

HL INFLUENCERS: DIGITAL TRANSFORMATION

TRANSCRIPT

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Leo von Gerlach	Hello everybody, and welcome to another edition of <i>The Influencers</i> , our podcast conversations on digital transformation, business and law. I am Leo von Gerlach and with me today is Professor Horst Eidenmeuller from the University of Oxford. At Oxford, Horst is the long term chair for Commercial Law and whilst this is an extremely prestigious position in itself, it does not in any way describe the extraordinary lawyer, legal scholar and practitioner that Horst actually is. I have come across very many lawyers in my life and out of them all, Horst is by far the most lucid, the most versatile and the most illuminating one. His contributions, interests, and experience range across all fields of civil and commercial law with a strong emphasis on negotiation techniques, mediation, and dispute resolution, always in the context of economic and technological developments. Aside from Oxford, he is closely related to research institutions like Stanford, Harvard, Munich and Columbia. He is also very experienced in conducting mediations and arbitration. So Horst, you are quite a figure, and welcome to the show.
Horst Eidenmueller	Thank you very much, Leo. And thank you for having me on your show.
Leo von Gerlach	Today, we want to speak about your most recent articles dealing with the impact of artificial intelligence on commercial negotiations. Before we dive deeper into that area of research, could you give us first an idea of how you relate all these different fields of interests and expertise that you obviously pursue with one another? So how do the dots combine?
Horst Eidenmueller	Well, I have always been very interested in philosophy and economics. Actually, I wanted to study philosophy before eventually deciding to study law. So during my legal studies, it was always methodological questions that intrigued me most. Questions such as how do humans react to the law? How rational, irrationalhow do they behave in a situation of conflict? So the common thread in my work is the design of incentive compatible systems and rules in various fields of business, law and business disputes. That's what binds my work together, basically.

Leo von Gerlach	And how did this evolve over time, now to a state where you weave in a lot of technology into your research, and how the interaction is between law, business and technology. So how do you get to this last iteration?
Horst Eidenmueller	My PhD dissertation was on the philosophy of law and economics, or what is also known as the economic analysis of law. I later then applied this method looking at legal rules through the lens of economics to various central issues in business law, and I've always been interested in dispute resolution in particular. I trained as a mediator when I was a student at Harvard, and I developed negotiation workshops and mediation trainings with friends in the 1990s. Also, at that time I started to work as a commercial mediator and published scholarly articles and books on negotiation and mediation. I took an interest in AI about ten years ago or so, when the field accelerated in terms of its development and in the sense that took me back to my philosophical roots, because AI of course raises a couple of very fundamental questions that had deep links to philosophy. And right now I'm looking at how AI influences negotiations, mediation, and conflict management more generally. That's a super hot and practically relevant topic.
Leo von Gerlach	Before we go deeper into the most recent inferences of strong AI models, let's stay with some simplistic technologies as they had, I think, over that time already, a significant influence on negotiations. So how would you describe that impact of technology, even before the arrival of AI, on commercial negotiations?
Horst Eidenmueller	I'm looking at the fields basically since about three and a half decades. Looking back, I'd say maybe a little bit contrary to what you had just said, that historically technology has had very little impact. Of course, we had the PC and then we had mobile phones etc., but there was very little in terms of interesting apps to assist negotiators in commercial negotiations. What existed was softer applications for specific issues, such as, for example, computing the expected value of litigation as an alternative to settlement negotiations or scenario analysis more generally, but that was really a very limited influence that technology had on the practice of negotiations.
Leo von Gerlach	Now, why does AI bring a fundamental shift right now?

Horst Eidenmueller	Negotiations are an information game. Knowledge is power and that relates both to creating value negotiations and training value in negotiations, and that's exactly where the power of big data in AI lies. AI allows us to leverage all relevant information which is available on the negotiators, on negotiation issues, etc., that's relevant for planning and conducting negotiations.
Leo von Gerlach	And if you follow a little bit up on that idea of having a significant impact, how does that break down in more detail in terms of the various stages of preparing negotiations, conducting negotiations, executing upon them and so on?
Horst Eidenmueller	Analytically, you can define negotiations as a process in which people try to solve a problem. That's a very simple model that I have developed with a colleague many years ago. We turned to the PP model process, the people and problem of negotiation. If you use that lens to look at negotiations, it is pretty clear that on all three levels AI becomes relevant, both in the planning phase of negotiations, then in the phase of conducting negotiations, and then also in the phase of executing whatever transaction is the outcome of negotiations.
	So when you plan negotiations, you will now have the opportunity to design the process with the help of AI applications. You can research other people on the other side of the table using AI applications, you can research the problem in the sense of identifying the interests of the parties involved, identifying their alternatives, looking at creative options. So information gathering and management are in the preparation phase is significantly assisted by AI applications and will be able to develop a sophisticated negotiation strategy using various AI tools.
	Now, when you conduct negotiations, you will then be able with the help of AI applications, to update the information that you have gathered when preparing for the negotiation in real time. There are, for example, and that's quite spooky, tools available already which allow you to detect whether somebody is lying in negotiations by just analyzing their facial movements and other gestures. Now when there is a settlement in negotiation or another form of written outcome, you can use AI applications to check the lawfulness of what you are looking into etc. So the options for bringing in AI applications in all phases of the negotiation are almost limitless.
Leo von Gerlach	And does this also tie in what you describe in your article as a machine driven chess end game? Perhaps, as opposed to the more human centered aspects of negotiations as we had them before, the full impact of artificial intelligence?

