

Webinar Transcript: AI in Retail

Speakers:

- **Benjamin (Ben) Hempel** – Lead Pre-Sales & Post-Sales (EMEA/APAC), Scandit [Host]
- **Natalie Berg** – Retail Analyst & Host, *Retail Disrupted* Podcast
- **Pavel Ryukhov** – Strategy & Operations Advisor, Former Head of Global Store Operations at Metro AG
- **Jessica (Jess) Grisolia** – Lead Retail Expert (Large Accounts), Scandit

Benjamin Hempel: Hello and welcome everybody. Good morning, good afternoon, to our AI in Retail webinar. We're going to be starting in just about a minute to give people a chance to join, especially those who join us from the waiting room. I hope the wait wasn't too boring, and we're going to kick off just in a minute.

(Pause as participants join)

Benjamin Hempel: Hello and welcome to the AI in Retail webinar for those who just joined us. Thank you for doing so. We'll give it like 30 more seconds. We still have quite a few more people in the waiting room waiting to join, so we'll kick off in just a few seconds. So if you're still looking for a little drink or something else to be ready, now is a good chance.

(Pause)

Benjamin Hempel: Okay, welcome everybody. Thank you so much for joining us today. Today we will discuss the AI trends reshaping retail and what retailers need to do to be set up for success with these new tools in the future. We have a great set of panelists today, so let's do a short round of introductions to kick us off. Natalie, would you like to go first?

Natalie Berg: Sure. Thank you, Ben, and good morning everyone. My name is Natalie Berg. I'm a retail analyst and host of the *Retail Disrupted* podcast. I am American, but I've lived in the UK for half my life, and I have spent the past 20 years helping retailers and brands to navigate all the changes and disruption impacting retail.

Benjamin Hempel: Thank you so much, Natalie. Pavel, would you like to go next?

Pavel Ryukhov: Hi, good morning everyone. So, I'm a former Head of Global Store Operations by Metro AG, so we'll definitely talk about that. But in general, I possess over 20 years of experience in retail operations, retail logistics, and these days I help companies as a strategy and operations advisor to improve their business operations processes, reach operational excellence, and so on. So, happy to be here.

Benjamin Hempel: Amazing. Thank you for joining us. Jess, would you like to go next?

Jessica Grisolia: Thank you, Ben. Good morning everyone. I'm Jessica Grisolia, retail expert and a lead here at Scandit for all things around go-to-market for large enterprise accounts. So, very much focus on how we help retailers achieving their business goals. Happy to be here.

Benjamin Hempel: Thank you, Jess. And I'm Benjamin Hempel, short Ben. I'm leading pre-sales and post-sales for EMEA and APAC here at Scandit. So right now you see, unfortunately hidden behind the clouds, a sunset over Tokyo. And really happy to host our webinar today. For those who have not heard that much about Scandit yet, our specialty is smart data capture powered by Vision AI. So in practice, this means we provide software solutions for you to capture data from everyday objects, be that via barcodes, be that via text recognition, or object recognition.

Today, and before we start, just a quick reminder: we have a Q&A button if you look down in your Zoom window. Please feel free to ask questions anytime via this function. We'll have a

dedicated session at the end to discuss these questions, and of course, we'll follow up for any questions that we couldn't handle live today.

So let's kick it off. There is, you know, a lot of different ways with the current landscape of artificial intelligence and how it impacts retail. Some of the most known types are agentic, physical AI, Vision AI, and all of these have the potential to really massively impact all the different areas of retail. The big question is, I think, and let's start off there: where do you start? Natalie, you track this industry as closely as anyone. What's the real state of retail AI right now? Of the big AI trends, what have retailers you've been talking to recently been giving serious attention to?

Natalie Berg: Yeah, it's such a big question. And I think we have to start off by just acknowledging that the pace of change we're seeing in retail right now is unprecedented. Like, AI is completely and fundamentally rewiring the industry. And I think it's also important to highlight that this comes at a time when retailers are facing so much disruption: geopolitical, economic, climate, new competitive threats, cybersecurity, tech, changing customer habits... I mean, the list just goes on and on and on. So AI isn't just another headwind; it is actually, as I said, it's really rewriting the rules of retail.

And I think the way I always sum it up is that there is a lot of transformation that needs to happen, and it is happening in real time. But ultimately, I think AI is going to make retailers smarter, leaner, and more efficient. And as customers, it's going to make our experiences more seamless, more compelling, and hyper-relevant.

