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TechnoVision 2023 pt.1: Dealing with scarcity, sustainability & uncertainty with Ron Tolido, Capgemini

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[00:00:00] Sometimes a father and son have been working on the same software. This actually has happened. I've seen it with a Swedish clients which to me is the ultimate nightmare to, to work on this. What is the meaning of life guys? I thought you were going to say that was a really beautiful story.

So that was absolutely horrendous.

Welcome to Cloud Realities, a conversation show exploring the practical and exciting alternate realities that can be unleashed through cloud driven transformation. I'm David Chapman. I'm Sjoukje Zaal, and I'm Rob Kernahan.

And this week we're going to be talking about Technovision 2023, a comprehensive report on the trends influencing business and tech decision making this year.

Specifically, they've made a call to action to be respectful of the increasingly scarce [00:01:00] resources we have at our disposal, balancing commercial futures with The societal impact in the first of two special episodes. We're going to look at the overall philosophy of the work first and talk about the key five trends.

In part two, we'll look at the mindset that informed the work and the important design principles that allow organizations to apply it within their context and joining us this week. I'm delighted to say is Ron Tolido data and insights, CTO at Capgemini and the overall leader of Technovision. Welcome Ron.

Great to see you. Do you want to say a little word about yourself and just introduce what you do? Hi Dave. Thank you very much for introducing me. I'm doing this broadcast from the Netherlands, as you can probably tell by my accent, which I wouldn't be able to hide. And it's a real pleasure to be on this podcast.

Technovision is just out. It's having a lot of impact and I'll be very happy to share a few of the key insights of it. Maybe take us back to the inception of it to start [00:02:00] with and tell us where it came from and what the journey has been like so far. It goes back a long time. They've actually already back to 2007, even before that we had something which we I think informally already call a techno vision, but then a few years later, we really decided to pick things up seriously.

I did it at the time together with Pierre Hessler known as the first and currently only kept Gemini. And so around 2007, we we created the first version of it and we presented it to a lot of people, including a few executives. And I can still remember that one of the executives said to me so we showed it to him and we were like, Hey, what do you think?

And he was like it's neither techno nor vision, right? And at the time you were a little bit disappointed slightly annoyed. A feedback you want, is it? Yeah it was his executive way to do that. And maybe trigger us a little bit, which probably worked. And, in hindsight, I think he was right.

Because technovision is not only about technology, there's, we're very much [00:03:00] interested in the business impact we create with technology including all of the business context around it. So there's actually a lot of business use cases and business impacts in the documents, and then it's also not just a vision which by the way, contains as well.

So it has a vision every year, we have. We have a vision on where an economy is going, where society is going, how technology can be applied to deal with everything that, that rises from that. But it's also a very actionable framework and tool sets. So we, it's actually designed to be used on a daily basis.

So not like a piece of thought leadership, let's read it on a Sunday afternoon. Okay. That was interesting. Thank you very much. Next but instead we are creating something which is really much more a framework and a tool set. that you can use as a daily basis to to innovate. Before we get to this year is when you look back on say 2007 to 2022, what are the big things that strike you about the journey?

The world has been on over that period. I certainly know that we have been [00:04:00] going ourselves with Technovision through a quest for simplicity. Not because we wanted to simplify things, but because most of our people around us that used the stuff or read the stuff or tried to read it, said to us, Oh, could it be a little bit more simple, please?

Why do I need a PhD? Why do I need to have won the Nobel Prize to actually understand this stuff? That's what another executive said to us. He literally said, should I really be a Nobel prize winner to understand this stuff? Did he say, do I need to be a Nobel prize winner to understand the techno and the vision?

Yeah, exactly. Something like that. So I, I've seen a simplification, I've seen a decrease of attention span. With many of the people that use the stuff and read the stuff over the years. So the thing became shorter and shorter. I wouldn't say it's already tweet level but I predicted a few years ago, sooner or later we have 37 trends and each of them is only a tweet because anything else more than that would be, I don't know overwhelming.

So difficult. The whole thing just becomes a tweet thread. Yeah, exactly.[00:05:00] So it's tempting, to actually do that. Or simply write haikus for each and every of the trends and that's it, right? 37 little poems. And maybe that is simple enough. It's a strange world, of course, the world has become more and more truly a digital world.

As we like to say, every business is a technology business now. And we've seen that evolve over the course of 15 years. Particularly this limited attention span and finding different ways to engage with the whole framework and the tool set has proven to be very crucial. Ron, before we dig into Technovision 2023, just give us an insight into where your heads were at when you grouped together to discuss what you might come up with for this year's trends.

It's interesting, Dave. It's actually quite a difficult exercise, because we typically already grouped together more than half a year before we released the thing. So somewhere around, around June, typically, together with a merry band of CTOs from across the global organization. And we start to brainstorm.

