The Future of Supply Chain: AI in Supply Chain Transformation: Human Decision-Making, Bias, and Trust with Benjamin Bargetzi

Benjamin Bargetzi: [00:00:00] Success in the age of AI is not technological but neurobiological .

Richard Howells: Welcome to the Future of Supply Chain, a podcast where we discuss hot topics, best practices, and the latest innovations in today's global business. I'm Richard Howells, and I'm joined by my wonderful co-host, Sin.

Sin To: Thank you, Richard. Hello everyone. My name is Sin To, and I am today's co-host. And in this episode, we want to discuss with a true expert, Benjamin Bargetzi, how leaders can make better decisions under uncertainty and how AI can augment, and not replace human judgment.

Benjamin, welcome to the Future of Supply Chain podcast, and it's very great to have you with us. So to kick us off, can you please take some minutes or a moment to introduce yourself?

Benjamin Bargetzi: Thank you very much for having me. I would say I'm a lucky nerd. So I grew up in Switzerland, a cute little village with 3,000 [00:01:00] people, and as the first person in my family history, I was allowed to go to university, so it was a big thing. There was already like a great moment for my family, but then also, like I chose to study first psychology and philosophy, and then later neurosciences.

And then I got really interested in how robots work and how you could copy the genius of the human brain and this greatest of all intelligences in the world. My favorite AI is still the one up in our brain. How you could copy some of the logic within algorithms, and that is I think, this dual world I've been walking in ever since.

On one hand, I'm really interested in human decision-making, emotions, perception, and what makes us human, so both from a neuroscientific but also almost a philosophical and existentialism approach. On the other hand, I'm extremely excited about technology and how it can scale processes, how it can

do amazing humanitarian work in the world, for example in the medical space or by figuring out cancer research and other things like that.

[00:02:00] And I think I always walk between the two worlds because for some reason our society is always "Oh, do you believe that AI should replace everyone and replace all jobs and we're all ruled by our robot overlords, or do you like people?" And I think that's a lot, sometimes a little bit too extreme in how the media is also phrasing the discussions because to me, I think modern technology is actually in the end an amazing sparring partner, a probabilistic sparring partner, which helps us humans make better decisions, more informed decisions, and thereby help us accelerate the projects that we're doing.

And if those projects happen to be something of value, we can do a lot of great stuff in the world. So, this kind of thinking brought me to Google and Amazon. In Amazon I was actually even working in one of the data science teams. I still think I'm coding horribly, to be honest, but a little bit of Python and TensorFlow was fine back then. And worked on last mile supply chain systems.

At Google I was more working on [00:03:00] telco and financial markets, and thereafter ventured out of a quest to use my neurological background but also my technical background for more like social projects. I moved to the World Economic Forum, was working there on some quite high-stake initiatives, and these days I'm mostly active as a global tech entrepreneur.

I also invest. I mostly try to invest in biotech, cancer research, medical tech, like this intersection of technology and human life that I find fascinating. And we also have a very big project going on in Ukraine where we try to help people deal with trauma, which to me is a big humanitarian mission, but it's also one of those statements I wanna make to the world that this distinction human against machine is misleading, whereas I believe the future is let's make humans better thanks to the machines.

And so the topic of today's podcast about enhancing decision-making is very close to my heart given my dual [00:04:00] background, I would say.

Sin To: Very impressive, and thank you so much. So, as you just mentioned, you've worked across big tech and global platforms like Amazon and Google, and also the World Economic Forum on future technologies and AI. And you've been working at the intersection of technology, human decision-making, and large scale transformation.

When you look at how organizations adopt AI today, what is one of the patterns you see again and again that supply chain

systematically underestimate?

Benjamin Bargetzi: The biggest one directly comes to mind. I mean, especially in supply chain, it's such an operational ecosystem. It's probably, I don't know if it's overstated, but I would say it's the most operationally efficient driven industry in the world. I'm just like now fact-checking maybe finance, but I would still say our supply chain is really every single mistake you make, you're gonna feel it somewhere down the line.

So, I would still say it's one of the most rigid industries, and for that one is of course [00:05:00] you're like, "Oh, great, we have to collect data. We have to use AI to optimize it, to predict where something can go wrong, to model risk behaviors, probabilistics, alternative plans." These are all amazing applications for machine learning, absolutely.

