Interviewer
If all goes well, it'll start now. Yes.

Interviewee
Yes, yes exactly. It has begun.

Interviewer
Okay. Well great, okay. My name is Milou, I'm currently doing the Master's in Information Studies and the Track Information Systems at the University of Amsterdam.

Interviewee
Okay.

Interviewer
And, I'm doing my research on accountability in AI, so accountability within AI and how do you take care of things like that. And actually, this interview will also be about that, about your vision about it, your experience with it within the sector in which you work. But before we start, I'll explain what it's going to look like for a while.

Interviewee
Yes.

Interviewer
So I'll introduce a little bit of everything first, so I'll do that now. After that, general questions about you, to get to know you a little better, and then the main part of the interview consists of about 15 questions and those are divided into 3 themes: The theme AI, AI governance and AI accountability.

Interviewee
Okay.

Interviewer
And then there are a number of final questions about the future, ethics, further questions from you, of course all of that is also possible. So I'm going to record the interview, transcribe it, and then code it. And in time I will also ask you to take a look at the data that I am collecting. So shortly after our interview, when I've transcribed

everything, you can oversee it for a while. And again, when I've processed the results, I'll send it back to you to validate.

Interviewee
Okay.

Interviewer
Let me take a look, am I forgetting something?
Yes, you remain completely anonymous and so does the name of the company. Furthermore, only the characteristics of the company are mentioned, so that it is great that it is located in the Netherlands, that kind of thing, but otherwise there is nothing of it 'on the record' so to speak; only I know is that you are participating in the interview.

Interviewee
Okay. Top.

Interviewer
So yes, if you agree, then, yes.

Interviewee
Yes, absolutely right. Yes, not really a question, but at least at first when I was asked that someone is doing research in the field of accountability, I thought: I don't deal with it directly, but it does influence me indirectly.

Interviewer
Yes.

Interviewee
But that's fine, right? Because, for example, I'm not a policymaker, but I'm in the field, of course.

Interviewer
Yes exactly, I actually interview people from all over the range so yesterday I had a conversation with, for example, an IT Risk Manager who is perhaps more experienced on that in terms of governance. But I would also really like to know from you how that actually affects your work, so that's no problem. And if you can't answer a question, we'll just move on to the next one and I'll be fine, I think.

Interviewee
Yes, exactly. Okay well great.

Interviewer
Yes, so.

Interviewer
Good.

Interviewee
Okay, well, no problem then. And maybe also in between things are going well now, but I have a puppy for 4 weeks, so it may be that somewhere in between she starts squeaking, but for now it's quiet. Just so you know.

Interviewer
Okay, no problem, I really don't think that's a problem. Super fun.
We'll actually to start then, I would like to know who you are, what kind of work you do, that kind of thing.

Interviewee
Yes let's see, I won't- I was kind of trying to be brief, but I'm, well, [Name]. I'm 36 years old, have been working in data science for almost 7, 7 plus years, so as a data scientist. And, well, started working a few years before that, but actually started working as a data scientist after two years. My background; I did, yes, I studied biomedical sciences for six months, then switched to physics and astronomy for a bachelor's degree, in Utrecht. I finished that and that's where I came into contact with solar cells. That was a specialization and that's how I went to Sustainable Energy Technology in Delft. That's yes, renewable energy technology. But I knew I didn't want to go into research and I knew about Data Science. That was really kind of a new profession at the time, field. It had been around for some time, but under that name it was new and I thought that would be a lot of fun, because it has investigative aspects, but it's something, the cycle is a bit shorter, so you have faster results than studies that take you years. So that really appealed to me. And then I retrained and started as a data scientist. What else would I say?

Interviewer
Maybe what your job entails, so as a data scientist?

Interviewee
Yes. It can indeed be different for each company, but within [Company] at least my job is: In principle, we develop machine learning models for the business, so models that can predict things or make recommendations. That's part of our work, but also a big part of the work that we do, so in addition to really the pure, the kind of coding and making those models, that's actually only a small aspect in the end. A big aspect is also with the business consultation of; What do you need? Trying to translate the questions, needs into something that we can build something for, especially now with generative AI and all that kind of stuff, it's also very important to kind of educate the business, if it's true. From; be careful, for example, with the information you put into ChatGPT, to inform them about that, to give a lot of presentations. And also, if you do talk about making the models, the modeling piece is, maybe you've heard that a lot, that's just a small part. A very big part is preparing the data, making sure it is in the right format, then modeling a small piece and then feeding it back to the stakeholder. We're trying to translate that from okay, what does this mean for you? Then implement that and sort of put it into production so that it runs properly, so there's also a bit of software engineering, just a little bit with it.

Interviewer
Yes.

Interviewee
Think that sums it up well.

Interviewer
Yes yes, and if you are talking about training, is that really arranged by you? That, let's say, is some kind of new responsibility of yours now?

Interviewee
It was always a little bit, so since we, the team I'm in, I'm talking about, the ACE team is actually the central team that deals with data science within [Company] and we have the expertise on that. And it's kind of up to us to- well, before this we would occasionally do talks, or a workshop or brainstorming sessions with the business of what can data science help you with? For example. So that was always part of it. Let's say we wanted to retrieve new use cases. For example, we would do a brainstorming session, or once in a while a data science course or something. In the last few years, the emphasis has been a lot more because so, well with the whole ChatGPT thing, it's become so easy for anyone to use something like this and it can also help you a lot in your work, that it's

really necessary for everyone to think okay, what can you use it for? What is it useful for? But also be careful with what you put in. What are the dangers?
So yes, that aspect of that is new, but that's also just because ChatGPT is new. Yes.

Interviewer
Yes yes, and is that- So when you talk about ChatGPT and all those changes, for example, are those really AI initiatives that are being taken in the company to go along with that, so to speak?