And so you try to think ahead in [00:06:00] terms of what will next year look like. And obviously we were in the middle of 22, which was a very shaky year, obviously because of all the geopolitical developments. And with that, all the economic fallout of it and all the uncertainty that came with it.

Having said that we already had to pioneer the concept of be like water and being like water, which were the main themes of 21 editions as a plea to use technology for more agility, adaptivity, resilience, while keeping the flow, anything really applying technology to deal with that uncertainty.

So we did feel we could do another one with water, maybe for the third year and still have a concept that's resonates that but we did feel it was time for something else, something new. So we came up with a theme that, that sort of addresses on one hand, still the uncertainty, because clearly 23, anybody who knows may say it but this world can change literally overnight.

And with that also the economy and with that also our dependence on [00:07:00] technology

and all sorts of different ways. But then we also felt that scarcity of things, so both natural resources and human resources, cheap money, essentially supply chains, literally anything essentially could be scarce.

So that's an important thing. And we realize with technology, you can challenge that scarcity, you can deal. With the scarcity, if you choose the right technologies, then of course, sustainability still tops the agenda of many executives. So bringing that all together, we felt is the melting pot, which would determine 23 and the way we should look at technology developments and technology trends.

So you're looking at the sort of power of technology, but in a way that looks at it not from just a point of view. of say transforming organizations and society in the world [00:08:00] around us, but actually balancing just the right innovation with the actual wider impact it might have on the world. Precisely.

And it is, of course, there's a wealth of technologies you could choose from, right? So as the theme for this year we've been choosing right to technology, right to future. So it's writing as in right sizing, but also choosing exactly the right technologies out of a wealth, I would say of different options that you could.

Select to to enable that technology driven change. And on the other hand, if you do that in the right way in the right sustainable way, by the way, as well you'll be able to thrive even in an era of uncertainty and in an era of scarcity. Is it referring to, in terms of coming at it with that mindset, are you referring to like less innovation?

More focused innovation. What's the way through the scarcity problem, but without losing your innovation repace? Do you think? Yeah, let's be honest. We used to [00:09:00] say, of course, let a thousand flowers bloom, right? Because there was an abundance of. Cheap technologies and resources may be also available.

So we could try all of these different things and let's see what works. And if it doesn't work, Oh, such a pity. We'll try something else. And nowadays that could be have, causing an enormous pressure on the environment, for example, and all the other, let's say scarce resources that you need in order to do it.

So you need to be much smarter. You need to be much smarter about the choices you make. And I like that because you engineer your portfolio a little bit more in terms of what will be the things that quite likely will deliver what I'm looking for. And also, is there a proper balance between all of the resources I need for it, including energy and natural resources metals, whatever.

And is that in a proper balance? With the value it delivers and the economic let's say fallout that it could create. So it's truly a balancing act and we need to be a little bit more smarter about it. Maybe also a bit more selective as you were debating that as a core theme, or [00:10:00] actually more than a theme isn't, it's almost like a surrounding philosophy.

For this year's work. Did you have any good or bad examples of where you've looked at this and elsewhere and thought, actually that one, they're particularly cracked. It there. Good and bad examples of this. I do feel that's what we see with a lot of our client organizations that we work with is that they simply have a vast portfolio of different things, right?

So they've been developing for years and growing for years, their applications portfolio without ever re engineering or rationalizing it. So it only grows. And now, of course, with data, we've seen the same thing. I've seen a lot of. Companies simply starting to collect as much data as they can because it's the era of big data and the more the better the more the

better.

And then you find yourself a few years later and I've seen several of these organizations with a heap of data and they don't know how to activate it, what to do with it. And it's also become unmanageable because it's such a loss and it's duplicated everywhere across the organization and nobody knows anymore.

What actually to do with it. [00:11:00] So you have a huge data store there. So you have a lot of different data points and nobody's there to activate the stuff. And that is a, that's rather unfortunate, right? I think we should, if we add something to our portfolio, we may want to think about getting rid of two other things before you do it.

Keeping a constant watching briefing. We talked on a couple of episodes of the show this season. Particularly in relation to things like data and the rise of AI that it used to be very much. I think your expression like a thousand flowers blooming or actually we've got a great solution.

Now, what's the problem? Yeah. And we were talking about the fact that going into 2023 with the uncertainty in the world and with the likely economic challenges that a lot of the world is going to face that there are a series of big problems that are suggesting themselves that might help. Focus some of this tooling, like we talked about, for example, like supply chain optimization in the face of a de globalization trend [00:12:00] or in the face of economic downturn.

Is that the sort of thing that you're suggesting as well as the having a strong grip on the environmental impacts that what you're doing has directly, but also getting a bit more focused on the question, what's the problem we're trying to solve with some of this stuff? Yeah, precisely.

