**Interviewer:**

Can you tell me? I can jump a little bit into this. Are you like, sort of in serious A financing or have you acquired VCs or what is the ownership status of the company?

**Interviewee:**

It's pre-everything. We only have research council grants and some smaller public grants. Okay. So we got 1 million from the research council and then some like 10,000, 30,000 thousand level stuff.

**Interviewer:**

Were you found like within the last five years? What is the actual thing?

**Interviewee:**

February 2019.

**Interviewer:**

So in this two years, roughly have you like sort of grown a bit in the product you are developing?

**Interviewee:**

I would say so, yes.

**Interviewer:**

Okay. That's good. I would ask more about that. The product itself. It is cell phone, I guess. Or do you have some headquarters where you work?

**Interviewee:**

We work in a Coworking space at Telo seven. Okay.

**Interviewer:**

You work at Telo. Okay. Nice.

**Interviewee:**

A free office provided by [inaudible]

**Interviewer:**

That's good. I work at [inaudible] also, so maybe we can talk to each other after Corona. Do you have you said this a little bit, but are you having some income coming from the product?

**Interviewer:**

No.

**Interviewee:**

No, not really right now. I would say almost, but I'm guessing you want the no answer.

**Interviewer:**

Yeah. You have to say what you think about it. You have a core development team. Like, do you have developers working or software developers.

**Interviewee:**

We are three people. We were four in the fall. In the fall we had two developers. Me with a computer background, but I didn't work as a developer. Another one only on the business side. So I was kind of in between

**Interviewer:**

Yeah.

**Interviewee:**

Right now I'm more on the programming because we lost one who was on the developer side.

**Interviewer:**

So when it comes to the product and service, the core product and service, can you tell me a bit more about that?

**Interviewee:**

Yeah. So like one of the base problems came from starting at [inaudible]. Struggling to find stuff organize. So it's the personal start page where you can add anything like links, so you can search for any resource and you can link your personal start page up to shared start pages. So that you can have a shared overview of a project. Like in your case, you can have one for this research project and anyone involved could have access to that start page.

**Interviewer:**

What is your role in the company?

**Interviewee:**

CEO

**Interviewer:**

What did you say now? CEO or something?

**Interviewee:**

Yeah. CEO.

**Interviewer:**

Yeah. You are the CEO. It sounded like you were the CEO from the discussion. Do you participate, more in product development and testing and so stuff like that?

**Interviewee:**

So I was part of it before as well. I was just not programming and typing the actual code. I still partake in the discussions about especially features and design but also some technical questions.

**Interviewer:**

Questions. And now, to what extent are you sort of developing or participating in development tasks?

**Interviewee:**

Like a little bit more, yeah.

**Interviewer:**

20%. 30%.

**Interviewee:**

So I have recently just caught up on the like learning sites for catching up. Okay. So that's kind of hard to say.

**Interviewer:**

Okay, no problem. Important is that you understand the software practices. So when it comes to software development practices, what kind of practices do you think you are using together with the rest of the team and what kind of tools and so on?

**Interviewee:**

Yeah, so we are using scrum principles and lean startup principles. I'd say that's kind of the main, inspiration from like, from those two. Yeah.

**Interviewer:**

And how about programming languages wise technology wise, technology tech?

**Interviewee:**

We're using [inaudible] JS, on the front end with [inaudible] JS, which encapsulates [inaudible] JS. And then we're using ALIXIR with the Phoenix framework on the back end. Something you probably haven't heard about.

**Interviewer:**

What kind of programming language is it?

**Interviewee:**

It's functional it compiles to URL Lang Byte code. Have you heard about URL Lang?

**Interviewer:**

No.

**Interviewee:**

So it is used in telecommunication systems.

**Interviewer:**

Okay. What kind of telecommunication systems?

**Interviewee:**

Like phone calls and stuff.

**Interviewer:**

So it's connected to protocols perhaps?

**Interviewee:**

It was made by Ericson.

**Interviewer:**

Yeah. But it's connected to the packaging change protocols or stuff like that, or no?

**Interviewee:**

Which kind of protocols?

