

HL INFLUENCERS: DIGITAL TRANSFORMATION

TRANSCRIPT

CHRISTIAN TEMATH

MANAGING DIRECTOR KI.NRW @ FRAUNHOFER IAIS

Leon Von Gerlach	Hello everybody and welcome to another edition of <i>The Influencers</i> , our podcast conversation on Digital Transformation and Law. I'm Leo von Gerlach and with me today is Christian Temath. Christian is managing director of KI.NRW. KI.NRW is the networking and competence platform for artificial intelligence in and for Germany's most populous and industrial region, North Rhine Westphalia. And it's run and led by Fraunhofer IAIS, the AI branch of Germanys' flagship technology research institution, Fraunhofer Institute. So Christian, that's a wonderful position, terrific. Great to have you.
Christian Temath	Yeah. Great to be here.
Leon Von Gerlach	Christian, tell me about your role and aspirations at the helm of KI.NRW and tell me about KI.NRW in the very first place?
Christian Temath	Yeah. Thank you very much Leo for asking. So KI.NRW or I would say in German, KI.NRW, is the central conference platform for artificial intelligence in North and Westphalia, though our basic task is to really bring the ecosystem together, bring research together with the industry, with the economy, with all the people who really want to apply AI. This is also why we really want to strengthen the ecosystem with technologies out of Northern Phalia but also closely collaborate with the other states in Germany, but also across Europe and across the globe, to really drive the application of AI forward. So really driving the application of AI is one of our key goals and I would say usually we want to play with AI in KI.NRW in the championship of applied AI. So really being at the forefront of playing it successfully.
Leon Von Gerlach	That's very interesting and I understand you are closely connected or even led by Fraunhofer IAIS and that is the AI branch of Fraunhofer Institute. Just tell us about how this link works and what the role of the respective parties are?
Christian Temath	So basically, we are funded by the state government. So we get money from the state government but what we are all front of our IIS employees and that's a good, very good mixture by the way, because the form for AIS Institute for Intelligent Analytic Information Systems is one of the largest

	research institutions for applied AI in Europe. And they have strong capabilities in driving, for example, language technologies forward, vision technologies, and they do this since the case and this experience but also this drive for application of AI into the industry is one of the key pillars of our understanding of what we should be doing at KI.NRW. And so, we really leverage their knowledge to really bring those experience, those research insights into the industry, and this is funded by the government. So this is the perfect mixture between a governmental task that we have but also leveraging the research expertise that we have at our institute with over 350 employees working, researching year by year.
Leon Von Gerlach	So you spoke about what you should be doing and let's stick with that and on a very high level. What is your experience working with companies that are about to implement artificial intelligence, just companies across any industry in your region?
Christian Temath	What we see and I think that the ChatGPT model movement was one of those tremendous marking points in history. Is that nearly every company, every CEO, everybody who's somehow involved in developing a company forward, now has understood there is a technology that has the potential and in our perspective it is having the potential, big time, to really transform whatever we are doing in industry, in the economy and society. So there is a very big interest in applying this technology, now that's on the very good end of things. The bad or the challenge is a lot of companies do not know how to really start and where to invest here. What's the value adding measures that you should be taking in application of AI. For larger companies, I think they've made their way 3-4 or five years back already and now with AI governance, with road maps, etc. Many smaller companies struggle because there is a lot of not understanding where to start, where to regain value and that's a challenge
Leon Von Gerlach	Let's stick with the medium sized and smaller companies for a moment. What is their particular challenge in implementing and getting their arms around artificial intelligence?
Christian Temath	I would summarize it with overall uncertainty. Now there is uncertainty when it comes to regulation, when it comes to the UAI Act, when it comes to GDPR, so data privacy. But it also comes to the question uncertainty, how relevant, how useful is technology? Like what specific technology is useful in which dimensions? So along the whole stack, a lot of uncertainty and in many observations we're having talks with especially small and medium enterprises, not the right base with trusted advisors around to say, Okay, where we actually start, you know. Where to actually get all my requirements and my thinking about Al into some bucket and let's sort it out and let's find a way forward and there is a lot of companies where we really start helping them to structure their Al journey to really start it fresh from the start. It takes sometimes multiple discussions for them and then

