

00:19 PARTICIPANT 12:

Morning Researcher.

00:20 RESEARCHER:

Good morning. How are you?

00:22 PARTICIPANT 12:

I'm good and self?

00:24 RESEARCHER:

I'm doing very well. Thank you very much. I'm just going to give three minutes for people to join us and we should be okay to kick off.

00:34 PARTICIPANT 12:

Wonderful, wonderful.

00:59 PARTICIPANT 3:

Hi, Researcher.

01:02 RESEARCHER:

Hi, PARTICIPANT 3. How are you?

01:04 PARTICIPANT 3:

I'm good. And yourself?

01:06 RESEARCHER:

I'm doing very well, thank you. I'm just going to give a three minute to people to join us. So here I have PARTICIPANT 12. PARTICIPANT 12 meet PARTICIPANT 3. PARTICIPANT 3, PARTICIPANT 12.

01:19 PARTICIPANT 3:

Hi PARTICIPANT 12:

01:19 PARTICIPANT 12:

Hi, pleased to meet you PARTICIPANT 3.

01:27 RESEARCHER:

Hi, PARTICIPANT 16. How are you?

01:29 PARTICIPANT 16:

Fine, Researcher. How are you?

01:32 RESEARCHER:

Good. Good.

01:34 PARTICIPANT 2:

Hi.

01:35 RESEARCHER:

Hi Participant 2, how are you?

01:43 RESEARCHER:

Hi Participant 2, how are you?

01:45 PARTICIPANT 2:

I'm good, Researcher. How are you?

01:47 RESEARCHER:

Good.

01:50 RESEARCHER:

PARTICIPANT 22, hi. How are you?

01:53 PARTICIPANT 22:

I'm doing good. How are you?

01:54 RESEARCHER:

Good. I'm just waiting for... I think I have all the participants. Yes, I have all the participants. I have Participant 2, I have PARTICIPANT 12, I have PARTICIPANT 22, I have PARTICIPANT 3. I have PARTICIPANT 16, PARTICIPANT 18 and Participant 22. Okay. All right. At any stage, if the audio gets really bad, we may need to just switch off the camera. But for the time being, it's okay. I'll share my screen with you.

02:35 RESEARCHER:

Can you see my screen? Can you see this?

02:38 ALL PARTICIPANTS:

Yes.

02:39 RESEARCHER:

So basically, what we going to do today is we're going to get your input into the findings of the study. So basically, we analyzed the interviews and we came up with some findings or with some conclusions. And we'd like to take you through these conclusions and get your input into these conclusions. So basically, they are statements from our findings. And we like you, for example, to give us what do you think of these statements, whether you support them, or you don't support them? And why do you support them or why wouldn't you support them? Give us the justification of your opinion and please use your experience to justify your answers. I'll go through the statements. There are six statements. Hopefully, one hour should be sufficient. If not, just let me know what's your availability like whether you can stay or not. And we will arrange. Hopefully, we can go through them in one hour. I will read the statement and will go through, one by one and ask for your opinion and your input in the statement. Before we do that, let's just go around and introduce ourselves briefly. Just the name, where you are located and what do you do.

04:10 RESEARCHER:

I will start with myself. My name is [REDACTED]. PARTICIPANT 3, would you like to introduce yourself briefly?

04:25 PARTICIPANT 3:

Yeah, I can go next. Hi everyone, my name is PARTICIPANT 3. I'm based in US. I'm now a product manager. But previously, I was the senior product manager at [REDACTED].

04:35 RESEARCHER:

Ok. PARTICIPANT 16. Thank you, PARTICIPANT 3.

04:38 PARTICIPANT 16:

My name is PARTICIPANT 16. I'm located in UK. Currently, I'm a Scrum Master working for [REDACTED].

04:57 RESEARCHER:

Thanks, PARTICIPANT 16. PARTICIPANT 12?

05:02 PARTICIPANT 12:

Hey, guys. Can you hear me?

05:06 RESEARCHER:

Yes, we can.

05:07 PARTICIPANT 12:

The connection is rather bad. As you see, I'm hanging out laying in my bed at the moment. I'm based in London. I am a project manager and Scrum Master.

05:26 RESEARCHER:

Okay, fantastic. Participant 2?

05:30 PARTICIPANT 2:

Hi, everyone. I'm Participant 2. I'm based out of UK, and currently head of IT.

05:41 RESEARCHER:

Thank you Participant 2. PARTICIPANT 22?

05:46 PARTICIPANT 22:

Hi, everybody. My name is PARTICIPANT 22 based in Germany. So, I have around twelve years software experience in I.T. Various experience, including starting from developer to project manager and as well as a Scrum Master. Now, I work as QA engineer.

06:05 RESEARCHER:

Thanks Participant 22. Participant 18?

06:07 PARTICIPANT 18:

Hi, I'm Participant 18 from Serbia. I'm a QA lead.

06:09 RESEARCHER:

Do you guys need any clarification before I start reading the statements?

06:10 PARTICIPANT 16:

Researcher, actually I have a question. Do you want something as we support or we agree or we don't agree, or is there a level of agreement?

06:20 RESEARCHER:

Do you mean amongst the group or...?

06:23 PARTICIPANT 16:

No, about the statements, such as like your statement one, I totally agree, or statement two, I don't think agree or I agree but...

06:33 RESEARCHER:

But yes, you can agree but... put a condition. Yes.

06:37 PARTICIPANT 16:

Okay, thank you.

06:40 RESEARCHER:

Any other clarifications? All right. I start with the summary of our findings. We will use the slides, but I'll read each statement.

06:47 RESEARCHER:

This an overall summary in this slide. Scrum teams achieve quality by adopting several software engineering practices and quality assurance processes. We found various practices used to achieve quality. For example, code review, unit testing, static analyzer, continuous integration, etc.

The Scrum method helps teams to achieve quality by promoting social qualities in the development environment. These are collaboration, psychological safety, accountability and transparency. In addition, some process features of Scrum like iterative development and inspection and adaptation also promote quality.