**Interviewer:**

Yeah. In telecommunication wise you send packages mostly

**Interviewee:**

I think maybe it can handle some of those things, but it's not that low level like ELIXIR, which is what we are using. It's kind of on the same level as Python, Ruby, or any of those languages, but you do have access to some features that normally would be on a lower level kind of, but they have distracted and made some like note communication features that you normally don't have the same kind of access to with other languages.

**Interviewer:**

Is it using also C programming libraries?

**Interviewee:**

I don't know.

**Interviewer:**

I don't know either. When it comes to quality attributes, what do you think?

**Interviewee:**

We are also using Postgress and Neo Four J which is a graph database.

**Interviewer:**

If I say UX performance, security, usability, availability, whatever which ones do you think are the most important? What attributes are you focusing on?

**Interviewee:**

Some of the reasons for using ELIXIR was concurrency availability handling, avoiding downtime and just general scalability while increasing users. That kind of also translates to the code itself, but by choosing ELIXIR, it's easier to write code where we achieve those goals. Also modularity.

**Interviewer:**

It's a framework like Python frameworks perhaps, or similar. When it comes to testing practices what kind of testing practices do you adopt in validating and verifying the code of your product?

**Interviewee:**

Math Manual testing

**Interviewer:**

Okay.

**Interviewee:**

Yeah. The thing you shouldn't do in theory, but that everyone does in practice or very often do.

**Interviewer:**

Yeah. I understand.

**Interviewee:**

We are not writing any unit tests.

**Interviewer:**

No automated testing, no regression testing.

**Interviewee:**

No, not now.

**Interviewer:**

When it comes to this menu testing, anyways, how much time do you think you spend doing it? Like if you are developing for six months in those six months, you of course also test. So how much time do you think you dedicate to testing and how much to development?

**Interviewee:**

We are avoiding like some of the need for testing by using ELIXIR, I think because you get really good error messages early on.

**Interviewer:**

Those errors are compile time, not round type

**Interviewee:**

So you have those some compile time and we are also like doing some tracking right now for errors that are sent to sentry and service for error checking like runtime errors. So I guess that should be included in the error or testing.

**Interviewer:**

Validation part. I understand that.

**Interviewee:**

In terms of testing the back end and the logic, when it's more just ingrained in developing, it's not like a separate process, but we are testing it when it's done and you can do like user testing. But we do the user testing first and then we might involve others and then we just release it.

**Interviewer:**

Well, that's a good idea to involve other people as well.

**Interviewee:**

It depends on how big the change is.

**Interviewer:**

I understand. How do you document your product? When you develop new features, for instance, in different phases of development and testing, how do you do the actual documentation?

**Interviewee:**

Mainly just comments in the code

**Interviewer:**

Comments in the code.

**Interviewee:**

That's good. And you have, like, you have read-me's for setting it up.

**Interviewer:**

So you spend time updating those read-me's and comments perhaps

**Interviewee:**

A little bit, but it's not done in a very active way. We do have everything, the need is less with ELIXIR because you kind of just follow with the functional style. You just follow the steps. Okay. This function goes into, that function goes into like, there's not side effects and stuff.

**Interviewer:**

Yeah. I understand. Now I want to enter a discussion, which is more about technical debt and pivoting. Now maybe I have to explain the concepts unless you already know them.

**Interviewee:**

I know the concepts.

**Interviewer:**

Yeah. That's very good. So, you know, technical debt it's more about good software practices so that you don't have to sort of accumulate a lot of, bad practices and, end up with paying back debt from a technical standpoint later on. Pivoting is changing directions because you now are actually doing something, but you change directions. So first of all, since you know, the concept, how much aware are you about the technical debt in your company, in your startup?

**Interviewee:**

I'd say it's something that we are aware is important. So we are doing refactoring.

**Interviewer:**

Okay. That's very good.

**Interviewee:**

Now I see that I should probably do some refactoring here. I will do some refactor at some point when I have some available time.

**Interviewer:**

Yeah. But what is the perception? Do you perceive it like a bad thing? Like positive thing? Because the questions here are, do you want to ignore it? Accept the technical debt? Avoid it?

**Interviewee:**

So we want to be aware of it mostly. Kind of having an intuition of how much technical debt we're getting and then, so that we intuitively go, now we need to fix this. So like when we are discussing how to implement something, we are considering the next few steps. Okay. And it's like, is this a temporary solution? Can we build on it or not? And what's the consequence. So we do like an evaluation before doing it okay. To avoid technical debt or to accept it.