But you know what these machine learnings need? They need to have the information from the people on the ground of what is actually going on, and that needs human buy-in. And human buy-in means that the people doing the actual work, who are standing on the operations which we try to optimize with machine learning, to feed back what they're seeing, what they're seeing in terms of where they are wasting the most time, where they have the biggest missed opportunities, where they are the most frustrated.

And if they don't feed back this either to the management team or to the machine learning, we will never achieve a great model because the model needs the operational feedback to be excellent. And that really brings about the point that if your company is filled with people that [00:06:00] are worried that AI is gonna replace them or that they help train the models which are in the end taking their jobs, they will sabotage it.

In fact, MIT research is quite clear, 90% of AI transformations fail. But if you dig in the data, most of those transformations fail because you lack human buy-in and the human factor. If people see AI as this kind of like abstract phantom, almost like an alien that is a either it's them or me situation, of course they will sabotage the models.

We all understand how that is if you're worried about it. But if people see it, if you as a leader can really explain to people how this helps them get rid of their pain points, how it makes their life easier, how it may actually even help them

avoid risky situations, how it makes them more safely, that will inevitably, if you keep using this language in a authentic way, people will start seeing the technology as a friend rather than an enemy, and that's when they [00:07:00] start feeding it, that's when they start training the models, and that's when the models actually start having amazing value, not just for the company, but also for the people who get supported by them.

Richard Howells: Benjamin, I wanted to go back to one of the terms you used a little earlier when you said AI is a sparring partner, and it's the first time I've heard it like that, but it certainly makes sense the way you just described things. And I also want to tie in that human buy-in concept that you mentioned. So, in a supply chain planning context, what would a world-class sparring partner actually do day to day, and what should it never do? And how do we design the interaction so humans stay in control rather than just rubber stamping things so they feel as if they have buy-in?

Benjamin Bargetzi: Absolutely. So maybe first I'll give you a quick of a, like a bird view overview of what my view on this is, and then actually I will give you a concrete example for especially back when I was at Amazon where I was working on exactly such topics.

You will find like events from me I host in Zurich or videos I did [00:08:00] from like around 10 years ago where I was talking about machine learning, AI, and what it can do for the world. So I have been roughly in the space around 10 years, a decade, and for me it's kind of like getting boring to talk about AI in the sense I believe in the future it will be like someone's trying to brag, "Oh, we use a printer in our office, we're so advanced." No, it's just gonna be like the new normal, right? I also think, however, that machine learning should never be confused with a cure. What I mean by that is if your processes are faulty, if your business models are not satisfying the needs of modern society anymore, and if your people are not ready to go on a journey, throwing machine learning on a problem is actually not solving anything.

In fact, I think very often replacing people with machine learning is actually lazy leadership because you realize a certain process is faulty, you just try to fix it with machine learning instead of actually thinking about how can I optimize this process together with the people to make it smoother, [00:09:00] lean, maybe more modern demand-oriented while scaling it with machine learning. I think machine learning in the end scales processes, but if what you're scaling is erroneous, the scaling will of course also be bad. And on a very concrete operational level, I would say if we ban the word AI for a second, what are we actually talking about? We're talking about algorithms that are in a machine

learning manner detecting patterns in data sets to do three things. Number one, they're trying to automate or instantiate certain processes which are not 100% recurrent, because if they're recurrent, you would use a deterministic model. You wouldn't use machine learning, which is statistical, right? It wouldn't make any sense. If it's a perfectly recurring process, you just use a deterministic algorithm, not a machine learning one.

But you would use it for something like it is repetitive, but there is some variation going on, and that's where machine learning is brilliant, right? So, you basically get the chance to [00:10:00] delegate something you don't like doing to a machine, which is actually making it a friend, right? It's taking away work from me, so to free up my time to, to do something that I consider of higher value.

The second thing machine learning can do, it creates probabilistic estimates of the future. So, it's basically a crystal ball. It's a crystal ball, however, which is not destiny, but it's probabilities. So basically we know, hey, in 12% of the cases this and this is happening, in 70% of the cases this and this is happening, which I think is wonderful because it's probabilistic, which means we get an information what the machine thinks will happen, but we as a human still have to take the bets.