07:19 RESEARCHER:

This is a broad summary we will go into the details shortly. For this summary, I just need your feedback and comments, but for the upcoming slides, I need more details whether you would support the statements or not. Does this summary need any further clarification?

07:40 PARTICIPANT 16:

It's okay.

07:51 RESEARCHER:

All right. PARTICIPANT 16, you spoke, so I'll start with you. Would you like to comment?

08:05 PARTICIPANT 16:

Okay. So, I actually I totally agree with this statement. There is a validity to this, but I need more details on some of what you propose, which I think is in the next slides.

08:26 RESEARCHER:

Okay, fantastic, PARTICIPANT 16. Thank you. I'll move to PARTICIPANT 22.

08:36 PARTICIPANT 22:

Yes, I agree. I agree more I would say that the second part it interesting. Curious to hear more.

08:55 RESEARCHER:

Ok, fantastic, thanks PARTICIPANT 22. PARTICIPANT 12?

09:02 PARTICIPANT 12:

Yes, I mostly agree with everything that's listed here. But one thing I would like to clarify from my perspective regarding the second part about collaboration and the rest. I would say the combination of the parts makes quality. For example, you could collaborate, but you don't test then the product will be crap.

09:29 RESEARCHER:

I agree. We did not imply that the social qualities stand alone. They complement the first part, software engineering and quality assurance

09:35 PARTICIPANT 12:

Yes, perfect. We on same page.

09:42 RESEARCHER:

Okay. Thanks PARTICIPANT 12. PARTICIPANT 3?

09:53 PARTICIPANT 3:

Yeah. So, I agree with the second part that different team and individual qualities combined with software engineering practices and sustained commitment to those make quality, especially because Agile is all about working together. Participant 12 already said this, but you could collaborate then if there is no commitment to good engineering practices then the product will be substandard.

10:43 RESEARCHER:

Okay, fantastic. That's a good input. Thank you. Participant 3? We agree. In here we emphasize what Scrum adds as a value to the team to help achieving quality. We do not mean at all disregarding quality assurance and other engineering practices.

10:55 PARTICIPANT 3:

I understand! I just wanted to emphasis the relation between both.

11:08 PARTICIPANT 2:

So, I agree with PARTICIPANT 3 when it's something that's collaborative [audio muffled] but it will affect the code of Agile as being flexible right. So that set of possibilities makes it neglected but at the same time it gives you an option to define what is the purpose and you can actually make it the way you want to but it's something that needs to be [inaudible] looked at differently, but also if you work on those social values you listed on the slide on top of commitment to quality assurance, I think that works the best.

11:55 PARTICIPANT 18:

So, I also agree with PARTICIPANT 3. So that set of social qualities like you called them if neglected than quality suffers but the fundamental practices of good software engineering and quality assurance process drive quality first. But again if you don't collaborate those engineering processes will also crumble. There is a strong coupling between the first and second part of the summary in the slide. I like it very much for example, if QAs do not talk and collaborate with the developers than defects go in circles and their resolution delays and things break.

12:48 RESEARCHER:

Thanks, Participant 18. That's a good input.

12:57 RESEARCHER:

Thanks, you all. So, I'm happy with your inputs regarding this I didn't hear major disagreement but rather an emphasis that what I presented as social qualities which are collaboration, psychological safety, accountability and transparency work in conjunction with the traditional quality processes and good software engineering practices and commitment to these. Is this a fair recap?

13:35 PARTICIPANT 12:

Yes.

13:37 PARTICIPANT 3:

We agree.

13:48 RESEARCHER:

So the focus of our work is the second part of the findings. I mean the social qualities. So, for the purpose of this feedback session, we will focus on those. Again. We do not mean to disregard quality assurance but rather to focus on what Scrum brings to the table. The next slides are about each of the social qualities I listed in the first slide. I'll present the findings in statements then you will get to comments, support them or disagree.

14:25 PARTICIPANT 2:

This is good. Because from my long year in software development, I believe this is the value of agile is to influence team culture and way of working. You could have good software engineering in Waterfall; it doesn't work as good as in agile.

15:05 RESEARCHER:

Fantastic! Let's move to the next slide. Any questions before I do that?

15:37 PARTICIPANT 12:

No. All good.

15:38 PARTICIPANT 2:

I'm ok.

15:45 PARTICIPANT 16:

Please, keep going.

15:57 RESEARCHER:

So, this is the first statement:

Scrum enhances team collaboration. It also improves the participation, access and collaboration with the business users or sometimes the Product Owner.

How does collaboration in Scrum help quality?

Collaboration in Scrum helps quality in 3 ways:

Collaboration helps better knowledge sharing within the team and the business users or the Product Owner.

Collaboration with the business users allows receiving feedback which helps the team to adjust misalignments to business needs.

It also helps to understand the requirements better because of the interaction with end users or the Product Owner. This reduces assumptions about the requirements and subsequently less defects

Collaboration within the team helps peer to peer learning and support which contribute to better decisions, for example, on coding and design

17:07 RESEARCHER:

So, before I start gathering feedback, comments and your support of rejection of this finding, I'd like to ask whether this statement is clear or I need to clarify?

17:18 PARTICIPANT 12:

I'm ok.

17:25 PARTICIPANT 16:

All good.

17:37 RESEARCHER:

So, basically you provide your comments on the statement and whether this statement reflects your experience, or you reject it because this is not what you experienced and please provide justifications either ways. PARTICIPANT 16 would you like to start?



17:52 PARTICIPANT 16:

The statement as I understand it is accurate. You could have the best regression suite, tools and so on but if people do not work together than things will fall apart. This can also happen in other processes. You could collaborate in waterfall. But Scrum creates unity in the team which makes collaboration far better. From my experience, people come out from their isolation in Scrum and start working together and helping each other's. I mostly agree with peer to peer learning. Developers become more willing to help each other. QAs talk to developers to check their understanding of specifications. Most importantly the availability of business users. It is not always perfect! You mentioned two roles, business users and product owner. There is a distinction though, product owners are not always competent and true users of the product and they are not always reliable. I suggest instead a true representation of the end users. Sometimes we call them subject matter experts. So overall I'm happy with the statement and it is what I experienced.

