[00:32] RESEARCHER:
Hi PARTICIPANT 28, how are you?

[00:35] PARTICIPANT 28:
Hi, I'm fine thank you. How are you?

[00:36] RESEARCHER:
I'm very well. Thank you. The voice seems to be very good so that's good.

[00:44] PARTICIPANT 28:
Ok I can hear you too very well.

[00:47] RESEARCHER:
Alright, fantastic. So, how about if we kick off. Alright. I start by introducing myself and telling you what I do, and the purpose of the interview and we'll start with the interview.

[01:03] PARTICIPANT 28:
OK.

[01:04] RESEARCHER:
My name is [Deleted to preserve the participant anonymity]. I'm a post-doc researcher. I do my research in software quality. I try to understand how software teams produce or achieve software quality. I do exam in various software processes like open source, Agile, etc. And currently I'm working on Agile trying to understand how Agile achieves quality. The purpose of the interviews is to gather data. We believe that people in practice and experience learn knowledge and accumulate knowledge and we try to understand that knowledge and extract it to interviews so we can bridge the gap between practice and theory. So, your participation in the interview is anonymous so your name wouldn't be mentioned publicly in any stage of the process and the companies you will be mentioning during the interview, or your employer, or previous experience would be anonymous. It won't be public knowledge or be used at any stage of the interview, of the research. If you happy with this, we can proceed, unless you have questions. Do you have questions?

[02:54] PARTICIPANT 28:
No. I'm fine.

[02:57] RESEARCHER:
Fantastic. We can start with some introductions. How about if you introduce yourself, telling us what you do and talk to us a little bit about your experience.

[03:14] PARTICIPANT 28:
Yes, so my name is PARTICIPANT 28. Can you hear me well? I'm just closing a window.

[03:21] RESEARCHER:
Yes, there is a little bit of an echo.

[03:25] PARTICIPANT 28:
OK, now maybe it is a bit better.

[03:27] RESEARCHER.
Much better. Excellent. Fantastic.

[03:31] PARTICIPANT 28:
My name is PARTICIPANT 28. I'm from Italy. I have started here and now I'm working here and I'm a researcher and developer. I work for [Deleted to preserve the participant anonymity]. We make [Deleted to preserve the participant anonymity]. Previous experience I have worked in [Deleted to preserve the participant anonymity] and I have a master's degree in computer science. I'm have started working in I.T for four years now. In my current company, I just write software and we are a team of ten persons. The company's really big. We are about, here in [Deleted to preserve the participant anonymity], more than 2000 employees. We have a lot of collaboration, we have a lot of other teams and in this company, I work as a programmer in [Deleted to preserve the participant anonymity]. We have a lot of tools in our teams like HMI, we have platform to assist from remote, like Hangouts or Google Meet, it's more complete, like teams.

[04:47] RESEARCHER:
OK. Alright fantastic. I'll start with the first question. How do you define quality in the context of agile software development?

[04:57] PARTICIPANT 28:
For me as a software developer, quality mean good and working software. This implies quality code and sustainable design. The design should be reusable and easy to change. I aim for well written code, easy to read and maintain. We have guidelines in place. We also use linting tools and code review. But quality comes with a good process in place. If you don't have a working

process then you will not deliver and if you manage to deliver something highly likely it would be poor quality. I like agile because it is a continuous work in progress. We have retrospectives and reviews where we continuously assess our working process and practices and think of how to improve it.

[05:47] RESEARCHER:
OK. Alright fantastic. Next question. What do you think of Agile in general and what is your opinion about it?

[06:01] PARTICIPANT 28:
I have a done different concepts of Agile and we are currently using Scrum in our team. I think Agile is useful to deliver good product and it's really useful to know what your teams are doing. You can collaborate more with them. We are using Scrum but it's a bit different, like Agile/Scrum in that way.

[06:47] RESEARCHER:
Ok, how different? Can you explain to me?

[06:51] PARTICIPANT 28:
Yes, we are every morning we discuss for thirty minutes all the things together and we were meeting every week. Not every two weeks.

