this dynamic where you have the "data bread line", where the data analysts have to wait for the data engineer to change the MapReduce query. And like now we don't really have that problem, because we have self-serve data tools, and you're talking about that trend kind of expanding, which is pretty promising.

[00:37:48] EZ: Yeah. I think tools like Lookr really set the data free. This is how we look at it. Like you said, I build my own reports. We're also using Lookr in Monday, and it just feels like you impart. I've feel we're doing kind of the same thing around work process and automations and connecting different tools, which I found to be super exciting.

One of the things that we kind of – The way we define ourself is that we can become the work operating system for businesses and basically connect almost anything and being some sort of a hub around many different applications. I think the average tech company users, a few hundreds of SaaS tools and just connecting all of those tools and creating one place where you can experience all that data and all that information and have one place where you have all your processes is so valuable and so required these days that I feel there's a huge gap to fill.

[00:38:50] JM: I think that work operating systems is a fair vision to have, especially given the level of growth that you've had. Operating systems are not easy to architect. They're not easy to manage the source code for. So that vision for the operating system, do you think of it like a monolithic big piece of code or big binary thing that you're building occasionally and like shipping out to people, or how decomposed is it? Give me a framing for how the software architecture looks today.

[00:39:32] EZ: Yeah. So this is really interesting, because the way that we built Monday, thinking about how people will be able to extend it in the future. So, if you just – The basic element is a board where it had a bunch of columns, and we have what we call a column store, where we have additional 30, 40 types of different columns. Then on top of that, we have views, which allow you to visualize data in different ways, either using a graph, or a map, or a forum or anything like that. Then we have automations and integration, which is a different store.

So, the way that we build a platform is that each one of those stores can be easily extended. Our vision and something that we're working on right now is to allow third-party developers to build their own extensions. So, in the future they'll be able to add different type of columns. Different types of views and different type of integrations to Monday. So it will be easily extensible for developers from outside.

[00:40:37] JM: How does your selection of software look today? Specifically, what cloud provider are you using if any?

[00:40:46] EZ: Where are we hosted on?

[00:40:49] JM: Yes.

[00:40:49] EZ: We're hosted on Amazon.

[00:40:52] JM: Amazon. Okay. How aggressively do you use Amazon, like Amazon services, or do you kind of just use their raw services and build your own things on top of it?

[00:41:04] EZ: Most of the cases we kind of build our own services on top of Ec2 machines or other options. But we use some of their services. But one of the key things for us as a company is super high availability, super high sensitivity around the data. So we use a lot of back mechanism just to be almost 100% available at all times. So, this is something that's really important for us.

[00:41:32] JM: Have you done any containerization?

[00:41:35] EZ: Not enough. Having, for example, the new automations and integration platforms that we launched is not inside a container. But apart from that, we're using Ruby on Rails on the server side, which kind of let us to build some kind of a monolith if you want. So now we're kind of in a phase where we're decomposing it into small services.

[00:41:57] JM: So, when you say that not enough and you say you want to decompose into small services, I've had some really interesting conversations recently with some I would say slightly more experienced – Not more experienced than you. Just people who are more – People who have spent a lot of time in Facebook, for example. Facebook has a monolith. So they've made me kind of question how much of this service breakdown, this breakdown of the monolith into services. Is it necessary? Is it a good expense of our time? I mean, because if we spend this time. Obviously, we've heard all the benefits of breaking up the monolith into microservices. But there's also benefits to keeping it monolithic. Also, there's a huge opportunity cost when you spend time investing in breaking up your monolith into microservices. You seem like a pretty pragmatic engineer. So I don't think you're getting caught in the hype cycle. Tell me about that assessment of making the decision to break out some services.

[00:43:03] EZ: I definitely agree. I've had enough in the industry, I've been writing code I think now for over 30 years I guess. I started like when I was 7. So this is what I do all my life basically, and I've seen so much hype around so many things in my history writing code. So I'm not excited about every new thing. I've seen them come and go. Promises being made and then people kind of revert back to what it was.

So, I think when this trend of breaking down to services started was like all or nothing. You should break everything to pieces. I don't think it makes sense. It just makes everything so

much more complex. Obviously, it wasn't like battle tested in production. I think what people found out at the end of the day, it makes things more complex if you break everything into pieces.

So, my kind of view on that is that it's okay to have a big codebase. But where it makes sense to break it into pieces is when you have different volumes or traffic or anything that's kind of has been affected by either amount of data or amount of usage within your platform.

So, for us, when we build the integrations and automations, it meant a lot of sense to build it as a separate project, because what we realized from the very beginning is that a lot of data is going to be synced to Monday and from Monday, which is a total different number from the amount of actions that people do manually inside a platform. So we have to be prepared. We have to have different servers and different technology in order to support it. Then it makes more sense to do it from a business perspective, if it makes sense.