**Interviewer:**

To be honest I wrote this paper a couple of months or some months ago that was accepted in a conference and it got the best paper there and this concepts of accepting, avoiding and managing everybody said manage before in the research. But I brought up this four concepts, avoid, accept, manage, and actually ignore, because ignore, because you don't sort of, you know about it roughly, but you ignore the fact that technical debt can affect you. It was very well received and these concepts are like, I mean, I understand when you say I to avoid it and uI want to accept it, but to fix it later somehow. And so it's quite good answer for me at least that you understand the actual concepts.

**Interviewee:**

Yeah. If you say manage it's like, you know.

**Interviewer:**

Yeah. But everybody before said manage and managing involves so many things.

**Interviewee:**

Managing it means that sometimes you're avoiding it and sometimes you are accepting it and yeah.

**Interviewer:**

Or maybe you are doing the right things to manage it, scrum for managing your project. So you have to be precise. You are still at an early phase, I would say, but at the very beginning, how did you deal with technical debt when you started the company for instance?

**Interviewee:**

Like, we started the company in 2019, but we started the process of developing it sooner. The idea started over six years ago and kind of evolved for a long time. We did like explore a lot of options initially programming languages frameworks, directions to go in, and then we kind of in 2018 in the fall, we went all in, did some simple subjects on the side. Then we were kind of pushing ourselves to accept the technical debt because we were more coming from a software engineering standpoint. We also were a few developers working who pushed ourselves to get it out there. And then fix it. Yeah. So I'd say, we were like really avoiding technical debt for a long time. And luckily we made the decision to choose a ELIXIR, that's one of the biggest avoidances of technical debt, that we have done and are going to do in the near future. Like that's that's core. And then after that, we kind of, okay, let's accept it. And we pushed ourselves to accept it more and more. And now we have kind of gotten back to a point where, well, now it's evolving, it's getting bigger. It's more a complete thing. Not an MEP anymore. It's a fully fledged product. And then we are kind of going back again to fix things. Yeah. Like make sure we think a bit long term. Cause we did a complete revamp of our front end in December, like scrap the old thing. So, I mean, that was an obvious technical debt there.

**Interviewer:**

So you said something, how you cope with technical debt before and how you do it now. So when it comes to pivoting that is something also I'm interested to knowing like have you changed directions and what have you done from the early phases to now? And actually from research context, the pivoting happens for 10 different reasons that the researchers have identified, but there might be also other reasons. So I'll leave the question open at the end, but the first reason that the researchers discussed is the zooming in like a single feature of the product that you have has become the whole product itself, like with 10 different features, but we realize nine of them are not very important and you stick with one of them and yeah, you make that one particular feature, your entire product. Do you think this has happened? And if, yes, I need to connect it a little bit to technical debt and we can see if reasonable upon that.

**Interviewee:**

So I would say kind of it really depends. So for this I'd say we have focused more in, on a particular element of the product. But it's still part of the same idea and the plan is to mostly include a lot of the initial ideas.

**Interviewer:**

But did it connect anyways with the technical debt, you might have not thought about it, but did the technical debt influence this process of changing the idea, varying the idea and so on? You don't have to say yes.

**Interviewee:**

I'm just thinking. I think not directly, t's more just the workload, but I I'd say indirectly. Yes, it is related to technical debts, but not that much, the technical debt that we have already acquired, but more about avoiding the future technical debts. Because we could make some simple solutions to solve some problems for some customers, but that's something we are not doing. So we are kind of making the hard choices of not adapting it for certain wishes. Yeah. Because it's not only technical debts, but it's also like we are going to like one niche and it will be hard to include those other segments. We want to make something for everyone. And then if we adapt too much for one type of user, then it will be hard to kind of backtrack.

**Interviewer:**

How about zooming out, it's sort of the opposite, but has the whole product become a single feature of much larger product? You had all those features and then you sort of joined them together and then became this bigger product. Maybe not, I'm not sure,

**Interviewee:**

That's the thing because of what we're making, you could take it from that perspective as well because one of the essential parts is a start page. Right. So you should be able to access all of your different tools and services. Yeah. And to that extent for you as one user, one company, it will be your access point for a lot of different services. And then that way you can look at all of that as kind of a package. We just don't have any like collaboration with any other tools and services, but from a user experience point of view, it can be perceived as, this is like my, my everything.