[07:13] RESEARCHER:
And so, you're released every week.

[07:15] PARTICIPANT 28:
Yes, we are. We release every week on Monday. We try release on Monday if there's something to release otherwise we just don't release.

[07:37] RESEARCHER:
That's very fast. That's a very fast cycle, isn't it?

[07:43] PARTICIPANT 28:
It is very fast because usually they are two weeks. We need to release every week because maybe it's a very dynamic team. We have a really dynamic team and dynamic project.

[08:11] RESEARCHER:
What does it mean to be dynamic? Can you explain to me how you are dynamic?

[08:17] PARTICIPANT 28:
Because we collaborate with a lot of other teams. For us it's mobilization or bug fixing. We need to release our platform more often.

[08:40] RESEARCHER:
It doesn't create pressure on you.

[08:44] PARTICIPANT 28:
Maybe a little bit. But this pressure is not a really big problem. And it's not a great pressure because on our team, we work very well together. So, yes.

[09:10] RESEARCHER
You mentioned earlier that Scrum is useful to produce software. Can you explain further how?

[09:19] PARTICIPANT 28:
Yes, these are useful because we are a team of ten persons and everyone one of us maybe sometimes solo, some different projects or they have different capabilities or they just know maybe different programming and maybe every morning with your team, this is really helpful because maybe you don't know how to do something and they can explain to you or if you have some problem, you can discuss together to make a better decision. In our team, we speak a lot too. And we need to do something, maybe every one of us tells how he will approach the problem and the after we have done speaking, we just choose the better way and we solve that way.

[10:29] RESEARCHER:
I've noticed from your response that there is a high level of collaboration in the team.

[10:34] PARTICIPANT 28:
Yes. Yes, it is.

[10:36] RESEARCHER:
And you learn from each other and you help each other.

[10:40] PARTICIPANT 28:
Yes.

[10:41] RESEARCHER:

How does this help you to achieve quality?

[10:48] PARTICIPANT 28:
Scrum helps us to work very well together. The product we developing is complex, so knowledge and how to deal with complex problem is important to us. We always discuss how to go about things and we come up with the most efficient solutions. You know, we develop automation software for pharmaceutical manufacturing; it can be complex. When we talk and learn from each other's we come up with better design and better code.

[11:01] RESEARCHER:
How long you been working together?

[11:05] PARTICIPANT 28:
I'm with this team in three and a half years but my colleagues, they worked in this company for a very long time. These people are fifty years, sixty-five. Yeah, I'm the youngest.

[11:31] RESEARCHER:
Do you get special treatment of being the youngest?

[11:34] PARTICIPANT 28:
Yes.

[11:36] RESEARCHER:
Do you think that helps to implement Scrum in a successful way in your team?

[11:44] PARTICIPANT 28:
I don't see you anymore. Can you hear me?

[11:47] RESEARCHER:
Yeah, I can hear you. Yeah. Can you hear me?

[11:50] PARTICIPANT 28:
I can hear you, but the video is just OK. I can hear you and see you too. The video has stopped.

[12:07] RESEARCHER:
OK, you've stopped too. Now, you're back. Fantastic.

[12:13] RESEARCHER:

Do you think it helps with the team being together for so long?

[12:24] RESEARCHER:
Hello? Can you hear me?

[12:28] PARTICIPANT 28:
No, I lost the question. Can you repeat it, please? Maybe we can switch off the video?

[12:36] RESEARCHER:
Yes, switch it off. It's much better.

[12:42] RESEARCHER:
Yeah, hopefully it's better. I think it's a little bit better, isn't it?

[12:49] PARTICIPANT 28:
Yeah. I can hear you without any problem now.

[12:51] RESEARCHER:
Fantastic. OK. Do you think the fact that the team has been together for so long helped the implementation of Scrum?

[13:02] PARTICIPANT 28:
Yes, I think it because at the start it was really hard for the other teammates, because they are older, and they don't want to make a lot of changes. But after starting a kind of psychology, it was better for everyone. Our work it speeded up and we are faster. We collaborate much more. We talk much more.