Because even if the machine tells you, "Oh, this will happen with a 70% probability," you can say, "Okay, but the upsides of the 30% are big enough for me to still invest in it." And I think that's the beauty of the machines, that they're statistical, which means they still need a final human judgment to come to reality, which is why I see AI and humans as teams [00:11:00] rather than antagonists.

And the third one is a sparring partner. I mean, very often when I invest in companies, what I actually do, I talk five minutes into a model and I tell it everything I believe about the world. I tell it all my assumptions, like why do I think this is a good idea? Why do I think it's a great founder? Why do I think it's a good market? And then after I've spoken all my soul to it, I will actually ask, "Please now tell me three ways how I may be wrong, overly enthusiastic, or have a cognitive bias or a cognitive fallacy in there." And then I read the feedback, and if the feedback is convincing, I probably just saved a few millions in wrong investment I would've made otherwise.

But if it is not convincing, then I can say, "Okay, let me trust my human judgment to go ahead." And that's really where I see the power of the sparring

partner engine within machine learning. It's not that they will tell you the truth, but they will help you create probabilistic assumptions what the machine thinks.

For example, if you think something is a very good idea and the [00:12:00] machine tells you there's like a 0.1% of that being true, at least it should caution you to rethink your thought process. It doesn't mean you have to give up on it, but you should at least rethink it. And I think that is a very powerful way to use the machines to mirror your thoughts.

The same you would do with a friend. I think machines will never replace what a human can give us in terms of emotional capabilities, but it can at least help us reflect our thoughts. In fact, if you look at the most popular stories in the world, like "Star Wars," "Harry Potter," "Lord of the Rings," they usually have a very similar narrative.

Like basically you have a young person being ripped out of their environment, they find a mentor who guides them, the mentor passes away or disappears otherwise, and the young person has to become adult and lead the way going forward. So, I think on a archetypical, almost Jungian perspective, we humans have a very deep desire for finding a mentor.

Unfortunately, not every one of us is lucky enough to have one. And [00:13:00] while I wouldn't say that machines could ever replace what a mentor can give us in terms of feeling safe, at least they can help us with mirroring our thoughts. And so this kind of like world where I use machines to model scenarios, I use them to create probabilistic models to solve mathematical equations, to try and combine, let's say, molecules in a new way to find a medication for cancer in a way that I've never thought about myself, to help me reflect my business investments and tell me where I may be wrong.

I think this richness of exchange that we can have, that is the true power of machine learning. But you see very much in what I describe, we are not replacing people with technology, we're actually enhancing them. If you now look at my old friends in the Silicon Valley, most of them are hiring back the people that they have fired for the AI revolution because they realized that the tokens are more expensive than the human factor, right?

And I think that speaks to the point that the way forward cannot be as [00:14:00] lazy and easy as just kicking out people to replace them with machines, but it's actually gonna be, how can I invest in my people sufficiently to make them shine thanks to the technology?

So the power of machine learning for operations and supply chain is insane. It's one of the, I think, medicine, like health data, financial data, and supply chain are the big three where you really can dig deep. But again, the models are only as good as the people who are entering the data, as the people who are reporting what they see, as the people who trust you as a leader enough to report you where the opportunity is.

And if you don't get the human factor into your calculation, you will by default fail your AI transformation, not because the AI wouldn't be a great use case for supply chain, but because the people who are supposed to carry the transformation haven't been enabled by you as their leader to actually believe in it.

And how you make them believe in it is to explain to them how they will [00:15:00] profit from this to get their buy-in, to make them co-founders of this small startup you're starting within the bigger corporate context, rather than making them scared that you're trying to get rid of them. It's all about psychology in the end.

Sin To: Yeah, it's all about psychology and I think also communication in that, in some way

Yes.

Benjamin Bargetzi: communication, I would argue communication is the way how humans transport psychology between each other. Yeah

Sin To: I like the the comparison with the different stories, movies that you mentioned , "Lord of the Rings"

Benjamin Bargetzi: I told you I'm a big nerd no, I love this. Science fiction, fantasy, that's my universe.

Sin To: That reminds me a little bit of how our supply chain are currently working. They are operating under uncertainty, and it's also some kind of a basically uncertainty engine, today something happening you need to move and to act fast, and everything is under volatility and disruption and trade-offs, and you need to decide very quickly if you want to do this or that [00:16:00] or something else.