Horst Eidenmueller	I think we have to distinguish between two forms in which AI applications can assist negotiators. The one is really assisting human negotiators, as I've discussed before, that is to say, technology that we use as a tool. Now, the other development that we are witnessing currently is early attempts to fully alternate negotiations, taking the humans out of the picture, so to speak. That's a relatively a recent development and it's right now in its infancy. It doesn't mean, though, that it doesn't exist. So for example, big retailers such as Walmart have done this for some of their contracts with suppliers. So if this becomes more widespread, this is going to, of course, drastically change how we could see those negotiations. It will no longer be haggling all back and forth, communication between humans but it will be machines interacting with each other, or humans interacting with machines. In the end, that's kind of mean, if you are the human, then you are going to be confronted with sophisticated, take it or leave it scenarios, which are produced by the machine on the other side of the table. Which is completely different type of negotiation. It's even questionable whether this is still a negotiation in the traditional sense anymore.
Leo von Gerlach	So before we come to this last phase, where humans are replaced by machines in negotiations, staying a little bit more on this twilight zone where we have AI enabled and supported negotiations. So how do you see the shift there in the traditional importance of information imbalances, the relevance of in transparencies and all these type of uncertainties that played strongly into the negotiation balances, now impacted by the support of intelligent systems?
Horst Eidenmueller	Well, as I said before, negotiations are an information game and AI applications will drastically increase the transparency in negotiations and the information level of negotiators. Now what that means in the first instance, this decreases the space for manipulative or deceptive techniques in negotiations because if everybody knows more about themselves but also about the others involved, there's less room for deceiving the others who are involved, and that's a good thing, because manipulative or deceptive techniques aim at claiming value negotiations. They don't aim at creating value, enlarging the pie, etc., etc. So if everybody is better informed, and I'm going to talk about the "if" in a second, we should see a lot of value creation and quick and relatively fair deals more than we see today. The key or interesting question is, of course, what happens if only one of the parties is better informed or to use an economic term, if information asymmetries still exist or process. What's happening then this party, ie, the better informed party is going to come out [with the better] hand. That party will be able to exploit their negotiating partner. Their negotiating partner will be like an open book to them because they will be very well understanding in their interest, in their alternatives, agreement, etc. and they can drive very hard bargain exploring this information asymmetry to their advantage.

Leo von Gerlach	That makes total sense. So whether AI will be eventually supported for fairness and transparency of negotiations will, to a considerable degree, depend on whether there is access to the same smartness of systems on both sides. And perhaps thinking this through further, you also speak about focal points in negotiations in a sense that well-supported smart negotiations may just come much speedier to an inflection point, to a decision point, and thereby reduce a lot of the clutter that otherwise just impacts negotiation. Can you just explain this concept a little bit further? How efficiency and focal point thinking is coming into negotiation through AI?
Horst Eidenmueller	So the term focal point, the concept of focal point, leads back to Tom Shelling, an American economist and game theorist who won the Nobel Prize in economics many years ago. And he was concerned with how humans can coordinate their behavior in situations where there are various possibilities to coordinate. So for example, we walk on the pavement, we decide whether to walk left or right in order to not collide with somebody who comes up to you on the same pavement and that's a coordination problem. Now, sometimes in these situations there exist "solutions" that allow parties to coordinate their behavior and more easily. Shelling talks about certain solutions that can be because of mathematical symmetry, that can be because of obvious fairness. That can be because of mathematical simplicity, whatever. Now, if you are in a bargaining situation or in a negotiation situation and you get full transparency, let's assume that for a second about the alternatives that parties have, if there's no deal. That means also of full transparency of what economists call the bargaining wage or the zone of possible agreement, then an obvious solution to the problem that the parties face is just to agree in the middle of the bargaining range, and to split the pie. That's obviously fair and because both parties are needed to come to that agreement, it seems to be an obviously fair solution to give everybody an equal share of the pie. So in this sense, if Al produces information transparency and reduces information asymmetries because everybody is as well informed as everybody else, then a quick solution in the sense of splitting the pie in the middle could emerge. Now the big thing here is yes, of course, if it's not the case that there are certain negotiators who are just better informed than others and we have information asymmetries then this kind of solution is not going to happen. What's going to happen is that the better informed party is going to, as I said, drive a hard bargain and push the other negotiators to their limits a