[13:40] RESEARCHER:
OK, fantastic. You mentioned transparency as one of the features of your team. Can you explain to me further, how does it help delivering good software?

[13:53] PARTICIPANT 28:
Yes, because every moment we know what the teammates are doing. And we see what products they are working and what they need to do. And this can help to organize your work and you need to do something, you remember once your teammates have something similar, maybe two months ago and you can ask how to approach the problem and so on. People can comment on my work anytime and criticize my coding and design decisions. This helps the

quality of my work and I learned extensively from my teammates feedback. As I said I'm the youngest and less experienced in the team.

[14:42] RESEARCHER:
Fantastic. Now, can we move to the next question? Can you describe the Scrum setup in your team? Can you explain to me the process? How does it work in your team?

[14:58] PARTICIPANT 28:
Yes, so we have a scrum master. He usually every morning, he asks us what we need to do and if we don't have anything to do, he asks us just to do something. The scrum master, he decides who is doing what. If we need help, we can ask scrum master or our colleagues and he decides what we need to deliver, when we need to deliver and so on. We have different products and platform and we use Heat or [inaudible] it depends on the project. We use an issue tracker and a wiki, and we use something like Trello. The master just enters the issues on the issue tracker. So, outside our team, the master is who talks a lot with us. He understands if there some bugs or some problem and if there is, he decides the issues and he decides who is doing what and in what time we need to finish the deadline.

[17:04] RESEARCHER:
What type of skills do you have in your team other than the Scrum master, the developers and who else do you have in your team?

[17:17] PARTICIPANT 28:
We have our boss, he just manages our team. We don't have testers because that's another team.

[17:33] RESEARCHER:
Ok, so it's not part of your team?

[17:36] PARTICIPANT 28:
No, the testers are another team. But they follow our directives.

[17:46] RESEARCHER:
So how do you collaborate with them?

[17:50] PARTICIPANT 28:

When we release something new, we ask them to test it. We have a very good testing methodology. So, they always need to do the same things and then they know it. There is documentation of that. And they use the wiki. If they find a problem or something wrong, they just call us and communicate. We verify the problem and if the problem is real, we start a new issue in our issue tracker.

[18:30] RESEARCHER:
Isn't this against Scrum because Scrum as calls for a co-located cross-functional team. So, the testing team should be part of your team.

[18:41] PARTICIPANT 28:
It's in our building; it's under us. It's a team. The testing team is under our team but it's different because they build various things, and the testing and the verification with the client.

[19:15] RESEARCHER:
So why are they not part of your Scrum team, for example? Do they participate in your stand up?

[19:25] PARTICIPANT 28
No, they don't.

[19:28] RESEARCHER:
So, is it working? This setup?

[19:32] PARTICIPANT 28:
Yes, yes.

[19:34] RESEARCHER:
Why is it working?

[19:37] PARTICIPANT 28
It's working because our products it's a really mature product.

[19:49] RESEARCHER:
So, it's a robust product, right?

[19:52] PARTICIPANT 28:
Yeah, it's very robust.

[19:55] RESEARCHER:
So, it's it has been tested for years.

[19:57] PARTICIPANT 28:
Yes. Yes, of course.

[20:00] RESEARCHER:
So, do you think the maturity of the team and the maturity of the product is helping?

[20:06] PARTICIPANT 28:
Yes. Yes. This is, of course, one of the points. And now we are doing automatic machine for the pharmaceutical. And it's like because you need to be very sure also what you are delivering. So, you'll meet the local smarts and you need to test everything, everywhere, all that platforms. And you need to test it for a really long time, because once you deliver that, you cannot make any other changes.

[20:44] RESEARCHER:
So, do you think the setup is good implementation of Scrum and why?

[20:53] PARTICIPANT 28:
Yes, we have another Agile methodology. We have done a lot of local courses and read a lot of books. But yeah, we started with the classical Agile and after that we have made some changes. And yeah, I think it's working very well, and we are delivering it without any problem.