So, from the neuroscience and decision science, which cognitive biases most reliably degrade planning and execution decisions from your perspective?

Benjamin Bargetzi: Oh my, you just, you literally just opened my favorite Pandora's box. I think this podcast gonna get, take three hours now as Richard has just. No, like, it's like, so actually a lot of my early research and work I was doing back at UCL or Oxford was really actually on uncertainty. That's actually the world I come from. Thank you so much for opening this box. It's actually, I originally come from the neuroscientific research of how human beings deal with uncertainty, risk, and situations where they have to make an estimate where the world may go, but they don't know what actually will happen, and they still have to make a decision.

So, this is really the world I come from, and I looked how it, how the transformation changes with age, for example, how it changes with depending on how sleepy you are. I had some research to find the genetic correlates of this thinking, [00:17:00] like how it's biochemically represented in the body.

I worked a lot on dopamine loops. So this is really like the world that I'm coming from. Actually in, in, back in Oxford at the, Center for Ethics, I actually even we looked at how the uncertainty preference of a person may predict how social they are, like how much they are willing to help others.

Because if you are very threatened by uncertainty, maybe you first will take care of yourself rather than the people around you. So actually, uncertainty was really the big world how I moved into machine learning, which actually was when back when I attempted to start my PhD with Professor Karl Friston at UCL.

He he works at the intersection of physics and neuroscience, and he was working with Google DeepMind on a project to see how the human brain's capability of reducing uncertainty may be used to build better reinforcement learning in robotics. So that's like how I actually got dragged into this whole world and then left research to move into Amazon, Google, and the rest of my path.

To answer your question on very practical terms I [00:18:00] think uncertainty is the one most defining characteristic of human life. I think human beings, we have an innate need to explain the world, and I don't wanna go too deep, but a lot of the stories we tell about how the world is working actually stems from our innate desire for safety and clarity. But the problem is, the more you actually work on the world, the more you understand how not even the material we see is properly stable, but you still have a molecular and a quantum layer below that. The more you realize the world is actually inherently stochastic and

inherently unsafe and probabilistic, and that's really something that goes deeply against our evolutionary preference for safety.

Human beings, if you look at us from the lens of evolution, what we like is to have stability, a long life, children, and go away in peace or maybe have some adventurous explorations along the way. But fundamentally we do wish to avoid uncertainty wherever we can. [00:19:00] However, we operate in a world that's very uncertain.

And I think that's actually also a paradox, a beautiful paradox that we come from nature. We have this inborn aversion to uncertainty, which actually helped us survive in a nature with much stronger animals. Human beings are actually quite pathetic animals. We cannot fly, we cannot swim very well. We don't have like big fangs or claws or anything. What we have is our fear of the unknown, taking a step back, and then as a group attacking the larger animals, and that helped us conquer the planet for better or worse. And now in this safety we have established a world which is so industrial and unnatural, where we work with digital ecosystems, financial markets, and we have created a world in which those who are afraid of change and uncertainty are actually punished the most.

And that's like a beautiful irony, that our fear of uncertainty made us survive in nature because true, if you walk through [00:20:00] the bushes back in the Stone Ages and you hear something moving next to you, what's better for you to assume that it's a cute little rabbit or a dangerous saber-toothed tiger, right?

The tiger, because if you're wrong you're the dinner. And that's, this instinct is so deep in us that I think it still carries a lot for our modern politics as well as business. And a lot of cognitive biases can really be explained by that tendency of the brain. We try to narrow down information to feel ourself safely when maybe the data would suggest otherwise.

One of my favorites is confirmation bias. Humans just instinctively, every single one of us listening to this podcast, me, everyone here, we like to listen more to information that confirms the things we really believe in rather than listening to data which contradicts it, which is of course great for feeling well, but it's a very bad idea for making good business decisions.

If you're a really big fan of a certain process or a certain idea, but the data stuff, is stuck, starts piling up that it's actually [00:21:00] a bad idea, but then your ego and pride get in the way and you keep defending it because, "Oh, if I acknowledged I was wrong, then everyone will think I'm stupid." I think that's,

first of all, it's sad that you feel that way, that you cannot open up with your colleagues openly.