Leo von Gerlach	Staying for a minute with this potential asymmetry of negotiation powers, how do you think this plays out in commercial terms, in terms of different types of negotiation parties, small business for example, as opposed to corporate negotiators and parties that have different access to different systems, be that general generative models, or be that very individualized pre \-trained models for the purpose of a given corporation? So would you foresee significant differences in the balance of power between different types of negotiation parties?
Horst Eidenmueller	Yeah, I foresee such imbalances for a variety reasons, some of which you have already highlighted. Now, large corporations, first of all, of course, have the resources to purchase and/or develop sophisticated Al models that allow them to achieve a very good, excellent outcome in their negotiations with their partners. They have also an incentive to do so because if, as a large corporation such as Walmart, you face multiple similarly situated negotiations with many parties. You can deploy the model that you are purchasing and/or developing at scale and that means at relatively low average cost and it makes economic sense to you to do so. Now there's another reason why I think that large corporations in particular will be the greatest beneficiaries of this development, and that's access to data. Large corporations have in house the relevant data that is needed to train machine learning algorithms, at least in certain forms of machine learning algorithms such as supervised learning, then we need these data in order to train the model so that it is as accurate as you want it to be. And consumers, for example, or small business don't have that easy access to relevant data. There's a host of reasons why large corporations, especially big tech, is going to be probably the greatest beneficiary of this development.
Leo von Gerlach	But changing subjects and bringing this on a more positive note, do you see any de-emotionalization of negotiations and thereby a distinctly positive contribution to the conduct and outcome of negotiations through intelligence systems?
Horst Eidenmueller	Well, yeah, I do think so. Everybody who has been involved in commercial negotiations knows that not always, but in many, many cases, negative emotions dominate, and these negative emotions, of course, are potentially very harmful to the negotiation process as they trigger irrational response. These negotiators are caught in the common vision and they do stupid things out of fear or anxiety or frustration, etcetera, etcetera. Machines, by contrast, of course, keep that cool. Now that means that the more intelligent algorithms are used in negotiating. Everything else being equal, the negotiation process is going to become smooth. Now, I'm not denying that emotions, of course, can also have the positive impact on negotiations, right? So people sometimes get really enthused about something if they are negotiating a joint project for example, and then positive emotions or a big source of energy and can

	also help come to a good resolution, but at least when we talk about dispute resolution negotiations, it is negative emotions that dominate. So machines coming in are going to be de-emotionalized negotiations and thereby prevent many mistakes being made out of irrationality or negative emotions which trigger a certain behavior. Now I should add, of course, that if it is only one side that's bringing in the machine and on the other side, there is a human, let's say in a business to consumer context. So we are negotiating against the chat box that is used by a big corporation. Then unfortunately, you might see the opposite result. Everybody here who has had a negative experience with negotiating against the robot knows what I'm talking about, right? So you get frustrated even more because you can't speak to a human and the kind of office that to the chatbot what makes to you is not what you want to hear. But there's no way out and actually, you might be freaking out because you are not able to negotiate to a human so that's again playing into the hands, of course, of the more "cool" machine assisted negotiator.
Leo von Gerlach	Very interesting. And now just very briefly, any recommendation for the legislature or regulator how to smooth the edges of what is to come?
Horst Eidenmueller	You know, there is a lot of thinking about regulating AI worldwide going on right now. Just recently, the European AI Act entered into force. It's a pretty rigid type of regulation which seeks to distinguish between different types of applications and band certain application which it considers to be very dangerous or even harmful to society. Now, I'm not a big fan of that sort of approach. For various reasons, it is over-inclusive and under inclusive. That is to say, it risks shutting down applications which are socially beneficial overall, and it risks not doing enough about applications which are too harmful, so I think that's a criticism that came to level against this kind of approach. It also reduces incentives to invest in AI and because it is only taking place in a certain geographical region, it's also probably not going to be very effective because the money is going to go elsewhere where there's less strict regulations. So AI regulation, the type of the European lawmaker just passed, I don't think is the right way forward. There are other things that should be considered, I think. First of all, it is really important to keep markets for products and services in general competitive so that when you are frustrated negotiating with this chatbot that is deployed against you by a big corporation, you just have alternatives to which you can resort. And then there's antitrust of course, as this is a big tech story or a battle issue of the big tech story, we need to consider whether at some point to deploy really heavy- handed instruments against certain big tech companies. And finally, that's something that also shouldn't be neglected, is access to AI tools for everybody. Now from the point of perspective these AI applications to a certain degree have the characteristics of a public good. They should be available more or less for free, for everybody to level the playing field,

	so to speak. Now, in a sense, that's the idea behind OpenAl and it's pretty unfortunate that OpenAl now has moved into the hands of Microsoft. And that's of course one of the big, dominant commercial players in the industry, but generally speaking, the more initiatives we have that help everybody to a certain degree in leveling the playing field against the large commercial actors who use these sophisticated algorithms, everything in terms of support for these initiatives is to be much welcome.
Leo von Gerlach	Alright. Thank you so much. I mean those considerations about level playing field and the impact of big tech opens the door for yet another conversation, which I would be very thrilled to have. But for now it has been absolutely terrific to listen from you and to learn all these insights about the impact of artificial intelligence on commercial negotiation and how the dynamics will just change for good as we speak. So thank you so much. Thank you so much everybody for joining and I hope you were listening in next time again. We'll be coming up soon, but for now, take care. Goodbye.
Articles cited in this episode	Game Over: Facing the AI Negotiator The Advent of the AI Negotiator