

# METIS Interview 01 Transcript

0:02

Let's start. Yeah, let's start with the question.

0:30

OK, so how do you guys come up with the name and the idea? And what is the vision statement if you have one? And which major user problems should be solved with the app? Do you want to start or should I? Yeah, can start if you want, All right. I mean, at the moment it seems OK, so then I'm gonna and we came up with the name because **Metis is the goddess of the smart advice.**

1:00

**And we had the principal concept of nudging, which helps the student to not make a mistake or other formulated The system realized what mistakes the student makes and elevates the task. So he works on his problems without him realizing.**

1:26

And with that concept, we found it a name. **Our vision is to implement as a software learning software which focuses the individual student and supports rather engagement with fellow students instead of frontal lessons.** Okay.

1:50

Yeah. So the, the mission statement is meaningful. Digitalization of schools. Yeah, that's one phrase. Yeah. OK. So, who are behind this idea or whom are you considering as your stakeholders? Like who are the actors of this idea?

2:16

**The people interacting with the systems are students, of course, and teachers and on the other hand, content creators.** These can be teachers, but also just some **random people like on YouTube** that just like to create content. OK, so content creator will be added, yeah?

2:47

Yeah. And we of course have schools, but they are on the secondary level. They don't interact directly, but somehow they are of course involved. We also have various institutions on state and country level which we have to talk to, but that's a bit complicated because.

3:12

Education, estate business in Germany. So there are different systems in place for different states. For example, not prime is fine, but Wittenberg and Bryan are three steps for that for the approval of schools and Gold members. Yeah, yeah. And others are too that if you get.

3:42

**Certified in one state, it's pretty easy to talk to the other educational institutions to widen it out. Counter, right? Yeah. On the other hand, we can get the program into the schools without official allowance.**

4:06

Just because they're the teachers at the school can decide on their own what they want to buy, There

is a specific teacher who has the power to judge what they buy. Do you need the exact free institutions that do that, or is it enough with that information?

4:28

So like, that's no. That's all for the stakeholder side. So the idea is to offer courses or just to the content, the specific content, for example if one student is like want to learn something.

4:46

For example, one programming language, so it will be a course the certification will be possible from this software or you are planning to just having the content to the student. I think you have a general misunderstanding there. **We want to integrate into the physical classroom and there then aid to what to the education that's happening there.**

5:14

**Our goal is to make the static, personal teaching to a hybrid digital and group work.** That's the plan. Yeah, okay. So.

5:31

So you can also access the system from at home and learn with it, but our focus is to integrate it into the real lessons institutions. OK. So that was the misunderstanding I'll say because at the first impression it seems like something like new Demi or Coursera. There people can learn something from this software. So yeah, thank you for clearing it up. So yeah, next question, next question is about.

6:00

Ram, you want to continue or should I go, yeah, the question, yeah, so like do you guys have a particular target market in your mind like students from maybe like second grade or 4th like or something like that and how are you planning to reach to them our target market is?

6:20

Depends on the time schedule. **Right now we are only focusing to get project schools in not running this fine. So we wanted to keep it for the first phase on a state level. The next phase is to roll it out and Germany wide and our targeted market.** If you wanna go for the end goal, it's the ducks duck countries, if you know what I mean. That's Germany, Austria and Switzerland for first.

6:46

If it's would be possible, I don't know, to go to other languages, but that's that's basically a future plan I guess. **Yeah, I think he had some basically have just to translate the menu because the content comes from content creators and the teachers and the recommender system suggest tasks to the students.**

7:14

And they can choose from that and they are guided by the gaming engine. Like, I don't know if you play games like RPGs with where you have different skills and you are guided by the system what to do. So you can't specialize in one thing all the time, you have to spread wider.

7:39

Yeah, but I think the leveling system comes in later when you ask about how we, how we make sure

that they get educated on a certain level and how we keep standards. So and like do you have like do you guys have a particular like age group in mind?

8:06

That like you'll have. You mean like elementary school or secondary school? High school stuff? Yeah, we aim to get all of them. **But probably it's easiest to start with elementary school and build up from there.**

8:26

**Yeah, but by the content creator system. If you leave it up to the teacher, the guidance, then you can integrate it everywhere very fast. But if you want to let the students learn independently, you are dependent on the game engine, and this will take time to build up from elementary school to the higher grades.** All right, Yeah, sounds good.