Because otherwise, indeed, as you could also put it, we have a very big aspirin, but we don't know for what headache, right? And I think it's it is time that we turn that more around and be a bit more mature in, in terms of the technologies that we assess and what we look at, how we look at them and what type of value that they could produce for us.

And then we have these main themes, right? So we see a little bit better what we want to achieve with it. Some of these technologies can help us to become more sustainable because it's still on top of many agendas, that, that net zero journey that a lot of companies are embarking on. What are the solutions that help me to achieve that?

And then you get the counter question, but wait a minute this brilliant AI algorithm that helps me to optimize it [00:13:00] itself burns a lot of energy. Produces a lot of CO2, right? So where, exactly how does that that balance sheet look like? Obviously there's a lot of smart technologies, including AI these days that can help us to produce more of it with less resources.

And I all think we, we agree that's a lack. The scarcity of human resources, but also natural resources will very much be a given. And funnily enough, again with more technology we could actually. Achieve less in, in terms of you're doing with fewer people and fewer resources finally enough by bringing in more technology.

So that's a very interesting balance act as well. And then of course they're still using technology to be prepared for anything like broken supply chains instantaneously changing customer behavior and so on. All of the technologies we've seen pop up also in the, during the pandemic that, that we've learned to appreciate.

And that we've been using for corporate[00:14:00]

agility.

So let's dig in to the core themes that you guys care. I think there is, there are six core trends that are in this year's Technovision 2023 and we'll just, let's just step through each of them and and get a view and have a bit of a discussion around them. So first of all, Invisible infrastructure.

So obviously there's a huge amount going on at the platform layer these days. And we're well on the way to the cloud. So when you talked about invisible infrastructure, where were you at? It's interesting because we made up that term literally 15 years ago, invisible infrastructure. And what we meant with it at the time was On one hand infrastructure needs to become less, less, less, so it became virtualized, it became standardized, and then as a result of it, it could disappear to the cloud, right?

So infrastructure truly became more and more invisible, which we [00:15:00] like, I like as a core theme in many different technology trends, the fact that something gets thinner. More lightweight, more elegant. And then it seems to disappear and it's still, producing and delivering for you.

So on one hand, we have the invisibility theme and we've always said the final desired end state of an infrastructure is where is it? There is no infrastructure, infrastructure, where are though? And on the other hand, infrastructure is getting richer. Because we have the Internet of Things, and as we now call it also the Internet of Twins, Internet of Digital Twins.

So all of that brings in a lot of additional, let's say, points of access of data, and points of interaction for which we need an infrastructure that can deal with that as well. So infrastructure is also becoming more a info structure, right? So it's these two big themes. That, that we still see in, in a combination.

And so yes, there's a lot of edge computing. There's a lot of internet of things that, that you need to take into account these days if you're working with infrastructure. And on the other hand we realized that hey, it's the very name of the podcast, of course but there's a future in clouds [00:16:00] that, that is still evolving clearly and is absolutely crucial in that quest for invisibility.

Having said that, there's something happening there as well. We have coined a new trend within that container, invisible infrastructure, which we call MyIndustry, MyCloud. And what we're saying is over there if infrastructure sooner or later also becomes more or less the operating system for your business applications that are specific to your industry, you have reached yet another level of abstraction and created.

Part of your business applications infrastructure also as something invisible because you be procured as a as an industry from an industry cloud provider. And with that you can probably get rid of a lot of your old legacy stuff that is burning a lot of energy, demanding a lot of servers and is not delivering the state of the art industry best practices that you're looking for.

And on the other hand, also, because it's very likely delivered as a service. It's probably done through through cloud providers that have a better green [00:17:00] practices, so it also would be more sustainable. So we see the infrastructure level increasingly rising to, to start to embrace that, that industry applications level as well.

And that is something that we currently see a lot these industry clouds. Sector specific industry specific clouds that are maybe in a way are the next level at an infrastructure platform context and actually applications become in a way also the new infrastructure. Ron,

if you take the sector solutions that you see is if everybody uses the same thing, because it's very convenient and easy, I think we're.

at risk of losing things that differentiate different organizations and make them different in the marketplace? Or do you think there'll still be enough flexibility in those sector solutions to allow people to be different? Rob, I consider it the 80 20 rule. Let's be honest, 80 80 percent of the work that we do and we realize it's all done in the same way across all of the different organizations within the sector.

We can benefit from an industry best practice because it's contained in these [00:18:00] industry cloud solutions and platforms. So if that's done for us and we don't have to deal with it because 80 percent of the work is already done for us, then we can fully focused on the 20 percent that makes a company differentiating, right?

That makes a company competitive or different or delivering on its specific purpose that you want. So I personally think that way too much of our energy is typically spent on things that doesn't help us to differentiate at all. So if industry clouds help us to achieve that. It's brilliant, right?