Interviewee
Yes you notice, you really notice it very much. We still do those brainstorming sessions, but that there are really a lot of use cases of: We want big yes - for example, reviews. 'We have a lot of reviews and we want to be able to summarise that', 'We want to be able to do sentiment analysis' and all that kind of stuff. All things with text really. We were already doing that before, but it was much more difficult to get insights from it and the development time was much longer.

Interviewer
Yes.

Interviewee
And now a lot more teams are coming to us, also because they know 'oh, these kinds of tools can do this pretty easily'. So they come to us for those kinds of purposes, or for example, let's say you have a lot of documents and you want to find a piece of information in all those documents very quickly. Well, those kinds of applications are now possible and you really notice that people know where to find us. So we don't really have enough capacity to absorb everything right now.

Interviewer
Okay, so there's a lot of potential in all those AI implementations?

Interviewee
Yes absolutely, it's on the one hand- it's kind of funny; On the one hand, it has become much easier to develop things, but that means that the demand has actually grown much faster.

Interviewer
Yes.

Interviewed
So. I think quite a few people could use that.

Interviewer
Yes, it seems almost exponential, doesn't it?

Interviewee
Yes, yes, at least for now. Maybe after a while we've fixed everything, but for now it's really sudden. You really notice that there are a lot of new initiatives emerging.

Interviewer
Yes yes, so if you're talking about standing AI systems that have already been implemented. What kind of systems are they?

Interviewee
That's mainly- yes, so our team is made up of two parts. I know best about my part of the team, because you also have another piece that's marketing-focused. I know something about that from a high level. They actually still have most of the stuff in production. I don't know them in detail, but they are about personalization, so recommenders, sending out newsletters, for example, and what items should be in a newsletter, what positions are shown to people. For example, to our members, if there's an offer, which of our offers should I show someone who's on the website, based on what they've clicked on before? Also, they do- They have a model called media mix modelling. A fancy term for actually if you have a marketing budget and you can spend it on TV, radio, newspaper, well this is all old-fashioned, but suppose you have those 3 channels. That you are actually going to calculate: How can you best divide your budget so that you make the most impact? So what percentage should go to TV, what percentage to radio, for example? That's what they do, so those things, that's quite a lot already in production.

Interviewer
Yes.

Interviewee
But that part of the story is a lot more projects that are similar to each other and so they can kind of automate a lot of models, kind of add a new one. What I'm in, which is actually more, so far at least, is a completely new model every time where you really have to start from scratch and really start thinking with the stakeholder. Like, okay, this is your question now, we're really going to make something specifically for you now, so the run time is much longer and we also have fewer things in production. But you can think of, for example, what they are doing now, is predicting the number of breakdowns per day, per region, so that you can properly schedule [colleagues]. You can predict; If you are unlucky, is it best to help you by phone, send the [colleagues] or send a [solution] right away? We have a model to predict the stocks at retail, or rather what will be ordered. We also have a number of, but in the old-fashioned way, text analysis models. So we have a lot of whatsapps, for example with questions and that you can then say a global something, what are all those questions about? But globally, those kinds of use cases.

Interviewer
Yes yes, and then that text analysis is actually a kind of categorization rather than such an LLM?

Interviewee
Yes, yes.

Interviewer
Yes.

Interviewee
Yes, exactly, so that's the old-fashioned way and how do we do that now? Yes, you have different ways in that as well. Sometimes we work with a dictionary. That's completely old-fashioned, because then you just start looking at can you match words with each other. For example, if you see 'solar panels', well then you know it's about solar panels.

Interviewer
Yes.

Interviewee
But that's - you can kind of frame that very well, a little bit, really what you're talking

about. Another way is really with machine learning that you're going to count, so you're going to look at combinations of words. But that's not the case with LLM's either, so with LLM's we're now working on developing a lot of things. What can I tell you about that? For example, at the LSC, so that's the Member Service Center where people answer the phone calls, they actually want to do it on the basis of a recorded question, so when you call you can record your questions, which is transcribed and that is looked up in a kind of database: From all the texts on our website, which answer is most similar to this? So what piece of text seems to contain the answer? And you can use LLM's for that, you can use vector databases for that, and then when you've found that piece of text, use an LLM to formulate a really nice answer and then give it back, for example.

Interviewer
Yes.

Interviewee
So it's really those new applications that are now possible where yes, before it wasn't doable. So yes.

Interviewer
No, no, then you still have that vector analysis, I've had that with a course too, but yes, that's also quite a hassle to get there - that also takes a lot of time, right? Or is that just me?

Interviewee
Yes, yes, well, now I think it's- I don't know how that used to be, but I have the idea that there has also been a lot of development in that, so that you have all kinds of new techniques that you can quite easily do that matching in a vector database where I don't think it used to be so efficient.

Interviewer
Okay.

Interviewee
But the thing is, even if you've found some kind of a similar vector, it's still of no use to you. Because then suppose you have 10, now you can ask an LLM like: 'I have found these 10, formulate the right answer from these 10 factors' and only then can you really give a nice answer back.

Interviewer
Yes, so there's just an extra party that makes it all a bit more polished.

Interviewee
Yes, exactly, yes.

Interviewer
Yes, yes.
Okay interesting. Okay, we can start with the main part now and each part, so each theme of the three, actually starts with a little bit of an initial question and that's here, what's your definition of AI?

Interviewee
Oof, that's a point of discussion. If you ask me tomorrow, I'll probably have a different answer. But we have said in the team of; AI is basically all the logic you give a computer. So even an if/else statement, technically that could be AI. So if you take it very literally, I think yes, every piece of logic in a computer is AI. But where you talk about AI in the vernacular, you are talking about slightly more advanced things. So a decision that you can't explain very easily anymore, I would say, so a way for a machine to make a decision that you can't.

Interviewer
Yes, well at least a complicated manual.

Interviewee
Yes, a way for machine to make a decision.