8:52

And like do you guys have a pricing model in mind and like if you have one, how will you ensure that it is competitive? We got let's say blueprint when we founded the idea, we made a small business model which include.

9:12

**It three different packages for schools that are less than 100 users, less than 250 users and less than 500 users. The average price would be would be discounts for bigger packages. And yeah, the problem which we are running into right now, the 799 is the standard pricing fee for learning.**

9:46

We are at the moment thinking about how we maybe could change something there because buy a new software is it. They can bypass all the. Sorry, I think they can. Best Buy. Yeah. Your voice is, I don't know, just cutting off for a while, yeah.

10:11

I don't know why I think it's our net, his network issues because he mentioned it before. Yeah, maybe like can you repeat from I can summarize it really quick. We have a different package sizes of a student license we sell to the schools and there are some standard sizes of schools, like I don't know the exact sizes.

10:38

You can ask Jan afterwards to send it to you, but something like 102 hundred 5500? Yeah, and we give them some discount if they buy in package and not let every student buy on their own. The teacher license come free for the schools so they can use it with all the teachers. And we scale by the number of students. Yeah, okay sure.

11:08

And do you have any plans for handling customer support and ensure that you, both your students and the teachers are happy with your product? **We have for the materials, reporting system and planning where they can report issues they face like the content is politically not correct or there are some errors within it.**

11:37

And they're the students, and the teachers can use this report function, OK. So like, it's just basically like, kind of like an e-mail to the admins. Yeah, like a feedback.

11:55

We maybe are thinking to implement something like Duolingo for example, has a general page where you can suggest new functions, new things for the program, and other people can rate them thumbs up or down so we have an idea what to focus on next. But this is okay. Yeah, we are in the early stages of development. We don't have a ready to go system yet.

12:24

All right. Yeah, makes sense. OK And what are the essential features do you think that an online classroom should have to provide a very good experience for both the teachers and the students? As we said earlier, we are planning to integrate into the physical classroom, not have an online classroom.

12:52

And they're the teachers who should have some general knowledge how to navigate the system and how to use the hardware they are using to make it a smooth experience. Therefore, we thought about creating some workshops or seminars and going on to fairs to teach the teachers how they could use our systems.

13:21

Because it's really flexible. You can do a classical front, the classes like where the teachers standing in front and holding the lecture and really independent learning that focus on the individual student or projects that includes students either from different classes or integrates them in just a college environment.

13:51

OK, all right. And will the system allow the students to choose their subjects and their teachers? Yes and no. You have the freedom of. Yeah. And your connection has problems. Yeah, you're learning. For example, let's say you want to have a freedom.

14:18

Yeah, you have freedom of choice, for example with the theme, let's say you wanna learn maths, then you can learn maths by a car, or you can learn maths by, I don't know, calculating the area of the field or a zoo or something like this. And then you combine them that in the physics for the car or I don't know, geography for the zoo, something like this, so.

14:44

There is some kind of freedom, but there is a mandatory skill level that you need to achieve. And this is also where the teacher has a surveillance responsibility to, well, let's not say push but to.

15:19

Well, we don't want to eliminate teachers from the classrooms. They're still necessary and should provide them and guide them. Um, level choosing if I Well, Yan, you're very hard to understand, yeah.

15:38

Yeah, and it depends on the implement general implementation at the school. You can use it at a basic level where you, the student has basically no choosing of their own and they just follow the

teacher's class. Or they're on the very independent level and they have some freedom to choose, but still they have.

16:04

To reach the next general level, they can just level up 10 levels at one skill and procrastinate on the other ones. You have to somehow balance it out and the system is guiding it. Yeah and like what if a student like I don't know, wants to learn geography using METIS but not maths or something like that. So like can he choose?

16:31

Like particular courses which he wants to learn using the digitalization software or not. Like for example if the next skill is you have to achieve is let's keep it simple like you have to learn to count to 100, you can choose different themes and you can choose different materials from different content creators as a recommender system is.