[00:44:45] JM: So I got super caught up – Well, I get caught up in these hype cycles, because I'm super subject. I'm trying to get better about it. But what are getting overhyped about today? Is there anything in particular where you see it and you're just like, "Nah," relative to other people's excitement.

[00:45:05] EZ: Yeah. I have one story that I always tell developers here that had one person coming for an interview here in Monday for the developer position. It was a few years ago. One of the things they asked me was I've mentioned that we're using Ruby on Rails. So they asked, "So, why aren't you guys using Node.js?"

[00:45:23] JM: Right.

[00:45:25] EZ: It's a funny scenario, where you're in an interview and you have to kind of defend your decision to use Ruby on Rails.

[00:45:32] JM: It's so funny. I remember, I did the same thing. In a couple of times I was interviewing people, how dare you use Ruby on Rails. You, outdated. How do you have time for

doing this podcast interview? Get back to work an fix your Ruby on Rails monolith. You go to Node.js microservices right this instant."

[00:45:51] EZ: Exactly. Yeah. I kind of had to think for a few seconds and then I asked them back, "So, why do you think we should move to Node.js?" Then there was like this little moan of silent where they have to kind of come up with reasons. But one thing that I found is that you mentioned Facebook is still using PHP or some version of it. We use Ruby on Rails. What I found is at the end of the day, you might have one programming language that's a little bit faster than the other.

But that's not what solves applications down. It's usually the database. We're using something like inefficiently. So, using one programming language over another I don't think have a huge impact on performance. It's more about human errors and not using technology in the right way that slows you down.

[00:46:43] JM: Totally. The worst thing I did, actually, it just comes to mind now, is I was interviewing like somebody who is running a coding boot camp one time. It was a Ruby on Rails coding boot camp and I was just like laying into it. I was like, "How are you teaching this people this antiquated Ruby on Rails technology? You need to be teaching them Node.js." I just like think back on that and I'm like, "Man! I was just really caught up in the hype." It's easy to do.

[00:47:10] EZ: Yeah.

[00:47:11] JM: So what it's like building software company in Israel?

[00:47:15] EZ: Well, I mean it's amazing, because I think for a very long time Israel was perceived as a starve nation, but a place where you can aim for an exit or kind of build in a small company waiting to be acquired in a way. What I feel now is there's new wave of companies that are building something sustainable, huge businesses. I think Wix was kind of one of the things that made an impact on us. Seeing them grow so much and going public.

I remember, Roy and I even I the beginning of our journey thinking to ourselves, "We want to build a huge company. We want to build a multibillion dollar company out of Israel and becoming

one of the tech giants in the world." I remember that back in the days it seems like a very ambitious thing to do. It's still is.

[00:48:05] JM: Not anymore. I mean, you and Wix. You and Wix, and I'm sure there's a few others at least setting the stage seriously.

[00:48:13] EZ: Yeah. And I have a few friends, founders that also build amazing businesses out of Israel. We have an office in New York as well where we have customer success in sales. Also, a few years ago when we met investors, they were like, "Are you guys planning to move to the US?" "How do you think that you can build a business of Israel?" Now, the wind has shifted. I think now it's very reasonable and they see it even as an advantage, because it's easier for us to recruit engineers here as supposed to the Valley I think, where there's so much more competition going on.

[00:48:51] JM: Yeah. I was talking to Gino, he runs RapidAPI. I don't know if you've met him, but he's originally from Israel. He has like distributed teams, and I think he has a pretty big office in Israel, or maybe it's not a big office, like a sizeable office.

But it's interesting, because they've set up a number of offices and you have like kind of the – It's sort of like, I don't know what the analogy is, but it's like there's cultural advantages and there's like different – Israel has – It's like I knew when I started watching your talks, I was like, "Okay. He's got the Israeli performance bug. Whatever makes these Israeli people really good at like web performance, like there's something there. Like these like sort t of tools businesses." But then you also have kind of the similarity to Wix, where you have this like really high-level product that has a really ambitious vision. I don't know. It's just interesting seeing the domestic trends really start to develop in powerful ways.

[00:49:57] EZ: Yeah. I think one thing that I saw in common kind of looking into myself and other founders in Israel is we really want to win whatever it takes. We want to win. We're ambitious, and we want to build companies. I'm not sure what, if it's because we're from Israel or because we've very ambitious as people. But I just want to win. I want to win. I want to build a huge company, and whatever is required to do so, we'll do it. We'll work hard. We'll do whatever it takes.