Interviewer
Okay. And do you often use AI systems in your work or in your daily life?

Interviewee
I think everyone uses them on a daily basis, even if you don't know it.

Interviewer
Yes.

Interviewee
So, yes, well, I really do- For example, for presentations, I very often make my pictures with generative AI these days, so to speak. I use ChatGPT a lot for questions, also just personally, this year I have drawn up a kind of itinerary with it of: I want to go to Spain and I want a kind of vacation. What tips do you have for visiting?

Interviewer
Oh yes.

Interviewee
I once had an unjustified parking fine e-mail passed on. I didn't feel like typing an e-mail. Well 'write an e-mail to the municipality for this'. I use that kind of thing a lot. But well, you name it; a Google photos, or a photo application that has facial recognition on it, those are all AI systems as well.

Interviewer
Yes.

Interviewee
There really are a lot more AI systems than you think.

Interviewer
Yes, just opening your phone with your face.

Interviewee
Yes, for example.

Interviewer
Yes, and do you also think, for example in your work environment, that the integration process of the AI is very far along or do you think that it is lagging behind?

Interviewee
It's all relative. I think for a company like [Company] and just for one for an average non-tech company, I think it's going pretty fast, especially now. With those, what I said, with those LLMS, I really notice that there is a kind of talk about it so much and that we are also purchasing all kinds of new software, so from Microsoft Copilot, so that everyone

will soon have secure access so that they are not using ChatGPT, but their own hosted GPT, so to speak.

Interviewer
Yes.

Interviewee
That this has already been arranged. You can see it from two sides. At the same time, we don't have some kind of plug-in for code yet. So if you want to write code, that it helps with that, we don't have that yet. So I think it's going pretty fast.

Interviewer
Yes.

Interviewee
I rarely see such big changes, say in such a short time.

Interviewer
Yes, it seems from what I'm saying but get as an impression is that they are very much on the data analysis and making sure that it is done in the best way and that it is used the most actually.

Interviewee
Yes.

Interviewer
Yes.
Yes, and do you also have an active role in the implementation of this? And the process of such a model?

Interviewed
Oh of a model. That's a specific-
What do you mean, the model or of really the strategy around it? You mean the model?

Interviewer
Both, actually, for the model, I think the answer is yes.

IntervieweeBoth.
Yes model is yes, I'm constantly working on that.

Interviewer
Yes.

Interviewee
And indeed, that's really from start to finish, so when an idea comes up I sit there, usually to look at; is this a data science issue? Or maybe sometimes it's a question for another team, up to and including doing a first 'proof of concept' we call it, so really a kind of trial balloon, and developing that further into a 'proof of value'. So okay, can this really deliver value, and really a product in production? So that entire chain, that's what we as data scientists are involved in in anyway. Beyond that, I'm directly involved. Yes, tangentially a little bit, so what you do have is that for example, at the beginning of the year we as a team, including me, organized an AI Summit for the whole of [Company] and that was with more than 300 people or so from [Company] visited that. With all the talk about, well, what is AI? What are deepfakes? Privacy and ethics. And so all different talks and different stalls and stuff. That doesn't directly influence the strategy, but you really try to increase that awareness, both among colleagues, but also among senior management. So that.

Interviewer
Yes.

Interviewee
And again, not me specifically, but other colleagues. And I happen to be in other teams, but a number of colleagues have also actually given presentations to management, for example, about what you can do with these new technologies. And I've also given presentations to a number of teams, for example, so that's how we're working on it, but we don't make the decisions.

Interviewer
Yes, so actually an idea is come up with and you are first used as a kind of consultant around: Is this possible?

Interviewee
Yes.

Interviewer
And after that, you're going to start the process if there's some sort of consensus?

Interviewee
Yes, yes, so that, that's then specific to real use cases and the models, and outside of that as a team, we're also like a kind of- yes, what do they call that?

Interviewer
Educational, almost.

Interviewee
Yes. yes, so we're kind of experts in this field, so it's expected of us, well, or I don't know if that's expected, but we- That's part of our job to create awareness, to educate people, also just to stay up to date with these rapid changes.

Interviewer
Yes.

Interviewee
Yes.

Interviewer
Okay, so what does a good presentation of an AI system mean to you?

Interviewee
Good performance or presentation?

Interviewer
Yes performance, yes, I have trouble with the word.

Interviewed
Performance.

Interviewer
Somehow, saying the word always goes wrong.

Interviewee
No, no, no problem, a good performance, yes. That is very dependent, sometimes- For example, I had already mentioned very briefly that we have a system that if you have an accident, we look at how you can best be helped, whether that is by telephone or not. Well, off the top of my head, there are a million, give or take, bad luck cases a year. And if you can improve that by even 1%, so that you send 1% fewer [colleagues] if you don't have to, even if you really do it almost the same as random, but it's a percent better, then you can still save a lot of money.
So sometimes a good performance isn't necessarily about doing 80% right, or whatever. It's basically like; What is the current performance and what will we gain if we improve it a little? For example. That's one aspect of it, although there are also plenty of models that don't necessarily have some kind of financial value, sometimes it has a social value or, simply, it gives us insight, so for example with that summarizing about what the reviews are about. You can't express that directly in euros, but it - yes maybe also indirectly, because you can say well, they don't have to do that themselves anymore and that saves them so many hours, or that gives insight, then they can improve their processes, so if it's valuable for the customer, then it's good.

Interviewer
Yes, and what role does accountability play in this? What if you're talking about summarizing reports and things like that?

IntervieweeAnd by accountability, you mean like- Because then I think you can interpret it in several ways. Of do you mean a bit of ethics? Or accountability in the sense of what, who is responsible for it if it doesn't work well? Or-

Interviewer
Yes actually the second, there's a bit of a difficult one- It's hard to translate to English, but if you look it up it's liability, accountability and things like that so not necessarily responsibility. In a way, yes, but also just what you say, that if something goes wrong, that person is the point of contact and so yes, should know everything about it.