[21:27] RESEARCHER:
So why it's working very well.

[21:31] PARTICIPANT 28:
Why it's working very well is because the team works very well, solid following the rules.

[21:41] RESEARCHER:
Following what, sorry. I didn't get that word.

[21:44] PARTICIPANT 28:
Following the rules.

[21:46] RESEARCHER:
Following the rules, OK.

[21:49] RESEARCHER:
Which rules? The rules of Scrum?

[21:53] PARTICIPANT 28:
Yes, so that stand-up meeting, the communication, issue tracking, and we deliver once a week.

[22:09] RESEARCHER:
So, can we call this the maturity of the software development and the team is the high?

[22:17] PARTICIPANT 28:
Yes. Yes.

[22:19] RESEARCHER:
So, do you think it's helping irrespective of whether it was Scrum or not?

[22:26] AGUSU
Sorry, can you repeat. I just lost you for some seconds.

[22:32] RESEARCHER
Do you think it's helping to implement Scrum and making it successful?

[22:39] PARTICIPANT 28
Yes. Yes, of course because I saw before the implementation of Scrum, the team was not so successful delivering. And after implementing Scrum we are working all together much better. And yeah, the people from seeing us, from all sides, they are really happy for what we are delivering. So, for our products. So, yeah, I think there where a lot of changes in the team approach.

[23:25] RESEARCHER:
Fantastic. I move to the next question. What do you do to assure quality software in this Scrum setup?

[23:39] PARTICIPANT 28:

I follow my issues that I developed in the software and I stay in touch with the testers. I ensure to test the problems before we go into production. And, we have a lot of meetings. So, speaking with each other is really helpful.

[24:21] RESEARCHER:
Can you take me through the journey of a requirement or a feature in this Scrum set up?

[24:30] PARTICIPANT 28
Yes. You mean by telling you how it works?

[24:35] RESEARCHER
Yes. OK.

[24:37] PARTICIPANT 28
OK. So, we have different products and different platforms. We work with [inaudible] or did. Every morning before the lockdown, we go to the office and we get coffee together for the first thirty minutes. We speak about what we've done, what have we reached until now and after that, we tell other teammates what we need to do. And usually what we need to do is an issue on our issue tracking. If we start, we ask for a hand from someone who maybe knows the problem better and if we just deliver an issue, maybe we create a production mode and we send it to our testers and the testers need to test it for fifteen or thirty days. And after that, if there issues, we create a new issue on the issue tracking. Otherwise, are we just going production with the version. We speak a lot together and we have a lot of meetings with the testing team or with our team or with the other colleagues.
And we approach every issue like this.

[27:08] RESEARCHER:
Fantastic. I'll move to the next question. Can you share with me a positive story about Agile in your team?

[27:22] PARTICIPANT 28:
Well, we don't we don't use the story, we use the maze. Because the team is external and the testing teams or other teams, they just send mail to the scrum master and the scrum master puts the issue on the issue tracking. They just don't write anything. They just call the scrum master or send a mail to explain the problem. So, the user story, the scrum master decides how to approach the issue or who is going to solve this issue.

[28:10] RESEARCHER:

How long the has scrum master been working in this product?

[28:16] PARTICIPANT 28:
A lot more than fifteen years.

[28:20] RESEARCHER:
Yeah, that's why. There is a great level of maturity in your team and the product is very mature. So Agile works for you. It works better when there is this level of maturity and people know the product. Can you share with me a negative experience about Agile in your team? It could be this company or previous company.

[29:00] PARTICIPANT 28:
A negative experience?

[29:01] RESEARCHER:
Yeah.

[29:04] PARTICIPANT 28:
I don't know. Maybe when we decided to release our product, but we have done maybe the work really fast. And we are not very sure on the issue we are delivering. And this will go to the testing area and ask the team to go through the issue and maybe it wasn't what they asked for. But they are communicating with the Scrum master or with us. They didn't understand each other and then we do something else for them. And it wasn't the purpose.