And we'll probably be back at the AI topic as well, which does the same these days for us. It can deliver 80 percent of something. It's just the foundation. It's more or less generic. And then we can very quickly get on top of it and do all of the stuff that makes the difference. If you think back to the old days, the amount of effort we used to expend just dealing with the very basic things that all that toil is now gone, I suppose it's getting as much focus as we can on that 20 percent that you talk about to make sure the real difference has all our mind share [00:19:00] and thought power applied to it.

I think that is a great bridge actually onto trend two, which is applications unleashed. We have to liberate ourselves somehow from the burden of the existing legacy landscape, which is outdated and doesn't help us to achieve the things that we want to achieve with with IT and applications.

Unleashing in that sense is like breaking them up, creating API gateways, microservices, unleashing the functional power of them, presumably, as well as, retiring the dead code. Yeah, precisely to begin with that, by the way get rid of the legacy applications that no longer deliver that differentiating value you're looking for.

So let's rationalize that and decommission as much as we can. Then we have a next generation of applications that are again, lightweight and almost not visible as applications because they are. microservices, right? They are microservices. They are API first. They are cloud native. They are also headless because they don't have a user interface.

The famous Mac, M A C H characteristics, [00:20:00] of course. So that, that creates for a much, much more, let's say, lightweight agile type of application portfolio. So that also opens up the way to unleash a new generation of applications. So that's a bit the word play here. We liberate. These old legacy applications, but we also unleash a new generation of application services that bring us that functionality, that business.

Enablements that we're looking for and within that presumably is the third trend, which is data and how a different style of unleashing and consuming applications also you have to put your mind on what you're doing with data at that point. Absolutely. And by the way, I don't see one thing contained in the other.

I've spent a big deal, a big part of my career in software engineering, but the last eight, nine years, particularly also in data analytics and AI, can see a little bit of both worlds, actually.

I've always found, by the way, that the world of data, which is still a lot [00:21:00] evolving, can learn a lot from the world of software engineering, where some of the, let's say, innovations.

In terms of architecture and wave delivery seem to take place a little bit earlier than the world of data. So you'll always see a lot of, let's say similarities between the two worlds. That in data as well. In, in, in data, we start to realize bringing it all together in one big monolithic giant doesn't really deliver the value of data that we're all looking for.

So we see more and more of this idea of federated data in which business domains. Embrace the data themselves much more that belongs to their business domain. And then they start to manage data truly as a product, a compelling product with a compelling and attractive experience in using it for others, both inside the organization, in another business domain, or even outside.

And then, of course, there's a whole new heap of new technologies that enable you. To do that and make it available. And there we see a lot of lessons from the world of software engineering [00:22:00] because again, next generation data is delivered through APIs, through, through microservices is much more lightweight, is platform enabled and definitely reminds us a lot of the breakthroughs.

We've seen in software engineering as well. So data as a product is a term that's used quite a lot. Just in your mind just help us define that out a little bit. What's the difference between, managing data in the old sense of it and data as a product. I think the way we used to manage data in the past was as long as you make something, accessible and available miracles will happen.

And in practice, of course, that didn't happen at all. Because if you sell a product, a real product, a service to the outside world. You do product management, you do an outside in design thinking oriented exercise you look at what is the experience and how can we make it compelling to buy and use this product, right?

All of that and we apply product management to it. But the moment we realize data is now becoming a first class, a product for the organization itself. And we all realize that, right? [00:23:00] More organizations see that the key value of this. So what keeps you then from applying the same way of thinking and approach to data as well?

But right now it's not often the case. We don't consider data as a product that should have a compelling experience. When you consume it, for example. Or should simply be an attractive product that is very easy to use and makes you come back for more. So how can we, because that's one of the big things we see in many organizations data is not necessarily considered exciting to use or easy to use, right?

It's it's a big secret. And if you're unlucky it's really driven by a central data department that, that has all sorts of entry gates that are heavily guarded. So it was very difficult to get into that, in that data, if you want to use it. It's a very different mindset, isn't it?

Coming at it from a point from the kind of inside out where you're desperately trying to manage, mountains of data and actually probably not succeeding versus coming at it from an outside in perspective where you're coming at it with a usage mindset. [00:24:00] You see what I mean? It's it's a very distinctly different way of managing the situation and it's actually remarkable if you realize that we haven't been thinking like that for a long time, it helps solve the age old problem of organizations just never getting their heads around MDM, doesn't it?

Because it's just coming out from a different perspective. Can you never get you to look

at the endless problem and by the way a lot of business domains like this idea of hey we're going to own the data ourselves you know now it's ours and we're going to manage it as a class a product and then of course after that you realize oh wait a minute it means that we are actually responsible for that part of our data state.