Now just briefly, because I know it's a big question and we have a lot of ground to cover, but I think there are so many use cases for AI we can't even really begin to list them. But I think it's worth calling out that what I'm hearing from retailers now is that given all the headwinds, there's a real need to focus on how AI can drive operational efficiencies. There is the whole customer experience side, and I think some of that will definitely stick. I think there's a lot of experimentation; some things will kind of quietly fizzle, as naturally happens when there's so much experimentation and innovation. But I think that right now, the focus is really on improving the basics. And I think an important point is that with these kinds of basics and operational efficiencies, even marginal gains can make a massive difference at scale. I think that's a really important point to highlight right at the beginning. So things like demand forecasting, inventory accuracy, staff productivity, supply chain optimization—all the kind of fundamentals of retail, I think AI is going to help to improve.

And then just very briefly, Ben, and this is probably going to be my longest answer... *(laughs)* very briefly, I think we have to acknowledge, I know we're not really going to be talking about it much today, but we have to acknowledge that we are moving—we're hurtling towards this new agentic era. And I'm not sure retailers are really ready for it, but it's coming. I think AI is going to power a whole new wave of e-commerce adoption in food and fashion. It's going to take the chore out of shopping for us as consumers, and it's going to make it a lot more personalized. And just finally, I think this raises some very big, almost existential questions for retailers, because if shoppers are buying inside ChatGPT, if they're outsourcing to AI agents, well, will we need websites in the future? How do retailers maintain that emotional connection with the customer? How do they make sure they don't just become a box that ships stuff? So, I've thrown a lot at you, but just some very big things happening, and I think it just kind of highlights how big of a topic it really is.

Benjamin Hempel: I asked for this, right? So thank you so much for really going on the wider landscape. And you know, we had a few preview conversations around this. What you mentioned, what I found really interesting, is you mentioned there's so much one can do. And maybe first for you, Natalie, but also then please Pavel, Jess, like chime in here: what really sets these retailers apart to be successful? Like, what would you recommend-how can they really-what should they focus on, what do they need to focus on, to be really set up for successful AI investments?

Natalie Berg: I think the first thing, and probably the most important thing, is think of the outcome. So never do tech for tech's sake, right? You have to start with the outcome, identify the business problem that you're trying to solve. How is it going to make life better for my customer? How is it going to make life better for my frontline workers? And then you work backwards from that. I recently had the CFO of Holland & Barrett, Vineta Bajaj, on my podcast, and she made the point that we're talking too much about "sexy AI." Actually, we need to be talking about "boring AI." So I think that kind of ties in with the point I made in my previous answer. And then also, you have to again get the basics right. You've got to have a strong foundation, you need to have clean data. I think that's important in the best of times, but now in this AI era, it's just non-negotiable. And totally essential for things like pricing and promotions, inventory, supply chain visibility, product attributes-which again, is going to become more important as we move towards this agentic world.

And then finally, I'd say, you know, I speak to a lot of retail leaders on the podcast and I spoke to the head of AI at Pets at Home here in the UK, Simon Ellis, who talked about the importance of-it's almost a pyramid, isn't it?-where you improve the fundamentals, then you can enable strategic differentiation, and then you can start to explore new things like agentic and different business models. But the main point is that you can't treat it as an isolated project, so it needs to be embedded across workflows and really part of the broader retail strategy. So I think, again, don't do tech for tech's sake and really you have to think about how it's going to improve either the customer or the colleague experience.

Benjamin Hempel: Thank you so much for sharing that. Now Pavel, you also-and this goes with what you said, Natalie, about the foundations-you mentioned in our preparation how important digitization of processes is. Would you like to elaborate a little bit on that to also go to Natalie's point of having good data to work from?

Pavel Ryukhov: Yeah, of course. The opportunities are endless, but the retailers should do the homework first. And one of the core components is the availability of data, I would say. So our stores, you know, the traditional offline retail stores, were designed for human customers and for human employees. And it is still the truth that the majority of retailers still are limited in understanding where, for example, stock sits. Is it in the backroom? Is it on the shelf? Or is it already in the customer basket? Or was it returned by the customer and it's somewhere around the checkout? So we really do not know.