**Interviewer:**

Yeah. I understand. This is also connected to technical debt somehow?

**Interviewee:**

Yes. I'm trying to make any connection that I can make. It's connected to other people's technical debt. So by kind of looking at it in relation to those other systems, by using our system, for example, if you have like a huge, huge system that has just piled, you could also say user experience debt, but I think technical debt is could be related there. You can circumvent it and have like an adaptive layer on top of your existing solutions and then just, well, this is where I'm going. I'm only using this part or this is where I'm going. I'm only using this part and then someone might have a different use of the existing system and they skip to other parts. Yeah,

**Interviewer:**

It's sort of mix and match there with competencies. How about the customer segment? Are you still having the same customer segment or have you changed the customer segment since you started the company?

**Interviewee:**

That has definitely changed, unless we go to the very beginning, because then our answer was everyone. Which it still is long term, but we are like targeting, a starting point. And that starting point has changed ever since we actually, had some sort of, starting point

**Interviewer:**

And I understand this is maybe evolved during the time, but was it somehow also connected to technical debt? Because this is like, I understand that you change the segment for different reasons, and those might be financial reasons whatever, because the customers you have targeted beginning maybe were not the right ones. And maybe you should have target some other people, but from a technical standpoint, do you see any technical debt reasons?

**Interviewee:**

Yeah. So if you go back to the previous point about. I am not sure if I mentioned exactly this, but so since it's a start page, a natural thing could be to think, okay, I'm doing it for an example. Let's have an integration to slack. Let's have an integration to Google drive. Let's have integration integration. You could see that as being a technical debt in terms of, how are we going to scale that if we want you to be able to choose anything because that's our goal. Choose whatever's best for you, even if it's a tiny startup making it that no one has heard of, then you use that system. If it's an internal system, use that system, that's up to you. So like realizing the difficulty there and the extent to which some users and some customers might require or ask to have an integration. We might want to use this product if you had an integration to slack or if you just had this thing that would turn into a kind of a technical debt or another type of debt, like product debt of some kind and what we have realized is, we don't want to adapt. So then we instead go for much larger companies and then the problem is often just organizing and navigating is bigger. I see. So then we don't have to make those short term adaptations, which long term are bad. And I'm not sure if I would categorize it as that technical debt, but maybe at least I think it is related. Yeah.

**Interviewer:**

Because technical debt, it's also about using bad practices instead of good practices in software engineering.

**Interviewee:**

Yeah, I might with this, be stretching it to take in like a product UX experience to calling it technical debt. But to some extent we are generalizing. We're keeping it general, which is a way to avoid technical debt as well. I guess you have to do the work of deciding whether or not it's falling within the definition or not.

**Interviewer:**

Yeah. I just have to make sure the transcription first part of subscription has gone to the cloud and this one, because I think you are bringing up very interesting points. Some of them I clearly have seen before because I've did some interviews also in Oslo. So I can compare with those. And I understand most of the things you are saying, but you are bringing up some new stuff, I guess. Customer needs you realize that your startup has realized that the problem you are trying to solve is not very important for the customers. And then you find other problems that are more important than the others. Has this happened, it doesn't have to have happened.

**Interviewee:**

We just decided that those are not our customers at this point. Yeah. Because they don't value the problem as much.

**Interviewer:**

They have sufficiently good solution right now that they would need, like, they expect other things it's not interesting enough. The, just

**Interviewer:**

To help you out with this, if you're not solving the right problem, because the customers are not giving always the feedback.

**Interviewee:**

I would say probably, some of the companies are correct in not using [inaudible] right now. But I do think like in terms of the long term development of the markets, it will make more sense in the future because I think you will have more microservices and then [inaudible] kind of like the inference there.But like bigger companies already have the problem. It's kind of like which came first, the chicken or the egg kind of thing. They are kind of in the middle there , but with the bigger companies, they have the navigation problem. It was during the fall that we realized that navigation is kind of, that's where we focus right now.