So we have to apply product management to it, and we must make other business units within our organization actually to like our stuff, our data products. And it's actually quite a tough call, right? Because now responsibility shifts to the business domains which they, I think, always wanted.

Nobody objected to it but actually having to embrace that and for example, really [00:25:00] understand. How to manage data, including data science, data analytics, data engineering, data governance. It's an interesting shift. These are not necessarily new capabilities, but they are new at the places where they are now being positioned.

I think there was always that phrase I like, which was digital litter, which is the data that you create that you no longer ever need. And it's how much data sat there. No use to anyone, but it has a CO2 impact, it's being stored somewhere as power to sustain it. It confuses the business. It's like getting control of that.

So then you know what's useful. And then you can go and do your engineering over the top and make that happen. I don't think many businesses have got a handle on that yet, but I was keen to hear your view around if you thought that was that they'd started, they understand the challenge and the break in the back of the problem.

And the good thing is, if you start to realize that there is a waste, that there's actually data waste currently in the organization, just like an applications, by the way, again, we've realized application sprawl [00:26:00] and legacy applications are keeping us from, We're We're Ask for a lot of management and maintenance and there's also indeed a let's say environmental cost to it as well.

It's the same with data. So actually we have this new trend in, in the thriving on data container in techno vision, which is called net zero data. And with it, we mean again, two things. It's again, a bit of a word play because on one hand, we're saying, Hey, data is key to your net zero journey. So manage it as something that is central to, to your business purpose and your business journey.

So learn how to manage data, but also exchanges with other organizations, because that is the key to net zero data. But we also mean data itself has a cost. it comes with a cost. We probably collect way too much data. We probably are duplicating it way too much. We're currently very likely storing data that we won't need ever anymore.

And with that comes an environmental cost. You get your e waste all sorts of difference. Let's say concerns that come with storing more and more data [00:27:00] without rationalizing it. And the beautiful thing is, Rob, if you start to simplify that, and if you start to clean up that landscape, you realize you're not just creating a sustainability impact, which is good.

We want a positive sustainability impact, so less e waste. We're consuming less energy, we're producing less CO2 because we have less data to take care of. But while doing so, of course you realize you're, you're updating and cleaning up your whole data landscape as well as a result.

So I always call this a journey with benefits and that's net zero is very good, sustainable. But this is, it's a journey with benefits because it will actually give you a better data landscape.

Which is highly optimized and better managed and governed as well as a result. And that's then take the next step on the journey, which is, it's something that I think is already undeniably.

Perhaps one of the biggest conversational topics of 2023 so far, which is artificial intelligence and process automation. So as you were coming [00:28:00] at this in summer 2022, you were almost on the other side at that point of chat GPT and what's subsequently happening in the world of AI. First of all, what's going on in the trend and is it already going faster than you thought it might go?

Actually within Technovision, we already had the notion of what we called creative machine for a few years. So we actually had a trend there that already acknowledged, already for three years we acknowledge this idea of AI is becoming more generative and creative.

So it can help us to do things that go way beyond the basic level of automation. So we had that for quite some time, having said that, of course. In this world of AI, you get some breakthroughs that as we've seen literally more than in the past few weeks than even in the past few months, that, that really made us scratch our head.

And if you realize that we start already on some of the content right off the summer, writing the thing. Then, and then you are about to release it and it's done already, let's say beginning of December because that's typically the timeframe we [00:29:00] follow. And then in December, jet G p t generative AI really starts to hit hard and everybody starts to use it.

And on a daily basis almost, you see the new announcements. So we actually had to rewrite a few sentences and make it a little bit more up to date, which we never had to do in the past. So that sort of proves how fast that thing went. Having said that already around September, maybe even August last year, we decided that all of the visual art in the documents in the techno vision document would AI.

And at that time, when we decided it, it was like, are you crazy? I can still remember marketing and communications where I like what are you going to do? And we were like try it. And then it was silent for one or two weeks. And then they came back and they were like, we've seen the light.

And our, the world will be different from now on. And now if you look at the document and you say, Hey, look at the illustrations, they've all been generated by AI. Then it's yeah, okay, sure. That's nice. Why not? So you can see how fast these things evolve.

Currently, I can see where [00:30:00] you're going on techno vision 2024 at this rate. Oh yeah. Like not just the art, the next year, hold my beer. I would almost say but it's. I think that's bound to happen Dave frankly we would be foolish not to it's again, the 80, 20 rule, by the way.

So I believe some of the heavy lifting you need to do in order, in order to describe the foundations and the basic of things I think A, a system such as chat GPT, because we'll see many more in forthcoming months will certainly help us and augment us in doing that. And, if it can do 80 percent of the heavy lifting for us, then properly prompted and properly guided and properly, of course, monitored and managed by us as humans then I think we would be foolish not to do it's already pretty clear, like eight weeks in to, having chat GPT in the world that. The use of things like boilerplate text is already going away because, why would you use something that was written eight months ago that you're just repurposing rather than just getting a new version of that written for [00:31:00] you on which you then base your position?