So most of the perfect systems which were designed in the past for desktop employees-like for example, you know, integrated demand and supply systems-they work perfectly only to the border of the store. But then we see that the data is only partially available after that point. On one side, this is an obstacle for many of the AI projects, but the other side is a kind of perfect opportunity, for example, for Vision AI tools. And that helps our stores to replace occasional

observations by management or by supervisors with a computer eye, yeah? And to enrich the data which we can use further for many of the use cases. This is one part.

And the second part I would like to mention is, of course, the involvement of frontline employees because retail is basically, you know, 90% are employees either in the distribution centers or the stores. And do they really want to be driven by AI algorithms? Do they-are they excited to work with AI? So this is the question. So when the companies design the use cases with AI, they should be very careful integrating the feedback of employees, integrating their feelings, emotions, whatever what they do around AI. Then that could be the success factor for any deployment. Yeah, thank you.

Benjamin Hempel: Amazing. Thank you so much for sharing on this one. And then Jessica, you know, Vision AI was already mentioned, so Scandit is definitely there, but I know you also had some thoughts on how to set up for success, right? What are the basics that need to be sorted?

Jessica Grisolia: Yeah, and to close the loop, Ben, on the data side, especially when looking at Vision AI in the context of stores, for us it's fascinating. We started with the old good computer vision, which now is empowered through Vision AI to make even a bigger impact. And looking especially at the inventory challenge, ultimately Vision AI uses and leverages whatever camera to then provide that overlay foundational task or action to the user to perform. Because if we didn't have an added layer of intelligence to that, well, humans have eyes, so why not just looking around and taking actions? *(laughs)* So I see two major wins when using and leveraging Vision AI. First of all is that we give infinite eyesight to employees and customers in the store, because whatever signal now we have through a variety of cameras that are in different places in the store-they monitor the shelf, they monitor the carts and the shoppers, they monitor the backroom-then you can aggregate this signal. And through the apps and the smart devices that we use as employees and consumers in the store, then we can overlay all that complex signal into an action, which could be replenishment that is more specific, which can be a suggestion for clienteling that is much more pertinent because you have the balance on hand.

So to me, when looking at Vision AI and the wins, that's definitely the most beautiful part of the process because then you can augment the user. You can augment the knowledge that we get in stores, and before it was impossible without that overlaying data. And just to close the loop on the data because I think it's a passion of everyone in this day and age... *(laughs)* especially looking at grocery environments, looking at do-it-yourself stores and so on, that's where we work with datasets that are now way more complex and way more cross-functional. Think about product catalogs used as master data for the store, now also used for e-commerce; balance on hand which sits in ERPs and warehouse management systems; and then we have price lists used for a variety of different outcomes in the store, not only for POS systems but also to update promotions; and then you have planograms. So that's where, to me, we see-and I'm going to hint to one of the best practices-the foundational data starts by looking at all the systems that read data and making sure that they are usable for the end application for Vision AI. We already said it, Natalie and Pavel touched on it: if you get garbage in, you get garbage out. We are going to talk about this later on, but it's incredible how the wrong data gets you to the wrong outcome in your project.

Benjamin Hempel: Thank you a lot for sharing this, Jess, and also, you know, closing the loop a little bit. And maybe before we go into some specific examples from a Scandit side, maybe

again for you, Pavel. I know you mentioned already before, right, working with multiple projects with Vision AI, large-scale pilots, deployments in different companies. From your time when you did global store operations at Metro, where have you actually seen Vision AI move the needle? Could you walk us through like one or two cases where it made a measurable difference on the ground? And like, what surprised you? Was there a positive surprise, negative surprise? Yeah, Pavel, would you share a bit on this one, please?

Pavel Ryukhov: Yep. Just to bring a little bit more context to that, so we had a major deployment of a mobile interface of our ERP system that included several components of AI and quite many different use cases-for example, shelf-life management, customer consultancy, in-store stock management, goods inbound, stock counting, and so on. And what surprised me when employees had actually seen the new solutions we offered to them-and by the way, tested it with them, piloted it with them-it came very naturally. So people really considered that not as a tool that just brought by someone to grow the productivity of the company, but as a kind of a real tool for them to help them in daily routine work. And that was really very, very, very positive feedback we got after the first pilots and then during the whole period of the project, actually, when we deployed that in many, many countries.