[00:50:28] JM: So, there's this like phenomenon that people always used to talk about, where in these developing startup nations, like Israel, nor New York. Well, I mean, New York is a bad example. But Israel, these places that are not Silicon Valley basically where you have like Israel, New York, Seattle. I'm from Austin originally, Austin, Texas. The narrative was always that you need to have one really, really big company develop and then like that company needs to have some kind of exit and then other people will start startups. Like you start to just – That ecosystem starts to mature.

I've been really waiting for this to happen in Austin. It still is not quite happen to the extent that I understand. There just hasn't been that – I'm sure you've been in San Francisco, and like there's just startups everywhere. It's just something in the water. I have not seen that anywhere else. Are you starting to see it in Israel? To what extent as you seeing it? Do you know what I'm talking about?

[00:51:27] EZ: Yeah, definitely. We're starting to see it in Israel, and I think investors and public market perspective on Israel have changed in the past years. Seeing a bunch of companies going public and seeing a bunch of company being acquired for very large amounts. It's definitely shifted. I feel now in Tel Aviv, it's one of the best places to start a new company. There's a lot of investors, either local investors or investors from Silicon Valley, in New York coming here looking for new businesses.

Insight, one of our investors, I think, if I'm not mistaken, investing in 7 or 8 different Israeli companies and some of those are already unicorns. There's so much potential here in Tel Aviv. So I definitely feel what you're saying, that something have changed. Something has shifted from a few years ago, and there's a lot of focus on Israel in general.

[00:52:16] JM: Just a few last things on kind of like the fundraising. Insight, they're mostly growth or only growth?

[00:52:23] EZ: Insight focus on growth, but they actually were a part of our B round, which was fairly small. I think they're doing kind of the growth and small chart sizes as well.

[00:52:34] JM: Okay. Wait, small?

[00:52:36] EZ: Well, back in the days it was small. We raised $25 million.

[00:52:39] JM: Okay. All right. So, when you have as much growth as you have had, like I saw the chart that you were – You gave some talk and you were just showing the chart. I was like, "That is some ridiculous growth." I think you said you're the fastest growing company in Israel. But it is just like – It's like vertical. It's not even a hockey stick. It's just like a wall.

When you have that much growth, you have a ton of leverage in raising capital. You can really – Not like pick your terms, but you can get a lot of selectivity in the terms. Most people when they're raising money, your back is kind of against the wall. You just kind of like want to take whatever deal or you're getting these exploding term sheets and it's like high-pressure situation. You're kind of in, I think, probably the reverse situation. But that doesn't mean it's like easier. You have a ton of options. Do you have any lessons from that unique fundraising position where you have tons of leverage but you've got tons of offers? Give me some lessons from that experience that I might not hear from anywhere else.

[00:53:49] EZ: Yeah. So, first of all, fundraising is hard. I mean, it was hard for us as well. It's never easy. It takes a lot of time and a lot of effort to do. But, yeah, we're lucky to have a few options almost on any funding round that we had. One thing that was really important for us was not to optimize for valuation, but to pick the right partner.

For me, it's one of the most important things, because in the end of the day, picking the wrong partner can be devastating for the company. Picking the right partner can be so beneficial looking at the company valuation in the long run. We just announced that we raised 150 round just recently, and we picked Sapphire Ventures leading the round, and it's wasn't the highest software that we bot. But we really connected with them on every level.

One of the things that we were most excited about was the fact that they really got the product, our vision, what we care about. For us, that's the most important thing. Because I think this maximizes the company potential in the long run just having the right people on the board. Right now, our board is amazing. We have great board meetings. We have great dynamics within the

board, and I've seen so many companies so successful that had the wrong board dynamics and their board, and it's devastating for a company. So, for us, this is what we optimized for.

[00:55:17] JM: What do you expect out of that kind of – Like when you take a large really late stage investment like that, what do you expect out of the investor? What are they doing on the board? Are they like helping you architect strategy? Are they helping you think about how to IPO or not IPO or like that level of decisions?

[00:55:37] EZ: Yeah. It's a great question, because some founders think that the board should be very involved in running the company. I don't think that's the right thing to do, because in the end of the day, you meet them once every few weeks or once a quarter, and it's hard for them to make decisions from that point of view because not in a day-to-day details.

Just looking at the last round, so at this stage people kind of look at us and think how the company would look. When we'll go public and look at our PNL and think about how it will be in a few years from now. One of the things that we love most when we got with Sapphire, for example, is the fact that we talk a lot about the business, what kind of strategic things we need to do in order to grow even faster than what we're growing today. It just gives us a different perspective.

So I think this is like the most value that you can somebody that can give you different perspectives that will allow you to think on things differently like with your existing tools you can reach. So this is kind of the value that I see from all of our investors. Just giving us different perspectives and giving us different ways to think about our journey.

[00:56:53] JM: Eran, really fun talking to you. Thanks for coming on the show.

[00:56:56] EZ: Thank you so much, Jeff. It was really fun.

[END]