Precisely. And it is the 80 percent thing, first of all, because you need human oversight. This is distinctively. artificial. I always say, what do you think the A stands for? It is artificial intelligence. So let's not try to compare this to the way people, humans would reason or would check their stuff.

It's not like that. It's just plain pattern matching that's actually happening there. It's incredibly stupid. If you know how it works it's, It's really incredibly stupid, as simple as it is but if we do it well, if we monitor it well, if we have that human oversight, I think it helps us tremendously.

Also, by the way, people that are not, were not able in the past to express themselves. So eloquently or, in any other style they choose, they were not able to express themselves, maybe because they didn't master, for example, the English language enough to do it, maybe even because they were dyslectic or anything else.

And here we see a phenomenal enabler. To [00:32:00] have more people share their thoughts and describe it in a way that is compelling to others. And let's maybe use that as a brilliant way to step into the final area that you guys looked at, which was around user experience and experience generally, and collaboration on top of all of these technologies, which I guess is where all of this really does come alive.

No, absolutely. And all of these things, of course, enable each other, right? So if we're looking at user experiences, we've always called this container, by the way, do you experience? Because we said what is the desired end state of a user experience? It's all about you. It completely, encapsulates your intentions and what you want to achieve without doing anything for it.

So again, the idea of a very lightweight experience. Almost invisible user experience. We've always loved that a lot. What if there is no experience because your intention is already clear and it's delivered to you even before you have to state it or have to express yourself. Obviously we need a lot of AI to to do [00:33:00] that.

And I love the idea of prompt engineering as you currently see it in AI, prompt engineering, meaning you can get a lot out of the system, but there is this new, this is new capability of expressing the right prompts. So that you really, in a very clear way, describe your intentions, what you're looking for.

And then maybe it's a visual AI or text AI or soon songs and video, all of that. It will generate what you're looking for if your prompts, if you have expressed your intentions in the right way. And then of course, if a system is able to collect a lot of data on it and start to understand you better and better in an emphatic way, I might want to ask in an emphatic, warm way then it could literally say you want to express what you're looking for, but say no more, I think I know what I'm looking for.

I've already delivered it to you. And we all know that there's a fine line here, right? Between on one hand, that is a very warm feeling. The system knows so much about me. It's, I don't even need to. Express myself. And on the other hand [00:34:00] very easy, of course, it because, it would become creepy.

He would say, are you monitoring me? Are you profiling me? Are you using algorithms to predict my intentions? And if you do it the wrong way, it becomes. Tricky. Yeah. Creepy. Gets a little bit minority report, doesn't it? About precognition of whatever you're going to do next.

Yeah. It's a brilliant movie, by the way, with Tom Cruise, of course, Minority Report. And in a

way it's already old fashioned because look at the way he interacts with the screen with big big gloves. Why? Why would you need these silly gloves? And on the other hand, a predictive algorithm that knows before, that you're going to, in this case, kill something, which is a bit spooky, maybe, but we're there, in a way, but now, indeed, the challenge will be not to make it creepy.

Let's just talk about the collaboration aspect, Ron. Obviously during the pandemic, online collaboration, like really fundamentally came of age. Like we've obviously been doing a lot of. Collaboration in the 20 odd years before that, but there [00:35:00] was something about the shift during the pandemic when organizations had an existential crisis, they had to move online.

The nature of work changed as a result of that. And I think the, the world is still laboring under what exactly hybrid working actually is, I suspect we'll work that out over the coming years. But what was your angle on collaboration and trying to come at it from a fresh perspective?

We've definitely seen a few in the past few years, literally, indeed, during the pandemic that became a paramount and became emphasized. So yes, you already mentioned it. One of the trends we call the team is the canvas. And the idea was from now on, it's not your individual desktop anymore, where you start your day, but it's actually your team.

And that might be literally your team's environment or whatever other the environment. Online collaborative environment you're using. There's also the notion of fluid workforce, which is a trend in which we identified nowadays it's not only a matter of being able to work wherever you are but also in or outside your [00:36:00] organization in a much looser connected way, because technology actually enables you to do that.

And nowadays in a time of scarcity, that's increasingly important because we have, we don't have many people. So we have to have the people at the right places where they have most fun and also can deliver most value to the organization or between organizations, right? So you see a lot of crucial technology there that also helps us now to deal with with the scarcity theme rather than it was our lifeline during the pandemic as well.