Interviewee
Yes, yes, exactly.
Yes, in that respect we have agreed within the team, that if you work on a model, and we usually try to do that with the two of us. Where one person is the lead who takes a little more of the leading role. Next time, it could be the other way around. It's not always the same people or something. But where one person is the lead of that project, they are

the first point of contact and the other person, in their absence, is the second point of contact. Because so we have that team, what I just said of there's a team that makes a lot of models and does kind of assembly line work, almost a lot of different or actually similar models for marketing. But we really, yes, make a lot of proof of concept and not everything comes to production. Sometimes it's analysis and then it ends there. Sometimes they are real models, but it's not good enough. There are still a lot of blockages or something, so we can't continue, because we need someone from the business and they can't be unlocked. So really models that go into production, that will be maybe 20% maximum. I think between 10% and 20% of it. Hey, so there's also a bit of analysis, because they can't go into production anyway, so of that 10%, that's a handful of models, so then you have one or two models in your pocket right now. And then you are responsible for that. If there's something to it, you go there- So we really have a list of people of things in production and people, the names. And if someone leaves, then – let's say someone leaves and they have a number of models under their name, then someone else has to be trained to be able to support those models. I have to say, we are yes, we are still a- The whole data science, it's not as developed as, for example, a software engineer team. So there are really, we have some no SLAs or anything like that. I don't know if you know what that is-

Interviewer
No, can you help me with that?

Interviewee
Yes, yes, that's Service Level Agreements.

Interviewer
Oh yes.

Interviewee
That's what they use, yes. So I've never made one, But they use that in- If you develop a software or develop an application, they often make a Service Level Agreement of: If the application is down then within 7 hours it has to be fixed, so a kind of contract that you agree on how good the application should be? What is the maximum number of times it can break? So we have not really laid down that kind of regulation. But it's just word of mouth, if it's broken, we hear it and then we go after it. But we don't have contracts of; It has to be fixed within that kind of time frame.

Interviewer

Okay. Yes.
Well, that actually flows nicely into the next theme; AI governance. Because, of course, that also has to do with the fact that you have structures above it, which ensure that everything runs smoothly. And then the starting question is: What does the term AI governance mean to you?

Interviewee
Yes, you can put a lot of things under that, I think. But that's actually having a good strategy about data and what you want to do with data, including AI, and good processes to set up everything that is needed. It's about data quality, it's about ownership, it's about lineage; So that you know exactly where your data comes from, how it is processed. That you know- A kind of security, of who is allowed to have access to what. Until you describe the roles properly, who does what? It contains a lot and I think it is essential.

InterviewerYes. Yes, and can you also describe possible risks associated with the AI initiatives that you are now using at [Company]?

Interviewee
Yes, we definitely have a standard. We have a kind of an intake, we have a process that we go through when we have new use cases and underneath that is also a risk scan, where we have a kind of questionnaire and try to map out, what are the risks? And if red flags come out of that, for example; If you work with personal data, you do a more extensive check and you also go to the privacy officer. Especially if you sometimes have to do that in the small *poc* (proof of concept), but if you really want to put something into production after the *poc*, then you have to be a bit sharper on that. But risks, if you have customer data, then you could profile, for example, so that you favor certain people and make better - you name it - better offers. Now the question is whether that's a bad thing, but if you take things away from certain other people for whatever reason, then that can be bad. Yes, that you are going to generalize, that data can leak. I'm thinking, but overall, a lot of our projects, it's not too bad. Because we work a lot with car data and if there is no customer data in it, it is all quite safe. But for example, something else that can be risky, we also have insurance, safe driving insurance, where we know about; In which places is the brake hard? But that's actually dongle data from individual users. And so if you really zoom in, even if you don't know who that person is, you can find out where someone lives.

Interviewer:
Oh yes.

Interviewee
So you have to think about that: How do I deal with this data? I then anonymize, what does it mean if I can see where someone lives, for example, and works? Etcetera. So there are risks.

Interviewer
Yes, and you just mentioned a little bit about a privacy officer. That sounds like some kind of governance measure that has been taken, but are there any other measures, or can you tell us a bit more about that officer?

Interviewee
Yes, I know that we are going to the privacy officer and explaining what we are trying to achieve with the project and why we need certain data for it. And then we get approval or not, does it serve the purpose, say, that you use this data, so to speak? So you get a kind of 'go' or 'no go'. That is a measure. Then - and then it is, I think it's on their retina of okay, this is the piece of data that is used for this. For the rest, I'm thinking, yes, I have to say, I myself was in social services a year before and the data there was actually very insensitive until now. So I didn't have to deal with the privacy officer very often myself, because my questionnaire always came out no, no, no, no, hence no risks. But for the rest, I do have the feeling that there are actually not enough kind of processes around it yet. Although I think that's the case with most companies. That is, companies like [Company]. For example, banks and so on, they can't afford that, but-

Interviewer
Yes.

Interviewee
I think there anyway- Maybe you will ask questions about that later, what I sometimes miss a bit is a very clear strategy and vision in the field of AI, but also just in the field of data. Kind of okay, this is the direction and this is how we're going to do it and maybe actually a chief data officer or someone in senior management that's that.

Interviewer

Yes.

Interviewee
I think there is room for improvement.

Interviewer
Yes, because you often work with people who come up with the strategy. But actually, you miss a party that is also in that, that says, okay, I know all about this. I know how to do it ethically and things like that, or?

Interviewee
Yes, yes I, I feel like that's kind of on the working layer, so we do have a privacy officer that we then discuss with. Or yes, maybe it's something I just don't know, but I do know that we don't have a chief data officer, for example, and in a lot of our quarterly sessions or strategy sessions, it's just said that we want to do a lot with AI, but never an elaboration of what exactly do you want to do with it? So what does it mean? So how else are we supposed to recruit? Or what- yes. So I sometimes miss that piece and that comes more from a few layers underneath.