But second of all, you're also risking to burn millions for a project that doesn't have any hope. If you really believe in the project because you say, "Hey, everyone else doesn't understand why it is the greatest idea ever," then go for it. And I think that's the hard thing. Sometimes cognitive biases can be your biggest strength.

They are called tenacity and, having a strong will. So I think that's also something where, for example, if you're creating a startup, people tell you, "Oh yeah, you gotta know when to stop, but you also should never give up." Those are two very contradictory statements, which I think again, just speaks to how uncertain real life is.

I think another one that I'm very guilty of as well is sunk cost bias. Like human beings start to love something more the more they've already invest into it. If you're building a website and you have put so much [00:22:00] into it, and then someone tells you, "Come on, let's do a full rebrand, like you'll feel almost personally attacked by that, right? But whereas they may actually be right is the better path.

If you have been building a certain organization or a process and you really think this is the way to go, and then someone else comes and tells you, "Let's pull everything over with machine learning," probably you'll feel something sting in your heart, but maybe it is the right play. And if you allow me the digress here sometimes or unfortunately also our marriages are like that, where we keep holding onto a dream, whereas the data would strongly suggest a different direction. And I think that is really, it's on the one hand beautiful that human beings are so defensive of what they have acquired.

On the other hand, in business, it may sometimes not be the right way to go. I think cognitive biases are immensely important in modern life, especially also, like human attention span is very limited. We have like our brain is split in two parts. As a metaphor, you have the subconscious and the conscious, or as Kahneman more [00:23:00] modernly calls it, System 1 and System 2, and you have limited energy.

The brain is an amazing energy conservation machine. In fact, right now one of the biggest developments in AI research is we're trying to copy the genius of the human brain and the algorithms by understanding why the brain is so good at saving energy and conserving it, and to learn that for the models. Because if we

can bring this genius to the AI models, we'll drastically bring down the costs and the energy pressure that it creates on the planet.

But back to the human brain, I fundamentally believe, if we are living in a time where everything gets geopolitically more disrupted, every single day there's a new crisis, machine learning keeps challenging our existing business, that creates a lot of pressure on the human brain and will reduce our attention span, which means we get more tired, more hollowed out, and more instinctive.

And the more instinctive and less conscious we get about our choices, this is not [00:24:00] spiritual, this is purely biological, the more energy goes away for worrying and different multitasking, the less energy you have in your prefrontal cortex, in your System 2, to actually channel and critically check information, the more you fall prey to cognitive biases.

So, especially in crisis situations, it's fundamentally important that we reflect our thinking. How much of what I now want to do is just wishful or lazy thinking because I don't have the energy anymore to think things through properly, and how much of it is actually data-driven? Which I think just speaks to two things.

Number one, don't make decisions on your own. Talk to your colleagues, talk to your mentors, talk to your worst enemy what they think of your thinking because you should drastically look for someone to fact check your thinking. And if after you have recorded all of it and journaled it, and even your worst enemy hasn't given you any good [00:25:00] reasons why your thinking is bad, then probably you can be confident to go ahead and say, "Yeah, this is a good idea."

Or the number two, use AI as a sparring partner to provide another layer of information to you. However, do not use AI as your only sparring partner, but enrich it with human elements, including your enemies. And I'm quite serious about that. I quite often have discussions with people who I think everything they believe is wrong, and I still have their discussions because I want to understand their logic, their premises, because it may actually help me reform my thinking, and maybe they're not fully wrong about everything.

And I think the more we practice like a muscle, the brain is as a metaphor, like a muscle. If you go to the gym, you build muscles. If you stop going, it decreases. The same with the human brain. If we practice critical thinking, if we train this muscle by exposing ourself to different opinions, either from machine learning

or from human beings, we train the muscle [00:26:00] to avoid our cognitive biases and make better leadership decisions.

If, however, we start delegating our decision makings to the machines, if we start just trusting the groups around us and we just comply with them, if we never dare to disagree and just go along with the flow even though we believe the flow is wrong, and if we just take AI as the new prophet of truth, I think then we will inevitably end up in a world where you decrease the muscle of your brain to actually make good decisions, and you will end up less smart than you were before.