**Interviewer:**

You realize what is the niche and what problem? What I was trying to say is that sometimes people see that some solutions are maybe shortcuts that could have been done better. And then they say, oh, this is interesting, but you know what maybe we don't really need it. So this kind of feedbacks are also very, very honest because telling somebody that you have done a bad job is not very good, but they can of course say, oh, it's good, but, you know what, it still doesn't feel like a real product because of technical debt issues that they yeah. They say this is something that has not been finished or it's a shortcut.

**Interviewee:**

Don't think we have anything there related to technical debt.

**Interviewer:**

Platform pivot your application has turned into a supporting platform or vice versa. I'm not sure. Yeah. It might fall under that. It might not. This depends on how you see it from your product standpoint

**Interviewee:**

Into its supporting platform. Like what's the supporting platform?

**Interviewer:**

Yeah. For instance first you had an app let's say even a mobile app, but then you realize you don't really need an app you need a portal or something like that, or a platform that support something else or an app for hardware system or, yeah. So it doesn't have to be like....

**Interviewee:**

We just switched when we revamped the front end, we just made it more from the ground up so that we would be able to develop it faster and adapt it better.

**Interviewer:**

It doesn't change the scope of the system we are developing and then business architecture, you startup has switched the business architecture, like aiming from low volume to high margin, for instance, instead of focusing on the mass market, like are you trying to sell a lot of people, or are you trying to sell to few people with a lot of revenue or vice versa?

**Interviewee:**

That has changed. We thought we would reach out to both individuals and companies at the same time. Yeah. We're still holding onto that, like individuals and companies simultaneously. But we started off thinking we start with the small ones because it will be easier to get it in there. But we have realized like I explained earlier that enterprise has a bigger problem with what we are solving early on.

**Interviewer:**

But then all these questions are connected. I would like you to try to connect them to technical debt.

**Interviewee:**

Yeah. That's what I'm thinking about now.

**Interviewer:**

It's not, it's not, but if it is.

**Interviewee:**

I have not related the technical debt to these things before.

**Interviewer:**

I think I'll have a very good one at the end. So don't worry about that. Value capture. Your startup has changed the method to capture value monetize. So how you make money, you are selling like the product in a certain way, then you change the way you are selling it. Like for instance per subscription, you sell per one time sales or whatever,

**Interviewee:**

It's still subscription, that was always the plan. I mean, we don't have any sales yet, but we're still going to stick to that one. So we had two variations there. One is direct to the company that's kind of organizing themselves internally and another is as a web portal to someone else's services where they are managing like a start page for their customer. We did have a pilot contract for that use case, the portal, the web portal. It just didn't go through in practice, like they signed that they were going to pay. But now we have some like real life testing. This is not official, so don't share this. It's like an informal testing at Health Northern Norway. But for the like more internal use case, like on top of the intranets and on top of the internal stuff.

**Interviewer:**

It's not public interface, but more internally.

**Interviewee:**

Yes, I can relate that a bit to technical debts. Because it's easier for us to create support the internal value proposition. It requires less supporting features. Okay. So there's less risk of adding up, piling up technical debt that we would risk. If we were following more the web portal, then we would need to adapt for some features that were specific to that customer. And we would pile on technical debts that would, or UX debts and other types of debts, it would pile up more likely.

**Interviewer:**

Engine growth. Your startup has significant changes in growth strategy to seek rapid or more profitable growth. I'm not sure if you are there yet or what is your impressions then? So how you perceive growth?

**Interviewee:**

So I'll give a quick kind of answer. We are doing growth hacking. Like if you heard about that principle, I think we are trying to just do the simple things that allows us to grow. And one of the main thoughts there is that we are not developing new features that are not necessarily well thought out, and that will be hard to pull back or change, but instead of increasing the user base by doing things that are easy to do, swap out. If we don't like this way of inviting people, well, we'll just remove it. Yeah. So it's not part of the core product in the same way. So then we are avoiding technical debt.

**Interviewer:**

That's good. It's sort of like testing, like, do you like this feature? No. Then throw it away. Yes. Then let's move it forward. That's interesting.

**Interviewee:**

I'm not sure if I got what you meant there.

**Interviewer:**

Yeah. It's a marketing approach. Like we call it AB testing.

**Interviewee:**

I know AB testing. I just didn't get the connection. Like we are not doing AB testing at this point. No.

**Interviewer:**

So that your startup has identified a more effective way to reach it customers than the previous ones. Like have you changed the way you talk to people now than you did before?