But now you see that the scarcity theme is very much a dress fruit as well. And then you see again, this notion of lightweights. Which I think is a common theme across Technovision. And we have a new trends in this collaboration container, which we call, by the way, we collaborate. And within that container, we have a new trend, which is called no leaders.

If you want something lightweight then it's no longer there. And we finally evolved to that point, Ron. Yeah but, so the thing is often you get less and less, and then it's no longer there. The final, often very innovative [00:37:00] end state of a development is it's no longer there.

And if you look at innovation, the world of innovation often happens like that. It becomes more lightweight, lightweight, virtualizes and then seems to go up maybe in the clouds or something else. And we think with with that all the notions that we have in web free and blockchain and decentralized distributed.

Platforms really to collaborate. You also see this idea of maybe we could in real time work together and make decisions maybe enabled by, by the blockchain and do not depend anymore on, on central leadership to, to guide us through it because it takes too long. It's not effective.

And maybe we don't have enough people and augmented by AI, by the way, we're able to make our own decisions. On the spot rather than relying on central leadership. So we're

like there's a whole series of these technologies coming together, distributed, federated, autonomous, AI enabled it helps us maybe to have organizations that don't really need or have.

Much leadership and become more agile and responsive as a result. Certainly that move [00:38:00] away from the traditional sort of militaristic command and control organization, I think has been, has been happening, hasn't it? I like the way you went and took that to a The next step, which is there's enough sort of structure and intelligence in the network that therefore it can become self sustaining.

Is that the point? I think so. And it becomes more autonomous as well. You have things that we describe in Technovision like DAOs, distributed autonomous organizations, which are literally organizational concepts. That, that, that enable a business to to run itself without obvious leadership because decisions can be made literally on the fly through maybe a voting system or any other like of collaborative system to, to describe policies and strategies and make decisions.

And you would be in a new world of startups, for examples these DAOs as an organizational unit are almost a default by now. So clearly sooner or later in the wider enterprise context we're going to embrace these concepts as well. The bit in there I love is the sort of code of [00:39:00] laws of the organization where we all work to that which society binds itself to anyway.

And now the corporate world is catching up to how we've lived our lives for many years, hundreds of years, and now learning that actually the community can often make a better decision than the command and control structures of the past. Yeah. So there's an awful lot in there in Technovision, but if somebody was new in, and this may be a very tough question, but if you could summarize it in a few statements and then say, what should somebody think they should use this for?

How could they use it to achieve some outcomes? Could you just sum up in a few sentences in your own words what Technovision is basically? It still depends, of course, always, you're never just looking for technologies and trends, but you're looking at the type of challenges or opportunities you're addressing.

So in these three big areas, you first of all look at scarcity. And how can we use technologies to deal with scarcity? And then you see, of course, AI and intelligent process automation, but also collaborative team environments, all as a [00:40:00] way to deal with that. But also the whole trend in green software engineering and in data engineering.

We have this little new trend in applications unleashed, which is called Little Green App. Which, which is the applications variants to to net zero data, but it's all making the same plea. Start to re engineer your applications and also your data to be more sustainable and while doing so you find out it's a journey with benefits.

So there's the scarcity thing. Sustainability, we see a lot on the infrastructure, of course with the move to the clouds but so much more there also with the edge and the Internet of things that all help us to create a info structure, which is, more sustainable which delivers more with lesser impact on on society as a whole and the and the environment, obviously smart algorithms and AI again, and the sharing of data helps us a lot.

Also in new collaborative environments to really achieve your sustainability goals, because if there's one thing we've learned from sustainability, it's not only the scope one and two that is in your direct influence, but it's scope [00:41:00] three, the others. That, that are

particularly interesting and there you need to connect and collaborate.

So we see several of these technologies that help you to achieve that. And then finally, there's a lot of flexible, agile technologies like, like microservices based application stacks. And again, collaboration technologies that, that help us to work together, even if the environment is extremely unstable and unpredictable, and we're still able to manage our supply chains, our our workforce and all of our other let's say production processes.

So it's always a matter of not only looking at what are the juicy trends, but I particularly like this idea of what I'm trying to address here. What are the challenges I'm looking for? And that, and then Technovision is a huge repository.[00:42:00]

So what have you been looking at this week? So each week I will do some research and what's trending in tech. And this time I want to focus on. The recent announcements from Microsoft around adding chat GPT to Bing and Google's announcement on Bart. So Microsoft announced on Tuesday that it was using the technology behind chat GPT, which is developed by open AI to enhance its Bing search engine and the edge web browser.

So Microsoft already made AI. And they're now really seeking to capitalize on the worldwide excitement around ChatGPT, which is now already changing how people are getting their information. Bing is going to be based on a more powerful version of ChatGPT. It would help the users to refine their queries more easily, give more relevant results.

