



THE INFLUENCERS: DIGITAL TRANSFORMATION

TRANSCRIPT ROSMARIE STEININGER

Leo von Gerlach
(00:24.8)

Hello, everybody, and welcome to another edition of The Influencers, with conversations on digital transformation and law. I'm Leo von Gerlach and with me today is Rosmarie Steininger. Rosmarie is founder and CEO of CHEMISTREE, which is a highly advanced matching platform for business networks and organizations. Rosmarie is also a long-term member of the German advisory group to the German government and, in particular, advisor on the German roadmap for AI, and we'd like to go into great detail into what they actually do and how that is related to her business.

But before we do so, let's perhaps go a little bit further back in your life, Rosmarie. You have been a long-term manager with the BMW Foundation, and perhaps you share with us what brought you from the work for a business foundation to the world of match-making and network building.

Rosmarie Steininger
(01:25.7)

Yes, but first, let me say thank you for having me, Leo. It's great being here.

So, I always was between a few roads. One road was BMW, with a rare technical background, developing algorithms and optimizing their logistics network, but then I switched over to the BMW Foundation. And I developed the first matching algorithm for them for a mentoring program. And, after a few years, BMW came along and said "We want matching, as well. We need matching solutions for a few leadership programs, and could you do that?" And that was the time when I decided to found my company and, yeah, be my own boss and try to get it to work.

Leo von Gerlach
(02:18.4)

Wonderful. And, obviously, in matchmaking and business context, you rely a lot on psychometric studies and evaluations. Perhaps you'll just tell us what type of metrics you use and how that fits with your business model.

Rosmarie Steininger
(02:37.1)

Yeah, as you said, the name of our company is CHEMISTREE. So, we say that, when the chemistry is right, new things can happen and things grow like the tree that's in our name, as well. CHEMISTREE. And the question is, of course, how to build chemistry with algorithms, which is on first glance, not really easy, and we had help there from the psychologists of the Munich University, who developed, as you said, a set of questions for us trying to capture chemistry. It's based on the Ocean model, the Big Five Model, where there are five big personality traits that are separated into different ways of doing stuff, like being very communicative, being very pragmatic or stuff like that, and we use that and ask people in the rare context, who do you like working together: with very communicative people, with very pragmatic people, a lot or not at all. So, that's one set of questions. And the other set of questions is: you, yourself, how would you describe yourself?

Or how would people who know you well describe you? And then we match preferences. So, if I say, "I want to work with somebody who is very pragmatic," and you say, "Other people will describe you as that," then we have points in that context. And we do that over 11 different features, 11 different points, and then that's what builds our chemistry.

Leo von Gerlach
(04:13.4)

Okay, so, you have personality traits, then you break this down into features, and then, of course, at some point, you want to use technology, and that means you need to translate that into algorithms. Perhaps you just tell us how that bridge works, from the psychometric world to the world of algorithms and breaking it down for a system.

Rosmarie Steininger
(04:38.9)

What we do is we use questionnaires. So, it's not what—I don't know, the internet or any other source knows about me that's relevant in our matchmaking algorithms, but it's only what I want it to say and I want to tell people. So, we develop questionnaires with our customers. One part is the psychological part, and then, of course, we have in which sector do I work, what's my problem, all the down-to-earth stuff, and all of these preferences are fed into the algorithm. We decide whether they are filtered out or where the surplus points are, and then, in the end, there's an optimization across the whole field of participants, and the result is that you get your best match. So, of all those in the group, who fits you best.

Leo von Gerlach
(05:36.5)

So, what's the additional value that the algorithm brings, I mean, in addition to the traditional ways of psychometric analysis of any given personalities that we have been knowing for quite some time?

Rosmarie Steininger
(05:53.1)

There are, I think, three aspects. One is that nobody needs to know your psychometric profile. It's only in the algorithms. It's not there for anyone to see. So, it's a very trustworthy system. The second is that, in our algorithms, we can deal with a hundred or more different aspects in matching, when you do it by hand, I think about five is all you can manage. Like if you say the region is important, professional background is important and what people want. Okay. But that's more or less all you can do when you do it by hand. And the algorithms, of course, they can handle hundreds of different aspects. And, if you have a group larger than fifty, it's not really possible to do it with high quality manually. It's not something you want to do, I'm sure.

Leo von Gerlach
(06:54.4)

Speaking of quality, what type of quality control do you use, or what type of review in terms of you are okay even with the benefit of hindsight and double checking that the results that the algorithm has produced for matchmaking are those that you find agreeable, also, when having a second human look at the results?