19:17 RESEARCHER:

Thanks PARTICIPANT 16. Just to clarify, you said true business users, right? Can you clarify further, please? Does it mean my statement about collaboration applies only when a true business representation can happen in the team?

19:48 PARTICIPANT 16:

Your statement is valid. What I tried to say is the participation of the business is not always ideal. Your statement will become more influent when the team has a competent subject matter expert or a seasoned business user with the right expertise. Sometimes we get PO who are just conduit of the business in the team. They create more problems. They always has to go back to the real business to get details on the specs. So my point is business representation can vary and have different effects.

20:17 RESEARCHER:

Thanks PARTICIPANT 16. Interesting input. PARTICIPANT 12, would you like to go next?

20:34 PARTICIPANT 12:

Sure. I agree 100 percent with PARTICIPANT 16. I think your focus is quality, so I'll add a bit into this. But first I agree with the statement with similar comments made by PARTICIPANT 16. When you have a good representation of the business, we understand the requirements better, then we know what to design for. Our understanding of the business become holistic, so we become more aware of potential future needs, growth and scalability needs. So this is to me better quality. Another aspect is functional also, when we understand the requirements we make less assumptions. I like this very much in your statements. Because in projects we do not have the luxury to wait for further details because the specifications are incomplete or unclear, we make assumptions to progress and hope we get it right or fix it in testing. This does not always end up well. We end up of so much defects, fixing them become a mess, the quality suffer, the design get patchy and so on. A real representation of the business is not always easy. It happens when the agile culture is understood in the company. Because I've seen different companies with different practices and ideas. And, you know, I ultimately decided that this requirement of cultural fitness, which is an absolute must in terms of agile implementation, because let's not forget, this is the journey. It's not a one-off type of activity that you perform. So, this is something that should reside over the months and years of existence. So, yeah, in essence, this is something that I agree one hundred percent.

22:10 RESEARCHER:

Great! Thanks, PARTICIPANT 12. I'll move to PARTICIPANT 3.

22:17 PARTICIPANT 3:

Yeah, I agree with this. And I like that PARTICIPANT 12 talk about the cultural fitness part of a prerequisite to sustain agile implementation. And for me, I think it's written in the agile manifesto where it's talking about cultural fit as people who have the growth mindset. It wasn't written, but I think it's implied. You know, people who have a proactive mindset or are psychologically safe, I think you cover it later. And I think if you don't have this mindset, you might take Agile framework might apply it word for word without really understanding the core meaning of it. So, I think Agile is a process that as a framework, the scaffolding, or the structure, but a lot of times teams should also feel empowered to modify as they see fit. And if they don't have that type of mindset, they might modify it to a way that it's not really Agile. So back to your collaboration statement. I do not think there is a clear-cut correlation with quality, if that what you implied. Obviously, it helps like you describe it but it does not guarantee quality. Let me put it this way. If people collaborate without good software engineering the product will be a disaster.

23:08 RESEARCHER:

Thanks, PARTICIPANT 3. Just to clarify, we do not mean correlation. We mean and effect is produced by collaboration which has benefits on quality.

23:27 PARTICIPANT 3:

I understand.

23:39 RESEARCHER:

So, PARTICIPANT 3, I understand you have reservations. Is that right? You do not agree?

23:57 PARTICIPANT 3:

No at all. I fully support this statement. What I tried to explain is the reciprocity of both, collaboration and good software engineering. I work for [REDACTED], so we strongly believe is good software engineering practices. But, I do not deny the effect of collaboration like you describe it.

24:10 RESEARCHER:

Thanks, PARTICIPANT 3. I'll move to PARTICIPANT 22.

24:24 PARTICIPANT 22:

Yeah, I agree with this one hundred percent because agile or Scrum in your research is something, where collaboration is required. How it helps quality as you said. It is what I experienced. Business knowledge is a must for quality. Simple! You get the requirements wrong then it is a defect or more defects. If you get a requirement wrong it may also mean your design was somehow not much aligned to the business needs and once your defect is

on UAT, it maybe too late to fix the design. So, scalability crumbles. I agree with the previous comments on a culture fit. Once you start on this journey of Agile, the people move on with theory and do whatever is written by the book. But if the cultural fit is not there then in the long term, things cannot be successful and then people tend to lose interest or do not understand why certain ceremonies is required or why we are doing something in an Agile way. What I'm trying to say in the case of collaboration, if people are not willing to collaborate then the agile implementation breaks. So definitely, a cultural fit is very much required, especially in cases where we are moving away from traditional software development models to Agile, so a cultural fit is something that is really required.

26:13 RESEARCHER:

Great. Thank you. I move to Participant 2.

26:28 PARTICIPANT 2:

Well, I think this is a very valid statement, because if you don't have a collaboration within the team then you have challenges that are not foreseen beforehand and they come during the whole process of execution, it would be really difficult to cater to them. So, I mean, I totally agree with it.

26:57 RESEARCHER:

Thank you. Finally, PARTICIPANT 18?

27:17 PARTICIPANT 18:

I also agree with this statement with some exceptions, let's say, what I see here is like, actually, the team members have to share the same attitudes and values and the same mindset. But I think they have to also bring some additional values to the team so that the other team members can also learn from each other. Because of one problem that I see is like if you actually streaks everything, that they are going to have one type of people that they are following the same rules or values, then sometimes in the long run, this is going to cause some problems. In order actually to succeed in a team and collaborate, I think there are some key items that they have to share, such as like the collaboration or there has to be control over the team. They need to actually cultivate each other because you grow actually in skills by working with each other, by learning the behavior of the team members. And also, I think, competence. So, if you are focusing on the same goal, this would actually increase the quality. So one hundred percent, but cultural fit is important. That's actually what I mean.

29:19 RESEARCHER:

Ok, can you clarify a bit more please? I do not get all your input.