Interviewer
Yes.

Interviewee
For yes- Maybe that's -

Interviewer
So, actually, you have that privacy officer, but in terms of the effectiveness of that, they can very much do themselves, or they actually have to rely on themselves. It is not necessarily checked that okay, so is it really airtight now?

Interviewee
Yes me- Exactly, and I could be wrong. I don't know if you speak to other people from [Company], but I wonder if there are really company-wide guidelines for that, or if, for example, it is different for one privacy officer, for example in [department], for example a privacy officer can act differently than a privacy officer in [other department] or somewhere else.

Interviewer
Yes.

Interviewee
I suspect that we don't have very clear process guidelines in that area. [Company]-wide.

Interviewer
Okay. Yes. Well, I'm not going to speak to anyone from [Company] for now, but that's certainly interesting to find out.

Interviewee
Yes.

Interviewer
And beyond anything else, have there been any recent changes within those governance structures, i.e. with those officers? Or is that something that-

Interviewee
Yes, yes and no, there have been a lot of changes within [Company] anyway. I don't know exactly how that translates to the governance structures. I do know that, for example, at least our team, we were a more centralized team before and here we go — we're now in a kind of in-between phase where we're moving to decentralized, so we have a couple of data scientists who are in the [department] department permanently, and that also brings certain things with it. So that those people who are in [department] kind of go along with the way of working of [department]. And so that means that, where before we really determined how we work, now we sometimes have to adapt a little bit to that team. And on the one hand, it works very well, because you are closer to the business. On the other hand, it only depends because some, for example, [department] may have governance well arranged, and with another team it is less so. And yes, I know that there have been a lot of changes as well. A lot of people have shifted, but I can't tell you exactly what that means for governance. I do know that I still haven't seen a strategy, AI strategy or anything like that.

Interviewer:
Okay yes, so not necessarily that there has been a change due to laws and regulations that have been adjusted? Or-

Interviewee
No, not directly. It's, I'm sure they're working on it, because I know the AI legislation there- well, whether they're working on it, I really don't know. I don't see enough of it.

Interviewer
Yes, well maybe they do, but then really 'off the radar' and that you only notice it when it has been entered.

Interviewee
Yes, it could be, yes.

Interviewer
Because I think that with the AI Act, for example, the guidelines have now almost been worked out and then I think a company like [Company] should be working on that to implement that.

Interviewee
I also know that there is also a Data Act or something, which may have even more impact, because that means that in my opinion, if there is a demand for your data, you should always be able to provide it. Kind of. But I don't know if teams are really working very that, or if a few people are working on it, I don't know.

InterviewerOkay well, no problem. Then we move on to the third part and that is accountability, so we just talked about it a little bit; accountability, accountability, liability. What's your definition of that? How do you see that?

IntervieweeYes, well, I think- Again, maybe how I understand it now anyway, I don't know if that's how you understand it, but how I understand it when I think about accountability is a piece that you are also responsible for that when you develop a model, that it for example- that you think about the ethical aspects of that, the privacy aspects of it, whether it is well-intentioned, but still turns out badly, for example. That you think about that. Less like, what happens if it's broken? Because yes, you always hear about that, so then you get a message from someone and then you just have to work on it. I think I see it mainly as a kind of responsibility to be ethical and to do well, and to think about what you make. And also that you work correctly, because you can do a lot - you can make quite a lot of mistakes, which makes it seem that you have a very good model, but then in production it doesn't work at all, but also be a bit careful with

that and always have it double-checked by your colleagues. The fact that you always work in pairs, that is also a rule that we use. So that you in-

InterviewerYes, actually, a kind of validation.

IntervieweeValidation yes yes.

InterviewerYes, and within the use of AI systems, for example for work, do you also see a certain form of liability in that?

IntervieweeDo you mean things like ChatGPT? So say, so that you use those kinds of systems, or what do you mean?

InterviewerYes, for example, a lot of companies are now starting with such a Microsoft Copilot.

IntervieweeYes.

InterviewerOr analysis of that text and that you use that for your work, basically that kind of thing.

IntervieweeYes the same goes for that, because that's actually also - it's a tool, so to speak, or what do you call it? Tools, and still you have to keep thinking about; What am I doing this for, what goal am I trying to achieve? Am I not going unintentionally- Doesn't it have bad side effects? All that kind of stuff. Because, for example, we are sometimes asked questions from HR that there is absenteeism due to illness and that we can see if we see any connections in that, for example. And we can somehow prevent people from getting sick for a long time, so maybe offer them help, etcetera. But that's a bit of a tricky thing, because is it really to offer help? How are you going to do that? Or do you know about, then you really have to start a conversation like that and-
Oh, that's a good one too, by the way. Maybe a bit of a side note, but sometimes, for example, with the model that you are going to predict bad luck. That's a scheduling algorithm, you actually make, so you're going to predict how many breakdowns there are per day. But there are planners who are predicting that every day. So you also have to be very kind of sensitive to; What does that mean for their work and will they then be cut back or not? How do you make sure that they feel comfortable with that, want to help? Because in most cases, you actually want to take away the boring work, so you

have to kind of try to work with them and show them okay, this is this is going to help you in your work to pick up the more complex things. I don't know if that's entirely accountability, but that, yes, a bit of awareness of what kind of effect your model can have on people, I think that's - That's kind of part of your job.

InterviewerYes yes yes, I think that's a good example actually what you mention right now, because it's exciting, because it's your job to make something like that, but do you also feel responsible for the fact that someone else might have less work or be cut back? Yes.

IntervieweeYes, it is true that in principle we have a major shortage of people at [Company], but still, something is really going to change significantly. So maybe they have to do something else, pick up other kinds of tasks or it's a bit uncertain then, what's going to happen?