[30:03] RESEARCHER:
OK. Let me have a look at my notes. How does the dynamic of the team help in creating software? Can you elaborate on that a bit because you've been talking about it a lot? I just want more detail on how this dynamic helps in creating software.

[30:44] PARTICIPANT 28:
In our team, we have really different skills. We work in different products, different platforms with different technologies. Being very dynamic, means for me, to work with a lot of other products in a lot of other technologies, we work in Windows, we work in Linux, we work with other products, our software. Some of us work across different technologies like C++, C, JavaScript, Java and speaking maybe a lot, it helps for you to choose the better way to approach and to solve the issue.

[32:05] RESEARCHER:

I see. The last question and hopefully it can create a little bit of discussion. What do you think of this statement? It's a bit of a provocative question but the purpose is to have a bit of discussion rather than being provocative. What do you think of this statement: Agile produces poor software?

[32:42] PARTICIPANT 28:
I don't think its Agile who is producing the software. Agile or Scrum as I experienced it works, it helps the team to work very well together. If the team works, you deliver good software. If the team doesn't work because something is wrong, you just don't deliver software, but it depends on the maturity of the product and the scaling of the product, and the team. There are lot a lot of variables in the beginning, I think. Agile is like a philosophy. There are not really straight rules to follow to do something. Every team has a different Agile way, I think. I have seen some things that work very well without following Agile and it depends on what you are working for, who you are working for. It depends on the team, the people.

[34:22] RESEARCHER:
So, do you think that people and the team are more important than the methodology itself?

[34:30] PARTICIPANT 28:
I didn't hear your question. You asked me if the team is more important than Agile?

[34:37] RESEARCHER:
Yeah, if the team and the people are more important than Agile itself?

[34:42] AGUSUT:
Yes, I think so. I think Agile is a way to make the team work together.

[34:52] RESEARCHER:
So, it doesn't deliver the software, it just makes people work together?

[34:57] AGUSUT:
Yes, I think so.

[35:04] RESEARCHER:
So, in your opinion, the focus should be in the team and the people? The performance of the team should be a high performance team, right?

[35:15] PARTICIPANT 28:

Yes. I think if you have a really good team, happy people who work well together, then you will deliver good software. They're working very well without following Agile methodology but Agile methodology, I think it helps a lot to make people work well together.

[35:53] RESEARCHER:
So, it helps. I understand.

[36:04] RESEARCHER:
For your team, for example, if we take off Agile and we put you to work in a different methodology, would you perform in the same manner?

[36:19] PARTICIPANT 28:
I don't know. I think the point on our team, we share a lot, so we work very well together. And, if we are following some other rules maybe we can work very well or work the same.
But we have tried methodologies, but we really like Agile.

[37:05] RESEARCHER:
What have you tried?

[37:08] PARTICIPANT 28:
Sorry? Oh, what have we tried?

[37:10] RESEARCHER:
Yes.

[37:11] PARTICIPANT 28:
Before we agreed to follow the Agile methodology, we just don't use anything. Everyone on our team was on a different product and we just don't share things. Everyone was responsible for their part, their products and there were people who worked a lot and people who don't work so much. That was a problem because when you need to work on something similar, you need to do the work and you need to speak and have meetings to present your product to other teams. What are they saying about the product you delivering and so on? So, there was a lot of time lost in things like that. Using Agile methodology, we have more time to work on and we can go to the meetings, but it was not stressed for us like before.

[38:57] RESEARCHER:
What made it stressful before?

[39:03] PARTICIPANT 28:
The fact that when you were delivering your product, a lot of people asks you to do implementation or they just testing your product and tell you all the issues. So, there was some really high work period, so maybe for three months, you just need to work 10-12 hours each day and for the next three months. This kind of method we are following, it's helpful to balance the work.

[40:03] RESEARCHER:
Fantastic. Just a quick question before we conclude. Why do you do stand-ups for thirty minutes instead of fifteen minutes?

[40:18] PARTICIPANT 28:
Because every day there is thirty minutes and if we don't have anything to say, we can just speak about ourselves.

[40:32] RESEARCHER:
OK.