29:37 PARTICIPANT 18:

Ok, let me articulate it better. I have no objection to the statement. What I tried to explain is you don't implement Scrum and the magic happens. Voila, people collaborate! Effective collaboration needs people who would believe in collaboration in the first place, then a team orientation attitude, constructive communication, empathetic toward each other's and openness of the individual himself. Do not assume that collaboration happens because simply we implemented Scrum, like other discuss it is a culture that people make happen.

So, yes, Scrum break down walls and makes collaboration better, but people must nurture this quality all the time.

30:29 RESEARCHER:

That's very interesting. But how do you nurture collaboration, from your own experience.

30:59 PARTICIPANT 18:

There is no magic stick, unfortunately. But what work is investing in team growth. I'm not talking about going for lunch together or beers or those silly exercises some consultants come up with. I'm talking about openness and the willingness of the individual to communicate and be open. Then, we talk about our issues and try to move forward.

32:09 RESEARCHER:

This interesting, but I need to move on. Yes PARTICIPANT 2, you want to say something?

32:32 PARTICIPANT 2:

Quickly, I just want add that a sense of security help people to open up and over time they become empathetic towards each other and communication gets better.

32:42 PARTICIPANT 3:

Researcher, I also want to add. At [REDACTED], we try to look for these personal traits during the recruitment process. I'm not saying it always works. But sometimes you can guess that the person just wants to be in his corner writing code and not talking to nobody. That's not good sign for us.

32:59 RESEARCHER:

This good discussion, but I need to keep moving. We already spent almost 30 mins just in one slide. Let's move to next slide. Some of you already touch into this. This is about psychological safety. We found that psychological safety in Scrum teams motivates people to care more about quality. Subsequently, they speak out to point out errors and defects. When, people feel safe, they also invest the required effort to achieve quality.

So, like we did before, I'll start gathering feedback, comments and your support of rejection of this finding, I'd like to ask whether this statement is clear or I need to clarify?

33:07 PARTICIPANT 22:

Sorry Researcher, what do you mean by psychological safety?

33:12 RESEARCHER:

The best way to explain it like PARTICIPANT 2 said it is a sense of security that the individual feel or perceive in the workplace. Another way to explain it is people feel it's ok or there is a perceive absence of fear from repercussions, for example, it a person would speak out when he or she think it is necessary. Does this help?

33:57 PARTICIPANT 22:

Yes, I got it. Thanks. I know what you mean.

34:12 RESEARCHER:

I remember PARTICIPANT 3 and PARTICIPANT 12 discussed this in the interviews. So, I'll start with PARTICIPANT 12 and PARTICIPANT 3.

34:30 PARTICIPANT 12:

OK, I agree with the proposed finding, and I'll share my experience. I wasn't happy at my previous job so this mate of mine from the university days was talking me up to join his company. So, I decided to try it out and I realized the culture was very different. People are at ease to speak their mind and there is so much courage to do so. I loved it. For this company our leadership make it clear all the time that no matter what people should not be sanctioned for talking, contributing and just being themselves. I noticed a difference, people take initiatives, invest effort to do better jobs and simply people are relaxed but performing well. So, like you said this sense of safety help that's for sure. And the whole perspective here is we are working with multiple individuals, in many cases in distributed offices around the world. So obviously, there will be lots of challenges, lots of problems to fix. And obviously, as my colleagues have also said before, mistakes will be made or decisions, bad decisions will be taken either by individuals or by groups. So whenever that happens, it is important to be able to land on your feet, you know, just realize and inspect on the previous things that were done and then learn from those and make sure those problems never appear in the future or if they are likely to appear in the future for whatever reasons, you have some process or some standards in place by which you guide yourselves and you'll try to mitigate the risks. So, yeah, absolutely.

36:42 RESEARCHER:

Thanks PARTICIPANT 12. So, what did you observed on the quality of the software?

36:55 PARTICIPANT 12:

Same apply to quality. When people care and put effort that's include the quality of course. I would say even more, quality becomes more important because it is your image.

37:12 RESEARCHER:

Great! PARTICIPANT 3?

37:27 PARTICIPANT 3:

I agree with PARTICIPANT 12 and your statement. Again, a very important comment. I think I said this in the interview and as PARTICIPANT 12 said already, this is a leadership thing. It comes from the company wanting to promote a psychologically safe place. It comes back to the culture fit discussion. So, it complements Scrum and make it work better that's for sure.

37:52 RESEARCHER:

Great! PARTICIPANT 16, would you like to be next?

38:07 PARTICIPANT 16:

I also agree with this statement with some comments. It does not happen in all places. In my 14 years of professional experience, one company out of 4 was promoting psychological safety. Sometimes, it does not cascade down from higher management. The reason is some managers do not like it or believe in it or simply do not want it. I understand that, it makes people challenge your decisions and push for improvements, not everybody like that. I'm not saying your statement is wrong, it is something that not very common. But I agree with PARTICIPANT 3 it complements and boost the potential of agile or Scrum. At least this is my experience. Just to give you an example, when there is this sense of safety, developers have a voice and professionally become more wanting to achieve quality. I've never met a developer who what to write crappy code, unless they not given the opportunity to do so. So, when they feel safe, quality becomes a priority for them because simply it implies professionalism.

Yes, I totally agree with the statement actually the psychological safety is very critical. You'll have different, let's say, people with diverse experiences within the team. Mistakes are going to be made. But the problem there is when the team succeeds, you share it together. When there's a problem, you have to share it also. And it's not a good thing that people are pointing to each other when there is a problem. And this actually creates an unsafe environment, which is not the thing that you want to do in Agile development. People have to be given clear roles and goals in order to achieve their tasks. You have to actually encourage active listening in order to listen to each other and learn from their mistakes. You also need to actually have an open mind. So, you have to be open for feedback. And this way you can create a better environment that people can share, both their values and to learn from their mistakes.

40:08 RESEARCHER:

Ok, great. Thank you. I'm happy with your input. So, I'll move to PARTICIPANT 22.