16:57

Suggesting some to you on your personal preferences, on the observation the recommended system made and the experience it gathered. And the teacher can suggest some. And if you started practicing with one material or from one content crater and you noticed somehow I don't understand it, you can just switch to another one.

17:19

And we also have a help function, so you can call for help and another student who already finished the skill or a teacher can explain it to you and help you. I think there is still a little misunderstanding, like when I interpret your question right, you ask if a student can just learn one subject with METIS, but we want as a.

17:50

Our software will be something teachers can use to improve their lessons. Like they can tell the students to go learn their subject on METIS. Okay. All right, yeah.

18:17

Yeah, that, it is also a part of our institution. So, yeah, it's the first part that they're, they try to clear the misunderstanding. So it is using as a tool of learning, not an institution, right. Yes. Yeah. It's a tool that's used in schools. Yeah. OK. And to use it most successfully, you should use it in all subjects in the school.

18:44

Yeah. But that's the choice of the school. Yeah. Like we just want to give them the opportunity to use it. Yeah. And therefore, we call it meaningful because they have some freedom of choosing. Yeah. So basically the freedom. So probably important. Yeah. Sorry, please go on.

19:07

Really also important to know that we don't want you to go to school and then you sit six hours before our system. That's not a plan. It's more like we swap between two hours for our system. Then you do some group activity or I don't know, you've you go into a discussion around about some things and then you maybe come back or something else. It's not like 8 hours from.

19:34

Yeah, and normal to know it ours, our education. And you can also use some physical material and do a mix of the them both say the system. Well, I finished in this school book, which the school has registered that they use this task so the system can check. Yeah, you did something there. OK All right.

20:01

And how are you planning to, like, ensure the security of both the students, the teachers like, and the school's data? By following the general guidelines from the European Union, I guess. Yeah, yeah, Well, yeah, yeah. Like I like a crypt of, like, cryptification. I don't know the English term, how it's correct.

20:31

And if if you're talking about your nine question, then it's about we need to save all our data from the students and teachers in Germany that's required, our service must be there and we also lay under the DSK for all this is done Schutz Kunfor. So we need to mask our datas so only the teachers which students are assigned to him can only assign them back.

21:01

If we are, what's what is a later question from you. If we are using the data to service something, then we need to anonymize them, Okay all right? And like before assigning a course, or like before helping the teacher digitalize the course for a student, how would you like assess the student's eligibility for that course?

21:27

Because of course, a student from grade 3 cannot learn something which is taught for a student of grade 6, right? So how will you address the student's eligibility for that course? Therefore, we use elements of gamification tool.

21:46

You have it as a later question. If it's not a distraction, well, we use the elements that are aiding our goal. We use the skill tree. I don't know if you know it from games. Yeah, you advance from basic skills to higher skills and you can just skip one. You can advance faster than others if you're just faster at doing things, but you still have to follow the skill tree.

22:15

OK, yeah. So like, even for documenting student progress, I guess you'll be using the script tree because it basically covers everything, I guess. Yeah. And on the we have a second thing. We have a learning diary. That's something commonly used at Montessori school principals.

22:41

There, the students give some written feedback on their learning experience. And something like a smiley. Like a laughing smiley, a sad smiley. So the teacher has something more profound to go on than just statistical values. Yeah, and on that point, these are also the data sets we will be using for the statistic evaluation.

23:05

With other values from that, from maybe the teacher's point of view, we are currently looking for something that's going in the Goodman scale direction when we will analyze that because that's question 17 from you. I thought I might just add it here. All right and.

23:29

So how will you like? How will METIS align the topics suggested by teachers with those suggested by Metis to ensure that students remain at the same level of difficulty? Like will? Will you give more importance to the topics suggested by the teachers because they are teaching in the school? Or will you prefer the topics by your recommender system for a particular student?

23:59

Teachers can make courses or task mandatory. This has to be done so it's at last or the last resort is still the teacher. He can decide if you have to do something or not, but it's supposed to be more open. So, the teacher, he can see your performance, you can see how fast you're doing things. So probably.

24:27

We hope that they will. There is a more open culture resulting from this and there's not. Yeah, like the landing stage will not prefer one over the other. They just show them, yeah, one next to each other. OK, Perhaps with a different flag like this is suggested from your teacher.