**Interviewee:**

Yes, but I don't think it has anything to do with technical debt.

**Interviewer:**

And then technology pivot, I think this one you have more to talk about, this is the last one, but your startup has delivered the same solution by using completely different technology.

**Interviewee:**

No

**Interviewer:**

So you haven't shifted the technology during the years when you started to know?

**Interviewee:**

Well, like the only big change we made was oh, like we had an idea then we were testing with different technologies, but after really starting, we have stuck to the same frameworks. We just swapped out to ready made components on the front end and therefore revamped the front end.

**Interviewer:**

Yeah. And just out of curiosity, because some other answers I get are more focused on this one, last one. Do you think on the long term you'll stick to the same technology because you feel that technical debt wise, this technology was gonna fit?

**Interviewee:**

Yeah. I think we will like I mentioned it before the choice of ELIXIR. I think that's a really well thought out choice that's going to avoid technical debt in the future. I think we might get some issues with like our database solutions in the front, and we'll swap out the front and we'll have new different clients, but like the core business logic and with the server code, I think that going to stay pretty much the same.

**Interviewer:**

Yeah. This also depends you can measure it somehow because depends on how much technical debt are you accumulating. If you say, okay, out of 10 features, we know that three of them are developed rapidly because we want to deliver fast, et cetera. And then we have accepted the technical debt and you say, OK, we have this framework. We are able to accumulate 30%. If we switch to a new framework, maybe things can be done better and easier, so we can accumulate less technical debt. So like a low holding framework or something like that.

**Interviewee:**

Yeah. So I don't think we're going to .... Not like in the next five years, I don't think we'll have anything on ELIXIR, which is kind of the core. There may be some database stuff once we have a million daily active users.

**Interviewer:**

Oh, that would be great. But how would you explain the role of technical debt in your startup and pivoting scenarios in one or two sentences? So you mentioned at the beginning that there were three, I noted down three or four cases that you mentioned that technical debt might be related to the pivoting. So how do you` explain the role of technical debt in few sentences, just to summarize?

**Interviewee:**

I think it is something that we have thought relatively much about beforehand compared to most startups. So we are avoiding it on a like fundamental level by some technology decisions with ELIXIR, which is the core also with the graph database, like those decisions are going to avoid a lot in the future. And also like product wise, feature wise, focusing on like, what's the core, what's the generalizable part of this. I think that also reduces the risk of getting technical debt. So choosing to not please the ones that are like, oh, if I can have this, then I'll be happy. Like, I mean, you should never listen to one of those, of course, but sometimes they could pay you if you did that. We are still hesitant to do that because we kind of instead try to go for the ones that accept the general solution so that we can make sure we start general. And then we look at all when we have the capacity, we look at all the people loud. Yeah.

**Interviewer:**

Yeah. That's a good idea. Yeah. Is something else you'd like to add, like from this discussion, something that pops up to your mind that I might have not brought up? Meanwhile, I just check what happened with the first part of the recording.

**Interviewee:**

It was interesting to think about those things.

**Interviewer:**

Yeah. Maybe thinking for a different type of interview? Was this something you expected an interview expected? The questions were the ones that you expected before talking to me?

**Interviewee:**

No. I had no idea. I didn't really think that much about it. I was expecting more general questions. I wasn't expecting it to be technical debt specific. I don't know if you wrote something about that?

**Interviewer:**

Yeah. Yeah. I can share my paper. I have some papers, but I can share one in particular that it's quite good. Yeah. By email. It's about some of the questions I ask, but not about pivoting yet. So the pivoting is the new.Pretty interesting. The things you say, because most of the companies that I talked before they were sticking to technology pivoting, while we were talking about different types of pivoting.I think this is the first case and they very happy to hear that, actually

**Interviewee:**

So some of the things are like those concepts are part of the core of the products.

**Interviewer:**

Yeah, exactly.

**Interviewee:**

It's like a lot, those things are intertwined in a way that it's not normally intertwined.

**Interviewer:**

Yeah. I understand.

**Interviewee:**

Cause I saw some of the good development practices are kind of good practices for the UX and the products and the fundamentals of the products.

**Interviewer:**

Yeah. That's very nice. But I'm mainly finished to be honest. If you do have something else to add, unless you don't I really like to thank you for the discussion because it has been quite useful for me. And I hope also for you from your side it has paid off to talk to me today.