Rosmarie Steininger
(07:21.7)

Mmm. I think it's very important to really think about how autonomous a software system or an AI should be. There should be different levels of autonomy. On the one hand, our users—the end users—so, if you're a mentor or mentee, they get a lot of insight into the matching process, and

they can see exactly why they are a match, and, of course, they give feedback for every single match, saying I want this match, or I veto it because of this or that reason, and we'll learn from that. It's expert learning, so it's not totally automatic, because it doesn't really work to do that totally automatically. It's expert learning from vetoes, on the one hand. And, on the other hand, it's our customers who can check every match. Before informing the participants, they can check every single match and see if they like it and if it's good enough. And when we start a matching project with our customers, mostly we have a few test runs where our customers say, "Well, I'm not quite sure. I wouldn't have done it like this, or I would have added this and that information," and then we can see that the concept needs to be enhanced, that we need to ask one more question, or we need to put one more filter, and you couldn't really all think about beforehand, but you find it out when you test the matching algorithms. And, when everybody's satisfied, it goes live, and then there are real matches, and then we learn from the participants' feedback.

Leo von Gerlach
(08:59.4)

That's very clear. Very good way of just learning and educating the system, and let's stay with that theme. In terms of use cases, where you say this is the area where our products make most sense or make much sense, what could you tell us?

Rosmarie Steininger
(09:20.2)

Most of our customers use it for some or all aspects of the employee life cycle. So, from recruiting the right people for a given job to onboarding them, giving them contacts very early on into the company, to mentoring or sparing, so if one person has a problem, another person in the company may have the solution and who should talk with each other, so all the different steps in the employee lifecycle can be supported by matching, and must be supported, of course, in our view, by matching. This is one thing the HR aspect, furthermore, there are many different fields for matching. When I go through the world, I will think everything is a matching case. Like going to a conference and meeting the right people. Meeting the right people within a community. Having the right volunteering theme for me. Everything is a matching case.

Leo von Gerlach
(10:24.8)

So, it basically goes from matchmaking to network building, and you mentioned conferences, and I understand that is also an area where you support just for every participant to make the most of the conference, right?

Rosmarie Steininger
(10:37.4)

That's right. To make the most of the conference. Going there with an icebreaker or having detailed matches regarding the professional background, or even having matches when vibe matchings for the drinks afterwards, where you want to meet somebody who you would not have met otherwise. You can put whatever you want there. Have very similar matches or matches that wouldn't have met otherwise. You can play around with that.

- Leo von Gerlach (11:06.2) Sounds if you are then migrating, then, into social education and how to conduct yourself with your fellow business people. Very good! But, of course, with all those areas of deployment, there are challenges. What do you find difficult, what are the areas where you put most focus on in terms of making changes, improvements?
- Rosmarie Steininger (11:32.8) On the one hand, it's people. It's always people. And people need to have trust in our system to really want to use it. For us, therefore, it's very important in the recruiting context, there's more regulation now, so, even if I am an AI startup, I want to have regulation, please, without context. Because I think now so many solutions are around that people learn what to trust that are not trustworthy, and it harms us, as well. And if you have a regulation saying—laying out the basis so that we can show that we are trustworthy, that we are transparent, that we are controllable, it will help us. So, trust, as a basis for using our system, is very important for us. And if it's not there, we can forget it.
- Leo von Gerlach (12:26.1) Yeah, trust into digital systems, obviously, very, very important topic. And I understand you in a sense that you would expect more clarity on the requirements on the benchmarking of what differentiate a trustworthy system from one that may not be so, right?
- Rosmarie Steininger (12:44.2) Yeah, right? That's a really easy question. As we all know, what's trustworthy, what isn't, and how can you show it? We are doing a lot in this context in research projects with the German government, as well, German ministry for work and social issues, and we are trying to find out what differentiates the systems and what exactly we have to tell our users, the participants, so that they can trust the system—what level of transparency do they need.
- Leo von Gerlach (13:19.9) And, just assuming the European Union AI Act is coming into force, do you expect any help from that front, or wouldn't do that the trick?
- Rosmarie Steininger (13:34.1) Yes, I do expect help from that front. We welcome that a lot. I know that I'm not alone in my peer group. But there are lots of tech companies that say it's too much regulation, it hinders innovation. We don't think that. We think that innovation in our age, our context, can really be based on the AI Act and on the trust building it provides. So, our research project really takes that into account and tries to build a solution that, even now, is compliant with the current AI Act proposal.
- Leo von Gerlach (14:13.8) So, and yeah, that sounds as if that is a reciprocal system where, wherever you have more trust, you will promote the system in a faster and better way, and so there are codependency between the two. And I think that's a nice inroad, perhaps, to speak a little bit more about technology. Do you also expect more to come on the technology front? Will the increase in capability

of the system that also transform the service you are offering, or is that already on a certain plateau?