InterviewerYes.

IntervieweeSo there, yes, you have to listen to that.

InterviewerBut suppose, for example, that such a planner can still do his job on the basis of such a system, which you then create. Can you perhaps say that the planner is also responsible for the system and what it does?

Interviewee
So for the model, you mean? Or?

InterviewerYes, suppose the person who uses the system very often, but the predictions are wrong and therefore there are a lot of people who have to wait a long time because they don't get a [solution] or vice versa that they are sent to the wrong places.

IntervieweeI think that's definitely a factor as well, because that's why that particular model didn't end up in production either. We have experimented quite a lot with it, but where it was- What was difficult, is-
Actually what the planners do now, they have a kind of Excel file, in which they make their predictions, but then they actually go, until the last moment they adjust their predictions based on information they get from people on the road, the radio, traffic jams, the weather, etcetera. So they have their own model-based prediction in Excel

and then they start tweaking that in their head from: 'I think it's a little bit more or less'. And what we wanted is to take that piece of Excel out and let the model make a prediction and then on the basis of that prediction they could still do their expertise, kind of that bit on top of it. Only they, they didn't trust our predictions enough, because they couldn't back it up. They didn't have a feeling about it and they also said 'Yes, if I have to explain why it is like this, I can't explain this'. And so yes, they do feel accountable for it and they didn't dare to take it all the way in. And then it was also the case that such predictions were not such. Actually, not better, it was just kind of right. So for now, we've said well, we'll leave it as it is. I know that there are new initiatives to try again.

Interviewer
: Okay, so which tasks should be done by AI and which shouldn't? Which tasks are actually kind of unchangeable?

IntervieweeYes, I think in a part of the 'business as usual' predictions that can be made by just ordinary data, say, I would let AI do that. But sometimes you really have external circumstances of; there is suddenly a strike or something, of farmers, I name it, or there is- the Dutch national team has won, or there are-
There can be all kinds of things, or at least last-minute extreme weather, so that planners, because about 20% of the planning is a bit the extreme cases and there is an even smaller percentage with really extreme cases. And you want them to be able to focus on those kinds of cases, where you just need some kind of human information about your country, your region, etcetera. And just managing people, so planning is just part of their job. But with the easy-to-automate, the real 'business as usual' things, you just don't want them to press a button, refresh every time. And to be able to focus more on the more human aspect of it or what you just need knowledge of your area for.

InterviewerYes, yes, yes. And then, do you think that the company also has an active role in implementing it, at least, making sure that that liability is really retained? You're also just talking about the fact that it really has to go through such a check and that it doesn't get through.

IntervieweeYes, I think that is, so I think a bit of strategy or something I'm missing. There's no one who really supports it, and really kind of wants this. Because yes, that's part of your strategy: you want to automate certain things, so that you're not responsible. We really only have a handful, I think 3, planners. Well, if all 3 of them are suddenly sick tomorrow, then you have a problem. So you have to – the will has to be there, the strategy has to be there, and a vision of that's where we're going. And indeed,

what do we do with the current planners? How do we make sure that they end up in the right place, try to take away the fears and that they don't get hit on the head if it doesn't work? How are you going to arrange that, yes, and I do miss that. It's all a bit, sort of, 'from the ground up' and then they don't dare to take that responsibility. And yes, then it stops.

InterviewerYes yes, because you just said that you are afraid that planners will get upside down for things that they probably don't understand about the system.

IntervieweeYes, yes, exactly.

InterviewerActually, that liability lies somewhere else than theirs.

Interviewee
Yes, actually, but whether that is well understood, that is- I think they are afraid of that. And rightly so, I think.

InterviewerYes, yes, well, even with the lack of guidelines, that's hard to structure, I can imagine.

IntervieweeYes.

InterviewerSo then you might have to be more careful than you actually want to be.

Interviewee
Yes, I think so. But if, for example, a manager comes tomorrow and says: 'We're just going to do it, it's okay if it goes wrong for a while first and we'll go for it'. Well, I'm just going to name a few, so that those fears are taken away and it's okay to set a new course, then maybe it could be easier. I don't know.

InterviewerYes.

Interviewee
: Yes.

InterviewerOkay and given the time. I still have a few questions to ask you, so can you run late?

IntervieweeOh yes I'll wait a look, by the way.

InterviewerOtherwise, it's not a big deal either. Then we can also schedule a second moment. Another half hour or so.

IntervieweeI can run late if I just send a message. Just a moment, because how long do you think you will need approximately? Because if it's more than fifteen minutes, then we'd better plan something else anyway.

InterviewerLet's see. I think 20 minutes or so so so maybe yes, I think we'll make it if you can get to a quarter over. Then yes, and if not, we'll do another time or I can give you a quick call or something if it ever suits you. That doesn't matter.

IntervieweeWell, fifteen minutes will work.

InterviewerOkay great, thank you very much. But what is your view on the success of using AI for different processes in [Company]?

IntervieweeMy vision for success.

InterviewerYes.

IntervieweeYes, I think- Just say, you can do it in different ways. You can do it from the bottom up that initiatives sort of come from the business itself. That in itself is going quite well. But I think it's also necessary to do some bigger projects from above, so that a decision is really made of 'this is what we're doing and we're going to get behind this and we're going to work on a project for a long time'. And that you also get the resources to be able to work on that? I think it's important that both sides, so yes, are kind of on the same page. Both a strategy and vision from above, but also the people on the floor who are enthusiastic about it and want to do so. Yes, that. And I think, as you mentioned earlier, data governance is an important one anyway – because if your data is a mess and your processes in your, well, your infrastructure, everything is not well organized, then it's going to be difficult anyway. And the people within your company are also

important, aren't they? So you have to have the people to be able to carry it out. So suppose you have the vision and strategy, but you don't have the people, then that's not going to work. You have several-

InterviewerNo, yes. Actually, you have to have all three complete in order to manage such a larger project?