In terms of negative, I would not call it like that, but it was definitely a request to make it even faster in terms of deployment through different business units, because people didn't understand why we do it just country by country and then not every country at once. But we really wanted to do it in a proper way, in a right way, that everyone gets the proper understanding of the product and really can use that. In general, I would say, still the right question is how the process can be improved with AI. And when you put the target is helping your employees to improve the process, to make their life a little bit easier, then, yeah, the results are good.

Benjamin Hempel: Amazing. Thank you for sharing on this one. And what you also mentioned was like, robots as a hardware platform was something, like, you know, in a way of alleviating some of the stress for people and seeing it as a benefit for their everyday work.

Pavel Ryukhov: Yeah, yeah, we had also one of the solutions we piloted over a certain period of time is to use the robots to identify gaps in shelves. And the-let's say in terms of hard results-there was definitely the accuracy of the recognition of the products and recognition of the gaps, and the opportunity to improve the shelf availability are there. So the accuracy was very high. There are definitely some disadvantages to bring a robot into a store environment like ours, for example, so when we have a big-box store. Of course, you always have some obstacles in aisles and then you have sometimes customers there, and the robots cannot really scan. But in general, this is a very powerful tool when you use computer vision to capture your gaps and to bring certain alerts for employees what products to be replenished or to be ordered later. Yeah.

Benjamin Hempel: Thank you so much, Pavel. So really like, people understanding, right? Vision AI is a tool and then, you know, robots as a hardware platform can be challenging, but overall also provide really good value for then, you know, making Vision AI work. If someone says robots, I need to think of one of our customers, Jess, that is deployed with robots and Vision AI. Do you want to give a quick overview to the audience on this one? Like, what worked well there and what was kind of the impact of Vision AI?

Jessica Grisolia: Sure. We can definitely mention, like, working with so many retailers, from Carrefour Poland in the space especially of shelf intelligence, to a variety of large chains in Europe and the US like Walmart as well. We see that when we look at Vision AI in terms of technology-how do you capture the signal?-first of all, it's important, in my opinion and based on what we learn from pilots, not to be too fixated on one specific way of capturing data. We often see that hybrid solutions are the ones that pay off the best.

So, we have experimented, for instance, using robots to capture stores like hypermarkets where, you know, you have the space for them to operate at best. But in smaller formats, you may want to use fixed cameras or you may want to use mobile cameras on the application and the devices that the employees already have. So it's important to have flexibility as a key object in mind because then you can also improve the infrastructure as you go. You don't have to commit from day one to a big capital expenditure on hardware; you can use what you have and then improve based on that. So that's definitely one of the learnings that we have from the experimentation that we have with these chains.

And, last but not least, Pavel, you mentioned it as well: it's like having some important KPIs in mind that are the ones that ultimately you want to reach. So we see on-shelf availability being one of the most coveted because it leads to immediate results in terms of revenue lifts. So if you can, and we've seen with this application of shelf intelligence technology, you can improve your on-shelf availability to 95% and above, which when you look at normally what these trends in the store, is really at these levels. It's much lower than what retailers think it is. Similarly for planograms, you can improve your revenues in some categories of 10% if you work on increasing the accuracy of your planogram. So those are really the best practices and the learnings that we're seeing from concrete deployments that we have in Europe and around the world.

Benjamin Hempel: Thanks so much for sharing the overall approach, right? Different data sources and then also, you know, how you analyze the data, but also that you have to keep your KPIs in mind. Quick one, because-nice drop, by the way-we'll just keep this for a little, I know we have a section later we're going to talk a bit more about KPIs. I just, before, I want to check with Natalie. So now we talked also about some examples of how to achieve success with these kinds of projects, of Vision AI and rolling out. But like, Natalie, what do you see maybe also a little higher in the landscape of Vision AI? What is really happening that we might have not touched upon just yet?

Natalie Berg: Yeah, I think I'll probably build on a couple of Jess's points. But I think if we take a step back, I think this term really entered the mainstream about eight years ago when we saw the launch of some very well-known autonomous stores. And I think at the time, that felt very futuristic, you know, being able to track which products are being taken off the shelf and then that experience of literally just walking out and not having to, you know, wait in line at the checkout-which for physical retail, that is still the biggest point of friction. So I think that was very well-intentioned, both from a customer experience point of view-reducing friction, making customers happy, which means they're more loyal, they come back-and also from a labor-savings perspective.