Many people ask me if I'm scared about the Terminator scenario in AI. I would say the Terminator one is a very serious one. Whenever I'm in Ukraine, I'm also quite far out east. I do get faced with the risk of technology being used in military warfare. Absolutely. This is horrible. But I think the bigger risk with, of AI is the matrix, that we all delegate so many things to the machines and, externalize our [00:27:00] responsibilities that our muscle in the brain gets smaller and smaller to actually think properly for ourselves.

And to all our audience, just think back to the phone numbers you were able to remember of your friends back in the old days compared to the phone numbers you're able to remember right now. And this is biological evidence that what we repeatedly do affects the very structure of our brains. Aristotle, already over 400 years before Christ, said, "You are what you repeatedly do."

And we see it now happening in real life. The more we delegate to the machines, the more we delegate responsibility and decision-making to external forces, the less your decision-making muscle in the brain will be strengthened, the less your synapses will connect, and the more you will build the habit of just following stimuli instead of actually choosing.

And I believe that now more than ever, in such a disrupted world, in such a geopolitical tension in the [00:28:00] world, now more than ever do we need people who are in focus, who are at peace with themselves, and who make real rational decisions and don't just get dragged left and right by either geopolitical trends or by machine learning telling them how to live.

Richard Howells: Benjamin, this is this has been intriguing. And you've really been talking about how a digital transformation, the importance of change management when it comes to digital transformation. And most transformations don't fail because of the algorithms or even the software, but all, but because of adoption. So, what are some of the most common human failure modes you've

observed, and what interventions could we make to make sure that this digital transformation is a success?

Benjamin Bargetzi: I would really suggest the most important, again, it's human buy-in. It's actually even if you look at evolution, why do we human beings accept having managers and leaders? Like, why do we do that? Why are we okay with having [00:29:00] politicians and leaders and people above us in the hierarchy? Because we're herd animals. You know, back in the old world, you had a lot of like horrible things going on, like droughts, floods. You had like very much uncertainty on steroids every day back in the ancient days. And so what we did is we delegate the leadership of the tribe to a leader to guide us out of the misery.

And there's basically an economic exchange going on. You give someone power in return for safety and trust. And the biggest problem of leadership is if you break this most ancient deal of the human genetics, which we're born with, if you break this deal, then you'll very quickly lose the people in your firm.

Because if you take power without giving back trust, safety, and accountability, you break the very reason why human beings have managers and leaders in the first place. And I think that really is the key to leadership transformation, to digital transformation. Like you gotta believe in it [00:30:00] yourself. And if you don't, please get a mentor. Please go to seminars. Please book one of my keynotes. That was a joke. 50% joke. You can also read my books. They are great, by the way.

But on the other more serious note, like if you believe in what you're doing, you should show up to work, be the first at the workplace, and actually radiate with that energy that gives the teams confidence that you actually are ready to take them on this journey and that you know where the ship is going, that you have the confidence that you can sail this ship.

And if the people show up to work and they think, "Hey this person doesn't even know what's going on, they're just using buzzwords, and they also are worried as we are," they will very quickly start looking for new jobs or do passive quitting. Passive quitting meaning they show up at 9:00, they leave at 17:00, and that's it, right?

And that's not what you want. What you want is people being excited to show up to work. They should be like, "Hey, I have seen this and this process not working. I think we're losing [00:31:00] a big opportunity here. Could we work together to build a model that actually addresses these challenges?" Imagine

how cool if the people in your company are actually bringing innovation ideas to you and you together, of course, you have to prioritize them, you have to make an assessment, is it worth the money?

But then you basically create this energy where everyone in your company becomes a co-founder of your department. Like they feel "Hey, I have a stake in this startup within the bigger corporate. I wanna make sure it's doing well." If every single employee in your company becomes a co-founder of the processes they manage and they're thinking about it, "Hey, how is this process maybe broken? How should it be done completely differently? What tech tool could we use to help here? How could we maybe lay things together and streamline it without having to fear that this means them losing their job?" What you gain is a wave of inspiration in your company, which will actually leverage the tech tools to the benefit rather than being in this weird [00:32:00] fight between human versus machine.

And I think one of the things I've implemented on government level but also on, on the Fortune 500s I've worked with, on Friday or the last day you have in-office days, if it's now with the work from home, if it's Thursday. On your last day in the office, bring together everyone for an hour and let them do what many people like do most, let them complain.