40:20 PARTICIPANT 22

Yes, I agree this, why. So, because as a QA, I have always to report defects. In some places, I felt I did not have the courage to do so, because developers do not like it and project managers do not like defects either. But, it is my job! What I use to do report it and keep quiet. I worked as a consultant for a while and in some places, I noticed that when I walk to the developers to discuss bugs, they were very open and accepting the fact that bugs are ok. It was encouraging and opened up the relationships. We talked about bugs without judgement, and we worked together to resolve them. Like PARTICIPANT 22, it is not something you see often.

Yeah, I mean, I agree that having psychological safety is good and it improves the implementation of Scrum. But I would also say that in all of this, the psychological safety is not just for Scrum. I mean, it can be any kind of process. It is always nice to have that psychological safety for a developer. But yes, definitely having it, it will enhance quality, not only in Scrum implementation.

41:59 RESEARCHER:

Nice to hear! PARTICIPANT 18, would you like to comment?

42:15 PARTICIPANT 18:

Yes, I agree with PARTICIPANT 22, it makes relationships better and talking about bugs acceptable and take a positive direction. The conversation become why this is a bug and how to resolve it not this is not a bug. But it is difficult to implement and promote, some managers do not know how to tell people simply it is safe here. It is a difficult message to get across. But this is a conversation for another day, I guess. For the purpose of this exercise, yes your statement is valid.

42:56 RESEARCHER:

Great, thanks PARTICIPANT 18. PARTICIPANT 2, it's your turn.

43:03 PARTICIPANT 2:

I think PARTICIPANT 12, PARTICIPANT 3 and the others said it better. I'm a big advocate for a workplace where people are empowered to contribute and have a sense of security to do that. Yes, 100 percent on board. Not only that, but I would also say that psychological safety is the a critical criteria for achieving quality but definitely it makes it stronger.

43:56 RESEARCHER:

Great, thanks PARTICIPANT 2. I'll move to the next slide and a new finding. So, this is about accountability. We found that Scrum promotes accountability in the individual and team levels. When team members feel accountable, they thrive to meet expectations for quality because they do not want to "let the team down" or substandard quality would reflect on them. Before, I start asking for comments, does this statement make sense or I need to clarify?

44:16 RESEARCHER:

OK. Silence is fine. I'll take it as perfectly clear. PARTICIPANT 2, why don't you start this time. Before I do that, I just like to take a little pause and tell you we are behind the time. But in ten minutes, I will do another pause and go around and see who wants to stay and who wants to leave, but we are a little bit behind of time. But that's okay. It's my fault. I underestimated the time necessary for this.

44:30 PARTICIPANT 12:

I wouldn't say it's your fault. I would say that that's what you estimated initially.

44:45 RESEARCHER:

Yes. I like the positive gesture, very nice [laughter].

44:56 PARTICIPANT 12:

Based on the discussions we're having, you'll see that the estimates that you initially went with isn't right so it's not a problem. It's not something that you should say it's your fault. It's something that you believed right at the time you contacted us.

45:03 RESEARCHER:

That's correct. Thank you. Very supportive. Back to PARTICIPANT 2?

45:18 PARTICIPANT 2:

What are you saying here is Scrum makes people feel accountable or a sense of shared accountability?

45:26 RESEARCHER:

Let me put it this way. It is not clear to me the source of accountability, but what we learned from the interviews is when people feel accountable, then two things happen individual want to achieve quality because of the sense of obligation and the second thing is a sense of duty towards the team, which is a collective shared responsibility.

45:58 PARTICIPANT 2:

Thanks, I see your point. I agree with both. When I was a developer, I always has this sense of obligation that my code shouldn't be messy because someone else will use it, maintained it and scale it. It is not easy. To sustain this obligation because some places want you for example to deliver fast and they don't care. So, why should I care. Scrum brings this unity and encourage it and I agree. When we united, we become accountable to each other and the team. I know your statement is about quality, 100 percent when accountability shapes in the team quality improves. I won't dispute that.

46:38 RESEARCHER:

Thanks PARTICIPANT 2, PARTICIPANT 3 would you like to comment?

46:48 PARTICIPANT 3:

Researcher, I always have challenging reservations for you [laughter]. I admit things are not black and white, right? So, I would cautiously accept the statement. My reservation is you assume people will accept accountability which is not always the case. There are people whatever you do they won't assume responsibility and share the team obligations including quality.

47:08 RESEARCHER:

PARTICIPANT 3, what do you do when that is the case?

47:23 PARTICIPANT 3:

There are many answers and no recipe. What I experienced is people leave. I think we discussed a case in the interview.



47:48 RESEARCHER:

PARTICIPANT 3, I understand your point. Our finding does not imply that accountability will take place each time you implement Scrum. We are dealing with a social quality here. As you said it is not black and white. The statement implies that when accountability takes place it promotes an effect which is the obligation to meet quality expectations.

48:12 PARTICIPANT 3:

Exactly. Then, I'm comfortable with that.

48:24 RESEARCHER:

Thanks PARTICIPANT 3. I'll move to Participant 12.

48:38 PARTICIPANT 12:

So, I'll say this is a valid statement. From experience, once the Scrum implementation matures, the team grows and matures, the accountability becomes a shared value. You talked about the source of accountability in Scrum, it is mostly because people feel empowered, they given opportunity to participate, they do not feel left out, etc. That where it comes from. To me accountability is showing your ability to do your job responsibly to your team. This means your team relies on you and needs to get everything right with the quality they need, to relay on you when they are struggling and you relay on them you're struggling, make a mistake, or just need help. Being accountable not only when their work relies on what you're doing, but also with the expected quality as you said. Scrum helps accountability because is helps with the team sense of unity. I like how you said do not let your team down, very true. But like PARTICIPANT 3 said it does not take place all the time. Sometimes, developers and the rest of the team are accountable but managers come with their expectations and interferences and we go back to square one and we become entangled in this meeting management expectations and our own expectations. This bring us to the culture discussion again.

50:26 RESEARCHER:

I agree with you. Thank you, Participant 12. Very passionate input. PARTICIPANT 16?