I think I don't think *that's* the future when it comes to checkout. I think again, with all of these things, there's experimentation. You've got to justify the investment, there has to be a cost savings, there has to be a tangible benefit for the customer. But I think that's what kind of

propelled it for those of us who aren't sort of living and breathing in this space. But I think that the kind of launch and experimentation that we saw with autonomous stores was pretty groundbreaking, actually. And kind of to build on Jess's point, the future, I think-without honing in too much on the checkout-but I think the future is that it's hybrid. There isn't a cookie-cutter approach to any of this, and you do need to, again, start with the customer and then kind of work backwards from that.

But I think if we zoom out, when we look at Vision AI more broadly, there are clearly tons of very tangible use cases. Again, where those small operational gains, when done at scale, make a massive difference, both to the bottom line but also to your colleagues feeling empowered and satisfied in their roles-which is so important. So that could be shelf intelligence, as you know, it's already been talked about, identifying out-of-stocks, pricing mistakes, food that's nearing its expiration date, that sort of thing; loss prevention and shrink-still a massive issue in retail, especially as we're moving more towards self-checkout; warehouse automation... I mean, the list sort of goes on. And I think the kind of common link here is that the ROI, as again to build on Jess's point, the ROI is very clear. You know, there's a direct labor savings, there's a direct improvement or a direct increase in sales. Like that correlation is very clear. And also, again, just to build on a point that was previously made, this isn't AI replacing humans. I think that's really important. This is really augmenting what humans can do. And for me, you know, I always talk about tech-enabled human touch, and I think, again, that is really powerful both for the bottom line but also the customer experience.

Benjamin Hempel: Super, thank you so much. Took a lot of notes here. We definitely have to touch back upon that on the ROI parts that you mentioned. But like, before we move there, also what you mentioned was around like, pilots and how to actually go live, right? So biggest challenge in retail: you have a pilot, but it never goes anywhere, right? So this seems to be the biggest challenge really seen. And you know, it's not a surprise. AI is complex, retail AI initiatives are very complex, and sometimes they don't work. Getting a pilot running is easy, to a degree, but then scaling it to hundreds or thousands of stores, a lot of different nations maybe, different backgrounds, different people, that's where like over 80% of programs stall or fail. And maybe here a quick question for you, Jess, because, you know, Scandit and you personally have helped a lot of retailers-you mentioned a few of them just before-to navigate this exact transition. What does a winning pilot approach actually look like? What are like key elements that you would suggest to separate a pilot that makes it from the ones that don't make the cut?

Jessica Grisolia: Yep, I have-I'll touch on four requirements for a successful pilot and a bonus time-the-knot one. *(laughs)* The first one in my opinion is allocation of resources. And it looks like a basic one, but it's often where the devil is in the details, because right now, especially with Vision AI, the pilots tend to run in a very similar format than any other retail tech pilot you've seen before. However, resources tend to be more cross-functional and there's new actors. So we said before, you normally have product, IT in the form of engineering, and business-those tend to be the famous like three-legged stool. However, now with Vision AI, you often have data scientists that come into the mix, so you add even more stakeholders. And we are operating all on limited resources. So that's where you really need to be careful when you start the pilot concept, understanding how do I want to leverage resources? What do I do in-house, what do I outsource? And if I outsource, do I want out-of-the-box solutions that can get faster to market and then build from there, bring them natively or integrate in different ways? Or do I want to start

with a broader scope from the get-go? Because resources, that's where, you know, with Vision AI, scope creep is a real thing. So you keep on adding things to your project and then you find yourself short on resources to be successful.

We had to touch on the KPIs, of course. Agreeing on KPIs across the cross-functional team plus your IT providers is also something that is not always obvious. Not only the hard KPIs which we have mentioned, but oftentimes the soft KPIs are even more important. We work with so many luxury retailers, for instance. How do you achieve a better customer experience? How do you measure it? This is going to be soft. How do you increase the brand awareness or the discoverability? That's something that if you ask three different functions how to measure, they will have different answers.

The third one is having a plan to get to the proof of value quickly, because otherwise if you are not convinced across the teams that you're going to realize the value, no one is going to want to finish the pilot and scale. And having an agreed timeline. We have seen sometimes pilots dragging for years even, when you don't have an agreed timeline. And if you are not convinced that you can reach your proof of value in three months max, that's where things get more complicated because then there is the tendency of that scope creep.