	it's usually successful. But obviously we cannot talk to every SME in NRW, so that's also a challenge for us.
Leon Von Gerlach	Yeah, obviously. And it sounds like you are very, kind of deep into AI consultancy and you may have noticed, does it make a difference in which specific industry sector, your client is operating?
Christian Temath	Usually, we do not see big differences across the sectors. Surely you have companies or industry sectors which are more digital. Our data plays a way more important role since basically the beginning of setting up those industry sectors but overall we see the same challenges across the board. We rather see differences if companies are rather bigger and better established, have their own employees already working domains like AI and data and smaller companies who need to deal with the same people working on technology questions on AI but also on research and development for their products. So this is rather a question between big and small.
Leon Von Gerlach	And what would be the most typical use cases of these smaller and medium sized companies?
Christian Temath	I would say AI is one of those technologies which can be applied as an enabler as a support in many, many different domains of a company and that can be from administration, marketing, sales etc. I am going really to the production and domains. So in administration, marketing, sales, especially with the generative AI, one of those common domains where people see very early measurable results with AI, on the other hand, and I think that is also one of the most challenging things we face in our discussions, with nobody wants to apply AI just for the sake applying AI. The key question is where does AI add value in my specific company context. Now in many companies you will find sweet spot in classical feedback and administration but if, for example, we look into examples like Miele - now Miele is one of those hidden champions from Gütersloh, they produce ovens and fridges and a lot of kitchen equipment and they, for example, have one of those slogans in "immer besser" so "always better," and they have very high management quality and also quality for customers and there was the question of how can we, for example, use AI for product innovation. And then they introduced a camera into their ovens so now there is a camera detecting if I put in fries or pizza or whatever. With this detection the oven suggests how much temperature I should be switching on etc. So really the whole process will be supervised and maintained with AI support and that is not so simple because you need to put some camera into an oven which directly goes to your cost of the oven. You need to collect data which includes having the permission of the customer to collect the data, then you need to develop the technology to actually identify the oven, but if you finally have managed this, then you have a completely different customer experience on the one hand. So basically if you put something in, I would recommend you use the exact program to choose, and then if the pizza, for example, was frozen or it is coming from a fridge

	which makes a difference if you really want to have a nice pizza. The other thing is and that is the funny part about it, once they have established this, now they are collecting data from real-life ovens all over the world and that is customer knowledge that maybe more or less none of the competitors have because nobody really knows what people exactly put into their ovens when they are doing their kitchen work.
Leon Von Gerlach	Ok, this is now very interesting. We started about the kind of internal operations with small and medium sized companies and their change management but then, of course, you have the integration of artificial intelligence into the products and the solution a given company operates. And then you just touched on this third layer where you would then derive value in terms of data from those integrated applications. That's opening a fascinating new world and what would be the tools that KI.NRW is providing its customers to just manage that change or integration
Christian Temath	As said, we have a strong focus on small and medium enterprises. So what we have in our portfolios. And that was very relevant five years ago. It gets less relevant these days where everybody's already heard about AI, but we have a real lot of offerings about publications, events, etc. to really inform about AI. People would say, why should we do that, because still a lot of people do not know about the opportunities, but also the challenges that you have with AI and I think it's still very, very important to inform about this. And this is what we not only do in broader public, but also for specific company situations. Then we also have a lot of offerings when it goes to: 'what could be example use cases' Not saying: 'let's apply AI in administrations' but saying, AI is helping you to source an e-mail when it comes in to identify is it an insurance case, or something different, and then sort it to the right employees. So, really giving concrete examples what use cases can be applied in your company so there we have different tools, the AI worlds for example, but also on our AI landscape, where they have a lot of example applications. And then we have – and I think that is really for the start of the AI journey very important – specific offerings for companies in one-on-one situations where they say 'this is our company context, where should we apply AI'. We have workshop formats where we then also check the data and look into 'could that solution be feasible' and that gives them a very good, I would say, starting point to say, 'ok, now from here I could ask my internal IT department, I could ask a supplier, I could be helping in a very concrete setup, my setup.
Leon Von Gerlach	Again, a number of different layers that I'm seeing here. On the one side there is this educational enlightening role, but then there is this going deeper into the weeds and brainstorming and strategizing how a solution could be integrated into a given product and that all being so I assume there is a difference. Whether you speak to more digitally native companies to those who develop themselves. In the space of AI, or