Interviewee
Yes and I would say myself; always try, because I can imagine that you then hire consultancy parties, but I think it is wise to always continue to train your own people. Because soon the consultants will be gone and you won't know how to deal with them anymore.

InterviewerNo.

Interviewee-Or how to improve or maintain it etcetera. So a mix is possible, but I wouldn't just rely on consultants. Yes.

InterviewerNo, yes, that's a good point you make. That is also something that could also retain the liability from the company, I think.

IntervieweeYes, yes, that- I've seen that before, so that a somewhat larger project is made and then it is handed over to people in the organization who have not participated in that project at all. And then it usually fails, because there is no support or people don't know how to deal with it, it's actually a bit of a waste of money then.

InterviewerYes, the engine is gone.

IntervieweeYes, yes.

Interviewer
: Yes, yes. And as far as you know, have there ever been incidents within the use of AI systems, for certain processes?

Interviewed AI systems. I don't know. I do know that there have been a number of leaks.

Well, not a leak either, but that there has been a potential for a leak, so that people found out oh, something wasn't properly secured and then they fixed it later. But that, that has nothing to do with AI. Yes and, you may be wondering here; I'm sure there are a lot of people using Chat GPT in their work right now, that's not shut down. Then you can wonder if it's all going well and if no one is putting sensitive data in it. Yes, I'm sure that won't go quite right, but we don't know.

InterviewerYes, that's kind of up to you to give as many workshops and trainings as possible before that goes wrong.

IntervieweeYes, exactly.

InterviewerAnd if, for example, those kinds of people, suppose there are people who use AI, should they also be held liable for what the system does, decides or says? And what do they do with it?

IntervieweeYes, I think so- I, at least - I would like to, at least if you follow that process of ours and have thought about what can it mean? In that sense, you absolutely have the responsibility to follow the process and think about it carefully. Especially with the newer techniques, you can never, you can never completely close that off 100%, because certainly with those LLMs and so on, it's almost impossible. But you have to do your best. And what we also do- I don't know if that's the same thing, but for example with the more common machine learning stuff, we do have some kind of model performance tracking. So we do keep an eye on over time, suppose it is a regression model, for example the number of breakdown falls. That's a number we could predict. Well, that's what keeps track of how much are we wrong? The moment you really sit too far off, a light bulb goes on and then you start looking at it, so things like that are built in. But if you're talking about, yes, what purpose are you serving and whether it's still sort of, whether you're serving a good purpose; Yes or no? Yes, you actually have to think about that in advance and maybe evaluate it at some point. But we're not at that point yet, that we're really working on it for so long that we're evaluating.

InterviewerOkay.

InterviewerWell, then this has been the main part of the interview and actually I only have the question for you now; Did you miss anything else on the topics we discussed?

Is there anything else you want to mention or do you think it's all clear? Do you have any questions? That is also possible.

IntervieweeWell, yes no questions. Maybe a comment or an addition to it, because you asked me what do I mean by accountability? I think that for us, data scientists, at least, for now one of the more important things that we are trying to think about more is the ethics and privacy part. Are we handling the data of our customers and members properly? And maybe a little less of, look, but that's a bit of 'business as usual', model performance and so on. And that's just really that little bit extra of being there- That's really expected of you, or you actually expect it of yourself, that you also think about those kinds of questions like ethics and stuff, so that. I think for me, when I think about accountability, that part is the most important and the rest is just like yes your work is just: You build models and they have to work well and if they don't work well, then you get a signal and then you go fix it. So.

InterviewerYes, yes.

IntervieweeYes.

Interviewer
: Yes, actually, that's nice that you say that, because it can of course also cause a lot of damage, not only for the company, but also for you. If you--if something goes wrong and it's actually something so big, then it's just put in your hands like, 'Okay, we're going to assume you do'.

Interviewee
: Yes. And you still can't prevent it, can you? But yes, you're kind of an expert in that field, so you really do have a responsibility to think about that carefully.

InterviewerYes, yes. Definitely a good addition. Actually, one of the final questions was about that: What is your view of the ethical implications of AI? And I think you've already answered that, you really have to take it into account.

IntervieweeI think we, others as well, of course, but we're also really in a unique position to see red flags or well, raise things, etcetera. So that we really have to think about it and indicate if something is not quite right, etcetera. So.

InterviewerYes.

IntervieweeThat's important.

InterviewerDo you really want to take an active role in making sure it's done in an ethical way, basically everything that's conceived?

IntervieweeYes, and we are not lawyers or privacy officers or whatever, but simply from our own feelings and expertise.

InterviewerYes, just your moral compass, yes?

Interviewee
: Yes, yes, yes.

Interviewer
And, let's think. Well. Ethical implications, for example, are things that can happen, such as a data breach that you had already described. But, suppose that happens. Let's say there's one, that something goes wrong with the use of an AI model, so maybe the example I also just discussed about how it doesn't go well with predicting accidents and what is needed. How- Then all kinds of ethical implications happen, namely angry people, perhaps-

People who are not being helped properly, perhaps suffering damage as a result, etcetera. Yes, you can.

InterviewerYes, yes, improper use of data. That sort of thing. But how do you think all these implications should be addressed, from an accountability perspective? So let's say a lot of things go wrong and [Company] is being looked at. Who is liable and how should it be addressed?

IntervieweeOh.

InterviewerIf you don't have an answer to it, that's okay too.

IntervieweeYes, I think in the end, yes, of course as a data scientist you have your own

responsibility. But in the end, I think it is also the responsibility of the business manager to keep an eye on their own area, that everything is going well and what the risks are. And if something goes wrong, I think that's the responsibility of the, well I don't know what that's called exactly, but the manager of that process or business line or whatever. And then it may be that if it's something very specific AI again, that will come back to us. And then, that could indeed be a shared responsibility.