24:54

There was another part. We do not care if they all are at the same level in one class. Like if you advance faster, you can advance faster. That's one of our unique selling points. On the other hand, if the school chooses to block them to all advance at the same speed, they can do that, but that's not what we're aiming at.

25:22

We would prefer if they give the students the freedom which the system supports, that they advance at their own pace. Okay. All right, yeah, sure. And how? How does METIS facilitate communication and collaboration between like students, teachers and parents in the system? Sorry, can you repeat?

25:50

I think parents are no longer a part of the stakeholders, so we can just avoid that. Yeah. No, I mean, I don't know okay sure. I mean, if I got your question right, the teacher can interact with the student through the learn.

26:18

Also, there's probably some message function or notification function where the teacher can ping the student and say, OK, we want to have discussion or something like that. Yeah, we have a notification function but not a message function because that can be very distracting for the students that they just began chatting with each other and stop learning. OK yeah, other students can notice, the teachers can notify the students.

26:48

Yeah and the student can ask for help Okay Sure. And in what ways does METIS encourage reflection and self-assessment among students? Like when someone like when a student is working on a task which he has chosen and which the teacher has not recommended him. So like how will you encourage him to just work on it because he likes to work on it or something like that?

27:14

Well, if he likes to work on it, he can work on it as a skill tree ensures that it is a correct level for him and the level system of the skill level and the general level ensures that you don't focus on just one area, OK, as this general the system is kind of the the general.

27:38

The general requirements is there is a lab on a teaching plan which has to be teach. And this is so it's. Yeah. And your connection is there. Yes. So like I guess he meant to say there was a team in the bottom line which everything above that is.

28:07

Better, yeah, yeah, it's better but muted. Yeah. I said there we have the teaching plans and for every state as well, they are individual and every state determines which is the baseline, that everything that must be taught. And this would be our base level. So if this is achieved and we are totally fine and everything above that is just bonus.

28:37

Yeah. So the general level ensures that, yeah, the requirements from the state are met okay and what are the like specific gamification features which will be provided to students like you talked about the tree and the diary, I guess like do you have anything else planned as a gamification feature?

29:03

We are planning to may show something like a streak, perhaps like how many days in a row you learned or something like a customizable avatar for example. But these aren't main areas we focus on, and these are just for a later day when we already are running the system and that's something the students want.

29:31

Or something like bad shows. For example. Ohh Vanessa, did you want to say that? I want to say that we also talked about achievements like on Steam, where you get one when you do something special, like you may you worked on a task that's a higher skill level or something like that.

29:54

Okay and like how will you address like any possible concerns about distractions or something which may arise because of this Because I mean you know you can get distracted by all these tasks and all like your notifications. So, like do you have any possible ideas which address this? Well as I mentioned before we want to keep it very slim. The game engine we mainly focus on.

30:24

Parts of gamification that ate our goal, like the level system and the skill tree. These are the main things we use, and everything else is up for discussion if it really would at hand. The learning experience, yeah. And we also plan to test some of the things with real students.

30:47

In user tests so we can see if it distract them or if they find with that or encourages their learning behavior. Yeah, we want to try do a usability test around autumn to winter this year with project schools in Cologne. OK yeah. By the way do you know what a project school is? It's a special type of school.

31:14

It's not a normal school. These schools are have more freedom. They don't have to follow the guidelines of the states as closely. They are more open for experiments. Okay. All right. So like your



your primary, I don't know place of deployment is the project school. Yeah, you'll start from there. Okay.

31:36

And how will you ensure the credibility of your evaluations in determining students' readiness to advance to the next grade Like do you so for example if I learn English there's like levels like A1A2 and something like that. So, do you have like will you refer to any set level? Or like will you just have a level which is I don't know which can be said by the teacher or the school or the state or something like that.

32:04

I think we will have some translation. One could say like level 100 equals grade 10 or something, but these things we leave more up to the teacher.

32:24

Like the actual exams for passing the grade, we will have some tests so we can check if the learning goals are met within the system, but that they are not cheating in some way. This is up to the teacher how they will test them on that with being sure that they don't have any means to cheat and really met the standards they are looking for.