And make shopping a lot easier. Very important, right? To be honest with you, nobody needs to make shopping any easier for me. It's way too [00:43:00] easy already. Yeah, but it's going to be much more easier now. Oh. So Google revealed BART on Monday. And it was undergoing specialist testing and would be made more widely available to the public in the upcoming weeks.

On Wednesday, Google decided to host a news conference in Paris, where it shared more details about its progress, integrating AI into search. And all the investors were underwhelmed by this demonstration. What went on? Now during the demo Bart was asked about new discoveries from the James Webb Space Telescope and in one of its responses Bart said that the telescope was used to take the first picture of a planet outside the Earth's solar system.

But NASA says those were actually taken by a different telescope. It was Hubble. And after this, Google lost 100 billion in market value. How fickle is the market there that a pre release of an AI gets something wrong? It's a reasonable thing. Down a [00:44:00] pub quiz, that's the sort of thing you could get wrong at a pub quiz as well.

So a human would fall foul of that 100 billion off your share price because you got a question wrong. It's a bit harsh. Yeah. Yeah. Google was really in a rush here. Releasing BART and presenting it to the public that early. How much market pressure is building around AI that these organizations, these great big behemoth organizations are rushing stuff out to try and keep up.

And then the stock market can do such a, a reaction to quite a simple thing going wrong. Yeah. Yeah. It's really crazy. Yeah. Yeah. But since search is their main business. It was likely that it would have a huge impact on this, right? True. It will cost correct. It's just a matter of iterating on that and it will get to the right place, I'm sure.

But let's talk about the chat GPT interface to Bing. Have you seen it yet? And have you had a go at using it? No I've signed up for the waiting list and I don't have access yet. I haven't seen it. [00:45:00] No. And what you mentioned that it had a more sophisticated version of chat

GPT in it.

Do we have any more info on what that is? What's most is it the Bing interface that's creating the increased sophistication in the questioning? Or is there something else going on with chat GPT there? It's summarizing websites for instance, or it can give you some additional information on top of what the search engine already does.

That's what I've seen up till now. And what is, what will be next is very unclear at the moment. They have just released or shown a little piece of what the features would be. But I'm curious, Ron, have you been following these announcements this week? Of course. And what do you think about the race between Microsoft and Google?

Oh, that there probably will be other contenders as well, right? And it seems to be, it seems to be much more about what will attract most advertisements, most ads, right? Because I do think there are two different things, frankly. So searching for something you're looking for [00:46:00] sources, right?

Of information and maybe these sources, so you trust them. It's on Reuters or it's on CNN or it's, TechCrunch, whatever. And you trust that because you know the sources and if you're looking for answers, which is an answer machine, it just says give me an answer on a question.

And nevermind the sources which by the way, chat GPT couldn't even give because it's a generative AI that doesn't. Glue together, little pieces of source content doesn't work like that. It just, tries to generate a pattern that it has seen before. So they're very different things.

I think it's much more about the ads. It seems than anything else. The trick of course of particularly Microsoft is playing very well is building this in, into anything else so whether it's Excel. Or PowerPoint, or Word, or Outlook. I'm already using ChatGPT to to brighten up a little bit my text in memos and emails every now and then.

Yeah, and sometimes I have some fun with it by saying how would, Ernest Hemingway would have said this? So I just give it, no, really, I've done it. I give it some text and I say let's rewrite this in the style of Ernest Hemingway. And I [00:47:00] love that, by the way, that, that really brightens up there.

There's barely a day go by then Rob doesn't send me a haiku on something that he's been working with. I'm obsessed. I find haikus really difficult to write and the thing just turns them out really quickly and they're very good. So I sit there and the cheese jokes to the haikus. Yeah. Cheese and haiku.

I did actually ask it to write a haiku about cheese. I'll have to hunt it out for another. I bet it's, I bet it's extremely moving. Okay, thank you. Shall run. We like to end every episode of the show by asking the guest what they are excited about doing next. So what are you excited about doing next? As a side hobby, I'm a little bit of a music producer.

I do some silly things with a surf rock band, which is really just a one man band these days, but with a lot of technology to make it sound like a band. And now I'm also exploring AI to see how it can produce. Songs. So singing and and [00:48:00] rap. And I expect within a few weeks Rob that Haiku also will be able to be sung by somebody, maybe in a nice Japanese voice.

So definitely recommend that as the next big thing. A huge thanks to our guests this week, Ron, thank you so much for being on the show. Thanks to our producer Marcel, our sound and editing wizards, Ben and Louis, and of course, to all of our listeners.

We’re on LinkedIn and X, Dave Chapman, Rob Kernahan, and Sjoukje Zaal. Feel free to follow or connect with us and please get in touch if you have any comments or ideas for the show. And of course, if you haven’t already done that, rate and subscribe to our podcast.

See you in another reality next week[00:49:00]

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