InterviewerYes.

IntervieweeYes.

InterviewerYes. And-

IntervieweeBut how does that work?

InterviewerYes, that. Well, yes, you don't need to know all that either, thankfully. But where do you see it in your current work, for example, how do you actually envision how AI will affect that? Do you think your position could be replaced in some way or overdue?

IntervieweeI think a lot is really going to change, just in the world, in people's working lives and so on. I think it's quite possible that my position could be replaced as it is now, but that everything is just going to change very quickly. So that it will be a completely different kind of job. And I've noticed that in the last year. For example, that it is increasingly becoming a function of explaining what it is, and how can you implement it? And so, you can do certain use cases much faster, which used to take longer, but then you get more of a kind of role that you're going to proclaim that, you're going to create awareness and things like that. So my role is also changing a little bit. I think it will take a while, because companies are not that fast. That it will take a while before it is completely replaced, but for the time being the demand is only more. I had- I was afraid at first that everything will be automated? But despite the fact that everything is automated, much more can be done. So you need a lot more people to automate those things.

InterviewerYes so actually yes, also what we just talked about, it's going up exponentially so there's still plenty of work to do. Yes.

IntervieweeYes, I think so. Yes, yes, for the time being, I don't see our jobs disappearing any time soon. But in the long run, I'm sure yes, I think that anyone who is going into a bit of a slow working life now, that we're just going to see a lot of changes and that roles that exist now won't exist in 20 years.

InterviewerYes, yes, well, how you describe it is that the human side and the interaction side with each other is actually becoming more and more important.

IntervieweeYes, I think so.

InterviewerAlso within your work.

IntervieweeAnd look, of course, you still have to understand how it all fits together for this kind of thing, but still change certain aspects of it. Because instead of really having to type out and program everything 'from scratch', it becomes a kind of abstraction level higher every time and that you then start 'orchestrating' many more types instead of programming with building blocks themselves, so it will be different.

InterviewerMore like a manager.

IntervieweeAnd very far into the future I can- yes, yes yes, you could see it that way, yes.

InterviewerYes, yes. And then the last question, should people always be held accountable for the actions of AI?

IntervieweeWell, to a certain extent, I guess. I do think that you should be held accountable, because 'I don't know', for example, a politician who makes a law, to what extent, to what extent is he held liable if it does not turn out the way he wants? So there are certain things you just can't oversee. But you always have to do your best, I think, to follow the processes and make sure that you're minimizing the risks and that you've just done your checks and thought about it. So in that respect, until then, yes. And always have a good conversation afterwards. But I do find it difficult. I don't know. Maybe there should be certain people in a company who are really about that and can do that, just like a privacy officer who has liability for that. But yes, that seems more difficult to me, because some of those types of models are a bit of a black box.

InterviewerYes. Yes, well actually what you're saying is also if you say, for example, yes, that you can do those checks and make sure that you have the liability, actually because you understand the system and because you're on top of it to make sure that it still works in an ethical way. And actually, maybe that knowledge is very important that there is just someone who is almost an expert?

IntervieweeYes, I think so.

InterviewerYes. And about the future, say 15 years in 10 years, do you see that liability perhaps changing or is that something that will always have to remain or remain?

IntervieweeMaybe with models you have to have something of a best-before-date date of 'I made this, but for 5 years and after that I'm no longer liable'. After that, he has to go out. Yes, I don't think it should be forever, but that also means that such a model shouldn't be valid forever. Or you have to kind of refresh again: Okay now- it can still be in use for 5 years. I never thought about validity date for their model.

InterviewerYes, some kind of certification or something. It was approved on this day, but I'll check it again in a year or two. Yes.

IntervieweeExactly, yes. That's not a bad idea, I think.

InterviewerWell, you can get started with it in no time. Maybe you're ahead of a whole market.

IntervieweeI, yes, I'm going to pitch it to the team, yes.

InterviewerWell great, then we've done it.

IntervieweeSuper. Well.

InterviewerYes, I want to thank you a lot actually for wanting to participate and for making time for this. That helps me a lot.

IntervieweeYes you're welcome, I hope, I hope you find it useful.

InterviewerYes, that will certainly be fine and I can, if you want, well, I will keep in touch anyway, because we still have to do those validations or evaluations a few more times, but if you want I can also send you the results or my thesis, then you can see how it turned out.

IntervieweeYes yes yes, I'm curious.

InterviewerYes okay great.

Interviewee
When do you have to, are you going to graduate? Do you have a date or something, a deadline?

InterviewerYes June 30 so juno in two months, one and a half.

IntervieweeOkay, that's good-

InterviewerYes is already close to the.

IntervieweeYes also nice to have a deadline I have, I never had one, I didn't have a deadline. I thought that was a little bit, because every time I came up with results. I know something completely different.

InterviewerYes.

IntervieweeBut then they came up with follow-up questions in this then and this then That was, It was yes.

InterviewerIt was never done, kind of endless.

IntervieweeSo it no me, I had the idea at one point that we were just free hands and that they came up with new assignments every time. Yes.

InterviewerOh, my gosh, no, thankfully this isn't, but.

IntervieweeThat's nice, yes, yes.

InterviewerYes, I think it's a great subject, so it's really nice to talk about it and to see a new perspective from your point of view. No, so I'm happy when it's finished, but I also find it very interesting.

IntervieweeOkay well, that's, that's good, then you're doing the right things anyway. Yes.

InterviewerExactly, exactly.

IntervieweeOkay. Yes.

InterviewerWell, then I won't hold you up any longer. We made it just in time.

IntervieweeYes. Within fifteen minutes of spout.

InterviewerYes, exactly.

IntervieweeYes.

InterviewerWell again, thank you for joining us.

IntervieweeYes, well, and you good luck and I'm very curious about your results.

InterviewerYes well, thank you.

IntervieweeYes is good bye.

InterviewerDoeg.