**Interviewee:**

Yeah. I, I think at least realizing how much technical debt I really think we're avoiding by some of the processes we're doing I think that's, that was a good reflection. Like my initial thought would be that we are not addressing it enough. Yeah. But that's because we're not directly working on fixing technical debts. But I think we're doing a good job of avoiding it. Yeah. Like that's a realization I had through this conversation.

**Interviewer:**

Oh, that's very good. It was first time in research context in the industry. I understand people want to avoid things. They wanna ignore things. They want to accept things, not just to say I manage it. How you manage everything. Thank you so much for the discussion. I'll send you an email with this paper, but when you have time, just send me back this signed form from NSD because it's like, and as I said, this is all anonymous. I won't use your name or the company name. I just might describe that you are the CEO of this company. And yeah. Say what is a little bit in general terms? What is the product about, it's a software engineering product, blah, blah, blah. I like

**Interviewee:**

I didn't know what questions to expect. Like these questions, it shouldn't be a problem to share stuff. Yeah.

**Interviewer:**

Yeah, exactly. So it's not very, <laugh>, I'm not looking into your personal details or something. Yeah. But thank you so much.

**Interviewee:**

By the way, I have also written a master's thesis on task technology and remote work performance loneliness during the COVID 19 pandemic. Okay. We are also trying to publish a paper together with [inaudible]

**Interviewer:**

What department?

**Interviewee:**

Computer science.

**Interviewer:**

I know one Patrick

**Interviewee:**

Okay

**Interviewer:**

Yeah, I know Patrick. It's a Greek guy. So how is the thesis going?

**Interviewee:**

So the thesis is delivered. We have written a scientific article together with him. Me and my fellow students.

**Interviewer:**

Okay. Where did you send it? What conference ?

**Interviewee:**

Emerald publishing.

**Interviewer:**

Yeah, that's the publisher, but what is the journal name?

**Interviewee:**

Well, that's a good question.

**Interviewer:**

Where did you send it? Well, what happened with the submission?

**Interviewee:**

I can check it real quick.

**Interviewer:**

I sent you these two papers

**Interviewee:**

Information technology and people.

**Interviewer:**

Yeah, but if you read this one that I'm sharing now and I would like to see if you can send the paper you have published. I would like to see it because it might be interesting. This is startups transitioning from early to growth phase. This is a pilot study of technical debt perception. And you'll see here some of the concepts, yeah. They pop up here, like what you do when you accept or manage or avoid technical debt. And these are the perceptions. And when you are in early phase, you are mostly leaning towards accepting and ignoring things. But when you are sort of growing, you say avoid a lot. And I understand cause we say avoid now, but you said also I accept at the beginning. So this sort of fits almost 100% with your discussions. This was well received because before every paper I read was about managing, so it was everything I manage, I manage, I manage, but how. Surprisingly enough last year they gave us this best paper at software business conference. So just send me your paper. I would be very interested to read more. I can also Google scholars.

**Interviewee:**

And so the master thesis should be available the scientific article it's like under review. It went through the first, like part of it and we have to make revisions, but the general recommendation is that to fix this. And most likely it'll be published is how I understood it.

**Interviewer:**

That's very interesting. I did the course in the past two years on experts in teamwork about startup driven course like all the students had to create innovative ideas and try to make part out of the MVPs that they were developing and they were working with external stakeholders. So I introduced a boot camp concept to the course, like they were having three intensive days and then they are talking to the stakeholders to develop products that were very relevant. I've had a lot of publications on this as well, so, but, yeah, it is nice that, you have also tried to publish to journal, so that's very good, yeah.

**Interviewee:**

Hope still how hoping it will be published.

**Interviewer:**

Yeah. I hope so too it will be published. You have a couple of revisions, but eventually it'll publish.

**Interviewee:**

Well, that's my understanding that usually It's like that

**Interviewer:**

Yeah. But also X, it is Y is good researcher, so help you alot in the process. So, yeah. But thank you so much again I need to pick up my daughter from school now. Very nice to talk to you and yeah. Let's keep in touch eventually. And yeah. And maybe we can meet when Corona is over or vaccines, get on the way. Yeah. Thanks a lot. Have a nice day.