So for me, the bonus one is: write a Statement of Work. Agree on paper, take that commitment. I know it's boring to write the Statement of Work, but is essential. Write it down, have all the parties involved agreeing and get the buy-in. And that's-that's what we see makes every pilot much, much smoother.

Benjamin Hempel: Thank you so much, Jess, for sharing this and also, you know, a free bonus one just on this call. You heard it here first. But so we briefly touched on-well, no, touched a lot of times on, you know, ROI metrics. We already mentioned on-shelf availability, there were efficiency gains, there was augmenting labor, shrinkage reduction... there were quite a few mentioned here already by Natalie and Jess. And also Pavel, want to check with you from the work with your customers or the companies you worked with directly, right? Which ROI metrics are retailers actually using to build and defend the business case for AI projects?

Pavel Ryukhov: Yeah, exactly. The surprise probably is that when we start discussing of the deployment of AI for any of the processes, we anyway come down to the same metrics we used-all we used in retail since ages, right? It's productivity growth, cost saving, wastage reduction, impact on sales and margin. So they're definitely not new.

What is definitely new right now is that AI could improve certain elements, productivity elements above general business rules and business, you know, standard operating procedures, yeah? So you can-you can really improve much faster than you did in the past. For-I could bring one-one example, but that's-that's actually from my work at Metro. So we-we used to deploy Markdown application proposals based on the machine learning and-by the way, it's a very typical usecase for many grocery retailers. And so typically, people use business rules for that in stores. For example, I have a huge to milk expiring tomorrow and then I put 50% minus on that milk. But in new case, AI can tell you it's minus 37%, minus 55%, whatever, yeah? But the reason is that the model is trained to reach the best sell-out probability of the product tomorrow, right? And then you see not your, let's say, you saved in that case, let's say, not a little bit of wastage, but you see really improvement in your margin. You see sharp decrease of wastage. Sometimes most of the cases brings you hundreds percentage of improvements, not just few

percentage of ROI, but really hundreds in a short period of time. So that's-that's-that's what is new and that's what is surprising now in the last few years.

Benjamin Hempel: Thank you so much for sharing this one. So really like, people understanding, right? Vision AI is a tool and then, you know, robots as a hardware platform can be challenging, but overall also provide really good value for then, you know, making Vision AI work. We're already nearly out of time. I would have one question though, Natalie. You already, you know, talked all about agentic, we talked about Vision AI, but AI is mentioned everywhere in so many different contexts. Like from your perspective, how do you really-what can people do to separate hype from reality? What's the outlook for retailers in the next few years, beside everyone now has their agent in their pocket and gets the best advice of ChatGPT and not maybe from a store associate anymore?

Natalie Berg: Yeah, it's a good question. I think it can be really hard to separate hype from reality. You know, a few years ago, we were all talking about the metaverse and how we were all going to be, you know, having our digital avatars and shopping, yeah, exactly. *(laughs and gestures)* But I think I think it is an exciting period. I think it's an exciting time to be an analyst and be, you know, observing all of these changes. And it's moving so quickly. I think for retailers, it's obviously a lot harder because you need to work out, you know, where you prioritize your investment. And AI is a big word, it means a lot of things.

I do think this shift to agentic, this is the platform shift of the decade, you know, of the century potentially. You know, this is a huge, huge shift in how we're going to buy goods. I think very-very briefly, because I'm conscious of time, I think the past 10 years we've been focusing on digitizing our physical spaces. And I think retailers have done a brilliant job doing that, COVID obviously being a huge catalyst for digital transformation. There's still more work to do in the physical space, of course there is. But I think the real shift that we're going to see over the next decade is going to be about how we make our digital experiences much more immersive, much more life-like. I think discovery, search, all that's being disrupted now. And I think essentially what we're going to see is a continued acceleration in this convergence between physical and digital retail. So, super exciting time, and I think I think the final message I'd say is that there's really no standing still.

Benjamin Hempel: Great closing statement for this. All remaining questions-I know there were a few more-will be answered later on. We'll follow up with you individually. Thank you all for joining us today, Natalie, Pavel, Jess, and especially all of you in the audience. Thank you for taking time out of your busy schedules. I hope you enjoyed this one, and we hope we see you on our next webinar. Have a nice rest of the day.

Jessica Grisolia: Have a nice day. Thank you, Ben. Thanks everyone. Bye-bye.

Pavel Ryukhov: Bye-bye.