32:54

OK. And like, will these tests be like completely different from the tests at school? Or like will they be the like the same test but based on like, I don't know, some other curriculum or like something like that. Basically, if you advance at one skill level to the next, you have to do some kind of test before that and there are some.

33:19

Requirements that must be met and content creators can create some tests and other content creators can grade them on difficulty and if they really test for the standards, OK, I think we are done because like the questions I asked, like you guys really answered in detail.

33:47

And like I think it consists of answers of other questions as well. So, and one more thing is about the packages of the modules for pricing. So, if you have any documents for that, could you please share with us for like it would be helpful for our requirement analysis for this project. And again did you make any?

34:14

Business process model here or it was not, it's not been done yet. Well to your first question, we can send you the numbers we planned on, but as we said, we had have to over work them, they're probably not will be realized like that, but of course we can send you to them and you can work with them.

34:43

For now. And the second thing, sorry, what was it again that was have you planned, have you any structure for business process flow above? Yeah, we have okay. So if he if it's shareable and not a privacy issue then could you please share with us so that we have a structure to analyze the requirements?

35:11

So yeah, and questions are done. So I think the recording will be helpful if we if we need some information afterwards. And again, is it open like is it OK with you if we like some some some time being in the teams if we are facing any info if we missed any information in this question, so it would be OK with you.

35:38

I would prefer if you send them per mail because I do not okay use Microsoft Teams. I would miss the call Okay that that's the thing like if it's OK so yeah okay yeah like yeah, OK e-mail will be fine. So, if we have any question comes up afterwards then we can just send them e-mail. So that's yes. So, anyone of you can answer us there.

36:04

Yeah. So, I prefer Teams because I'm always there. So, it just came out of my mouth. OK, yeah, I mean, you can also try messaging on Teams. I should be able to see it and I got a notification on the math, but let's say don't count on it. Yeah, OK, e-mail is fine for me.

36:30

So, yeah. And anyone has to ask anything else? Yeah, or any. I just saw the message from Jan and like he said that schools can buy software for like €500 without getting it approved by the Ministry of Education. Like. And I I'm not really sure with the the education system in Germany because I'm new here, but like is this legal or I mean it, it is legal since you're doing it, but yeah.

37:00

It is Okay. My my mother is a teacher and they use Anton. I don't know if you ever heard of the learning software, but they don't are allowed to use it. But because it's in the pricing model that is allowed, they can use it. Same with Moodle and all and different kinds of tools.

37:27

Okay. Alright. It's like a it's like a loophole in the Ding and the and the agenda. Because it was original planned for small investments, not for software, but software. Also, software is also included in that budget of 500. OK, all right.

37:48

Yeah, I have a question. Sorry for interruption. Like in the beginning it was said that the content creators will be creating the content, but how will we make sure that they're being aligned with what is being thought in the class like by the teachers are? Is there any gap which will be filled between the teachers and the content creators?

38:08

The content creators will add to their learning materials whatever they want to choose for that multimedia wise which skills are addressed, which hard skills and which soft skills and at which level they recommended. Of course we have general guidelines which skill belongs where.

38:36

Just so the teacher has an easier time and the recommender system to to access it. But the teachers can also make their own content if they want to. Yeah, so if they want to teach the students some really particular thing, they could make some task about it and give it to them in meters. Yeah, so like

pretty much everything will be recorded and like available for students to watch whenever they want to.

39:06

Yeah. And as it was said in the recording that you guys will make a note of how the group collaboration is working. So how will you track that progress with the learning diary. As I mentioned, they have an area for free text where they just write text and there they.

39:32

Keep record of the learning experience, including experience with others and the help they got from them. For example. And if someone else was included in this task, they have an additional smiley where they can say like with this particular student, the collaboration was really great or it was not so good, so they can work on that.

40:01

And the teacher may can intervene if they notice some conflict there. Thank you. Yeah. Okay. So I think we are all OK or any anything else should be discussed. No I think we are we are good. All good. All good. Yeah. OK. And thank you so much for you to manage the time so.

40:31

Yeah. And if we have any problem or any questions, we'll just get back to you. OK. OK. Thanks then. Have a nice day everyone. You too. Nice. OK. Thank you so much. Take care. Bye. Thank you.