50:31 PARTICIPANT 16:

Yes, I agree on this one hundred percent. What I want to add here is from the executive point of view, actually, they have to buy in the decision to actually implement Agile into the company. So, what I am seeing in some companies is although they will now develop products in Agile, the executives micromanage all the tasks and checks that makes the process very cumbersome and difficult at the end. The things, the KPIs, actually change it from the executives' point of view, the managers' point of view. And it makes the developer's life miserable. So, one thing is like in order to succeed, the teams have to be as self-organized team. And in order to be self-organized, the executive parts have to support them, support them with resources, support them with the scope of the development, to support them with their feedback. And I think by providing actually the support, the team can actually decide on their goals, decide on their objectives, and succeed. And this will be a benefit for the company. That's how accountability materializes. You know what I mean, the team is bunch of professionals they know what they doing, they will share accountability once they become self-governed and supported in making their own decisions.

51:36 RESEARCHER:

Thanks PARTICIPANT 16. PARTICIPANT 22, it's your turn.

51:45 PARTICIPANT 22:

Thank you, Researcher. Yeah, absolutely. I wholeheartedly agree with this. However, I should say that in my view, executive support is the whole deal really. I would say also team mentality thing is tricky. And if we think that executives lead by example and obviously we should be in a position where we understand that whenever there is uncertainty, or whenever there are challenges, the executives are in a position not only to support the teams and the implementation, but also really enforce the beliefs and the strengths that this brings.

52:26 RESEARCHER:

Thanks PARTICIPANT 22. PARTICIPANT 18, any comment?

52:31 PARTICIPANT 18:

Makes perfect sense. A lot has been said in support of your finding, I don't think I have much to add.

52:42 RESEARCHER:

Thanks. That's great. Thank you to you all. I'll move to the next statement. This is about transparency in Scrum team. We found Scrum enhances the transparency of the process. When information, decisions and deliverables are transparent, then team members voluntarily inspect and review each other's work to provide feedback which helps quality. Any clarification?

52:58 RESEARCHER:

I think we are running out of time. So, I may need an extra 20 mins. I appreciate your time and it is ok if you can't.

53:20 PARTICIPANT 3:

Sorry Researcher, I have to go in 10 minutes.

53:43 RESEARCHER:

I understand. Let's continue and we will check in 10 minutes. Ok the slide is up. So Any clarification?

53:59 PARTICIPANT 2:

Sounds fine to me.

54:04 PARTICIPANT 16:

I'm fine to.

54:12 RESEARCHER:

Thanks. PARTICIPANT 2, would you like to go first?

54:24 PARTICIPANT 2:

Sure. So, I think Scrum is transparency. How it helps quality? That is a very interesting finding. I haven't been actively part of a development team, so I won't be able to categorically support it. But I relate to it. If I was developing in a transparent environment and see for example the readability of the code of one of my mates not up to the team's standards than I would talk to him or her of course. This also brings the sense of security we talked about, if not empowered to do so than you will keep quiet. I believe the combination of what you come up with, feeling of safety, collaboration and accountability they all work together to produce this team energy to improve quality. I don't think they work in isolation. I think what you propose is great and has synergy.

55:19 RESEARCHER:

That's the purpose. The combination enables quality, it to make it possible. Thanks, Participant 2. I'll move to PARTICIPANT 3.

55:32 PARTICIPANT 3:

Yes, I agree with this statement. Especially because in Agile you need to iterate more quickly than in the Waterfall model. So, if you iterate quickly, of course, there's a high percentage, that you'll make a mistake or something in the hands of the customer is going to break. And in the culture of the company or the environment we're working with, of course do your best to eliminate mistakes, but if you make mistake, you're not afraid that you're going to get fired, you're not going to get negative repercussions. It really promotes innovation. And I think that if you facilitate this and [audio breakup] and especially if you catch these, you could go through the Agile ceremonies, like a retrospective, you understand why this mistake was made. It can help to reduce the mistakes and fix things quicker. And so, I think both Agile and psychological safety will help Agile and also the Agile practices also help to make the quality better. So, transparency is a Scrum thing. You cannot have Scrum without being transparent. I agree, the combination make these what you call them?

56:29 RESEARCHER:

Social qualities or traits.

56:32 PARTICIPANT 3:

Yes! So to finish my comment, they work together. I agree when you accountable in a safe working environment, then you will feel obliged to correct mistakes, point them out and help better quality. So, I agree with PARTICIPANT 2, transparency is not stand alone. You can be as transparent as you want but if people do not feel accountable than nobody would care, right.

56:54 RESEARCHER:

Thanks, PARTICIPANT 3. PARTICIPANT 3, you can go if you want to.

57:20 PARTICIPANT 3:

Thanks Researcher. Nice meeting you all. Good luck Researcher with the rest of the project and thanks for the interesting session and findings. I find all your work relevant and valid at least from what I saw and experienced. I hope my comments would help. Don't forget to send me the paper.

57:54 RESEARCHER:

Thanks, PARTICIPANT 3. I will for sure send the paper. Bye. I'll move to PARTICIPANT 12.

58:05 PARTICIPANT 12:

Yeah, once again, another statement I agree with. Especially because it goes in many directions. So, transparency make everything visible, this ensures inclusions, you know. When, decisions are shared than people feel included. Personally, it makes me feel I want to contribute in a productive way and this as per your statement including the quality of our product. I see developers making comments in each other's code and coding decisions not because they were asked to do it because they want to. From the quality perspective, it also becomes visible. My work can be seen by everybody on the team so I'm motivated to do it as per the expectations of the team. I saw developers asking their peers to check their code before they make is available for review and I saw developers reviewing without being asked to.

59:04 RESEARCHER:

Thanks PARTICIPANT 12. PARTICIPANT 16?

59:07 PARTICIPANT 16:

Interesting statement. I never thought of it that way. Now, you made me think and I support it, because in my experience it is true. Scrum is all about transparency, the tools we use the ceremonies improve transparency. When your work is out there, people will inspect it you like it or not and they will comment on it. You cannot hide, that's for sure. I also agree with PARTICIPANT 3 and PARTICIPANT 2, transparency does work alone. If you have disengaged people, then nobody would care in the first place. So, you have a developer who wouldn't collaborate all he cares about is his code.