Rosmarie Steininger (14:49.2) Do you mean will we use large language models or other forms of AI to enhance our platform?

Leo von Gerlach (14:57.4) Yes, and perhaps, more generally, the increased capability of the system with just ever more nuanced and dedicated applications that also and, specifically, touches on the evaluation of people and the ever better abilities to fine tune, what does that mean for your service offering? Will it just be changing as we go forward, or are you already at a level where, say, well, that's how it may stay for quite some time?

Rosmarie Steininger (15:34.2) I'm sure it will be changing all the time. We look into different kinds of new technology all the time, of course, and if there's something that we think will enhance our solution, we look into it. For us, it's very important that a certain kind of technology does not have any place in our solution, and that's machine learning and the decision about people. In our opinion, if you decide on the short list for a job, for example, then you need to make sure that you decide on the individual people and not on groups of people. Deciding on groups of people or on majorities will always have a problem with diversity and ethics. You will always have the danger of promoting the largest group in your set and of demoting the smaller groups. So, we think that machine learning in the context of decisions about people, for us, does not have a place, should not be applied. We think that, if it's about individual decisions, it should always be like individual data, individual preferences, individual sense of decision-making algorithms. But there are, of course, small fears where we think, for example, large language models, if it helps me with categorizing skillsets or something like that, that might have a place, but not in the core decision on people.

Leo von Gerlach (17:10.5) So, that's interesting, Rosmarie. And I understand that, in the sense that you would always reserve the question of which individual to pick to a human as opposed to too much of the preceding analytics that may just be the realm of the system and leave it there. Is that the right understanding?

Rosmarie Steininger (17:33.9) It's one aspect that's very important for my view. One is, as you just said, in the end, the human being should have the last word. It's human oversight, human command what we're talking about, yes. But there's another aspect there, which I think is very important, and it has to deal with AI architecture. You could either use algorithmic decision-making, deterministic algorithms to find matches, or you could, for example, machine-learning architecture. With machine learning, you will almost always have a problem with diversity, because machine learning uses the aspects or the features of the largest group and the highest probability, and it takes decisions or makes suggestions on an individual based on the largest group. So, you always have a bias or diversity aspect there that you have to control. And we think, in decisions about people, it's very hard to

control. So, we'd rather go for algorithmic decision-making based on very clear algorithms that really take into what you, as a single person, want, and give you what you want and not what other people who are like you wanted.

Leo von Gerlach
(19:00.8)

Okay, that makes a lot of sense. So, in a way, you are saying this specific bias problem that comes along with unsupervised learning where you simply take the given data sets and let the system run is a problem, and I think one way of countering that is to just simply use the more traditional form of supervised learning, and then you make sure that the results that you come up—or the system comes up with—is something that really accords to a educated understanding of which individual to pick. That's very interesting. Perhaps we, just because there are so much more stuff on which you dedicate, let's go one more time to your role of advising the German government and the AI roadmap. Just what are the topics you are concerned with in that area, and what does drive you around at this particular point in time?

Rosmarie Steininger
(20:02.5)

So, my area of expertise is when the AI meets people, the associate technical part of it, how do people want to control the AI in the HR context, and what kind of framework do we need to make sure that the AI does work in an ethical, bias-sensitive way? Not bias-free, because that will never be possible, but bias-sensitive way.

Leo von Gerlach
(20:30.4)

And you see progress being made on that front?

Rosmarie Steininger
(20:34.6)

Well, on the one hand, I see that many expert groups get to the same conclusion, which is, one, that the AI or software solutions in general should be transparent and understandable, and, two, that they should be controllable by humans. That's what, I think, every ethical expert group agrees on. And, second, I see that the AI Act tries to work on that and to provide a set of rules to implement that in algorithms. The question, now, is how to really do it? Because it's only a set of rules, and then you have to put a stop button for your AI in your actual system. And what does it stop? And what runs on? And what do you need to stop it? There's still a lot of questions there that can only be solved in the practical, down-to-earth context.

Leo von Gerlach
(21:33.4)

Absolutely. Oversight is an abstract term. Breaking it down to something specific can be very, very challenging in particular with a technology that progresses so incredibly fast.

Rosmarie, that was terrific. Thank you so much, and thank you everybody for joining. It was great to have you, and hope you tune in again to our next edition of The Influencers, which will come up soon. For today, goodbye, everybody, and take care.