[40:33] PARTICIPANT 28:
It's like work and friends.

[40:37] RESEARCHER:
Ah, OK. OK. So, it's a socializing thing as well. Why do you do it this way?

[40:44] PARTICIPANT 28:
If you don't need to speak about work, of course, first comes the work. If you don't need to speak about work, you can speak about what you have done at home or when you are going on vacation.

[41:03] RESEARCHER:
Interesting. That helps the teambuilding, right?

[41:08] PARTICIPANT 28:
Yes, I think so.

[41:09] RESEARCHER:
That's very interesting.

[41:14] PARTICIPANT 28
The Scrum master balances your work even on your private life so if you are sad or have issues with your child and you need to go home first and so on, the scrum master decides maybe you have to work not so much. So, if you are not stressed, you are going to be happy and you're going to work well, and you want to share more with your team. If you are sad, you just don't work or want to work with anyone.

[42:00] RESEARCHER:
The role of the Scrum master is social as well, right?

[42:05] PARTICIPANT 28
Yes.

[42:07] RESEARCHER:
That's very interesting because I haven't seen that before. He or she shields you from a lot of obstacles and problems?

[42:20] PARTICIPANT 28:
Yes. The scrum master speaks of his private life too. In the stand-up meeting, we are all on the same level.

[42:33] RESEARCHER:
That's helps a lot. That helps increase the performance of the teams, that helps you bonding, right?

[42:47] PARTICIPANT 28:
Yes, I think so.

[42:53] RESEARCHER:
Fantastic. That's really great to see a good example of Scrum implementation that is working. But you have like you said yourself, you have a lot of variables that work in your favor?

[43:06] PARTICIPANT 28:
Yes.

[43:09] RESEARCHER:
Yes, you have a lot of variables in your favor. Not every team has that.

[43:16] PARTICIPANT 28:

Yes. We have a lot of mature people, they have a lot of experience. They are working in the company for a long time, they nice, they have family and children. They understand your issues and problems outside your work too. The team is really important.

[43:48] RESEARCHER:

Yes of course. What makes people stay with this company? I'm just curious because it seems like the retention is quite good.

[44:02] PARTICIPANT 28:

Yes. The pay is really good too

[44:05] RESEARCHER:

Ah. Good on you!

[44:09] PARTICIPANT 28:

The team is good. The work is good. I'm like a researcher on this so I develop a lot, but I do a lot of research too. It's my favorite thing of this work and I can travel when I want. We have a really big budget to work. There are different good things.

[44:48] RESEARCHER:

OK. Fantastic. I don't have more questions. That was really good, I enjoyed the conversation. It was really nice. Do you have any questions for me?

[45:00] PARTICIPANT 28:

You are writing a book or something similar?

[45:06] RESEARCHER:

No, it's just a research paper. Not a book. Just a research paper which I will be publishing.

[45:14] PARTICIPANT 28:

Maybe when you published your paper, you can share it.

[45:19] RESEARCHER:

Yes, of course. I will add you in the distribution list and once the paper is ready, I will send you a copy. But you know these papers take a long time. So be patient.

[45:42] PARTICIPANT 28:

Yes. Of course.

[45:44] RESEARCHER:
You have a PhD, so you know how long it takes. It takes a long time, so maybe in six months, hopefully I'll have the paper ready so I can send it to you.

[45:58] PARTICIPANT 28:
If you need other questions, you can write to me at any time.

[46:07] RESEARCHER:
Fantastic. I need something from you actually. What we do is we transcribe these interviews. I will send you your interview transcription. If you can go through it and make sure everything is okay and that we didn't misquote you or make you say something wrong or anything. We just do it for validity purposes just to make sure everything is okay, and you agree with us with whatever you said.

[46:36] PARTICIPANT 28:
Yes. Of course. You have may email, right?

[46:40] RESEARCHER:
I do have your email.

[46:43] PARTICIPANT 28:
OK, yes right.

[46:45] RESEARCHER:
Fantastic PARTICIPANT 28. Thank you very much for your time. I wish you a goodnight.