Complain about where they lost the most time this week, where they were the most frustrated, which tool was a nightmare to work with, where they saw big opportunities in the market, in sales, in anything which they couldn't leverage because something went wrong. Let them talk about it and listen.

Be humble and listen. Write it down in an Excel, in a Word, whatever. Write it down. And then afterwards, if you do this for a few weeks and you start seeing patterns in the complaints that the people you're responsible for have, that is probably a pain point worth solving for. [00:33:00] And then you have two options.

Either you look online what tech tool, what new startup, what software has come out which you could actually use to get that problem addressed and save hundreds of hours every week or month for your team. Or alternatively, if it doesn't exist yet, create a task force and build your own models. Build something of your own.

The barrier to entry for tech entrepreneurship is becoming smaller and smaller. Vibe coding obviously is not the right answer for everything, but with the models, you can very quickly start prototyping things and gauge interest and see

how well it would perform. And then once you have a proven prototype, you can actually bring in experienced engineers who turn it into an actual proper product.

If you believe in the agility that AI allows us to actually create our own tech, and you see this as a proliferation where the only barrier to entry is your willingness to act upon [00:34:00] ideas, you as a leader suddenly become very much in demand of good ideas. And you know where the good ideas come from, not from you, not from the crystal ball. They come from the people working every day on their processes. And if they report back in this weekly one-hour session or also even outside of that, if they report back to you what they think is right now the top priority you should be fixing, you either buy the tech solution externally or you create it your own.

And suddenly you become the tech entrepreneur that creates an amazing system that not only solves your own problem but may actually even be licensed to other companies to also solve their problem in return for revenue. And suddenly your company creates whole new business models based on the innovation you made to solve your own issues in the first place.

Think of Amazon Cloud, one of the world's most profitable businesses today, worked exactly like that. And I think that [00:35:00] innovation readiness, it's beautiful because it's not only taking away your pain points, it's also giving you potentially a whole new revenue model. But third of all, it's also giving the people in your company the trust and confidence that they are co-shapers of the futures and are not made redundant by it.

And whereas I know we're at the end of the podcast on a neurobiological level, dopamine molecules, that's the usually what I write books about and everything. Dopamine is one of the most important molecules of our modern day. Dopamine is determining what we crave and where we spend our energy, and we have completely destroyed our dopamine centers in this modern industrialized world with sugar, snacking, digital consumption, reels.

So, we are very much imbalanced these days, which I think reflects also on a bigger scale why there is so much geopolitical aggression because people are just not anymore at peace with theirself. And one of the key solutions to that is [00:36:00] actually to find something outside of easy comfort and distraction which you can give yourself these dopamine kicks by. And I believe raising a project you care about, doing something at work that you think actually matters, raising a family, doing something in your free time that you believe in, these

things give you a meaning that transcends easy pleasure and actually also brings you back to balance.

And I believe that when I say that innovation in companies, it's where we spend most of our days. If someone leaves the workplace feeling that they did something which was actually valuable, that will also impact their private life and, their mental health in the end.

Richard Howells: Benjamin, this conversation has been riveting. But we are coming to the end of the podcast and my human brain is firing on all cylinders at the moment based on your enthusiasm and the information that you've been sharing. But I have one question that we ask all of our guests, and I [00:37:00] think it's gonna be the hardest question 'cause I don't know how you can summarize in a sentence or two what you've just explained to us, but that's what the real ask is here. In a sentence or two, when we talk about AI and the balance of AI and humans, what is the future of supply chain?

Benjamin Bargetzi: I think I can give you a very easy one-sentence answer to that actually. Success in the age of AI is not technological but neurobiological .

Richard Howells: That's the most impressive summarization of a half-hour conversation that I think we've had. Hey Benjamin, this has been great, I really appreciate it and, I'm sure the listeners will have lots of questions, and we will make sure that we share links to your social content and any assets that you'd like to share in the show notes. But thanks for a great conversation.

Benjamin Bargetzi: Thank you very much to you too. Thank you.

Richard Howells: And thanks everyone for listening. And until next time, from Benjamin, Sin, [00:38:00] and I, thanks for discussing the future of supply chain.