59:14 RESEARCHER:

Fantastic. Thanks, PARTICIPANT 16. Next, PARTICIPANT 22.

59:20 PARTICIPANT 22:

Yes. I would say for this one, I'm split fifty/fifty because I agree transparency makes information and decision available. But, if you don't care and collaborate that you wouldn't take the initiative to inspect. This is how I understood it. I think PARTICIPANT 2 and PARTICIPANT 3 made same comment. Transparency in Scrum also work it's magic in

another way. Like I heard from the others you cannot hide, and this include the quality of your work. I saw this happening, a junior developer came to our team and he wouldn't ask for help or take comments. So, his code always comes with bugs. So, he became visible because the quality of his work. The Scrum Master talked to him and mentored him, it took a while for him to get the mindset of working with us.

1:00:18 RESEARCHER:

Correct. I see what you mean. I appreciate the critical input and the example.

1:00:28 PARTICIPANT 22:

My next comment on mistakes if we talk about mistakes, yes, I agree. Because of the nature of the way Scrum is, so people who learn from it, the best part here with Scrum is because of the iterative nature, people are not developing the entire thing together, so they are doing it in parts. So even if mistakes are made, chances of correcting it quickly is more in Scrum than any other. So that is one reason why mistakes even if they are made, it is easier to correct. Another part is that Scrum also promotes the nature of taking feedback. So, like let's say a retrospective meeting, that is a very important ceremony. So that is when after each iteration, people actually meet together and talk about what was done or what went bad and why it went bad so that they can learn from the mistakes. So, my point here is transparency is across the whole Scrum process. Of course, making things visible helps quality.

1:01:18 RESEARCHER:

Fantastic. Great input. Thanks, PARTICIPANT 22. Before I move to the next statement, I think I haven't heard from PARTICIPANT 18, right?

1:01:38 RESEARCHER:

Sorry guys. Can I ask you to mute yourself? Unless you are asked is your turn to talk. Please. Thank you. Thank you much better. Great. Thank you. Much better.

1:02:08 RESEARCHER:

Sorry PARTICIPANT 18.

1:02:18 PARTICIPANT 18:

Yes. I would say for this one, I'm happy with the statement and all the comments I heard are accurate from what I have experienced. So, not much to add really.

1:02:58 RESEARCHER:

Great. Thanks.

1:03:08 RESEARCHER:

Thank you very much. Thanks to everyone. I'll move to statement number five.

1:03:28 RESEARCHER:

Ok. I'm ready for the fifth statement. So far, we have been discussing these social aspects of Scrum teams and values. Now, this part of the findings is more related to the process aspect. I mean the software development approach of Scrum. We found that the iterative approach of Scrum and the continuous inspection and adaptation contribute to quality. We will start with iterative development. The iterative development of Scrum enables better modularity of tasks. This allows developers to focus on the quality, because they develop small units of code. It also allows them better control over the code. Any clarification?

1:04:15 PARTICIPANT 12:

Researcher, do mean this statement or iterative development apply only to developments tasks?

1:04:58 RESEARCHER:

Good observation. Yes, it implies to development tasks. At least this is what we found.

1:05:18 PARTICIPANT 2:

Interesting! Because the first thing that comes to my mind. Same question.

1:05:38 RESEARCHER:

That's good. Why don't you start PARTICIPANT 2?

1:05:49 PARTICIPANT 2:

OK! When I was a developer, yes that is very true. I have few comments. You could be modular not only using Scrum. In waterfall you could be modular. Scrum encourages modularity because of the user stories. So from the requirements, everything start modular, small and achievable. When, it gets to the development, developers love it because they can focus on small pieces instead of trying to figure out a solution to the whole world! This is what is good about Scrum. From a developer perspective, I can focus better on the quality when the user story is concise. I mean my code is clean. It also helps estimation, the smaller the user story the better and more accurate I can estimate because I can see the risk, the complexity and predict difficulties. It also helps managing the Sprints, the scope of Sprint becomes more realistic. Obviously, you need to give this responsibility to the developers, they know better their work, the software and complexity so when managers do the estimate things can collapse easily. Because they get wrong, and it sends the wrong message to. Developers are professionals with university degrees they can do their jobs, just let them do it. Interferences in the developers' decisions can break this process easily. So, yes, I agree but it has more that just influencing modularity and as you put it quality becomes easier to achieve. So, I would add more to that statement to make it complete.

1:07:08 RESEARCHER:

Thanks PARTICIPANT 2. I appreciate the thoroughness in your input. PARTICIPANT 12, you wanted to say something?

1:07:28 PARTICIPANT 12:

I can go next. I have similar thoughts. It influences the development part that is very true. But also the whole process from start to the end like PARTICIPANT 2 explained. So, I won't repeat same things. I do not mean to oppose this proposal you have in the statement. I agree with it but it doesn't capture everything. Iterative development brings much more to the development process.

1:08:08 RESEARCHER:

That's good. This gives an opportunity to think this a bit further. I'd like to hear more feedback. So, who wants to go next?

1:08:38 PARTICIPANT 16:

Okay, yeah Researcher. I also agree with this one. What you need to add is PARTICIPANT 2 comment. When the estimate is accurate and developers take ownership of their own estimation, they make sure they plan for everything they need. Because they know their job better than me and the product owner for example. So, I think I mean, I read the statement I felt similarly. I think definitely agree, I'd like to add, you need good developers and a good team. Not every developer coming out of university knows how write modular code and scalable design. So, back to collaboration if people not willing to work together and learn from each other's then you could iterate as much as you like and you won't see the benefits. I agree with PARTICIPANT 2, developers should be empowered to make their own decisions. It makes things much better.

1:09:03 RESEARCHER:

So, we still talking about iterative development the slide is still up. PARTICIPANT 18, would you like to comment?