	whether you speak about those who apply, does that make a big difference how savvy your clients are in terms of technology?
Christian Temath	Yes, absolutely. So, I think that makes a very big difference. Usually those companies that you just mentioned, digital native companies, companies that produce AI solutions, etc. So, let me be very frank, I don't go in there and say 'let's identify use cases, let's tell you about the value of data.' Now, so I think that message is very clear, those companies usually have a very good background in this already. For those companies we have rather something like challenging character, so and also supporting character in the network. So they'll say, 'We don't know where to partner on language models etc.' So then we can bring in the expertise what we see from the market overall. Also what we see as customer demand as demand from the industry and I think that is then not rather than standardized offerings, but rather in a sense of 'You have seen here.' And if you go back to those examples that we described earlier where people focus on production of materials, they're producing profiles for Windows, etc., then they are not digital native usually, they're not producing our solutions and then it starts with our, I would say, very hands-on offerings to start the AI journey. Coming back to your question, it makes a big difference if they're digital native or not.
Leon Von Gerlach	Speaking about differences, I mean, if a short while ago, it was all about building communities and we are all together and just all humankind and that kind of mood has shifted a little bit. Everybody is just struggling for their own supremacy, be it a company, be it a region, be it a country and so we are in a kind of competitive environment these days. Is is that something that defines KI.NRW as well, or is that just outside its scope of consideration. How do you see yourself in relationship with other German regions, or even as a Germany-embedded organization vis-a-vis kind of efforts in other countries?
Christian Temath	I personally believe now that the big questions in AI technology cannot be solved in NRW. So we are a very strong state, we have 18 million people living here. We have, like Europe's heartbeat, when it comes to industry and economy. Now, on the other hand, compared to what we see in China, in the U.S., even if you look just on the other side of one of our borders to France and to Paris. This is basically just a tiny piece of what we can offer in Europe so, for the large topics, be it trustworthy AI, be it development of own language models, be it looking into what specific solutions can AI bring into industry domains. I think collaboration is key and needs to be driven forward and in that regard, we actually also see ourselves not only being a mandated intern in Northern Australia to work with the companies but also speak outside with other relevant institutions, initiatives etc. in Germany, but also in Europe to find ways where to collaborate even better. And I think that is important. On the other hand, and I think that this also important is, the companies who operate here, operating in Siegen, in Wuppertal, in Aachen, in Cologne, like just naming some cities in NRW,

	and they need like regional support, where they can go to trusted people advice and then get things up and running. So, really getting things up and running locally and regionally is key, but also collaborating across Germany across Europe is one of those very important tasks.
Leon Von Gerlach	And now with the new German government in place, is there anything that you hear from your clients what they expect, what should be changed or is there anything from your own perspective that should be taken on and made different
Christian Temath	We live in very turbulent times. We have a lot of crisis out there, economy is struggling. We have situations where we do not know how our political but also business relations to let's say the USA will be developing in the coming years. So it's still in times and I think it's also very clear that we need to be very clear that we take responsibility, people would say for defense, but I think also for technological sovereignty ourselves. That doesn't mean that we lead this out of NRW, but I think one of the key expectations is how can we make ourselves less dependent from other regions of the world when it comes to basic technology and I think that needs investments. Those investments need primarily, from my perspective, come from private investors. So for me it doesn't make sense that we now ask the state or the government whoever gives \$10 billion or \$50 billion that's in comparison to what the U.S. and the Chinese guys throw in is anyways nothing, but the question is, how can we activate the entire ecosystem so that we drive the application of AI forward. And in that regard I asked the government to really think about what kind of regulation do we apply, now, do people understand it. Is there any way of where we can bring research funding and corporates closer together and how can we also make the government, the state as one of the four frontrunners of applying AI's really digitize the whole government and be a very good customer for our ecosystem and drive startups forward. I think that would some of those things that could help a lot.
Leon Von Gerlach	That makes a lot of sense. So asking the government to step up and encourage and support everybody to take their, I think, deserved place at the table. We will see whether that works out. Christian, that has been extremely fascinating speaking with you about these AL supports in your region and thank you so much for being with up
	those AI supports in your region and thank you so much for being with us and thank you everybody for tuning in and I hope you'll join again for the next session of The Influencers that is coming up soon. Until then, take care. Goodbye.

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