1:09:39 PARTICIPANT 18:

Quickly, not much to add. I agree and also support comments already made by other participants.

1:09:53 RESEARCHER:

PARTICIPANT 22?

1:10:05 PARTICIPANT 18:

I also agree. I'd like also to add it also helps functional and regression tests not only coding. This is how I understood your statement, it is very specific to code. As a QA, I'm also in control of my regression suite, CI configuration and writing test cases is much easier and flexible. When we get feedback from the PO, then easy to fix. So, I think this statement is valid but could cover also QA techniques advantages, there are so many.

1:10:49 RESEARCHER:

Thanks PARTICIPANT 18. We almost consumed one hour.

1:11:04 RESEARCHER:

Guys, feel free to go. I'll continue with those who can stay. I expect 10 to 20 minutes should do it.

1:11:31 PARTICIPANT 18:

I'll stay.

1:11:33 PARTICIPANT 2:

Same.

1:11:36 RESEARCHER:

Great! So, we suggest that Scrum's inspection and adaptation allows continuous feedback and frequent testing. This helps quality because adjustments are made to align with the business needs as results of the continuous feedback and adaptation. Let's start with PARTICIPANT 22.

1:12:01 PARTICIPANT 22:

Valid statement. I think this is the best value of Scrum. I'm a bit biased for this one because I'm a QA. We test more, faster and we also correct faster in Scrum.

1:12:51 RESEARCHER:

Good to hear. PARTICIPANT 12?

1:13:07 PARTICIPANT 22:

This is the easiest one to agree with. In comparison with waterfall for example agile, iterate fast but also test fast and frequent feedback. This also requires reliable end users working with the Scrum team. If you have a PO who doesn't know his business or doesn't have time then we back to the same problems in waterfall. We delay testing and feedback. I had PO telling me I'll get back to you, one week later he doesn't have the answer yet. The Sprint is only one week. So the defect goes into UAT and this because he didn't know his business. I think we discussed this at the beginning, let's not repeat ourselves [laughter].

1:14:01 RESEARCHER:

True. PARTICIPANT 16?

1:14:11 PARTICIPANT 16:

Agree this is an easy one. You cannot disagree with this one. I like PARTICIPANT 22 comment. It is very true. The competence of the PO makes a huge difference.

1:14:47 RESEARCHER:

OK. PARTICIPANT 2?



1:14:53 PARTICIPANT 2:

I agree 100 percent with everything that has been said. I also agree that a real and competent business representation is the key for this statement to work better.

1:15:07 RESEARCHER:

PARTICIPANT 18?

1:15:13 PARTICIPANT 18:

I agree you left the easy one to the very end. Nothing to add, very valid statement. You also need the right automation in place, it makes a difference.

1:15:52 RESEARCHER:

Yeah, I agree with you. I agree with you a hundred percent. Thank you very much. I come up to the end. We do have few minutes. And I will go around and if you have any feedback for me, would be great. So, feedback regarding this finding, the overall impressions and you have one minute each. I'll start with PARTICIPANT 2.

1:16:16 PARTICIPANT 2:

Yeah, I think the findings were great. We made some comments here and there. But my feedback is that its good. Your work put Scrum strengths for quality on the spotlights. I like it very much. It is in line of what I always believed in, you need a team of accountable people in an environment that promotes a sense of security, and the team grows then they start delivering better quality.

1:16:51 RESEARCHER:

Okay, thank you. PARTICIPANT 22?

1:17:13 PARTICIPANT 22:

Yeah, I think this is impressive. I understand, you know, you got to go and talk to a lot of people and then come up with all these findings. So, this is impressive. Just all those little bit of tweaking that is required and this would be absolutely good.

1:17:38 RESEARCHER:

Thank you very much. PARTICIPANT 12?

1:17:55 PARTICIPANT 12:

First of all, I would like to congratulate you for your hard work that you put into this.

1:18:12 RESEARCHER:

Thank you.

1:18:24 PARTICIPANT 12:

And I realize it's very difficult to try to you know, understand different things, and then negotiate building findings whether it's abstract or not. So yeah doesn't matter but in addition to the congratulations that you deserve, I would like to thank you for taking the time to do this and I would kindly ask if possible, at least but I'm interested, but maybe others as well, I would be interested in seeing the final result.

1:13:17 RESEARCHER:

Yes.

1:13:19 PARTICIPANT 12:

I'm thinking you are going to publish a paper and if possible, I would like to receive a link to read it as well.

1:19:34 RESEARCHER:

Yeah, I will circulate it, I think in three or four weeks. So, before we send it for review by the publisher.

1:19:54 PARTICIPANT 12:

Wonderful. Thank you.

1:20:13 RESEARCHER:

Okay. PARTICIPANT 16 before PARTICIPANT 18?

1:20:29 PARTICIPANT 16:

Yeah, Researcher, actually it is great research, doing a great job for working on this one. One suggestion on the Agile foundation, the support psychological safety and the Agile mindset, maybe you can actually weight those values. We discussed those earlier, we talked about the agile culture fit and mindset and their importance in making your findings work better. So, my suggestion is to link these findings to trying to build the Agile foundation. Companies neglect this foundation and miss on the opportunity to benefit from these findings.

1:21:11 RESEARCHER:

Yeah, there would be a lot of tuning for the findings, that's for sure. This could be a future topic. I appreciate this input. Really good! PARTICIPANT 18?

1:21:30 PARTICIPANT 18:

Thanks, Researcher. First of all, I would like to thank you for giving me the opportunity to be part of this group and it's always good to share our experience and knowledge and good to see if it's going somewhere as part of the research. So, I'm glad that I was part of it and

thanks to you and all the best in you for next set of projects. I think like PARTICIPANT 2 said this put the spotlights on the non-technical values for quality always neglected by companies. It is good to see someone looking at this.

1:23:04 RESEARCHER:

Thank you very much. Thank you, guys. We'll stay in touch, okay? Have a good day. Bye. I'm really grateful for your time, feedback and the opportunity to learn from your experiences. Bye for now.